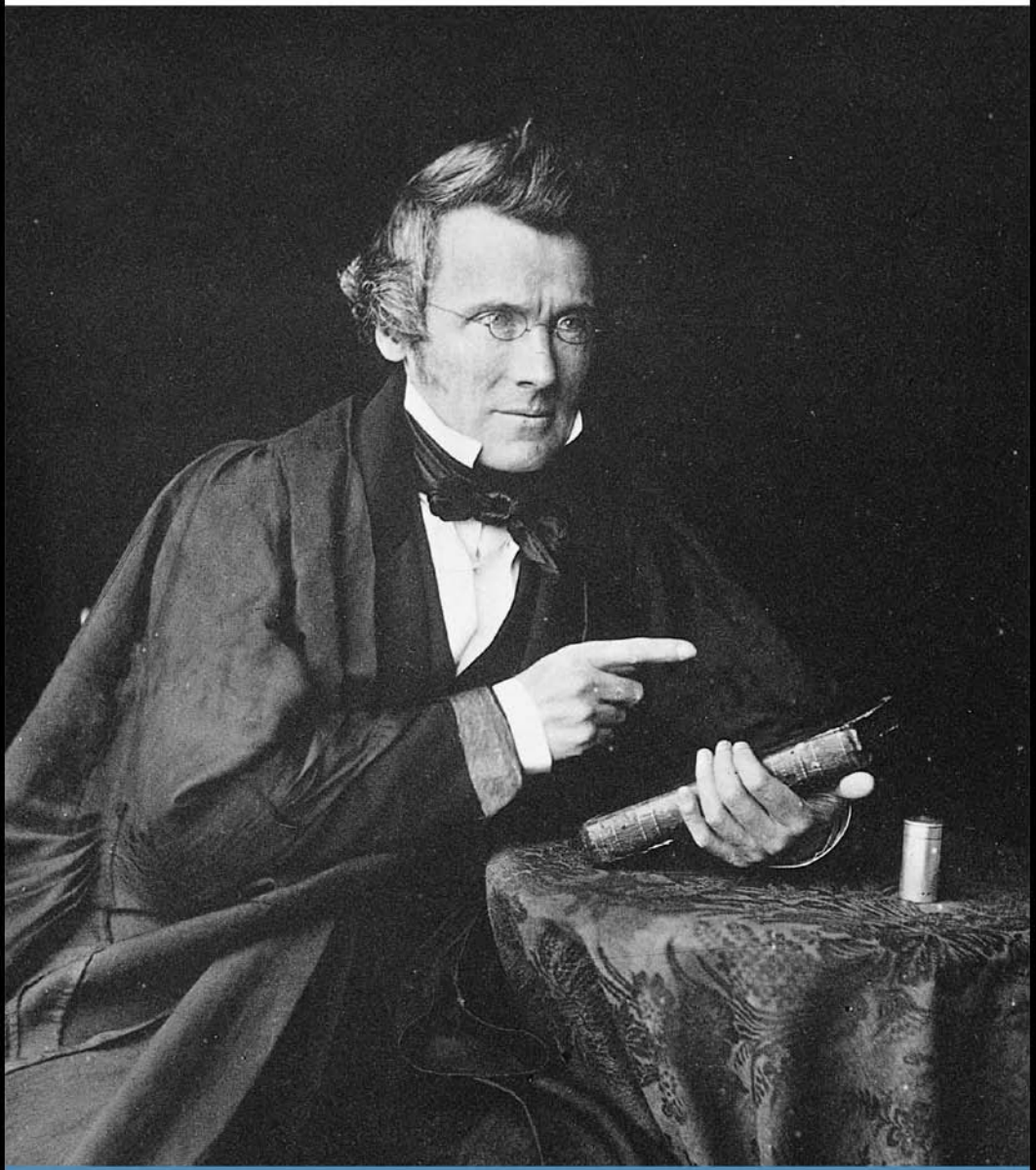
GEORGE DAVIE

THE SCOTCH METAPHYSICS

A Century of Enlightenment in Scotland



ROUTLEDGE STUDIES IN NINETEENTH CENTURY PHILOSOPHY

The Scotch Metaphysics

In the Scottish universities, an Enlightenment in philosophy, which George III dubbed "the Scotch Metaphysics," continued unabated from the eighteenth and throughout the nineteenth century. This book brings out how different the way of doing philosophy in Scotland was during this period by comparison with how it was pursued in England. In Scotland, as on the continent of Europe, philosophy was a central subject in the universities, whereas in England, except for a perfunctory application in faculties of divinity, it flourished only outside the walls of the academy.

Focusing on the works of Thomas Reid, Dugald Stewart, Sir William Hamilton, Thomas Brown and James Frederick Ferrier, *The Scotch Metaphysics* offers a definitive account of an important philosophical movement and represents a ground-breaking contribution to scholarship in the area. It will be essential reading for philosophers and anyone interested in the history of philosophical thought.

George Davie D.Litt, FRSE, D.h.c. is the author of *The Democratic Intellect: Scotland and her Universities in the Nineteenth Century*, *The Crisis of the Democratic Intellect* and two volumes of essays on the Scottish Enlightenment. He is Emeritus Reader in Philosophy at the University of Edinburgh and recipient of the Andrew Fletcher of Saltoun Award for services to Scotland.

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To the memory of
Dr Christopher Murray Grieve
and
Professor Norman Kemp Smith

Contents

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Introduction

The historical context

The renaissance of the Scottish spirit: 1690–1700

In 1690, William of Orange accepted Presbyterianism as the official religion of Scotland. The replacement of Episcopalianism had, according to one of the ministers, an "electrifying" effect in reawakening the country as a whole. This reawakening had been anticipated in 1681 by the publication of the *Institutions of the Law of Scotland* by the Presbyterian jurist James Dalrymple, Viscount Stair. It was followed by the Darien scheme of 1698 to 1700, and, most importantly for our work, by parliamentary consent for funding printed courses for the teaching of philosophy in the universities.

Lord Stair, who had earlier been a Regent of Glasgow University, produced a book immediately recognised as a masterpiece of systematisation. It gave the legal system of Scotland a philosophical development that made it outstanding in the eyes of the country. Stair's *Institutions* were felt to be a new beginning, something that would transform the character of the law of Scotland in a lasting way. Similarly, although the Darien scheme for setting up a Scottish colony in Panama was to have a disappointing result, it was nevertheless seen as a bold example of risk-taking and was welcomed by strict Presbyterian ministers. A scheme that looked well on paper, it was the sort of thing the Scots have subsequently ruled out through an excess of caution. A bit more Darien boldness would have done them no harm. Finally, the Scottish parliament not merely reaffirmed the idea of establishing a school in every parish, but, more importantly, authorised a project to write and publish Scottish textbooks suitable for Scottish university students.

It was, as one of the university Regents said, incompatible with "the famed learning of the nation" to use imported textbooks that were in any case unsuitable for students of Scottish universities. What was wanted were textbooks that were not one-sided and which gave a fair discussion of the issues arising between both Aristotelian scholasticism and modern philosophy, especially Cartesianism. These revised textbooks featured an organisation of studies around a principle which was to persist in one way or another until 1965. This principle was that philosophical studies, which were later supplemented by literary studies and by natural philosophy, were central to the

arts course with which the university curriculum opened. What this meant was that on one side was philosophy of grammar and rhetoric, in the middle pneumatology (philosophy of mind), logic and moral philosophy, and on the other side general and special physics.

When negotiations began in 1700 for the Union with England, the Scots were ready to abandon colonial ambitions in favour of being given access to the English colonial empire. However, the full benefits of this arrangement were not to be felt until the middle decades of the eighteenth century. The preceding period was one of relative economic stagnation as the Scottish economy adjusted to the effects of the Union. However, the other two projects – law and university education – continued to thrive. Scottish law developed in the light of Stair's *Institutions* and continued to achieve a philosophical systematisation and depth lacking in the law of England, something it owed to Roman law kept alive in continental countries. In the universities the old triple scheme of Latin, philosophy and geometry (including physics) was retained, but, thanks to the success of Francis Hutcheson's lectures in Glasgow, the idea of using Latin textbooks as a basis of study was set aside in favour of lecturing in the vernacular.

More important still is the fact that the powerful originality of the last decade of the seventeenth century was carried forward after the Union. This was indeed the heroic age of Scottish scholarship, although it was not always recognised to be so. Robert Simson, a gifted young mathematical student of Glasgow, was made Professor of Mathematics there in the year of Hume's birth, after a year or two of study in London, where he was influenced by Edmund Halley and Isaac Newton. He admired Ancient Greek geometry, believing it to be philosophically superior to Cartesian geometry, and, although Sir Thomas Heath, the modern exponent of Greek geometry, thought Simson unscholarly, the latter had an understanding of what the Greeks were after that makes up for the lack of scholarship in the modern narrow sense.

At the same time Thomas Ruddiman produced a distillation of about seventy Latin grammars previously published in various countries. A very impressive work, it became not only a standard text in Scottish schools and universities, but was also to be praised by German scholars one hundred years later for its care in explaining the philosophical distinctions in grammar between different parts of speech. Like Simson's, Ruddiman's career coincided with that of the young David Hume.

David Hume (1711–76) began his extraordinary work by producing a philosophy that exposed the weaknesses of Scholastic and Cartesian metaphysics, and laid the foundations of modern philosophy. Hume, along with Simson and Ruddiman, was setting the agenda that was to guide Scottish philosophy for the next two centuries.

The organisation of triplicate studies, Ruddiman's work on philosophy and grammar, Simson's exploration of the philosophical foundations of Greek mathematics, and the youthful Hume's philosophy, had a most fruitful effect

in Scotland. By the 1750s, Hume was able to point out that, although Scotland had lost its king, its parliament and its nobility, it had become a country well known for its excellence in literature. We can say that the recurrent characteristic of the organisation of studies in the universities of Scotland was a concentration upon the philosophical foundations of subjects such as grammar and mathematics. As Dugald Stewart later noted, the study of the grammars and idioms of specific languages and the study of practical Cartesian mathematics took second place in Scotland to the study of intellectual foundations.

Hume's own conception of science was based on the experience of particulars, and his conception of society explained the social basis of ethics. The same thing was happening with a whole range of Scottish thinkers. Adam Smith published his *Theory of Moral Sentiments* in 1759 (an enlarged sixth edition appearing in 1790), and Thomas Reid published his *An Inquiry into the Human Mind, on the Principles of Common Sense* in 1764. After Hume's death, Reid published a more general treatment of the intellectual powers entitled *Essays on the Intellectual Powers of Man* (1785) and dealt with moral and political society in his *Essays on the Active Powers of the Human Mind* (1788). Among many other significant publications was Adam Ferguson's *Essay on the History of Civil Society*, published in 1767. A Gaelic speaker, Ferguson understood that a high level of culture could be combined with a society in which the rustling of cattle took the place of trading. Given the Scots' wariness of political enthusiasm, their philosophy withdrew into the background during the French Revolution. However, the coming of Napoleon and the concomitant reorganisation of French education ensured that the Scottish thinkers of the past began to attract attention again on the continent. Adam Smith was read in a new translation by the wife of the French philosopher Condorcet, and Reid's work became available in a new version for use in the *classe de philosophie* in the French *lycées*. At the same time the Scottish philosophers of the new century – Dugald Stewart, Thomas Brown, William Hamilton and James Ferrier – carried further the idea advocated by Hume, following Maupertuis, of a programme of science based on the experience of particulars. Each generation vigorously debated the principles of metaphysics with the previous generation, but did so courteously. However, this did not prevent a breakdown of friendships, even though it contributed to advance after advance in the field of the philosophy of mind. At times their positions anticipated the discussions of abstraction in the Second Investigation of Edmund Husserl's *Logical Investigations*, and of the relation of sight and touch in the second chapter of the third part of Jean-Paul Sartre's *Being and Nothingness* and in the second chapter of the first part of Maurice Merleau-Ponty's *Phenomenology of Perception*.

The collapse of the Scottish Enlightenment after 1854

As we have seen, the rejection of Episcopalianism in favour of Presbyterianism produced a thorough-going rebirth of Scottish enterprise at both an intellectual and practical level. Nevertheless these advances contained from the outset a conflict that was suddenly to wreck the Enlightenment it had done so much to bring into being.

The first sign of a major contradiction appeared at the beginning of the eighteenth century in the negotiations leading up to the Union. Around 1712 the Westminster parliament in its Anglo-Scottish, post-Union form went back upon the agreement made in its pre-Union, purely English form by passing an act restoring lay patronage in the Church of Scotland. Many Presbyterians found this offensive. They held that in the Church of England the church was without question subordinate to the state, whereas in Scotland the church was to be treated as equal to the state. In Scotland, the church had the right to criticise the state – and have its criticisms listened to – just as the state had the same right to pass criticism on the church. When the Union parliament was dealing with Scotland, the church was to be reckoned as the equal of the state, whereas when dealing with the Church of England, the parliament was dealing with a subordinate. The problem after the Union was that the Westminster parliament, under the influence of its Scottish members, who were mostly lairds and landowners, voted to go back to a virtually Episcopalian system, where the relation of church to state did not differ much from the English version. The Presbyterian system had involved the right of congregations to appoint their own ministers, whereas the Episcopalian system had ministers appointed by the local lairds. The result of this reversion was that a substantial number of the common people in the congregations made trouble when they had ministers settled on them by the lairds.

These objections to a system which some thought "Episcopalian" became serious in 1735. Francis Hutcheson, then Professor of Moral Philosophy at the University of Glasgow, wrote a powerful pamphlet aimed at a substantial class of people, including some of the landowners, urging them to show some of the spirit for which the Scots had been famous and not simply to accept unquestioningly the Patronage Act. Instead, Hutcheson wrote, they should side with the common people in opposing the Patronage Act, an opposition that would be all the more effective if it was controlled and moderate. Doing this would be an advantage in strengthening their own position within Scotland. Hutcheson's pamphlet seems to have had a considerable effect. The common people, with their new allies, were to see the implementation of the new system of patronage postponed and frustrated in many parts of Scotland. This altered suddenly when William Robertson, historian and Principal of the University of Edinburgh, achieved control of the General Assembly and insisted that the law of the land should be enforced. Robertson's policy was successful during his lifetime, but a new reversal back to Presbyterianism came at the beginning of the French Revolution. Thomas Muir of Hunterston,

an advocate at the Scottish Court of Session, was a member of the United Scotsmen, a group with similar views to the United Irishmen. At a meeting of the Friends of the People, in words copied down verbatim by government spies in the audience, Muir proposed that Scotland go back to the Presbyterian version of equality between church and state even if this could only be done by breaking the Union with England. Though too extreme for the majority, Muir's position nevertheless made sense to some because it was in part a revival of *On the Law of Kingship in Scotland* in which George Buchanan pointed out that, although the populace did not have the right to appoint kings, it had the right to reject a king if he broke the law in his own favour and to replace him with another member of his family. Nevertheless, Muir's nationalistic opinions caused great shock and scandal. He was arrested, tried and sentenced to fourteen years' transportation to Australia by the famous Lord Braxfield, who held that the only class of people who had rights in Scotland were the landowners. In the event, during his passage to Australia, Muir was rescued by the recently founded American navy and sent to France where he further developed his nationalist opinions.

Although Braxfield's opinions somewhat shocked people, the majority of judges at the Court of Session decided publicly that, whatever the relation of church and state might have been before the Union, it was now necessary and convenient to adopt the English scheme, irrespective of the rights and wrongs of the matter. The question of patronage was to dominate church politics until the Disruption of 1843, drawing in philosophers like Stewart, Brown, Hamilton and Ferrier, who were developing the philosophical ideas of Hume, Reid and the Scottish Enlightenment. Opposition to patronage, far from being overcome, threatened to lead to cataclysm in the relations between church and state in Scotland, a fact very much brought out in the standpoints taken by the various philosophers. In his biography of Principal Robertson, Dugald Stewart characteristically sat on the fence. Thomas Brown, Dugald Stewart's pupil, took the side of the General Assembly, adopting its view that the role of the church was to distribute spiritual goods to the whole community, with the authority of Jesus Christ as its head, just as the role of the state under the leadership of the king was to distribute the material goods of the country. William Hamilton, on the other hand, wrote a pamphlet in which he strongly sided with the judges, giving numerous examples from the history of Presbyterianism on the continent to show that it was in general untrue that in its effective forms the church opposed itself to the state; rather did it willingly subordinate itself. Ferrier, who was a kind of Walter Scott Tory, went back to a position which, although utterly different to that of the advocate Thomas Muir, in that it had no nationalistic pretensions and no wish to break up the Union, nevertheless argued that what was required was a rethinking and modification of the Union. For Ferrier this was necessary in order to bring home to the members of the Westminster parliament that in dealing with the Church of Scotland it had to accept a different role from the one assumed when dealing with the the Church of England. In the case of

Scotland, the parliament was dealing with a body equal to itself. Ferrier was equally dismissive of the position of the General Assembly as supported by Thomas Brown. Whilst Ferrier thought the General Assembly had been right to claim that people should be left to form their own spiritual views without state interference, he argued that they were wrong to give up their manses and their glebes. They should have clung to their temporalities. No doubt, he went on, the state would have expelled them, but the effect of the ensuing struggle would in all probability have seen the community as a whole sympathise with the ministers and restore their manses to them.

So far, Ferrier's part had been an attempt to find a middle way and reconcile the two positions. In his pamphlet on church and state, he criticised both parties – that represented by Hamilton, who accepted the subordination of church to state, and that represented by Brown, who took the opposite view. However, as Ferrier became caught up in the dispute, he began to be interested in a tendency among the evangelically dominated General Assembly to accept unnoticed contradictions in their position. Ferrier argued that if they had paid attention to the Reformation settlement they would have seen that it was argued out in purely logical forms, on deductive principles similar to those in Euclid's Geometry, and that had this been recognised they would not have been so liable to split. Why had the logicality of the Reformation settlement not been perceived? Ferrier felt that the culprit had been Thomas Reid, who had much influence in the dispute both upon Thomas Brown on one side and Hamilton on the other. Reid's "Scottish philosophy," which did not try to prove things, but taught people that first principles could not be proved and that they were innate ideas, made it impossible for the Scots to understand the Reformation settlement since it relied so much upon deductive argument. To ensure that this neglect of logic never happened again, Ferrier broke altogether with the traditions of the Scottish Enlightenment and its acceptance of the perception of particulars as the basis of knowledge of the world. Published in 1854, *The Institutes of Metaphysic* was intended to demonstrate that the principles of philosophy could be worked out deductively, along Euclidian lines. The second edition of 1856 was in effect to bring the Scottish Enlightenment to a halt by denying that knowledge is founded upon experience and affirming instead that knowledge is achieved by deduction. Ferrier's book was an impressive intellectual achievement, marred however by expressions of contempt for Reid and, with the exception of Hume, for Scottish philosophy in general. Compared with Hume, Ferrier said, Reid was like a whale in a field of clover. Ferrier subsequently realised that he had gone too far. In his inaugural lecture for the session of 1861 he makes it clear that the argument of his *Institutes* breaks down because you cannot have deduction without induction; that is to say, necessary truths need to be connected with contingent ones. He illustrates this, in a manner that anticipates Sartre, by recourse to Adam Smith. Ferrier contends that it is only the experience arising from an encounter with others that enables us to "see ourselves as others see us." Our looks, and our views of the world, are

expressed through our behaviour. The message conveyed by our behaviour entirely escapes us and is only brought home to us by our recognising the other as a mirror in which our lack of consideration for others is read in the other's reproving glances. This point did not get over because Ferrier's inaugural lecture was the last public lecture he ever gave. His health deteriorated and he died two years later.

However, it became apparent that Ferrier had effectively turned the appointment of professors – and not just philosophy professors – into a competition between the new Free Church and the Established Church. The starting point of this competition was Ferrier's loss in 1852 and 1856 of two Edinburgh chairs to philosophers of the Free Church. There ensued a kind of thirty years war in which the professorships of philosophy in Scotland went now to one of the conflicting churches, now to the other. As a result of this continuing conflict the country began to forget about the one hundred years of the Enlightenment, seeing not the achievements of its great opening century but the involvement its various members had in the crisis of church and state. Consequently, when the younger generation of students of philosophy represented by, for example, Norman Kemp Smith and John Macmurray were appointed to chairs in the 1920s and 1930s, they associated Scottish philosophy more with internecine conflict between churches than with getting at the truth. These younger philosophers gave up altogether the idea of nationalism in philosophy, that is, philosophy within national boundaries, deeming it as we now say "politically incorrect." They argued that, instead of being carried on mainly within individual countries, philosophy should become an international debate. This view has been taken over in our own time by Prime Minister Anthony Blair. An admiring reader of Macmurray, Blair follows him in wanting to destroy the idea of philosophical debate as a national one in favour of conceiving it in global terms. It calls to be noted that, as a result of Blair's giving a new lease of life to the ideas expressed by Macmurray and Kemp Smith, the debate in Britain, which had for a long time been the contest between English philosophy and Scottish philosophy, has completely altered. Blair however is equally opposed to what you could call the English tradition in philosophy – practical utilitarianism, Bentham, John Stuart Mill and his father, Russell, Ryle and Popper.

The Scotch Metaphysics

So much for the historical context of the philosophical controversies to be examined in detail in my book. I must now explain the book's title. This picks up the remark "Fie, Fie, Mr Dundas, no more of your Scotch metaphysics" made by George III in the early days of the French Revolution in response to the attempt made by Dundas to overcome the King's scruples about signing the Catholic (one might say Irish) Emancipation Bill, which the government of William Pitt the younger wanted to pass into law. "Scotch metaphysics" was a reference to Dundas's advice to George III that he accept

the bill in his official capacity as king but reject it in his private capacity as an Englishman. I adopt the king's phrase to mark what I see as a certain continuity between the work of the quartet of nineteenth-century philosophers I examine, namely Stewart, Brown, Hamilton and Ferrier, and that of the eighteenth-century quartet composed of Hutcheson, Hume, Reid and Smith. The title serves also to mark off the debates of these eighteenth- and nineteenth-century Scottish philosophers from the debates engaged in by philosophers in England and Ireland. It distinguishes a set of philosophical problems that have less affinity with the latter than with questions being treated then and to be treated later by philosophers on the continent of Europe. In particular, the Scots were united in their interest in a problem of abstraction and of distinguishing between inseparables which is not the problem of abstract general ideas that interests Locke and Berkeley. The Scots regarded their problem of abstraction as crucial. Even the laity in Scotland took this problem of abstraction seriously, judging by Sidney Smith's reference to having heard someone comment at a ball in Edinburgh "What you say, my Lord, is true of love in the abstract." The brilliant version of this problem presented by Hume will be discussed at great length by Husserl in his *Logical Investigations*, whilst Reid's discussion of it will be highly praised – though Stewart's cursorily dismissed – by Schopenhauer in *The World as Will and Representation*.

That the Scottish Enlightenment's manner of doing philosophy resembles more the French and the German styles than the English is brought out by Hamilton and Brown, but it is demonstrated most clearly of all by Ferrier, whose philosophy Thomas de Quincey characterises as German philosophy refracted through a Scottish medium. Indeed, in a letter to Victor Cousin accompanying offprints of two of Ferrier's articles, the author says that what he is doing in them is presenting the dialectical theory of perception that Hegel should have advanced. Better than any other British philosopher, Ferrier grasps that what has been called "the secret of Hegel" is expressed in his own teaching that sight and touch correct each other, the doctrine set out effectively in the first of two articles he published in the fateful year of 1843.

However, the second of these articles effects a surprising about-turn. Ferrier there drops his claim to be expressing the essence of what Hegel was trying to say. Instead, he proposes the kind of Platonism spelled out in the first of my two chapters on Hamilton and Brown. Suddenly, he dissociates himself altogether from the Scottish Philosophy of Common Sense to which these philosophers subscribe in their different ways. He goes as far as to hold them responsible for the misunderstanding of the Presbyterian polity in Scotland, a misunderstanding he believes his own new Platonism exposes. Unfortunately, as I have indicated already above and will argue in my final chapter, Ferrier makes confusion worse confounded.

My chapters on Hume and Reid set the scene for the treatment in the succeeding chapters of the problems discussed by philosophers in Scotland in the nineteenth century: the problem of the external world, the problem of

universals and particulars and, bound up with these, the already mentioned problem of abstraction conceived as distinguishing between inseparables. This cluster of problems was debated by the Scots with a thoroughness and intensity so astonishing to philosophers south of the Border that it demanded a name, and as apt as any is the one given it by the king.

For further discussion of how the Scotch Metaphysics came to suffer neglect as a consequence of the involvement of philosophers north of the Border in ecclesiastical wrangles, the reader is referred to my *The Democratic Intellect*.

1 Hume and the Rankenian Society

The purposes we have in view in the ensuing discussion of Hume are of a very limited kind. In the first place we are not to meddle with his ethics but only with his metaphysics, that is, with *Treatise* Book I, and in the second place, we are to concern ourselves not with the whole of this *Treatise* I but only with those parts of it where there is some sort of evident continuity between Hume's themes and the themes favoured by philosophers in Hume's native land during the century following the publication of the *Treatise*. In short, we are to be concerned with Hume's metaphysics only so far as they inaugurate the sort of discussion of the problems of perception that was to flourish in the Common Sense School and that went by the name of "Scotch Metaphysics" or "La Philosophie écossaise" or "School of Edinburgh" in England, France and the USA respectively.

Hume, however, was not the first philosopher of his time and country to occupy himself with the problem of perception. The fact is that when, in about 1728, the sixteen-year-old prodigy was beginning, all unknown to his family, to turn his attention to philosophy, Edinburgh and also Glasgow, and even perhaps Aberdeen, were already swarming with earnest young metaphysicians, not much older than Hume. "It is well known," the Ochtertyre papers relate, "that between the years 1723 and 1740 nothing was in more request with the Edinburgh literati, both laical and clerical, than metaphysical disquisitions," and Locke, Clarke, Butler and Berkeley are mentioned as the chief subjects of debate. Moreover a plain enough hint as to the serious critical temper of these discussions is given by Woodrow the diarist where he mentions certain student societies in Edinburgh and Glasgow in 1725 and 1726: "the clubs are like to have a very ill influence; *they declare against reading and cry up thinking*."

Of all the clubs, the most notable, apparently, was the Rankenian Society of Edinburgh, so called because of its meeting regularly in Ranken's tavern. It was founded in 1716 or 1717 for the purpose of literary and philosophical discussion, and its members, to judge by the list appended to Volume I of Woodhouselee's life of Kames, were, at its inception, Edinburgh students in their late teens. Yet, young as they were, they seem to have soon become competent in philosophy, and according to the account given in the *Scots*

Magazine for July 1771, the accuracy of which is confirmed carefully by Dugald Stewart in his *Life of Robertson* and elsewhere, they entered into correspondence with Bishop Berkeley himself and were complimented by him on their understanding of his system. Indeed, if the *Magazine* is to be trusted, the correspondence was not finally terminated until the eve of Berkeley's departure to America (i.e. about 1727), and in the course of it the Rankenians apparently put some very awkward questions to Berkeley about the implications of his views, "pushing his amazing tenets," as the *Magazine* says, "all the lengths they have been carried in subsequent publications."

But Berkeley was not, it seems, the only intellectual influence directly in touch with the country at this time. The Glasgow student society mentioned by Woodrow was apparently in contact with Francis Hutcheson and the other Dublin disciples of Shaftesbury; and the go-between, a precocious young Irishman of Ulster stock, until 1724 prominent in student circles, and already in 1725 contributing articles of a Hutchesonian tendency to the magazine in Dublin, for which Hutcheson himself was writing, must evidently have made a considerable impression, not only on Glasgow, but on the Edinburgh literati, being, in fact, no other than the addressee of the verse-epistle of Allan Ramsey "To James Arbukle of Belfast." In this way, the conditions would be prepared for a favourable reception for Hutcheson's first book – the *Inquiry into Virtue and Beauty* of 1725 – not merely in Glasgow, his old Alma Mater, but also doubtless in Edinburgh, among the Rankenians.

Now in a way much of what has been said so far is mere conjecture, and in order to prove our case we must go to two books, *The Principles of Moral Philosophy* by George Turnbull, born in 1698, student at Edinburgh from 1717 to 1721 and member of the Rankenian Club, and the *Account of Sir Isaac Newton's Philosophical Discoveries* by Colin Maclaurin, born also in 1698, educated at Glasgow University, and appointed Professor at Edinburgh in 1725. Turnbull's book, indeed, was not published until 1740, nor Maclaurin's until 1748, two years after his death, but each book, as it happens, can fairly be claimed as giving some sort of indication of the ideas canvassed in the Rankenian Club and University circles before 1728; Turnbull's book being, according to its author's own preface, ultimately based on lectures he gave to college students some twelve years earlier (i.e. about 1727) when he was Regent at the Marischal College, Aberdeen, and Maclaurin's book, or at any rate the part that interests us, namely the first hundred pages, being said by his editor, Patrick Murdoch, to have already been in existence in its present form since 1728, except for such additions as were necessary to keep it abreast of new works in the field.

Both Turnbull and Maclaurin advocate the use of Newton's experimental method in all physical science, and, in the cause of empiricism, Maclaurin attacks the conceptions of Descartes, Leibnitz and Spinoza. In particular, he opposes the pretensions of these philosophers to establish laws of nature a priori, arguing patiently and in detail against the various proofs offered by Descartes and Leibnitz of the inconceivability of a vacuum, following up his

argument on this point with briefer objections to their alleged demonstrations by pure reason of laws of continuity and of conservation of force, and ridiculing, in between times, Spinoza's way of "assuming a definition of substance and attributes at his pleasure, and passing from these definitions as true ideas (as he calls them) to the necessary existence of the thing defined by a pretended immediate consequence which he will not allow to be disputed" (Maclaurin, *Account*, p. 78). Moreover he does not leave us in doubt as to his opinion of the major heresy of the rationalist school:

> it is not the business of philosophy to take in at once, in one view, the whole scheme of nature; but to extend, with great care and circumspection, our knowledge, by just steps, from sensible things as far as our observations or reasonings from them will carry us, in our enquiries concerning either the greater motions and operations of nature, or her more subtle and hidden works.
>
> (Maclaurin, *Account*, p. 19)

Occupied as he is with polemics against the rival sect, he does not stop to inquire into the philosophical implications of this obligation on us "to allow the necessity of taking it [nature] in parts and of proceeding with all the care and caution we are capable of in enquiring into each part." Perhaps, if he had given more time to questions of first principle, he would have developed a doctrine, much like Hume's, of the externality of relations, but the nearest he comes to doing this is his picking out from Spinoza and quoting the following passage:

> if matter could be so divided that its parts could be really distinct, why might not one part be annihilated while the remaining parts remain connected with each other as before? For, of things that are really distinct from one another, the one can exist and remain in its state without the other.
>
> (Spinoza's *Ethics*, Part I. Proposition 15)

By comparison with Maclaurin, Turnbull gives a somewhat superficial sketch of the principles of empiricism in science. In particular, he does not join issue at all with the anti-empiricists of the continent, and does not, apparently, see that there is any problem about foundations.

To come now to their attitude to the problem of psychology, both Turnbull and Maclaurin are evidently just as much taken as Hume was with the notion of introducing the method of experimental reasoning into moral subjects, and of thereby doing for the problem of mind what Newton had done for the problem of matter. "It was," says Turnbull, "by this important hint [of Newton's] that I was led long ago to apply myself to the study of the human mind in the same way as to that of the human body" (Turnbull, *Principles*, p. iii). Moral philosophy, he goes on to explain more precisely, is distinguished from

physiology, because "it inquires chiefly about objects not perceivable by means of our outward organs of sense, but by internal feeling and experience." Even those internal, introspectable objects, he goes on, "may properly be called parts of nature," and in any case "it is obvious that an enquiry about any of them is a question of natural history or fact" (p. 9). Much the same thesis about making the study of psychology a study of internally experienced facts is maintained by Maclaurin too. "It is evident," he says, trying to confute some a priori speculations of Leibnitz,

> that as it is from internal consciousness I know anything of liberty, so no assertion contrary to what I am conscious of can be admitted *and it were better perhaps to treat this abstruse subject after the manner of experimental philosophy than to fill a thousand pages with metaphysical discussions of it*.
>
> (Book I, ch. 4; italics mine)

Now let us see what Turnbull and Maclaurin make of the central problem of cognition as the result of this psychological, introspective approach. Actually neither of them devotes much space to this sort of issue, the one being chiefly occupied with Newton's physics, the other with an empiricist approach to theology. However, the interesting thing is that such discussions of "the human mind" as we do find in them tend to bear out the traditions that have come down respecting the interests of the Rankenian Club.

Of the existence in Turnbull of a certain Berkeleian tendency there can be no reasonable doubt. In his preface, he praises Berkeley by name, and in his text he follows a procedure very like Berkeley's, dismissing the independent material world as an unnecessary entity, or in other words analysing away the belief we seem to find in ourselves as to the existence of such a world. "A material world," he says, "is to all intents and purposes nothing when considered as absolutely unperceived," because, "a material world without being perceived would be of no use." Nor does he leave his thesis in this summary form; a material world, if considered as beyond the reach of perception, must also, he seems to hold, be considered as beyond the reach of cognition, and thus can be conceived only as an indefinite sort of being devoid of empirical, practical effects on us, and for that reason strictly negligible. But let him put his point in his own way:

> A material world considered apart from perceptive beings hath no existence or at least cannot be said to merit existence; it is neither good nor bad, beautiful nor deformed, useful nor hurtful, it cannot be said to have any property but bare existence which, by consequence, would in that case be thrown away on it.

Finally, in the same passage in his book, and as a consequence of this very reasoning, he makes explicit the very Berkeleian conclusion that "inquiries into the material world can only mean inquiries into the effects material laws

and connections have on perceptive beings"; and, in addition, in another part of his book, when trying to rebut the view that the annihilation of body involves the annihilation of mind, he applies this same principle in a peculiarly Berkeleian way: "when matter is said to be destroyed," he states, "all that can be said to be done is that perceiving beings have lost a certain class or order of perceptions, conveyed into them from without." In short, Turnbull, like Berkeley, tries to analyse away the ordinary common sense notion of matter as existing independently of mind, or in other words is willing to upset the colloquial distinction between *esse* and *percipi*.

Turnbull's book, however, shows, in addition, that other influences besides Berkeley were abroad in the land at the time. If he follows Berkeley on cognition, he follows Hutcheson in morals, and, in developing the Hutchesonian doctrine of a moral sense, he propounds a principle according to which, it seems, his Berkeleian annulment of the colloquial distinction between *esse* and *percipi* becomes a highly questionable doctrine. "Language," he says, "not being invented by philosophers but contrived to express sentiments or what everyone perceives, we may be morally sure that where universally all languages make a difference, there really is in nature a difference. Now all languages speak of a beautiful and a deformed in action as well as of profitableness and hurtfulness," and it is wrong, therefore, he concludes, to declare as some philosophers do that beauty in action (i.e. moral worth or rectitude) is synonymous with, is nothing but, profitableness or expediency. Or again, speaking this time of those defenders of determinism who hold everyday talk about "might have acted otherwise" as nonsensical, he gives an even more emphatic version of this same principle. "Common language," he says, "is built on fact or universal feeling; and to say that such phrases received in all languages and universally understood have no meaning at all is to assert an absurdity."

Turnbull, one might think, should at this point have remembered that Berkeley offers his principle of *esse–percipi* as an amendment of the ambiguities of ordinary speech, and should have gone on to note that the advice of Berkeley to his disciples – "to speak with the vulgar but think with the learned" – is considerably at variance with the Hutchesonian injunction to accept the distinctions of vulgar speech as valid, where these distinctions are found in all languages. In fact, however, Turnbull does nothing of the kind and in general he seems not to have the slightest inkling of any incompatibility between the doctrines of his two masters. It is, he seems to think, only anti-empiricist philosophers who depart from common language in this way, and tamper with its usages, and of course he considers both Berkeley and Hutcheson as representatives of the empiricist school. In the event, therefore, he sees no difficulty in accepting the *esse–percipi*, and in professing adherence to common sense.

Colin Maclaurin, in sharp contrast to George Turnbull, makes a very great deal indeed of the incompatibility of Berkeleianism and common sense in his brief notice of the problem of perception. "It were easy," he concludes, "to

make many more remarks about the philosophy of those whose principles would lead them to maintain that external objects vary with our perceptions, and that the object is different when perceived by different minds, or by the same mind in different circumstances." However, Maclaurin limits himself to making some three points against this position. In the first place, this thesis, he says, is an unnatural one (i.e. in conflict with common sense); "when a figure described on a board," he says, "produces a similar impression on all who see it, it is as natural to ascribe this to one cause as when we speak to a numerous audience the effect of the discourse is to be ascribed to us." That is to say, it would be difficult to deny that the various sounds heard by each of my listeners, though no doubt different in each case, have all one common source, namely, my discourse, and, this granted, why refuse to allow that people's perceptions of a figure, although differing in accordance with the stand point of each, have, in like manner, a common independently existing source? But, in the second place, what of the Berkeleian point that this allegedly common sense notion of material substance is the notion of something which transcends perception, i.e. of an I-know-not-what, and, as such, is quite superfluous? As to that, Maclaurin apparently would reply that Berkeley does not regard as superfluous our common sense notion of other people's minds although these transcend perception too and are not directly knowable, and ought he not therefore, in all consistency, to allow us to retain our natural notion of body in its transcendence. "As it is not an objection," Maclaurin says,

> against the existence of the souls of other men that they may be very different from the notion or conception we have formed of them, so it is no just reason against the existence of body that its inner essence or substratum may be very different from anything we know of it.

However, in the third place, there remains the crucial point of Berkeleianism that it is impossible, strictly speaking, to form *any conception whatever* of this inner essence of body, and it is apparently with an eye to this sort of difficulty that Maclaurin formulates very briefly his one other point. Material substance, i.e. matter in its unobserved state, he seems to concede to Berkeley, is certainly unimaginable, and the crucial question therefore is whether, as the result of this unimaginability, it becomes wholly inconceivable. But this question is surely settled, he seems to think, by reference to a fact or alleged fact still sometimes invoked by philosophers (for example, by Moritz Schlick), namely that while one is quite capable of thinking about past or possible attacks of toothache, one cannot, strictly speaking, *imagine* what the pain was like or might be like. "The idea we form in our imagination of a place or person or figure," he says, "has a much more perfect resemblance to the impression we receive from sense than the idea we form in our imagination of a pain has to the sensation we have felt of it." It is quite inaccurate then, he apparently wants us to conclude, to say as Berkeley does that an

absent thing cannot be thought about unless it can be clearly and distinctly imagined, and, accordingly, material substance or matter absent from perception, in spite of its unimaginability, may still be regarded as conceivable.

Now, although the Rankenian Club was by all accounts a forum rather than a clique, this utter divergence of view between two of its members is certainly noteworthy. In this connection, the relevant fact probably is that Turnbull left Edinburgh and presumably gave up regular membership of the Club in 1722, while Maclaurin settled in Edinburgh only in 1725 and presumably did not take up with the Club before that date; and accordingly it seems a fair surmise that Turnbull's opinions of Berkeley derive from the days of the Club's initial enthusiasm, and Maclaurin's from the time of the Club's final disillusionment, as hinted at in the *Scots Magazine* cited above (p. 11). Interestingly, however, it is also a fact, apparently, that, during the years (1723–5) between the departure of the one from Edinburgh and the arrival of the other there, both these men were for a period colleagues on the teaching staff of the Marischal College, Aberdeen, and it is accordingly quite likely that they may have argued about Berkeley there.

Now, in these circumstances, there is apparently nothing very anachronistic about our speculating as to the sort of argument that might have arisen between Turnbull and Maclaurin, supposing them to have explained to one another the rival views of Berkeley just set forth. On the one hand, Turnbull, we think, might have been able to make a very effective retort to Maclaurin's suggestion that, while Berkeley is right in holding material things in their independence of sense to be unimaginable, he is wrong in holding them to be, while in that state, also in all respects inconceivable. After all – Turnbull might have said – the point really at issue is whether or not one can form any conception whatever of something *never in any circumstances* present to sense, and so it is beside the point to cite the fact, if fact it be, that entities like pains *which have already been present to sense* are conceivable but not imaginable during their absence from sense. In any case – Turnbull might have gone on to reinforce his point – if, as is universally allowed, the blind can form no conception whatsoever of colour because colour is not an object of sense to them, it must on analogous principle follow that men in general can form no conception whatever of the inner nature of body, because the inner nature of body is not an object of sense to them. But, on the other hand, Maclaurin, however troubled by this argument, would still have been able to put a strong case against Turnbull. If – he might have argued – Berkeley is on the right track in upholding the impossibility of our forming any conception whatsoever of what is not given us in some sort of experience, then we have, properly speaking, not only no conception whatever of an independent material world, but also no conception whatever of other minds. Berkeley, then – he might have said – leads, in a word, to solipsism. But now solipsism – he might have gone on – is unnatural or contrary to common sense, and, according to Turnbull's own principles, common sense is incontrovertible.

Accordingly, there must be, on Turnbull's own showing, something wrong with Berkeley's views, in spite of all that can be argued in their favour.

Now there is no need to speculate as to whether the imaginary conversation ever could have taken place. The important thing to note is rather that the issue shown by means of this literary device to be implicit in the divergence between Turnbull and Maclaurin is precisely the issue explicitly brought to light and candidly faced by David Hume, when he is dealing with this range of topics. In the first place, Hume insists on the very position that Maclaurin with his talk about pains tries to upset, by maintaining unequivocally that where there is no sense perception, there can be no corresponding idea, and that therefore, as we lack all sense impression of matter in its unobserved state, we can have no idea whatever of an external world. In the second place, Hume applies the principle he shares with Turnbull and Maclaurin – the principle of common sense – much more consistently than Turnbull does, agreeing that ordinary usage is a clue to belief, pointing out that, in the case in question, "when the thing is absent, we say it still exists, but we do not see it, do not feel it," and going on to conclude that we are indubitably in possession of an idea of an external world. Finally, in the third place, Hume, going far beyond the one-sidedness of Maclaurin or Turnbull, draws the conclusion that there is here a crux of the most serious kind, namely a discrepancy between sense and common sense, and raises the question as to what is to be done to resolve it.

Obviously then there are remarkable coincidences between the approach of Hume to this problem, and that of the Rankenian members. In the first place, Hume seemingly made his philosophy out of exactly the same material as Turnbull. That is to say, a penetrating appreciation of the standpoints of both Berkeley and Hutcheson formed the starting-point not merely of Turnbull in Aberdeen between, say, 1725 and 1727, but also, as Professor Kemp Smith has suggested, of Hume in Edinburgh, about 1728 or 1729; and the chief difference between the two men is that Hume, unlike Turnbull, was aware of the impossibility of both adopting a Hutchesonian standpoint in morals and following Berkeley all the way on cognition. But, in the second place, this perception of Hume in Edinburgh, probably before 1730, that Berkeley is incompatible with Hutcheson was perhaps to a great extent the same as the opinions propounded in the Rankenian Club in Edinburgh about 1727 or earlier in the criticisms made there of Berkeley. Indeed the statement of the *Scots Magazine* cited above that "they carried his {Berkeley's} amazing tenets all the lengths they have been carried in subsequent publications" is nothing short of a declaration that the Rankenians in Edinburgh before 1727 were anticipating Hume, since the reference "subsequent publications" can hardly refer to any other books but Hume's and although, no doubt, this magazine assertion, taken by itself, would have to be regarded with caution, nevertheless it becomes probable enough, once the Maclaurin evidence is taken into account, that in the Rankenian Club Berkeley was being criticised by 1727 as solipsistic and as contrary to common sense.

However, it is after all by no means easy to argue from the undoubted fact of these coincidences between the Rankenians and Hume to the conclusion that the Rankenians were in fact the determining influence in Hume's formation, for the reason that a certain apparently quite un-Rankenian factor – foreign at any rate to the spirit of Turnbull and Maclaurin, and explicitly mentioned by the former as being of only secondary moment – namely, associationism, figures prominently in Hume's original discussion of the problem, and in consequence the only parts of Hume's writings on the topic where the issue at stake is the same as that dividing our two Rankenians occur not in the *Treatise* of 1739 but in the *Enquiry* of 1748. That is to say, Hume, in the *Treatise*, as Professor Kemp Smith has shown, seemingly oscillates between two points of view; his chapter on the subject (*Treatise* I, IV, II) begins by elaborating the dilemma that common sense and sense, though each of equal authority, nevertheless contradict one another on the topic of the external world, and ends, or seems to end, by formulating the thesis that common sense, in so far as it contradicts sense, is a mere transcendental illusion, a secondary formation derivable in the last resort from sense, by a complicated and subtle sort of association of ideas; and he is here, so to speak, at one moment the sceptic, playing off Berkeley and Hutcheson against one another without favouring either, and, at the next moment, the positivist, bent on carrying on Berkeley's position in an improved form, conceding nothing to Hutcheson, but rather explaining common sense away. In the *Enquiry*, on the other hand, all this ambiguity or oscillation disappears; the attempt to analyse away common sense as a fiction of the mind is quietly but unmistakably dropped, and, instead, the contradiction between sense and common sense is emphatically declared to be of a serious, unsurmountable nature. As if to dissociate himself completely from the Berkeleian point of view, Hume has recourse to his famous aphorism that Berkeley's arguments admit of no refutation but produce no conviction – an aphorism which we will misunderstand unless we bear in mind that, as Professor Kemp Smith has argued, conviction, i.e. natural belief, is here regarded by Hume as authoritative and uncontrovertible. Indeed the idea behind the aphorism of Hume's would seem to be this, that the Berkeleian principle of appeal to sense, and the Hutchesonian principle of appeal to common sense or language cannot be reconciled with one another, and yet neither of them can be refuted; and the passages in Hume where the aphorism occurs read like a comment on the issues raised in the Rankenian discussions.

Why, then, is Hume's *Enquiry* of 1748 somewhat nearer in spirit to the writing of the Rankenians than his *Treatise* of 1739? Of course, it is perhaps idle to ask questions of this kind, and one must in any case be very cautious in one's answers. However, the most likely answer, we shall argue, would seem to be that Hume was moved to recast the relevant section of the *Treatise* and to produce the revised version of 1748, precisely on account of the criticisms and misunderstanding on the part of the philosophical set in his own native city, i.e. on the part of the men prominent in the Rankenian Club in their youth. If

so, then it would seem that while Hume in some vague, indirect way may very well have been "influenced" by the Rankenians before he left for France, i.e. before 1733 – in the sense that he was occupied with the same books and problems as they were – nevertheless he was under Rankenian influence in a much more direct, definable way in the decade between the *Treatise* and the publication of the *Enquiry*.

Now as evidence of the unfavourable reception of the *Treatise* in the Edinburgh of the 1740s, there is a remarkable passage in Maclaurin which certainly does not date back to 1728, and was presumably added, in accordance with his aforementioned habit of keeping his MSS up to date, at some time between 1739 and the year of his death, 1746, as his considered judgment on Hume's *Treatise*. Maclaurin, after concentrating his attention throughout the whole of his Book I on the three great a priori systems of Descartes, Spinoza and Leibnitz, suddenly introduces on the very last page of this first book a reference to two more recent systems of a very different tendency. "Some," he remarks, "from contrary disposition [i.e. by dislike of materialism] admit nothing but perceptions and things which perceive, and some have pursued this way of reasoning till they have admitted nothing but their own perceptions." "In forming these systems," he proceeds, meaning both systems of the Continental sort and systems of the kind just noticed,

> he who has prosecuted each of them furthest has done the valuable service that, while he vainly imagined he had completed or improved it, he really opened up the fallacy and reduced it to absurdity. Many who suffered themselves to be pleased with Descartes' fables were put to a stand by Spinoza's impieties, and some, willing to give up the reality of matter, would not think of giving up their own and other minds.
>
> (p. 95, 1748 edition)

In reading Maclaurin's very cool appraisal of the *Treatise*, written at least two years before the publication of the *Enquiry* and itself published (with a Royal Society *imprimatur*) in the same year as the *Enquiry*, we can understand better both what Hume meant in saying that the *Treatise* "fell *dead-born* from the press" and also perhaps why he set about preparing a radically different version of his argument. The fact is that the *Treatise* was regarded by the best mind in Edinburgh bar Hume's merely as an attempt to continue and improve on Berkeley, and that in all probability the only tendency detected by Maclaurin in the book was the tendency to explain away common sense as a fiction. Indeed, in his capacity as Newton's chief official disciple, Maclaurin would be very likely to take a poor view of Hume's claim that the principle of association – i.e. the principle behind the fictions – was to do for psychology what Newton's principle of attraction had done for physics; and accordingly, in lumping Hume with Berkeley and the Continental system-builders, he perhaps wanted to indicate that, in his own, authoritative opinion, the would-be Newtonian aim of the *Treatise*, as Professor Kemp Smith calls it, is

conceived much more in the a priori speculative spirit of Descartes or in the analytic reductive spirit of Berkeley than in the genuinely experimental fact-loving spirit of Newton.

What then of Hume's reaction, when he heard judgments of this sort passed on his *Treatise*? In the first place, Hume, we may be pretty sure, would not be very happy to be told that his contribution to philosophy lay in having *unwittingly* carried through a *reductio ad absurdum* of the Berkeleian or reductive principle; for example, Hume was evidently not very enthusiastic about the aptness of this sort of description of his achievement, when, in 1764, Reid compliments him in terms that recall the passage by Maclaurin. In the second place, to correct the superficial impression, Hume in his *Enquiry* of 1748 goes out of his way to suggest that his achievement in this quarter lies not in the *reductio ad absurdum* of Berkeley or associationism, i.e. of a passing fashionable hypothesis, but in the *reductio ad absurdum* of – so to speak – the human mind, i.e. in the demonstration of the mutual irreconcilability of a set of basic principles which no competent philosopher could ever refuse to admit. In other words, Hume in his remarks in the *Enquiry* about perception presumably meant to deny that the crux brought to light in the *Treatise* is a superficial avoidable difficulty due to some mistake in the preliminary statement of the facts; and on the contrary meant to assert that the *Treatise* crux is a quite fundamental difficulty confronting philosophers of all tendencies, no matter what their system or hypothesis may be.

But here let us go back to the text of the *Treatise* in order to show to what extent the issue faced there by Hume is at bottom the same as the issue arising between Turnbull and Maclaurin. According to Hume there is a thorough-going discrepancy between facts as they are for sense and the same facts as they are for common sense, or, if you like, between the colloquial description of one's situation in the world and the phenomenological description of one's situation in the world, and he sets about making this point in the following manner. A plain man, Hume points out, will say that the table is beyond his hand, and that the hand is part of his own body, but the table is a foreign body; accordingly the habits of everyday speech may be said to testify to the existence of a belief in the plain man's mind that bodies like the table are distinct from and external to him and his sense organs. Now Hume's intention is of course to raise a question as to the evidence the plain man has for this belief or set of beliefs, and, in order not to have too complicated an issue on his hands, he proposes to disregard entirely that part of the plain man's belief that involves a reference to his own self in the sense of thinking subject, and to confine himself entirely to that part of the plain man's belief that involves a reference to his own self as incarnate being, that is, as a body external to other bodies. In that case, therefore, the question at issue simply concerns the foundation of the belief that a certain unfamiliar body, namely the table, is situated beyond a certain familiar body, namely the hand, the eye, or other sense organ, endowed with certain familiar feelings such as muscular sensations. But now, even if the belief in externality is reduced to

this artificially simplified form, the question as to its foundation, Hume argues, still remains as obstinate a crux as ever it was, and he proceeds to argue that not one of the five senses, if regard is paid to the *original* deliverances of each, ever corroborates any such belief. Tastes, smells, sounds, Hume argues, turn out to be as vague and elusive as muscular sensations are if you try to discover by introspection their spatial relations and places, and for that reason cannot properly be regarded as being anywhere at all, i.e. as existing in space. Accordingly the belief in externality cannot be based on hearing, taste or smell. What then of sight which at any rate does present its objects, namely colours, as spread out in space? In the light of Berkeley's theory of vision, Hume points out that these coloured objects are not seen as external to the eye, i.e. to the appropriate part of oneself, and in any case present themselves not as common sense bodies but as flat patches. Accordingly there is no foundation for the belief that the objects of vision are seen as being beyond one's eye. Nor, finally, is common sense confirmed even by tactual experience. We say, or believe, no doubt, that the hand, when acting as organ of touch, presses on the table, and we claim in effect to feel, in immediate experience, the solid table as being beyond the hand that serves us as feeler but we do not, Hume maintains, immediately experience in the actual act of touching anything remotely resembling this contact of two bodies, this externality of table to hand which our common sense thus alleges to be occurring. On such occasions, we see, no doubt, our hand resting on the table, or more precisely perhaps, one coloured shape called a hand hiding part of another coloured shape called a table, but – and this is Hume's main point – the corresponding tactual experience makes us aware only of one solitary solid shape, and not of two solid shapes in contact, or, to put the matter more pointedly, whereas we see both the hand and the table, we feel only the table and do not feel the hand. But even if it is thus the case that we are not aware of our organ of touch as a solid shape, are we not, during tactual experience, aware nevertheless of the co-existence of two distinct objects, each of a different sort, namely "a sensation conjoined with solidity," to use Hume's expression? Or, in other words, are we not aware simultaneously of both the above-mentioned solitary, solid shape or outer object, and our muscular sensation or inner object? But, Hume replies, if we are to be aware of the alleged objects as distinct from one another, we must have experience of the objects in separation from one another, for example, the solid *minus* the sensation. But surely we cannot ever encounter this solid *minus* the sensation, since, to do this, we would have to know by experience what an unfelt solid, a solid beyond experience, is like. Accordingly, we cannot analyse the object given in tactual experience into two distinct parts, a sensation on the one hand and a solid on the other, i.e. into an inner component and an outer component, because the experience in question turns out to be one and indivisible, or, as Hume puts it, to be a simple sensation. In short it seems impossible to hold that our common sense belief in externality is even in its most elementary form derived from experience.

But now, in the second place, the refutation of the view that our common sense belief in externality arises through our experience of the relation of our body to other bodies has not yet been carried through, and Hume has now to cope with the argument that we ordinarily believe the table to be beyond the hand, simply because, as was noted above, we see both the hand and the table and their externality to one another. But this argument, Hume notes, will not do. It is, for example, notorious that the shape believed to exist independently of us rarely or never tallies with the coloured shape actually present to vision, and accordingly the sort of claim we make in saying in a common sense way that our hand rests on the table is by no means borne out by actual introspections of the visible counterparts of the objects in question. "Properly speaking, it is not our body we perceive when we regard our limbs and members, but certain impressions." Moreover, Hume does not confine his illustrations of this principle to sight and the senses most obviously affected by illusion, but, by a characteristically bold move – not easy perhaps to parallel in the philosophical discussions of the time – goes on to throw out a hint that an analogous discrepancy is to be found perhaps in tactual experience. "Though the solidity," he says, "continues to be always invariably the same, the impressions of touch change every moment in us, which is a clear proof that the latter are not representations of the former." The point of this is apparently that in the case of the experience of handling a ball – for example – common sense believes the object to be of an unchanging degree of solidity throughout, whereas introspection or phenomenological description can find nothing but an interrupted succession of shifting "feels," not all of them of the same strength. If so, then the argument here is analogous to another argument of Hume's. "The table which we see seems to diminish as we remove further from it; but the real table that exists independently of us suffers no alteration. It was therefore nothing but its image which was present to the mind." But the last argument is Hume's main reason for holding the sort of thesis described earlier in the paragraph – for example, that I do not *really* see my hand but only a certain impression. The principle then is the same in relation to both touch and vision.

There are two points to bear in mind about all this. First, the problem of the external world as expounded here is only the second of Hume's co-ordinate questions: "Why we attribute a *continued* existence to objects, even when they are not present to the senses; and why we suppose them to have an existence *distinct* from the mind and perception." Second, it is not by any arbitrary interpretation or guess that we have identified this Humean problem of belief in distinct existence with the rather restricted problem developed above, of our belief that the material objects perceived by us present themselves as both located beyond our organ of perception and standing out in sharp contrast to our feelings during the act of perception. Hume himself indicates pretty plainly that he himself understands the problem in just this sense. "Under this last head," he says, referring to the problem of *distinct* existence, "I comprehend their situation as well as relations, their

external position as well as the *independence* of their operation" (italics in Hume; "their" means the situation as well as relation of the bodies at present perceived).

But there is another matter to be settled before the interpretation of Hume offered here can become acceptable. It will be asked, perhaps, what justification we can give for treating Hume's discussion of touch at the end of *Treatise* I, IV, IV as if it were an immediate sequel to his discussion of the other four senses early in *Treatise* I, IV, II? Now in defence of this procedure all that we can urge is that the passage on touch, difficult and obscure if taken by itself, soon begins to make good sense if taken as a sequel to the earlier passage on the other senses. Compare, for example, the two following extracts, the first from I, IV, II, and the second from I, IV, IV.

> That our senses offer not their impressions as images of something *distinct*, or *independent*, or *external*, is evident because they convey to us nothing but a single perception, and never give us the least intimation of any thing beyond. A single perception can never produce the idea of a double existence.

> The impressions of touch are simple impressions, except when considered with regard to their extension; which makes nothing to the present purpose: And from this simplicity I infer, that they neither represent solidity, nor any real object.

In our view, this second passage is best interpreted as an illustration of the general principle announced in the first passage. In the first place, consider the curious phrase, "simple impressions, except when considered with regard to their extension which makes nothing to the present purposes." Now the impression of touch Hume has in mind here, as appears in the course of his discussion, is the impression got by a man who "presses a stone with his hand"; that is to say, the impression in question, being the impression of a solid shape or extension, is, according to Hume's ordinary usage, a compound impression. Accordingly Hume's meaning would seem to be that the impression got by feeling a stone is a simple impression, not in the ordinary sense in which he uses this term, but in some other sense. But, in the second place, Hume, continuing his analysis, tells us that in the case in question it is impossible "to remove some part of the impression which the man feels with his hand" when he presses the stone, without at the same time removing the whole impression. Presumably then, Hume, in calling the impression simple, means that it is indecomposable, i.e. that it does not involve two distinguishable, separable parts, one of them the organ of touch, or something belonging thereto, and the other the object of touch; or in other words that we can't distinguish between feeler and object felt. In short, then, Hume's point here would seem to be a development of the point made in the earlier chapter, namely that the tactual impression of the stone is a single, indivisible

perception and can never convey the idea of a double existence or distinct existence.

As this question of touch is somewhat important, it will be best to state, in our own words, what we take to be the substance of Hume's remarks in the paragraph preceding the one just summarised. His problem, apparently, is somewhat as follows: do we have in our experience of a solid body an experience of that body as being independently real, i.e. as being distinct from ourselves and from our bodies? Now in answer to this question he makes apparently one main point. He asks us to consider the action of touching a stone or a table from two points of view – one of them being that of common sense, or perhaps visual observation (it doesn't matter which), and the other being that of attentive introspection to what is actually felt; and on the strength of this comparison he expects us to agree with him that there is very little resemblance between the process as it is experienced from without, and the same process as it is experienced from within. Apparently his point is that the distinction between the feeling hand and the stone does not emerge nearly so clearly from the internal standpoint as it does from the external standpoint, and, following up this point, he goes on to make the further contentions we have discussed in the previous paragraph.

This said, we reach the end of our present theme – namely, the rise to prominence in Scotland of the problem of the external world. It might indeed be expected that, in the interests of completeness, we would append to the survey of Hume on the *belief in distinct existence* a parallel survey of Hume on the *belief in continued existence*. However, in view of the limited purposes of our study, this will not be necessary. The fact apparently is that whereas Hume's discussion of belief in distinct existence starts, so to speak, from where the Rankenian Club left off, and prepared the way for the century-long inquiries and arguments of Reid and the Common Sense School, his discussion of belief in continued existence made no impression whatever on philosophy in his native land, and raised issues outside the scope of his forerunners and his successors.

Here let us turn abruptly to quite another side of Hume's discussion of the perception of an external world – namely, his discussion of the foundation of our ordinary belief in the spatial extendedness of objects of sight and touch. The problem at stake in this new case, just as in the previous case, seems to have been "in the air" at the time in Hume's city, and some points in Hume's doctrine become more intelligible in the light of contemporary texts.

In the introductory part of Maclaurin's book, the most elaborate piece of argumentation is an attempt to combat a Leibnitzian thesis that Newton's system rests on a contradictory notion, that of a vacuum, and to prove, against Leibnitz, that, on the contrary, it is quite good sense to postulate a vacuum. But now the last part of Hume's chapter on space (*Treatise* I, II, V) is occupied explicitly with much the same point at issue as arises between Maclaurin and Leibnitz, and Hume's contribution consists in the contention that Newton's system works quite well without the sort of vacuum Maclaurin and Leibnitz have in mind – namely, a sort of absolute or metaphysical vacuum.

Now there is nothing so very unreasonable in the idea that Hume is here intervening in this very controversy. Professor Hendel has already pointed out that Hume's ideas about space "imply a criticism of Newton and Locke not unlike that which Leibnitz propounded in his yet unpublished *Nouveaux Essais*," and he goes on to suggest that Hume could very well have picked up hints as to the Leibnitzian view about space from two works by John Toland, an Irish philosopher resident in Germany and in touch with the Leibnitzian circles. But now there is no difficulty, surely, in supposing yet one more Irish philosopher, and a Glasgow student at that, to have been studied attentively in Scotland in the 1720s. Accordingly – to state the most probable implication of these facts – Hume's contribution to this Maclaurin controversy was to point out that, although Leibnitz is in the right about the notion of a vacuum, the essentials of Newton's system can be defended just the same, and that, in order to defend it, the proper question to ask is what can be meant in empirical terms, phenomenologically speaking (Hume is most emphatic on this point), by the notion of space, or, in other words, whether a notion of empty space, quite adequate for Newtonian purposes, can be "logically constructed out of sense-data" – to use a modern phrase.

Furthermore when it comes to the actual business of phenomenology, Hume's discussion of space-perception, we believe, bears somewhat the same sort of relationship to previous discussions in his neighbourhood of the paradoxes of Berkeley's *New Theory of Vision*, as his discussion of the belief in externality seemed to bear to previous discussions in his neighbourhood of the paradoxes of Berkeley's *Principles of Human Knowledge*. That is to say, somewhat as in the other case, Hume would seem to be sometimes siding with those who prefer "convictions" or common sense to Berkeley, sometimes with those who prefer Berkeley to common sense.

Let us begin by proving, by quotations from Turnbull, the existence of a whole-hearted admiration in the circle in question for Berkeley's theory of vision. "How few, not very much accustomed to philosophy, are not startled to hear that distance is not an idea of sight, but an idea of touch suggested by sight!" Or again, consider this other passage:

> How soon do we learn to judge of magnitudes, distances and forms, and of the connection between the ideas of sight and touch, as far at least, as the common purpose and conveniences of life require; so much, that, when we are grown up and begin to reflect, we have quite forgot how we learned these connections and became able to judge them so readily. Nay, when we come to play the philosopher about them, it is very difficult for us not to confound those ideas which are however totally distinct from one another and only connected together by the institution of the Author of our nature.
>
> (Turnbull, *Principles*, vol. 1, pp. 87–8, vol. 2, p. 39)

Maclaurin, by comparison, adopts a much more judicious attitude to Berkeley's theory of vision.

> A learned author, of a distinguished character, begins an ingenious treatise upon this subject, by observing, "It is, I think, agreed by all that distance, of itself and immediately, cannot be seen. For distance, being a line directed endwise to the eye, it projects only one point on the fund of the eye, which point remains invariably the same, whether the distance be longer or shorter."

"The distance here spoken of," Maclaurin continues, speaking now for himself,

> is distance from the eye; and what is said of it is not to be applied to distance in general. The apparent distance between two stars is capable of the same varieties as any other quantity or magnitude. Visible magnitudes consist of parts into which they may be resolved as well as tangible magnitudes, and the proportions of the former may be assigned as well as of the latter; so that this author goes too far when he tells us that visible magnitudes are no more to be accounted the object of geometry than words; and when he concludes of distance in general what has only been shown of distance directed endwise to the eye, and pretends to demonstrate that the ideas of space, outness and things placed at a distance are not, strictly speaking, the object of sight, and are not otherwise perceived by the eye than by the ear.
>
> (Maclaurin, *Account*, opening of Bk III)

The precise point Maclaurin makes here against Berkeley can best be brought out by a quotation from Reid to much the same purpose.

> We may observe, by the way, that the ingenious author [Berkeley] seems not to have attended to a distinction by which his general assertion [that distance of itself and immediately is not seen] ought to have been limited. It is true that the distance of an object from the eye is not immediately seen; but there is a certain kind of distance of one object from another which we see immediately. Astronomers call it angular distance; and although they measure it by the angle, which is made by two right lines drawn from the eye to the distant objects, yet it is immediately perceived by sight, even by those who never thought of that angle.
>
> (Reid, *Works*, p. 281–2)

Maclaurin, then, is impatient with Berkeley's denial of the common sense notion that space-relations are the objects of sight as well as of touch. Accordingly, while admitting Berkeley's narrower thesis that the visual perception of depth is not original but acquired by tactual association, he goes on to deny the wider thesis of Berkeley that the visual perception of space-relations is in no degree innate but is due to the influence of touch. In defence of his position, he asserts that we see the distance of the stars from one another

immediately and independently of touch; and the point of taking a case like this presumably is that, as the stars are out of reach, tactual association cannot be regarded as influencing vision here.

It is now time to turn to Hume.

> 'Tis commonly allowed by philosophers that all bodies that discover themselves to the eye, appear as if painted on a plain surface, and their different degrees of remoteness from ourselves are discovered more by reason than by the senses. When I hold up my hand before me, and spread my fingers they are separated as perfectly by the blue colour of the firmament as they could be by any visible object which I could place between them. In order, therefore, to know whether sight can convey the impression and idea of a vacuum [i.e. space empty of object in the sense that the space separating the fingers is empty of objects] we must suppose that amidst an entire darkness there are luminous bodies presented to us, whose light discovers only the bodies themselves without giving us any impression of the surrounding objects.
>
> (*Treatise* I, II, V)

Hume here is evidently concerned with much the same topic as Maclaurin. Taking for granted the primary and widespread thesis that the distance of objects from the observer's eye – i.e. their depth or three-dimensionality – is an acquired and not an original perception of vision, Hume means to consider carefully the secondary, and, so to speak, peculiarly Berkeleian thesis that the distance of objects from one another as exemplified in the space-separatedness of the fingers is likewise an acquired and not an original perception of vision. Moreover for Hume just as much as for Maclaurin, the decisive question in this connection is whether sight originally or immediately reveals the intervening spaces between one star and another in the night sky (cf. luminous bodies presented to us amidst an entire darkness).

Hume formulates the problem somewhat in the following manner. I see three stars suddenly appear in the midst of a previously pitch-black night – that is, I remember what the sky was like before these numerically different objects appeared, and I see what it is like now that they have appeared. That is all the experience I am allowed to have, and the question is whether, on the basis of that experience alone, I could even understand, let alone verify, a proposition (which I now, as a matter of common sense, know to be true) to the effect that the distance between this star and that star is twice as great as the distance between the latter star and a third star.

Hume disposes of the matter pretty quickly. If I am to speak of the relation between star one and star two as being twice as extensive as the relation between star two and star three, I must understand what would be meant by saying that there are two parts to the first relation, each of them equal to the whole of the second. ("Visible magnitudes consist of parts into which they may be resolved," said Maclaurin, in the above quotation (see p. 26), thereby

conceding to Hume his premises.) Accordingly the question now is whether, on the basis of the experience allowed to us, we can give a relevant sense to the expression "whole and part" in reference to the objects that now interest us. But once the question is put in that form, there is no longer any reason, Hume thinks, to remain in any doubt about the answer. The darkness, surely, he points out, is, if taken by itself, "without parts, without composition, invariable and indivisible," and, in elucidation of this thesis, he argues that, when everything is pitch-black we are as good as blind or see absolutely nothing – his object in this assertion apparently being to rule out as contradictory the counter-thesis that in the dark we see something indefinite or, in other words, a spread-out whole containing parts, but not definite, clear-cut parts. ("It is evident that the idea of darkness is no positive idea, but merely the negative of light, or, more properly speaking, of coloured and visible objects" (*Treatise* I, II, V, pp. 60–1).) This granted, then, we couldn't in the circumstances get the idea of extension from our memory of what the night was like without stars. But further, does the appearing of the stars, he goes on, make any real difference to the situation in this respect? At any rate if the view followed is sound, it is evident that, if we were in parallel circumstances to look at the pitch-black corner of a partly lighted street, we would *see* nothing – and therefore no extendedness – in the direction in which we look. Accordingly, "it is impossible that the dark and indistinguishable distance between the two [luminous bodies] can ever produce this idea" (i.e. of extendedness).

In order to understand Hume's view on the topic by comparison with Maclaurin or Reid's, it is necessary to go not merely to the text of *Treatise*, I, II, V, but also to the appendix added after Book III. In the text, Hume, owing to some confusion, had come pretty near to conceding the orthodox theory about angular distance mentioned by Maclaurin and Reid, but in the appendix he owns to having made a mistake on this point, and accordingly introduces a correction. An error, he says,

> may be found in Vol. I page 62, where I say that distance between two bodies [i.e. the luminous bodies in the dark] may be known among other things, by the angle which the rays of light flowing from the bodies make with one another [i.e. in the eye]. 'Tis certain, that these angles are not known to the mind, and consequently can never discover the distance.

In this decisive " 'Tis certain, that these angles are not known to the mind," Hume presumably is putting to a special use a principle enunciated in the same appendix in connection with topics of this kind: namely, "So long as we confine our speculations to the appearance of objects to our senses, we are safe from difficulties, and can never be embarrassed by any question." If so, Hume's point is simply that the question at issue is a question as to the purely visible facts, and the angles made by light rays are accordingly irrelevant as they are not visual facts at all; or that, since the initially postulated situation

is that of stars seen in a pitch-black night by uncontaminated virgin vision, the sort of talk the angular distance theory would seemingly involve – namely talk about imaginary coloured lines from the stars conceived as meeting in some visible organ of my body – is ruled out by our preliminary supposition.

But, at this point, it is quite in order to recall Reid's assertion that, "although they measure it by the angle, which is made by two right lines drawn from the eye to the distant objects, yet it is immediately perceived by sight, even by those who never thought of that angle." That is to say, Reid obviously holds that, even where "these angles are not known to the mind," the mind, nevertheless, immediately and without measuring, sees the so-called apparent or angular distances between the stars, and, therebye, makes a claim, directly at variance with Hume's, about the purely visual facts. Accordingly, in order to clarify Hume's position, we had better ask what sort of reply he would have made to Reid.

Now there can be little doubt as to the line Hume would have taken in the face of this crux. He would probably have pointed out that, where people have already learned by experience to perform the appropriate operation of measurement, they are in a position to pass rough and ready opinions, preliminary to actual measurement as to the visible distances of stars from one another, but he would have then gone on to raise a query as to whether people, before they have the least notion of the mode of measurement in question, are in a position to form any opinion whatever about the matter in hand. Now Reid, he would have perhaps continued, apparently is relying on the idea that people have notions of size before they have notions of measurement, but such an idea, surely, is tantamount to the claim that people have notions of visible size before they have precise notions of visible size, and, as such, seems to contain a contradiction, since it seems nonsense to speak of having a conception or notion which is not clear and precise.

Let us see, finally, how Hume works out his peculiar view of the purely visual datum in the case in question. It is "our natural and familiar way of thinking," he tells us, to believe that "when only two luminous bodies appear to the eye, we can perceive whether they be separate or conjoined or whether they be separated by a great or a small distance." That is to say, we believe ourselves, in cases like this, to be immediately aware, by vision, of space-relations. But, Hume goes on, in this is an opinion which "we will learn to correct by a little reflection."

Reflection, Hume claims, leads us to the conclusion that we don't actually see the spatial relations between the stars in all these different cases. To start with the point already made, we can't claim to see differences in the disposition of the pair of stars in their relationship to their background or environment, since the alleged background or environment – the gloom said to encompass and to relate the stars in different ways – has revealed itself in analysis to be nothing positive, and so not to be an object of vision at all. But, even granting this, do we not, it may be asked, actually see a spatial difference between the relationship of the two stars to one another in all these different

cases? Hume apparently had envisaged very distinctly this sort of objection and some of his most celebrated principles were perhaps devised for the purpose of meeting it. His approach to the matter probably consisted in asking what is meant by saying that we see two numerically distinct stars, and in invoking as relevant to the case the principle that what is distinguishable is separable, or, in other words, that the proof of empirical distinctness is to be found, in cases like this, in empirical separateness. The point of this principle is presumably that – to take a particular case – if my only visual experience had been that of two conjoint stars always appearing together and always disappearing together, I would not have the least ground for distinguishing the red component from the blue component (supposing them of different colours), so long as I had no experience of each in independence of the other, and would naturally believe myself to be looking at one single, indeed, for aught I knew to the contrary, simple object; or that – to put the matter in a more general way – before I can claim to be looking at two stars, I must have managed to see each of them in separation from the other and by itself, i.e. successively. But if this is so, then the visual experience basic to the claim of seeing a pair of stars is that of seeing one solitary light by itself in the dark followed by another solitary light by itself in the dark, and it will readily be granted that, in a case of a purely visual experience of a succession of differently coloured lights, each alone in the dark, one can't have the least notion of the whereabouts of one in relation to another, or in other words it doesn't make sense to talk of space-relation here. But, in that case – to mention a final objection – what about our undoubted impression of the pair of visible stars as being in one case conjoined, in another case separate but near, and in a third case far apart? As regards this point, reflection, Hume probably thinks, will tell us that our impressions or notions of this kind, in so far as they must be allowed some sort of a foundation in the experience in question, can perfectly well be traced to a sense quite different to that of sight, and one, moreover, not involving any information about space-relations – namely the organic sense. In speaking of two stars as far from, or as near to, or as just beside, one another, all we mean, practically speaking, is, according to Hume, that, in looking from the one star to the other, or rather in the quickest successive experience of the one after the other, we feel a larger, or a shorter, or a minimal train of muscular sensations in the eye-balls, as the case may be, and the impression of differences of this sort (Hume leaves their nature very vague) gives us the germ of the notion we want to explain, without involving any experience of space, as yet.

In all this, Hume has been, it is plain, defending one of Berkeley's opinions (albeit with arguments sometimes Leibnitzian rather than Berkeleian in inspiration) against the attack of Maclaurin, or rather perhaps against an attack quite similar to Maclaurin's, and so far accordingly has been aligning himself with devotees of the Berkeleian theory of vision, like Turnbull, i.e. with Maclaurin's opponents. However, Hume's agreement with the Berkeleians does not apparently in this field extend much beyond the one

point in question, and, at the next stage of his discussion of the problem of seeing space, we find him brushing aside, as brusquely as Maclaurin himself would have done, the main suggestion offered by Berkeley himself towards the solution of this problem, and so enthusiastically commended by Turnbull – the suggestion, namely, that our visual perception, both in a case like the present and in all other cases, though not originally and in themselves space-revealing, come in the long run to be regarded as space-revealing through the operation of tactual association, that is, because the corresponding tactual experiences are, originally and in themselves, space-revealing, and hence come by custom to infect the visual perceptions with spatiality.

To make this point clear, let us confine ourselves first to the sort of case we have been discussing. Hume's position, here, we find, is that the same sort of arguments enabling us to deny the original or immediate visibleness of the space-relations between the luminous bodies set apart in the dark can also be used to deny the original or immediate palpableness or tangibleness of the space-relations between the solid aspects of these bodies suspended in the air. The immediate successor to the original paragraph quoted about the luminous bodies runs as follows:

> We must form a parallel supposition concerning the objects of our feeling. It is not proper to suppose a perfect removal of all tangible objects: we must allow something to be perceived by the feeling; and after an interval and motion of the hand or other organ of sensation, another object of the touch to be met with; and upon leaving that another; and so on, as often as we please. The question is, whether these intervals do not afford us the idea of extension without body [i.e. of empty space]?

Hume's treatment of this new case is pretty well a duplication of his treatment of the other case. In the first place, he points out that, during the time elapsing between the man's feeling one solid object and his feeling the next solid object, nothing occurs but "the perceiving of that sensation we call motion in our hand or organ of sensation," and, these feelings being muscular feelings, "he feels in that case a certain sensation or impression, the parts of which are successive to one another, and may give him the idea of time, but are certainly not disposed in such a manner as is necessary to convey the idea of space or extension." In the Appendix, Hume goes on, just as before, to deal with the objection that the analysis given wholly fails to account for our natural propensity to describe an experience of this sort as the experience of two solids as not in contact with or not touching one another.

> If it be asked whether two objects having such a distance between them [i.e. having an intangible distance between them, or having nothing palpable between them] touch or not; it may be answered that this depends on the definition of the word *touch*. If the objects be said to touch when the hand feels both objects sucessively, without any interposed

> motion [i.e. without feeling one of these trains of muscular sensation accompanied by something solid], these objects do not touch.

That is to say, our language in these cases can quite adequately be accounted for up to a point, without invoking space-perception.

To touch here for a moment on Hume's discussion of space-perception as a whole, we will venture the remark that much the same line very likely is followed in those parts of *Treatise* I, II we will leave aside as in the parts of it we have just explained. That is to say, Hume at one and the same time rejects the wholesale Berkeleian "reduction" of the perception of visual extension to perception of tactual extension, and yet accepts a "reduction," devised by himself no doubt but clearly owing something to Berkeley, of the perception of the extended to the perception of the unextended proceeding on parallel lines in the case of vision and of touch. For example, in discussing the question of the condition of our awareness of colours, or lights as extended in space, he evidently wants us to regard coloured extension as definable, at least in principle, in terms of the number of contiguous minima visibilia, expecting us, on the one hand, to arrive at the notion of a minimum visible or "atom of colour" by the same sort of employment of the principle that whatever is distinguishable is separable as was made above in dealing with the stars; and, on the other hand, to analyse the spatial notion of contiguity or side-by-sideness on the now familiar lines of its reducibility to the non-spatial organic sensations involved in seeing. So too, in the case of touch, the procedure followed is in all respects parallel; the minimum tangible or "atom of solidity" that enters into the business is apparently the exact analogue of the minimum visible, and side-by-sideness and apartness are disposed of by reference to the purely temporal feelings of movement in the hand.

In view of facts like these, we are very much attracted by the hypothesis that in this *Treatise* discussion of space-perception Hume is trying to reconcile pretty much the same opposite tendencies as he also tries to combine in his *Treatise* (NB, *Treatise*) discussion of belief in an external world – namely the tendencies which we have called respectively Berkeleian (Professor Kemp Smith calls it Newtonian) and Hutchesonian, that is to say, the tendencies represented among Hume's own countrymen by Turnbull on the one hand, and Maclaurin on the other. However, so far as we have gone, we have only dealt adequately with the tendency in Hume we call (for the sake of a word) Berkeleian, and if we are to render our hypothesis acceptable, it remains for us to show just what Hume does, on this one subject, in the way of moving in an anti-Berkeleian direction.

Let us begin by repeating, in clearer language, the one point we have already made about Hume's anti-Berkeleianism. Our starting-point will be a quotation from Hutcheson, brought to general notice by Professor Kemp Smith. "Extension, figure, motion and rest," says Hutcheson, "seem therefore to be more properly called ideas accompanying the sensations of sight or touch than the sensations of either of these senses," (Hutcheson, *Essay*, p. 3,

note; Kemp Smith, *The Philosophy of David Hume*, p. 280), and he means by that assertion, as the context plainly shows, that extension and the rest are objects accompanying both our experience of colour, and our experience of hardness or solidity, and so common to both touch and sight. Now this doctrine is, of course, by no means peculiar to Hutcheson. It is found also in Locke, not to mention anybody earlier, and – to come now to the point that concerns us here – it is one of the things in Locke that Berkeley most strenuously opposes. Hutcheson's doctrine, then, may fairly be regarded as anti-Berkeleian. Moreover Reid, considerably later in the century – though that doesn't matter here – repeats this doctrine approvingly pretty much following Hutcheson's very words, in connection with his criticism of Berkeley on the point in question. But now, as Professor Kemp Smith has argued, this Hutchesonian doctrine seems to have formed the starting-point of Hume's treatment of space-perception, and, accordingly, Hume, for all that he is a "reductionist" and Reid is not, is at one with his classic opponent on this subject.

But let us try to make Hume's position a little more definite by a further reference to his contemporaries. Maclaurin, it will be recalled, when defending the view that space is an object common to sight and to touch but not to hearing or smell, repudiates Berkeley's dictum that space is "not otherwise perceived by the eye than by the ear." But now Hume, even when his peculiar point of view on the subject is taken into account, is here in agreement with Maclaurin on fundamentals. That is to say, Hume, while holding space-perception to be "a logical construction" out of the perception of the non-spatial, i.e. (one might say) of the temporal, nevertheless lays it down that "the logical construction" in question can be managed both in the case of the non-extended impressions of sight (i.e. atoms of colour) and (in a quite separate but parallel way) in the case of the non-extended atoms of solidity, but does not in the least apply in the case of the equally non-extended impressions of sound, of smell or of feelings like muscular strain or aversion. Hume, indeed, would hesitate to go all the length of saying that space or extension is an object common to (in the sense of "identical for") both sight and touch, but would certainly admit – and, as we shall show, does indeed do so – that although colour and solidity bear no sort of resemblance to one another, yet their respective modifications, visible extension and tangible extension do bear some sort of resemblance to one another. But, in saying even this much, Hume is already opposing himself to Berkeley on the question under review since, as Adam Smith says, the Berkeleian doctrine is that "as colour and solidity bear no sort of resemblance to one another, so neither can their respective modifications" ("Of the External Senses," *Essays on Philosophical Subjects*, p. 150).

Here let us look more closely into one of the arguments as to whether or not in fact so-called visible extension bears no sort of resemblance to its tangible namesake, or, more precisely, as to whether space is no otherwise the object of sight than of hearing. Now the Berkeleian position here is generally

stigmatised as paradoxical, i.e. out of line with common sense, and, accordingly, in his defence of it, Berkeley tries to shake the prestige of common sense, arguing that, "while common speech would incline me to think I heard, saw and touched the same thing" (*A New Theory of Vision*, section XLVI), yet it is, to all appearances, misleading in the way it speaks of hearing here, and accordingly need not be regarded as trustworthy either in what it says about seeing. Hume, however, in his discussion of the same topic, gives a very different version of the facts, arguing that common sense treats sight and touch as analogous to one another and as sharply differentiated from the other senses in the respect in question. "What is extended must have a particular figure, as square or triangular; none of which will agree to a desire, or to any other impression or idea, except those of the two senses above mentioned" (i.e. sight and touch); "nor can a smell or sound," he adds further to the same topic, "be either of circular or square figure." In short, it is impossible, according to Hume, to convict common sense of indefiniteness or error even in what it says about hearing, and so the Berkeleian case for upsetting colloquial usage collapses (*Treatise* I, IV, V).

Let us turn to another of Berkeley's arguments in support of the thesis that it is, strictly speaking, a misnomer to apply the word "extension" to objects of sight as well as touch.

> I am apt to think, that when men speak of extension, as being an idea common to two senses, it is with a secret supposition, that we can single out extension from all other tangible and visible qualities, and form thereof an abstract idea, which idea they will have common to sight and touch.
>
> (*Theory* CXXII)

Berkeley then proceeds in his usual strain.

> Now I do not find that I can perceive, imagine, or in any wise form in my mind such an abstract idea, as is here spoken of. A line or surface, which is neither black, nor white, nor blue, nor yellow, etc., nor long, nor short, nor rough, nor smooth, nor square, nor round, etc. is perfectly incomprehensible. This I am sure of as to myself: how far the faculties of other men may reach, they best can tell.
>
> (*Theory* CXXIII)

Accordingly, "there are no abstract ideas of figure" and "it is impossible for us, by any precision of thought, to frame an idea of extension separate from all other visible and tangible qualities, which shall be common both to sight and touch" (*Theory* CXXVII).

But now, to turn to the first point in Hume relevant to the Berkeleian thesis: it is quite possible, Hume says, to concede that "a line or surface, which is neither black, nor white etc. is perfectly incomprehensible" and at

the same time to lay claim to the power of forming an idea of visible figure in the abstract. He approaches the matter by way of a query as to whether one could differentiate between the shape and the colour of a white globe, supposing that one had no experience of any other object but this. His point is that, in such a case, one would as yet have no evidence at one's disposal enabling one to make the distinction in question. "Thus when a globe of white marble is presented, we receive only the impression of a white colour disposed in a certain form, nor are we able to separate and distinguish the colour from the form. But observing afterwards," he goes on,

> a globe of black marble and a cube of white, and comparing them with our former object, we find two separate resemblances, in what formerly seemed, and really is, perfectly inseparable. After a little practice of this kind, we begin to distinguish the figure from the colour by a *distinction* of *reason*; that is, we consider the figure and colour together, since they are in effect the same and undistinguishable; but still view them in different aspects, according to the resemblances, of which they are suspectable. When we would consider only the figure of the globe of white marble, we form in reality an idea both of the figure and colour, but tacitly carry our eye to its resemblance with the globe of black marble.

But if we do this, we have, Hume claimed, already formed an abstract idea of the figure of the thing and, in short, forming an abstract idea of the visible figure of anything doesn't in the least involve, as people like Berkeley seem to think, the impossible feat of "seeing in one's mind's eye" an uncoloured figure.

> A person, who desires us to consider the figure of a globe of white marble without thinking on its colour, desires an impossibility; but his meaning is, that we should consider the colour and figure together, but still keep in our eye the resemblance to the globe of black marble, or that to any other globe of whatever colour or substance.
>
> (*Treatise* I, I, VII, pp. 32–3)

It is by a further development of this very theme that Hume attempts (a few pages on) to demolish completely Berkeley's thesis about the impossibility of forming "an idea of extension separate from all other visible and tangible qualities which shall be common both to sight and touch." These are his words.

> Suppose that in the extended object, or composition of coloured points, from which we first received the idea of extension, the points were of a purple colour; it follows, that in every repetition of the idea we would not only place the points in the same order with respect to each other, but also bestow on them that precise colour, with which alone we are

> acquainted. But afterwards having experience of the other colours of violet, green, red, white, black, and of all the different compositions of these, and finding a resemblance in the disposition of coloured points, of which they are composed, we omit the peculiarities of colour, as far as possible, and found an abstract idea merely on that disposition of points or manner of appearance, in which they agree. Nay even when the resemblance is carried beyond the objects of one sense, and the impressions of touch are found to be similar to those of sight in the disposition of their parts; this does not hinder the abstract idea from representing both, upon account of their resemblance.
>
> (*Treatise* I, II, III, p. 41)

Hume is here working on the same theme as before, starting with a purple patch instead of a globe of white marble as the first extended object ever seen. However this time he combines his anti-Berkeleian or common sense tendency to defend an abstract idea of extension with his anti-common sense counter-tendency of "reducing" extension to a set of unextended minima sensibilia. That is to say, his manner of speaking implies that the experience revealing to us this entirely new sort of object – to wit, a space-occupying one – must involve an experience of the difference between a set of contiguous atoms of purple and a set of non-contiguous atoms of purple, or – to express more exactly what we take to be Hume's meaning – that we first see the object as being, so to speak, an undifferentiated whole and in that sense simple (much as in the former case we first saw the white globe as simple); then we see it as a succession of minimal bits, each one being seen by itself while the others are hidden from view, and, at the same time, feel, by means of the sensations in the eye before alluded to, the succession-relation in question to be a species of relation never encountered with sets of sounds or smells, namely a relation of contiguity or non-contiguity, or, rather, a relation allowing the "logical construction" of these spatial notions, of contiguity and non-contiguity; and finally, as the result of all these experiences, we come to regard the originally given simple object as being extended or spatial, i.e. containing in it the relation we call spatial. Now, by this time, we are, according to Hume, aware of the object as being complex in the sense of being composed of a set of contiguous simple parts, but so far we are not aware of the complex so composed, i.e. of the given extension as being itself complex or of double aspect in the sense of having both a shape (by "order of parts" Hume seems to mean shape) and a colour. But now we cannot, Hume is clear, become aware of this latter sort of complexity in the same manner as we become aware of the first sort of complexity; in the case treated, our analysis or apprehension of the complexity depended on seeing each of the minimal atoms of purple by itself without seeing the others; whereas in this new case, we cannot, it will be admitted, see the aspect principally concerning us here – namely the shape – without seeing the other aspect, namely the purple colour. That is to say, we must proceed here exactly as we did in the case of the white

globe, the black globe and the white cube, when we become aware of each of them as a complex only in the act of noting that the first in one way resembles the second more than it does the third, and in another way resembles the third more than it does the second. Accordingly the crucial step is for us now to have a whole new set of experiences, not merely of these contiguous atoms of purple arranged in different orders (i.e in different shapes) from the ones originally encountered, but also of equally numerous sets of atoms of red, of blue, and so forth, similarly disposed in all these various orders, or shapes, and even of – to drop the jargon – parti-coloured shapes with various combinations of hues. Thereby we would, through comparing the visible objects with one another, come to the conclusion that shape and colour, though inseparable, varied independently; and then, in the next place, through going on to compare visible objects with tangible objects, we would begin to discover that shape was, in a certain sense, independent both of solidity and of colour; not of course that we could ever hope to encounter a shape that wasn't either solid or coloured but we would know how to talk about shapes and their relations without having to mention their colour or solidity.

By this time, there is not much room for doubt as to the existence of divergent (though not perhaps contradictory) tendencies in Hume's doctrine of space, but, to round off our discussion, we had better say something more about these different tendencies, so as to note, more precisely than hitherto, just what they have in common, and when they begin to diverge. To confine ourselves to the case of vision, it is obvious that the starting-point of both lines of treatment is common sense in the one case – the fact of our believing objects of sight to be spatially extended in a way objects of hearing are not – and, in the other case, the fact of our believing objects of sight to have both colour and shape, and that the question at issue in the case of either belief is whether common sense is here ultimate and analysable, and, granted its analysability, what are the separate experiences that form its constitution. But now, in either case, common sense is regarded by Hume as being analysable, and, so far, his treatment of the one point is on a level with his treatment of the other. However, the parting of the ways is reached as soon as Hume begins the business of analysis; and whereas, on the one hand, our awareness of an object of sight as extended is analysed into the experience of objects of two kinds – *minima visibilia* and ocular strains – each of which objects is literally unextended in the sense of being non-spatial, on the other hand our awareness of an object of sight as having both shape and colour is treated according to a very different principle and is regarded as analysable into the experience of a series of objects, each of which, taken by itself, is devoid of shape and colour, but only in the sense of having the distinction in question as yet latent in itself, or implicit, and not therefore in the sense of being literally devoid of this shape-colour distinction. That is to say, the former type of analysis is, in its way, like the Berkeleian reduction of talk about the existence of material objects to talk about the existence of sense-data, whereas the latter sort of analysis is, as Hume explicitly tells us, taken over from "the schools,"

and might perhaps be viewed as a case where "the whole is more than the sum of its parts." In short the one line of approach proposes to deal with common sense by explaining it away – "Space is nothing but" – while the other line of approach proposes to deal with common sense, by regarding it as – so to speak – potentially but not actually present in its alleged constituents, and thus tries to explain it, without explaining it away.

While nothing further need be said about the side of Hume's analysis of common sense taken over from scholasticism, because it is introduced into the *Treatise* only in a somewhat incidental way, the other tendency in his analysis of common sense (the one we have called Berkeleian, and which Professor Kemp Smith, perhaps with more accuracy, calls Newtonian in the sense of associationistic) demands a good deal of further consideration, because Hume himself, at various points in the *Treatise*, not to speak of the *Enquiry*, raises some penetrating questions about the general validity of this sort of approach. For example, it is a fact that in his mature reflections, in the *Enquiry* on the problem of belief in an external world, he rejects outright the Berkeleian tactics, and, after comparing the two relevant sets of facts – on the one hand our common sense beliefs about our situation, and, on the other hand, the actual experiences relative to these beliefs – goes on to point out the impossibility of attempting to "reduce" the first set of facts to the second. But now a fact of this sort is obviously very pertinent to our present thesis, and in view of it the question naturally arises as to whether Hume was as much aware of the difficulty of reductively explaining away the belief in the spatial extendedness of objects as he was of the difficulty of reductively explaining away the belief in the independent existence of these spatially extended objects.

Hume, of course, excludes from his *Enquiry* all discussion of the belief in space, but, if we go carefully through his *Treatise*, we find him, on one occasion, drawing attention to certain paradoxical consequences following from his positivistic analysis of our awareness of tangible or solid extension. The passage containing the admission occurs in the earlier part of the long discussion of touch in *Treatise* I, IV, IV, the remainder of which has already been considered during our discussion of Hume on the belief in independence. "I," Hume begins

> have shown that it is impossible to conceive extension, but as composed of parts, endowed with colour or solidity. The idea of extension is a compound idea; but as it is not compounded of an infinite number of parts or inferior ideas, it must at least resolve itself into such as are perfectly simple and indivisible. These simple and indivisible parts, not being ideas of extension, must be non-entities, unless conceived as coloured or solid. Colour is excluded from any real existence. The reality, therefore, of our idea of extension depends upon the reality of that of solidity, nor can the former be just while the latter is chimerical. Let us, then, lend our attention to the idea of solidity.

> The idea of solidity is that of two objects, which being impelled by the utmost force, cannot penetrate each other; but still maintain a separate and distinct existence. Solidity, therefore, is perfectly incomprehensible alone, and without the conception of some bodies which are solid, and maintain this separate and distinct existence. Now what idea have we of these bodies? The ideas of colours, sounds, and other secondary qualities are excluded. The idea of motion depends on that of extension, and the idea of extension on that of solidity. It is impossible, therefore, that the idea of solidity can depend on either of them. For that would be to run in a circle, and make one idea depend on another, while at the same time the latter depends on the former. Our modern philosophy, therefore, leaves us no just nor satisfactory idea of solidity; nor consequently of matter.

In order to bring out Hume's meaning more clearly, let us set side by side a sentence from I, IV, IV and a sentence from I, II, III. Here, then, is Hume's reductive analysis of our ordinary notion of solid extension: "That compound impression, which represents extension, consists of several lesser impressions which are indivisible to the eye or feeling, and may be called impressions of atoms or corpuscles endowed with colour and solidity." But now let us compare Hume's comment on our common sense notion of solidity: "In order to form an idea of solidity, we must conceive of two bodies pressing on each other without any penetrating; and it is impossible for us to arrive at this idea when we confine ourselves to one object." Now, obviously, there is some sort of contradiction between the facts of common sense as given in the former quotation, and the root of the difficulty would seem to be that, as far as tangible extension is concerned, the would-be elucidatory analysis or reduction of common sense can be carried through only at the price of introducing a certain notion – namely of an isolated, simple solid – that makes nonsense of solidity in its common sense meaning, and, so far, doesn't elucidate at all.

This granted, we can perhaps begin to see better what Hume is driving at here. Apparently, he expects us to recall that the total problem at issue is that of accounting for our common sense belief in, or talk about, space-occupying bodies, and he is pointing out that his previous analysis of the item in this common sense formula concerned with space and space-occupation, although illuminating in its way and satisfactory enough for certain limited purposes, for example in regard to the crux about the Newtonian vacuum, nevertheless carries with it the disadvantage of rendering unintelligible and altogether mysterious the other items in the common sense formula, namely that concerned with solidity. Indeed, when he declares, above, that "our modern philosophy, therefore, leaves us no just nor satisfactory idea of solidity; nor consequently of matter," he means nothing else, apparently, by "our modern philosophy" in the present connection than his own analysis of space and extension as given in *Treatise* I, II, and his point is, therefore, roughly speaking, that the analysis of the belief in extendedness in terms of feelings of unextended objects makes nonsense of our common sense notions of body in

much the same fashion as does the analysis of the belief in independence in terms of the idea that "the imagination, when set into any train of thinking, is apt to continue, even when its object fails" (*Treatise* I, IV, II, p. 192).

In short, it would seem as if Hume's dominant policy in regard to the problem both of spatiality and of independent existence is, in general, to try to do full justice to the facts of common sense. In the *Treatise*, this tendency mainly shows itself in his decidedly suspicious and critical attitude towards his own highly ingenious attempts at "positivistic" or "associationistic" analysis of common sense in terms of sense; in the *Enquiry*, he goes on to reject this sort of explanation altogether, and to propound the paradox that common sense cannot be set aside, and yet, on a strict view, doesn't make sense. Of course, in this *Enquiry* doctrine, he is concerned explicitly only with the question of belief in independent existence, but apparently he would not have dealt very differently with the question of belief in spatiality, if he cared to introduce that topic too, alongside the other.

2 Reid (1)

Older than Hume by about two years, Thomas Reid had been introduced to philosophy at the Marischal College, Aberdeen, by none other than George Turnbull of the Rankenian Club, and was probably led thereby to adopt a position which he himself, looking back, called Berkeleian, but which may well have been the sort of amalgam of Berkeleianism and Hutchesonian common sense characteristic of his teacher. However, as the result of reading the *Treatise of Human Nature*, Reid renounced Berkeleianism, and the only part of Turnbull's teaching which has any echo in the works of his pupil's maturity is the common sense part – the principle of respect for the distinctions of ordinary language, so far as they are universal. What Reid had in fact done was to take over from Hume the idea of common sense or natural belief as authoritative and unshakable, and then to go somewhat further than Hume did in the direction of defending the consistency and trustworthiness of this unshakable common sense.

With the Humean doctrines discussed in the last chapter, Reid, as one might expect, is partly in agreement, partly in disagreement. On the one hand, Reid agrees with Hume that the common sense beliefs in the objects of sight and of touch as existing independently of perception, and as being, both the one and the other, equally space-occupying, have to be accepted in a spirit of natural piety, in spite of their not being fully justifiable at the bar of reason. That is to say, he is quite prepared to accept the "hypothesis" of Hume, so fundamental to the *Treatise*, that belief is more properly an act of the sensitive than of the cogitative "part of the mind" – provided the point about "cogitative" is taken as meaning that "the belief and fidelity of our faculties cannot be proved by reasoning," and therefore the belief of first principles (i.e. spatiality, independence, etc.) cannot be founded on reason: "If this last be what the author calls his hypothesis, I subscribe to it, and think it not an hypothesis but a manifest truth, though I conceive it to be very improperly expressed, by saying that belief is more properly an act of the sensitive than of the cognitive part of our nature" (Hamilton's edition of Reid's *Works*, p. 489). On the other hand, Reid goes on to repudiate Hume's suggestion that, from a merely theoretical point of view, there is something to the sceptical or the positivistic criticism of these natural and, practically

speaking, indispensable beliefs. That is to say, Reid tries to meet the point in the *Treatise* explained above that the universal and natural belief in the independence of visible and tangible objects is found to be in conflict with other less natural, less widespread but equally well-founded beliefs – namely those acquired by devotion to phenomenological introspection. As regards the other belief in question in the last chapter, namely the belief in the irreducible spatiality and complexity of things, "here again," says Reid, "the ideal system comes in our way; it teaches us that the first operation of the mind about its ideas is simple apprehension," and "that the belief or knowledge is got by putting together and comparing the simple apprehensions" (*Works*, pp. 106, 107). But now this part of the Humean doctrine – the part, that is, declaring material objects seen and felt to be at bottom nothing but a bundle of simple unextended impressions of sight and of touch – is, according to Reid, no better than the part just touched upon, i.e. the part declaring the independence of these material objects of sight and touch to have no foundation whatsoever in the facts of experience; and Reid's argument here consists (roughly speaking) in the contention that the one Humean doctrine admitting an idea of extension in the abstract is in conflict with the other Humean doctrine viewing extension as being, in the last analysis, a series of non-extended simple impressions of touch or of sight.

In his approach to this last topic, Reid is to some extent following up a line already opened by Kames in 1751, and a glance at the latter will form the best introduction to the former. Now Kames here is concerned to make two points. In the first place, "by sight and touch, we have the impression of substance or body as well as qualities; it is not figure, extension, motion, we perceive but a thing figured, extended, moving" (*Essays on the Principles of Morality and Natural Religion*, 1751, p. 252), or again, "another thing that is observed with regard to these things which are perceived as qualities by sight and touch is that we cannot form a conception of them independent of the beings to which they belong" (p. 248). Moreover he takes care to explain pretty carefully what he means by "impression of substance or body" or by "conception of the qualities as dependent on the beings to which they belong" – "it is not in our power to separate, even in imagination, colour, figure, extension and motion from body or substance" (p. 248), or again, "smoothness, hardness, extension and figure are felt not as separate and unconnected existences, but as belonging to something I call body" (p. 246). In short, Kames's first point is that not only is extension or shape, as Hume admits, unimaginable except as solid or coloured, but also, neither colour nor solidity are, contrary to what Hume thought, imaginable except as extended and possessing shape. In the second place, Kames has to give some reason for his denial of the Humean view that unextended colour (atoms of colour) and unextended solids or atoms of solidity are readily imaginable.

> The above analysis of the impressions of sight and of touch will be best illustrated by means of a comparison with the impressions made by the

> other senses. I hear a sound, I feel a smell. Attending to these impressions, I perceive nothing but the sound or smell. They are not perceived by the qualities or properties of any body, thing, or substance. They make their appearances in the mind as simple existences.
>
> (p. 248)

That is to say, Kames's second point is simply that it doesn't seem to make sense to speak of simple impressions of colour and solidity, in the way it does seem to make sense to speak of simple impressions of smell or sound; and this granted, it follows that Hume is wrong in holding our perceptions of material substances or body to be, in the last resort, reducible to groups of perceptions of the non-bodily or non-space-occupying atoms of colour or hardness.

The most noteworthy thing about Kames is, however, not so much the actual argument as the context presupposed by the argument. As Kames sees it, Hume's peculiar view about the nature of extended things rests in some ways upon, or, perhaps, is only a more definite expression of, the view of the nature of belief peculiar to Hume. Indeed the chapter on the *authority of the senses*, where the above argument is propounded, is apparently intended by Kames as a sequel to his chapter on *belief*, and as an answer to the problem raised by Hume about belief; and in general, it looks as if, so far as Kames is concerned, Hume's reduction of sensible extensions to a series of *minima sensibilia* depends on Hume's view of belief in the sensible presence of a body or material substance as consisting in nothing but a series of simple impressions (or vivid simple ideas) of sight or touch.

Now Reid's critique of this part of Hume's question here is, to all appearances, a follow-up of Kames's critique. For one thing, Reid occupies himself, like Kames, with the facts concerning the relationship of colour to visible extension or shape, and of solidity to tangible extension or shape. For another thing, and this is a very significant one, Reid propounds his criticism of the Humean doctrine of our apprehension of extension and of material substance only as a sort of sequel, indeed as a brief corollary, to a long discussion of the Humean theory of belief, and accordingly his line of approach coincides entirely with Kames's, or rather is a further development of it.

To introduce Reid's main theme, let us start with a quotation (somewhat abbreviated) from the conclusion to the *Inquiry into the Human Mind* of 1764 (*Works*, p. 209).

> The account which this system [the ideal system] gives of our judgment and belief concerning things, is as far from the truth as the account it gives of our notions or simple apprehensions. It represents our senses as having no other office than that of furnishing the mind with notions or simple apprehensions of things. . . . We have shown, on the contrary, that every operation of the senses, in its very nature, implies judgment or belief as well as simple apprehension. . . . When I perceive a tree before me, my faculty of seeing gives me not only a notion or a simple

> apprehension of the tree, but a belief of its existence, and of its figure, distance, and magnitude.

In order to bring out Reid's meaning, let us take a somewhat similar quotation, also from the *Inquiry*, but this time from the beginning (p. 106) and not the end. "Instead of saying, that belief or knowledge is got by putting together and comparing the simple apprehensions, we ought rather to say that the simple apprehension is performed by resolving and analysing a natural and original judgment." Now, by "natural and original judgment," Reid is, in this context too, talking about a judgment of perception – for example (to take the case of the tree), "I observe this object to be green and pyramid-shaped." Accordingly, Reid's point would seem to consist in raising a question about the relationship between, on the one hand, the state of mind Hume calls "having a simple impression" – for example, in this case, seeing an extensionless atom of green – and, on the other hand, the state of mind Hume would perhaps call "having a natural belief in the existence of a substance," – for example, in this case, seeing a thing both green and pyramid-shaped – namely a question as to whether Hume is right in making the awareness of these extensionless atoms of green, each separately and by itself, precede the awareness of these atoms of green constituting, when taken together, a green pyramid, or whether he would not have done better to make the awareness of the whole object as both green and pyramid-shaped precede the awareness of each particular atom of green, by itself and out of relation to its fellow atoms, and so without relation to the extended shape of which it forms part. In short, Reid is taking up somewhat the same attitude to the Humean doctrine as did Kames.

Here let us state Reid's thesis. Perception, he tells us, naturally involves judging that the thing is and what the thing is. "The man who perceives an object believes that it exists, and is what he distinctly perceives it to be, nor is it in his power to avoid such judgment" (*Works*, p. 414). However, in his serious discussion of the matter, the aspect of the judgment of perception that concerns him is not the aspect that regards existence so much as the aspect concerned with the *what* of the object perceived. Judgments about aspects of this latter sort, he tells us, "are more allied to our rational nature" (p. 416) – capable of being cultivated and improved in a way in which judgment of existence are not. Accordingly, Reid is more concerned with the judgment as to *what* than the judgment as to *that*; and, for example, when, in setting the stage for his discussion, he tells us that perception involves judging a contingent proposition to be true, he does not bother to mention the existential reference in the example he gives. "That I now write upon a table covered with green cloth is a contingent event which I judge to be most undoubtedly true. My judgment is grounded upon my perception, and is a necessary concomitant or ingredient of my perception" (p. 414).

Reid approaches the crux of the problem in the following way. Judgments of perception, he has told us in the beginning, are judgments about

contingent propositions. But now, "there cannot," he tells us, "be any proposition in the language which does not involve some general conception" (*Works*, p. 417). Even an existential proposition does this, existence being "one of the most abstract general notions," and "in every other proposition" (other than the existential one) "the predicate at least must be a general notion, a universal and a predicable being one and the same," i.e. the predicate must be a word like "green" or "round." Now of course Reid, as we have said, is not seriously concerned with the reference to existence, and accordingly his main point is the simple one that, when we make judgments of perception, we must understand and know how to use elementary general terms like those involved in the judgment above about the green cloth on the writing table.

But, this being the case, the thesis now being unfolded will at once, Reid notes, strike men like Locke and Hume as "paradoxical," and the objection they are sure to raise is that the view of experience or perceptions as involving judgments of contingent propositions in the sense just explained, will render impossible any reasonable account of how the *tabula rasa* of the mind first gets written on. If perception naturally involves judging a contingent proposition to be true on the evidence of sense, then it is, they will argue, surely the case that one must first be able to understand the meaning of that proposition and its denial before one can go on to confirm it empirically, and that, until one achieves this empirical confirmation, one does not, on Reid's own admission, begin to have a perception. But this being so, the absurd situation, they will point out, must follow that, in respect of the dawn of cognition, the infant, before it can begin to have perceptions, must be able to understand propositions about observable objects, i.e. propositions containing general terms of the sort already mentioned – sweet, bitter, round, square, and so on.

Here we had better let Reid formulate the objections in his own way.

> I am sensible that a strong objection may be made to this reasoning [of mine], and that it may seem to lead to an absurdity or contradiction. It may be said, . . . every judgment may be expressed by a proposition, and a proposition must be conceived before we can judge of it. If, therefore, we cannot conceive the meaning of a proposition without a previous exercise of judgment, it follows that judgment must be previous to the conception of any proposition, and at the same time that the conception of a proposition must be previous to all judgment, which is a contradiction.

In short, Reid continues, "it is like the question concerning the bird and the egg. In the present state of things every bird comes from an egg, and every egg from a bird, and each may be said to be previous to the other," and a paradox similar to the one above may be formulated. (All the quotations in this and subsequent paragraphs come from *Works*, pp. 417–18.) In order to avoid "this labyrinth of absurdity and contradiction," Reid proceeds to avail himself of another "similitude."

> An artist, suppose a carpenter, cannot work in his art without tools and these tools must be made by art. The exercise of the art, therefore, is necessary to make the tools, and the tools are necessary to the exercise of the art. There is the same appearance of contradiction, as in what I have advanced concerning the necessity of some degree of judgment, in order to form clear and distinct conceptions of things. These are the tools we must use in judging and in reasoning, and without them must make very bungling work; yet those tools cannot be made without some exercise of judgment.

Reid apparently expects his readers to have some acquaintance with a well-known solution of the paradox about the tools and the art. Take the case of the first carpenter at his first job. Let us suppose he wants to cut up, or slit up, a fallen tree trunk into regularly shaped cylindrical blocks. He begins by trying to use as tools the bits of wood and stone he finds lying about, and, taught by trial and error in one effort after another to split the tree trunk, he discards the useless bits of wood and stone, and remodels the others, and, at the moment he is successful in cutting up the wood into regular blocks, he finds himself also the possessor of a set of primitive wedges, hammers, and axes, and the master of a technique. The point is that, through the man's instigation and efforts, the intact tree trunk and the original sticks and stones begin to act on and modify one another.

Reid's speculations about the origins of judgment and conception follow exactly the analogy of these well-known speculations about the origins of tools and of manufactures. "The faculties of conception and judgment," he says, "have an infancy and a maturity as man has. What I have said is limited to their mature state" (i.e. it is only in the mature state of these faculties that judgment supposes the distinct conception of a proposition). "I believe in their infant state they are very weak and indistinct, and that, by imperceptible degrees, they grow to maturity, each giving aid to the other, and receiving aid from it" (i.e. very much as the natural objects serving as tools and the natural objects serving as raw materials for elaboration modify one another, and, by modifying one another, are turned – the former into tools proper, and the latter into the finished product).

This second similitude does indeed give a fair idea of the sort of solution of the paradox Reid is working towards. The chief point of the analogy is apparently something like this: just as the everyday rule "you can't do the job without having the proper tools" doesn't hold good of the first beginnings of manufacture, so, probably, the parallel rule "judgment supposes the distinct conception of a proposition" does not hold good of the first beginnings of cognition. Or, to put the matter in a precise way, there is apparently this point to be brought out, namely that just as primitive manufacture does a rough job without having the proper tools, so too primitive cognition or perception produces only a rough judgment without having proper, i.e. clear and distinct, ideas.

To pass now from these prefatory similitudes to the theory they introduce, its main point is certainly something like this. An ordinary common sense judgment of perception like the one about the green cloth on the writing-table is not, evidently, primitive and unanalysable for Reid any more than it is for Hume, and the chief difference between the one and the other has to do solely with the nature of the various elementary experiences underlying the common sense judgment. "It is acknowledged on all hands," Reid says, conceding a point to Hume, "that the first notions of sensible objects are got by the external senses only, and probably before the judgment is brought forth; but these first notions," Reid goes on, defining his position against Hume's, "are neither simple, nor are they accurate and distinct: they are gross and indistinct, and, like the *chaos*, a *rudis indigestaque moles*." Indeed, according to what Reid tells us later on the same page, "the notion we have from the senses alone, even of the simplest objects of sense, is indistinct and incapable of being described," and, in fine, his main point is that the ordinary judgment about the present existence of a material substance does not presuppose, as Hume would have it, an initial experience of a set of clear-cut nameable atoms, but rather presupposes an initial experience of a vague, nameless "something."

In defence of this thesis, Reid at once introduces the topic of abstraction. "A man who is able to say with understanding or to determine in his own mind that this object is white must have distinguished whiteness from the other attributes. If he has not made this distinction he does not understand what he says" – since, the context implies, in that case, all he can properly say is that the object is of an indescribable character, is a mere something. That is to say, the confirmation of the above thesis about the vagueness of the initial experience is, according to Reid, only to be had if we explore the foundations of a judgment like "this object is white."

At the very end of the chapter immediately preceding the one under review, Reid has touched upon this very topic, and we may quote what he says about it. In the passage in question, his subject is the empirical foundations of general notions like whiteness, or – in other words – the presuppositions of ordinary judgments of perception containing words like white and round; and his point is that, in order to form such judgments, a twofold process must be gone through of, first, noting vague resemblances between different things, and, second, distinguishing the parts of each thing from one another.

> I believe, indeed, we may have an indistinct perception of resemblances without knowing where it lies. Thus, I may see a resemblance between one face and another, when I cannot distinctly say in what feature they resemble; but, by analysing the two faces, and comparing feature with feature, I may form a distinct notion of that which is common to both. A painter, being accustomed to an analysis of this kind, would have formed a distinct notion of this resemblance at first sight; to another man it may require some attention.

> There is, therefore, an indistinct notion of resemblance when we compare the objects only in gross: and this I believe brute animals may have. There is also a distinct notion of resemblance when we analyse the objects into their different attributes and perceive them to agree in some while they differ in others. It is in this case only that we give a name to the attributes wherein they agree, which must be a common name, because the thing signified by it is common. Thus, when I compare cubes of different matter, I perceive them to have this attribute in common, that they are comprehended under six equal squares, and this attribute only is signified by applying the name, *cube* to them all. When I compare clean linen with snow, I perceive them to agree in colour; and when I apply the name of white to both, this name signifies neither snow nor clean linen, but the attribute which is common to both.
>
> (*Works*, pp. 411–12)

We may note in passing that the doctrine of this passage, when read in its context, is pretty complicated and will require further attention from us at a later stage in our exposition. For the present, however, we try to explain Reid's position only so far as it throws light on the presuppositions of a judgment of perception like "this is snow-white." Now Reid gives us to understand that in a case of this kind there is a sort of movement from a preliminary judgment as to indistinct resemblance, by way of an analysis of the objects concerned, to a final judgment as to distinct resemblance. Presumably, in view of his key-analogy of the features of the face, his point is that at first I would not be able to do more than merely judge the linen and the snow – or rather (to confine the question entirely to vision) the linen-like colour-patch and the snow-like colour-patch – to be alike somewhat or in some way, I couldn't say how or where, but that later – perhaps after studying the objects in relation to their visual common background – I would be able to make the rough preliminary verdict distinct, and to judge the objects (regarded, it should be remembered as colour-patches) to be unlike in outline, but otherwise alike. Moreover it seems obvious (though Reid doesn't mention the fact) that, having thus in a manner distinguished and put to one side the outline or shape aspect of the object as irrelevant, I would now begin to repeat the whole process of passing from an indistinct to a distinct judgment about the resembling aspects of the objects at a new and, so to speak, higher level. That is to say, the judgment I have already formed is a distinct perception of resemblance in the sense of my now being able to assert that the resemblance between the two objects does not lie in their outlines (i.e. in parts of each, indicatable by pointing, which in the course of further experience we should come to call their outlines), but at the same time is also an indistinct perception of resemblance in the sense of my not yet knowing whether the region or aspect singled out from the object I call linen everywhere uniformly resembles the corresponding region or aspect singled out from the object I call snow. That is to say, before I am in a position to

pronounce the linen to be white as snow (taking the snow to be standard case), I must make sure that, for example, the linen has no stains and that its resemblance is not in this way only approximate, and, to ascertain facts like this, I must go through more than once the movement from indistinct perception of resemblance to distinct perception of resemblance.

In order to do justice to Reid's thesis that a judgment like "this object is white" presupposes in the beginning an experience of the vague, we have gone back to a passage in the previous chapter – Essay 5, Chapter 6 – as being peculiarly illuminating in regard to the point under review, and have disregarded the equivalent passage (a passage in the preceding paragraph) in the chapter containing the thesis – Essay 6, Chapter 1 – as being insufficiently precise as regards details. Continuing now on the same lines, we want to show that this passage from Essay 5, Chapter 6 is presupposed throughout the whole argument from Essay 6, Chapter 1, already summarised by us in the preceding pages. Reid, we may note, introduces the crucial passage in Essay 6, Chapter 1 with a reference to the same point as is made in the Essay 5, Chapter 6 paragraphs – the point, namely, that generalisation or the formation of general notions involves abstraction. "It has been shown that our simplest general notions are formed by these two operations of distinguishing and generalising." But "it is impossible to distinguish the different attributes belonging to the same subject, without judging that they are really different and distinguishable," and so too "we cannot generalise without judging that the same attribute does or may belong to many individuals." Accordingly it follows that "judgment is exercised in forming the simplest general notions." But now, in the unfolding of Reid's argument, the next important passage following this one is a passage we have met before, summarising some common sense facts of logic. "There cannot be any proposition in language which does not involve some general conception" and "judgment . . . may be expressed by a proposition" (*Works*, p. 417). (The meaning of "may be" here is probably that ordinary language is elliptical, and that a sentence like "I see a cow" is short for "I see a cow to exist.") But now, immediately thereafter, Reid goes on to remove the apparent contradiction between the assertion in the earlier passage that judgments precede the having of general notions, and the assertion in the latter passage that there can't be judgments unless one has general notions, by pointing out that in the former case the judgments spoken about, i.e. those previous to the formation of general concepts, are "immature" judgments, whereas in the latter case the judgments in question are "mature" and, so to speak, common sense judgments; and, in justification of this biological analogy, he goes on to explain that the so-called mature judgments, i.e. judgments presupposing clear and distinct general notions, rest on and arise out of judgments presupposing indistinct conceptions. In short, Reid overcomes the paradox by arguing that the judgments required previous to the formation of general conceptions of a clear and distinct kind are not ordinary judgments at all but rough judgments containing vague notions. But in saying this, Reid, if his words have any meaning, is, to all

intents and purposes, identifying the mature and finished judgments with his perceptions of distinct resemblance, and the immature and rough judgments with his perception of indistinct resemblance; and, indeed, the whole passage in Essay 6, Chapter 1 concerned with the propounding and the resolving of the paradox of cognition is, in the last analysis, nothing but a restatement, of a more striking and full kind, of the point made in the Essay 5, Chapter 6 passage.

By this time we have explained fairly adequately Reid's view of ordinary judgments of perception as arising out of vague experiences, or more precisely, perhaps, rough judgments, and it now remains to note the limits which Reid seems to set to the scope of his doctrine. In general he is very emphatic about refusing to carry his analysis back to first origins. "The first exercise of these faculties of judgment and conception is hid, like the sources of the Nile in an unknown region." Apparently Reid, to judge more from his practice than from his express words – means by this kind of assertion to convey to us that while we can trace the original ordinary judgment of perception back to the perceptual judgment of vague resemblance, we must stop here and cannot get behind this latter judgment. But now, in this refusal to explain everything, Reid, we are inclined to think, knows very well what he is doing. This perceptual judgment of indistinct resemblance, to which we have got back, itself involves, Reid apparently is aware, some sort of rudimentary general terms – "like and unlike" or rather perhaps, for Reid himself, identity and difference in the sense of "is" and "is not" – and it is out of the question to derive a vague judgment of this sort from some still vaguer judgment, by an extension of the method used in the previous case, since every judgment, however vague, must, by definition, already involve just these general terms. But let us hear Reid's version of this point. "Every proposition either affirms or denies. And no man can have a distinct conception of a proposition, who does not understand distinctly the meaning of affirming and denying. But these are very general conceptions, and, as was before observed, are derived from the judgment as their source and origin" (*Works*, p. 417), along with notions like "subject, predicate, and copula," etc. (*Works*, p. 414) – Reid's point being that we must know the meanings of basic words like "is and is not" and know the construction of sentences like "this is not that" in order to think at all. But this being so, Reid goes on, "if, therefore, some previous exercise of judgment be necessary to understand what is meant by affirmation and negation [i.e. if general concepts like them are formed on the analogy of the formation of general conceptions like "white" or "round"], the exercise of judgment must go before any judgment which is absurd" (*Works*, p. 417).

We had better close the topic with a word in defence of this last exegesis. Reid, we grant, is very unsystematic, but there is little doubt that he holds some such doctrine as the one just attributed to him. The relevant fact is that he begins by formulating two distinct but analogous paradoxes – one about universals or predicables, i.e. general terms like "white" or "round," and the

other about "the very general conceptions derived from judgment as their source and origin," i.e. general terms like "is" and "is not" – and that he ends by offering a resolution of the former of the paradoxes – the one about "white" or "round" – and by failing to offer any solution of the latter paradox – except for emphatically telling us that he does not profess to determine anything about the origin of judgment as such.

We now come to the third part of Reid's doctrine on this subject. His central theme here is summarised in a passage from the *Inquiry* already quoted: "instead of saying, that belief or knowledge is got by putting together and comparing the simple apprehensions, we ought rather to say that the simple apprehension is performed by resolving and analysing a natural and original judgment." Reid's point here is restated somewhat more clearly in the heading to the section in question, "Judgment and belief, in some cases precede simple apprehension" (*Inquiry*, Chapter 2, Section 4, *Works*, p. 106), and our task is now to explain just what this point of his is.

We will let Reid make his own comment on this doctrine, as given in the *Essays on the Intellectual and Active Powers of Man*.

> Simple apprehension, therefore, though it be the simplest, is not the first operation of the understanding; and, instead of saying that the more complex operations of the mind are formed by compounding simple apprehensions, we ought rather to say, that simple apprehensions are got by analysing more complex operations.
>
> A similar mistake [similar to Hume's probably], which is carried through the whole of Mr. Locke's essay, may be here mentioned. It is, that our simplest ideas or conceptions are got immediately by the senses, or by consciousness and the complex afterwards formed by compounding them. I apprehend it is far otherwise.
>
> So that it is not by the senses immediately, but rather by the powers of analysing and abstraction, that we get the most simple and the most distinct notions even of the objects of sense. This will be more fully explained in another place.
>
> (*Works*, p. 376)

It must already be obvious, in a vague sort of way, where Reid is going, but before we give a precise account of his doctrine, it will be necessary to explain the point of his peculiar terminology. To this end, let us quote (with omissions) a passage from Hume's *Treatise* (I, III, VII). There is an error, Hume says,

> in the vulgar division of the acts of understanding into *conception*, *judgment* and *reasoning*, and in the definitions we give of them. Conception is defined to be the simple survey of one or more ideas: Judgment to be the separating or uniting of different ideas: . . . But these distinctions and definitions are faulty in very considerable articles. For first, it is far from

> being true that, in every judgment, which we form, we unite two different ideas; since in that proposition, *God is*, or indeed any other, which regards existence, the idea of existence is no distinct idea, which we unite with that of the object, and . . . we can thus form a proposition, which contains only one idea.

In short, the distinction between judgment and conception here begins to disappear, and, indeed, Hume tells us in another place that in the case of having a present impression of sense, and believing in the existence of that impression, there is no foundation for any distinction whatever between the so-called simple survey, and the existential judgment. Belief or assent, he admits, always attends the senses, but "To believe is in this case to feel an immediate impression of the senses. It is merely the force and liveliness of perception that constitutes the first act of judgment" (*Treatise* I, III, V, p. 89).

Now Reid was evidently much struck by the doctrine of Hume, and the first seven pages of the third of the *Philosophical Orations*, delivered at Aberdeen in 1759, are devoted to a discussion of it. He begins by explaining the traditional distinction (or what, following Hume, he regards as such) between simple survey, or, as he calls it, simple apprehension, and judgment, in much the same way as Hume does but more fully and clearly. "Per Apprehensionem intellegunt philosophi nudum rei cujusvis conceptum, absque ulla affirmatione vel negatione. Ea vero intellectus operatio, quae aliqua affirmatione vel negatione enunciatur Judicium dicitur. Ita vir sapiens, est qui pauca loquitur, est Propositio, Judicii signum" (p. 28) – whereas "vir sapiens" alone is an apprehension.

In the sequel he proceeds to raise the question which Hume had raised as to whether this sort of distinction makes sense when applied to sense perception, and produces the answer that, while the older philosophers misuse the distinction in the case in question and so are open to the Humean criticism, the distinction, nevertheless, when properly understood, does have an application there.

> A host of philosophers teach that sensation is simple apprehension. But now, although it is clear enough what they mean by sensation – namely those operations carried on by the medium of the external senses; nevertheless it seems to me that these operations are judgments rather than simple apprehensions. I cannot look upon this learned assembly without believing in its present existence, and feeling bashful before it. In one and the same act, we apprehend a sensible thing, and believe that to exist which our senses testify, relying on no other evidence than sensation itself. In all sensation therefore there is apprehension, not simple (bare and by itself) but conjoined with judgment and belief.

Accordingly this operation (simple apprehension), although it be the simplest, is not the first operation of mind. Judgment, Reid concludes, precedes

simple apprehension, and we form simple apprehension from natural judgments by resolution and analysis. That is to say, to take Reid's above example, it is only after I believe in the existence of my present object of vision, the learned assembly, that I can, so to speak, suspend my belief, and consider the object of vision purely phenomenologically, i.e. as a sense-datum. In this way and in this way only, according to Reid, we can establish the distinction Hume denies between an existential judgment of sense, and a mere impression of sense.

This theme is fundamental in Reid, and the purpose of the chapter we have been studying (Essay 6, Chapter 1) is, Reid tells us himself, to develop fully his criticisms of the thesis of Hume we have been citing.

> Sometimes he (Mr. Hume) maintains that judgment and reasoning resolve themselves into conceptions, and are nothing but particular ways of conceiving objects; and he says, that an opinion or belief may be most accurately defined, *a lively idea related to or associated with a present impression*. – Treatise of Human Nature, Vol. I, p. 172 [the page reference given by Reid to the main passage cited by us above]. I have endeavoured before, in the first chapter of the Essay [i.e. in our chapter, Essay 6, Chapter 1], to show that judgment is an operation of the mind specifically distinct from the bare conception of an object. I have also considered his notion of belief, in treating the theory concerning memory.
>
> (*Works*, p. 433)

Reid's discussion of this topic in Essay 6, Chapter 1 is clearer than anything he says elsewhere; and for one thing, he enables us to understand the relation between a simple apprehension on the one hand, and a simple idea or impression, in Hume's sense, on the other. A simple impression, he seems to say, is a simple apprehension of a simple or elementary aspect of a thing, and he goes on to indicate in what sense a state of mind like that may be said to occur.

> That I may not be mistaken, it may be observed that I do not say that abstract notions, or other accurate notions of things, after they have been formed, cannot be barely conceived without any exercise of judgment about them. I doubt not that they may: but what I say is, that, in their formation in the mind at first, there must be some exercise of judgment.

Still keeping to the question of the meaning of Reid's peculiar terminology here, let us supply by way of comment on the language in that passage one or two extracts from Essay 5, Chapter 3. First, then, take this declaration: "what hinders me from attending to the whiteness of the paper before me, without applying that colour to any other object? The whiteness of this individual object is an abstract conception but not a general one, when applied to one

individual only", and, second, take Reid's elucidation later, in the same passage, of the notions implicit here:

> the whiteness of this sheet is one thing, whiteness is another; the conceptions signified by these two forms of speech are as different as the expressions. The first signifies an individual quality really existing, and is not a general conception, though it be an abstract one: the second signifies a general conception [which is also an abstract one].

The point Reid tries to bring out by this contrast is that it is one thing to say "I see that A is white, i.e. A resembles B in whiteness, though not in other respects," and quite another thing to say "I see the whiteness of A, and nothing but that, disregarding its other qualities." But now, apparently this latter case might well be regarded as "the barely conceiving of – i.e. the apprehending without judgment – the abstract aspect of the things" (conceive – apprehend, be aware of), and the former case might well be regarded as the judgment of perception, corresponding thereto; and if this is so, then Reid's point is that the second sort of mental operation must always be previous to the first sort.

Finally, to make the doctrine clearer still, let us note that the paragraph under review – i.e. the one beginning: "That I may not be mistaken" and allowing simple apprehensions of the simple, provided they be posterior to judgments of perception – is put as a sort of introductory paragraph to the discussion of the presuppositions of judgment which we studied at length. That is to say, for Reid, apprehension without judgment of an aspect of a thing presupposes a previous judgment as to the distinct resemblance of the thing in respect of the aspect in question to another thing, just as this distinct judgment presupposes, in its turn, a previous judgment as vague resemblance of the one thing to the other.

So far, we have not done more than elucidate Reid's terminology, and it is time now to consider the point of his insistence on this topic of simple apprehension – to use the short name. Now the important thing here is that, when he is speaking (as in the quotation under review) of "abstract notions, or other accurate notions of things" and of the possibility of their being "barely conceived" (i.e. simply apprehended) "without any exercise of judgment about them," the sort of awareness he has in mind is, roughly speaking, the awareness of geometrical points, that is to say, the awareness identified by Hume with "having simple impressions of the coloured and of the solid atoms." Accordingly the central thesis that Reid is here advancing might be, provisionally, described as a thesis to the effect that the simple apprehension of points comes not at the start of the perception of extended objects, as Hume would have it, but at the end of the process.

In order to get a more precise view of what Reid is about, we must look more closely at Hume's doctrine about mathematics. Geometry, Hume asserts, "is perfectly intelligible only upon the supposition of the composition

of extension by indivisible points or atoms," i.e. of colour or solidity, but, at the same time, he accepts this doctrine only in a very qualified form, and his considered opinion is that geometrical notions, while intelligible in principle only on some such atomistic hypothesis, are, in practice and as a matter of empirical fact, intelligible on no hypothesis whatsoever. Take for example what he says of equality. The defenders of the hypothesis of indivisible points, he asserts,

> have the readiest and justest answer to the question. They need only reply that lines are equal, when the number of points in each are equal. But, though this answer be just as well as obvious, yet I affirm, that this standard of equality is entirely useless since the points which enter into the composition of any line are so minute and so confounded with each other that it is utterly impossible for the mind to compute their number.
>
> (*Treatise* I, II, IV, p. 51, abridged)

Moreover Hume says much the same thing about the notion of a straight line.

> You must surely have some idea of a right line, to which this line [the bent line] does not agree. Do you therefore mean, that it takes not the points in the same order, and by the same rule, as is peculiar and essential to a right line? If so, I must inform you, that besides that in judging after this manner you allow, that extension is composed of indivisible points (which is perhaps more than you intend) [i.e. which commits you to the Humean hypothesis], besides this, I say, that there is no such firmness in our senses or imagination, as to determine when such an order is violated or preserved.
>
> (*Treatise* I, II, IV, p. 57)

That is to say, we get some sort of a clear notion of a straight line by regarding it as a series of points in complete continuity with one another, but at the same time no use can be made of this definition, owing to "the natural infirmity and unsteadiness of our senses when employed on such minute objects" as *minima visibilia*, i.e. as empirical points.

The object Reid has before him in all this discussion is to reply to this Humean view of geometry. His point, in brief, is that all Hume's paradoxes about the practical impossibility of making sense of the geometrical notions disappear if one adopts the hypothesis that we begin with vague impressions. That is to say, he is trying to argue that Hume's difficulties are due to his regarding the hypothesis of our beginning with simple clear-cut impressions as being in principle the only intelligible hypothesis.

"There are," he begins,

> notions of the objects of sense which are gross and indistinct, and there are others that are distinct and scientific. The former may be got from

the senses alone, but the latter cannot be obtained without some degree of judgment. The clear and accurate notions [cf. above "abstract notions, or other accurate notions of things"] which geometry presents to us of a point, a right line, an angle, a square, a circle, of ratios direct and inverse, and others of that kind, can find no admittance into a mind that has not some degree of judgment. They are not properly ideas of the senses, nor are they got by compounding ideas of the senses, but by analysing the ideas or notions we get by the senses into their simplest elements, and again combining these elements into various accurate and elegant forms, which the senses never did nor can exhibit.

Had Mr. Hume attended duly to this, it ought to have prevented a very bold attempt, which he has prosecuted through fourteen pages of his "Treatise of Human Nature," to prove that geometry is founded on ideas that are not exact, and axioms that are not precisely true. . . . The principle he reasons from is, That every simple idea is a copy of a preceding impression, and therefore in its precision and accuracy, can never go beyond its original. From which he reasons in this manner: No man ever saw or felt a line so straight that it might not cut another, equally straight, in two or more points. Therefore, there can be no idea of such a line. I agree with this acute author, that, if we could form no notion of points, lines and surfaces, more accurate than those we see and handle, there could be no mathematical demonstration. But every man that has understanding . . . can fabricate in his own mind those elegant and accurate forms of mathematical lines, surfaces and solids. The Medicean Venus is not a copy of the block of marble from which it was made. It is true, that this elegant statue was formed out of the rude block, and, that too, by a manual operation, which, in a literal sense, we may call abstraction. Mathematical notions are formed in the understanding by an abstraction of another kind, out of the rude perceptions of our senses.

(The quotation consists of an amalgamation of the passage in Essay 6, Chapter 1 with a restatement of the very same point in Essay 6, Chapter 6)

Reid says little more on the present subject, and his intention probably was that of supplying some hints towards answering Hume's difficulties about geometry. But are these hints fruitful hints? By way of deciding this question, it will be sufficient to look into Hume's opinions of the straight line from Reid's point of view, and, to this end, to quote a relevant passage from *Treatise* I.

It is true, mathematics pretend they give an exact definition of a right line when they say, *it is the shortest way betwixt two points*. But in the first place I observe, that this is more properly the discovery of one of the properties of a right line, than a just definition of it. For I ask any one, if

> upon mention of a right line he thinks not immediately on such a particular appearance, and if it is not by accident only that he considers this property? A right line can be comprehended alone; but this definition is unintelligible without a comparison with other lines, which we conceive to be more extended. In common life it is established as a maxim, that the straightest way is always the shortest; which would be as absurd as to say, the shortest way is always the shortest, if our idea of a right line was not different from that of the shortest way betwixt two points. Secondly, I repeat what I have already established, that we have no precise idea of equality and inequality, shorter and longer, more than of a right line or a curve; and consequently the one can never afford us a perfect standard for the other.

Here let us put Reid to the test by inquiring to what extent the kind of approach he suggests succeeds in meeting Hume's point. To begin with Hume's statement: "A right line can be comprehended alone, but this definition is unintelligible without a comparison with other lines"; its point, let us note, is that when we see nothing but isolated, disconnected lines, straightish and not so straight, we feel some kind of difference between them, and are in a position to give them different names, but can't say where the difference lies, or make any statement about it whatsoever, but that when we see a number of lines of a similar sort all intersecting in the same two points, we can now as the result of a comparison say something about the difference in virtue of which we named them before – namely we can say in regard to it that the straighter the line, the shorter it is. But now, the comparison spoken of here is obviously a sort of judgment, and, according to Reid's view of the matter, what we have been doing here is to pass by way of judgment from a notion of the object of sense in question, the straight line, which is gross and indistinct, to one which is, by comparison, distinct and scientific. Even so, however, what about the retort to this Reidian view already implicit in Hume's paragraph – the retort, namely, to the effect that it is quite inappropriate to describe the knowledge we start from, and the knowledge we subsequently attain by the comparison in question, as being respectively a vague knowledge and a distinct knowledge of one and the same fact, since, on Hume's showing, we are concerned here not with one and the same fact, throughout, but rather first with one fact discoverable by itself and without reference to what comes after, and second, with different additional facts, which it requires a quite separate, and special experience to learn? But now, according to Reid, it does not follow in cases like the present one that, because the facts are known by separate experiences, they are therefore sheerly distinct and not intrinsically connected.

> It is therefore certain that attributes, which in their nature are absolutely inseparable from their subject and from one another, may be disjoined in

> our conception; one cannot exist without the other, but one can be conceived without the other.
>
> Thus, all the properties of a circle are inseparable from the nature of a circle, and may be demonstrated from its definition; yet a man may have a perfectly distinct notion of a circle, who knows very few of those properties of it which mathematicians have demonstrated.
>
> (*Works*, p. 395)

That is to say, considered in the light of Reid's remarks, Hume's conclusions about the analagous case of the straight line would seem to be bound up with a very dubious application of the favourite Humean principle that "whatever objects are separable are also distinguishable, and whatever objects are distinguishable are also different" (*Treatise* I, II, VII, p. 26).

But, in the second place, how, it may be asked, would Reid set about defending his claim that the mathematical "idea of a straight line is not copied from any impression of sight or touch, but must have a different origin and a more perfect standard" (*Works*, p. 419)? On the subject Reid is silent, but presumably he might have argued that, in addition to a group of lines actually drawn between two points, there is no limit to the number of lines that might be conceived also connecting the two points, and that among these conceivable lines there must be one which would not deviate with an upward or downward bend. Not that Reid ever does commit himself to any such proposition, but the significant thing is that he affirms the principle of some such operation, and repudiates the antithetic principle, when he is giving his opinion about Hume's fundamental views about space, his views of extension as composed of extensionless points and of these points as being identical with *minima sensibilia*.

> There is a limit beyond which we cannot perceive any division of a body. The parts become too small to be perceived by our senses; but we cannot believe that it becomes then incapable of being further divided, or that such division would make it not to be a body. We carry on the division and subdivision in our thoughts far beyond the reach of our senses, and we can find no end to it; nay, I think we plainly discern that there can be no limit beyond which the division cannot be carried. For, if there be any limit to this division, one of two things must necessarily happen; either we have come by division to a body which is extended, but has no parts, and is absolutely indivisible; or this body is divisible, but, as soon as it is divided it becomes no body [i.e. we get an unextended point]. Both these positions seem to me absurd, and one or the other is the necessary consequence of supposing a limit to the divisibility of matter.
>
> (*Intellectual Powers*, Essay 2, Chapter 19, *Works*, p. 323)

Of course Reid's points against Hume, as we said, are nothing but a series of hints, and, it should be added, hints that are sometimes not very well

worked out. A quite serious example of this is to be found in the passage when he objects to the Humean principle that whatever is distinguishable is separable – the passage, that is to say, containing the remarks quoted above about the properties of a circle. What he does here is to speak both of the relationship between a body's solidity and its figure and of the relationship of the various geometrical properties of the body's figure to one another, without ever raising a question as to how far the one sort of relationship is different from the other; for example, as to whether the figure of a circle and its colour or solidity are not distinguishable but inseparable in one sense, whereas the properties of the circle's figure – for example, its having its circumference at every point equidistant from its centre, and its having its circumference and its diameter related in length to one another by the ratio $2\pi r$ – are distinguishable but inseparable in quite another sense.

Obviously, however, there is a good deal of truth in Reid's main point that Hume's treatment of geometry is the result of his refusal to allow vague ideas at the initial stage of apprehension, and he might very well have gone on to criticise the whole of Hume's treatment of space-awareness in general on similar lines. Take for example the question which, in our opinion, had a great deal of importance indeed for Hume's position as a whole in regard to space – namely the question as to whether we are immediately aware of the so-called angular distances between the stars. On this subject, apparently, one of Hume's chief reasons for denying us an immediate awareness of distance and spatiality is that we can't be aware, in this situation, of the precise distance between the lights, because the dark intervals, being "without parts and composition," i.e. being without definite visibly bounded parts, are immeasurable, and that, not being aware, accordingly, of the exact lengths between, we can't be aware of length and spatiality at all. As it is, however, Reid doesn't carry his theory into this kind of topic, but contents himself with the bare but repeated assertion that we do in fact apprehend this so-called angular distance immediately, and without knowing anything of the angles in question, and, for the rest, passes by, almost in silence, Hume's ingenious attempt at the "logical construction" of notions like "*being in, and out of, contact*" from muscular and organic sensations. By this time we have said enough about the use to which Reid puts this distinction between the judgment of sense and the simple apprehension of sense, and it only remains for us to round off the discussion in this chapter by calling attention to a fact so far passed over in silence by us – namely the fact that Reid has very decided views as to the metaphysical implications or presuppositions of the said distinction. Now the fact in question is that Reid regards the part of his doctrine that we have been studying as implying a doctrine of abstract general ideas, and, in order to explain his insistence on this point, we must take a step back from the chapter we have been studying (Essay 6, Chapter 1) to the final pages of its immediate predecessor (Essay 5, Chapter 6).

As some of the topics to be discussed are fairly familiar, we will plunge *in medias res*.

> The third argument [of Hume] is this: "It is a principle generally received in philosophy, that everything in nature is individual; and that it is utterly absurd to suppose a triangle really existent which has no precise proportion of sides and angles. If this, therefore, be absurd in fact and reality, it must be absurd in idea, since nothing of which we can form a clear and distinct idea is absurd or impossible."

"I acknowledge it to be impossible," Reid continues,

> that a triangle should really exist which has no precise proportion of sides and angles; and impossible that any being should exist which is not an individual being; for, I think, a being and an individual being mean the same thing: but that there can be no attributes common to many individuals I do not acknowledge. Thus, to many figures that really exist it may be common that they are triangles; and to many bodies that exist it may be common that they are fluid. Triangle and fluid are not beings, they are attributes of beings.
>
> As to the principle here assumed, that nothing of which we can form a clear and distinct idea is absurd or impossible, I refer the reader to what is said upon it, chap. 3, Essay 4. It is evident that, in every mathematical demonstration, *ad absurdum*, of which kind almost one half of mathematics consists, we are required to suppose, and, consequently to conceive, a thing that is impossible. From that supposition we reason, until we come to a conclusion which is not only impossible but absurd. . . . As this is the nature of all demonstration, *ad absurdum*, it is evident, (I do not say we can have a clear and distinct idea,) but that we can clearly and distinctly conceive things impossible [*sic*]. The rest of Mr. Hume's discourse on this subject is employed in explaining how an individual idea, annexed to a general term, may serve all the purposes in reasoning which have been ascribed to abstract general ideas.

(He means the rest of Hume's discourse is employed in showing that there is no need to postulate "the attributes common to many individuals" mentioned above.) "Upon this account" (of Hume's) "I shall," Reid continues, "make some remarks."

> He allows that we find a resemblance among several objects, and such a resemblance as leads us to apply the same name to all of them. This concession is sufficient to show that we have general conceptions. There can be no resemblance in objects which have no common attribute; and, if there be attributes belonging in common to several objects, and in man a faculty to observe and conceive these, and to give names to them, this is to have general conceptions.

(He means, of course, abstract general conceptions.)

"I believe, indeed, we may have," Reid continues, immediately after the above statement, taking us now on to familiar ground, "an indistinct perception of resemblance without knowing wherein it lies etc. etc." But we need not quote what we quoted before, and we can now proceed to comment on the whole of the above extract, insisting, in the meantime, that it forms one continuous passage and that nothing has been left out in our citation bar redundancies.

There are two quite distinct points made in this set of paragraphs, of which the first is as follows. According to Reid's frequently expressed view (see, especially, the end of Essay 5, Chapter 2), the fact that we can define a triangle and discuss its nature without referring to its lengths of sides or measurement of angles or time and place of existence, constitutes prima facie evidence that we can form an abstract general idea of a triangle, answering in some sort to Locke's notorious description of such an entity. That said, however, he has at once to take into account the sort of objection Berkeley or Hume would raise to this sort of claim, namely that this abstract general idea of a triangle, in the Lockeian acceptation of the term, can be dismissed out of hand as something self-evidently inconceivable and absurd. Now the main point of Reid's reply to this standard objection only begins to emerge when we follow up his reference to Essay 4, Chapter 3, and turns out to be a point to the effect that Hume is indulging in quite illegitimate tactics in pretending to settle in this off-hand intuitive way the question of the validity or invalidity of the hypothesis under discussion.

> Mathematicians have, in many cases, proved some things to be possible, and others to be impossible, which, without demonstration, would not have been believed. Yet I have never found that any mathematician has attempted to prove a thing to be possible, because it can be conceived; or impossible, because it cannot be conceived. Why is not this maxim applied to determine whether it is possible to square a circle? a point about which very many eminent mathematicians have differed. It is easy to conceive that, in the infinite series of numbers, and intermediate fractions, some one number, integral or fractional, may bear the same ratio to another, as the side of a square bears to its diagonal; yet, however conceivable this may be, it may be demonstrated to be impossible.

That is to say, Reid is concerned to contend that Hume is taking in regard to the point at issue a sort of arbitrary "short way" which no mathematician would dream of adopting in the case of analogous questions in that field, or, to put the matter more clearly, Reid's point is that the hypothesis of abstract general ideas can't be discussed independently of arguments, and, so to speak, a certain intellectual content.

The second part of the long citation from Reid – the part, that is, which we have analysed before – is, one might say, very much taken up with this question of contents and presuppositions. That is to say, not only is the

contention Reid puts forward a contention to the effect that abstract general ideas presuppose distinct resemblances, but, in addition, this claim as to the existence of a connection between the doctrine of abstract general ideas and the doctrine of the vagueness of initial experiences itself presupposes in its turn a good deal Reid has already said in the earlier parts of this present chapter, and other parts of his book relevant to the present chapter, notably the Essay 3, Chapter 4, to which he has already referred us back. But now, looked at from this standpoint, Reid's leading thought here may perhaps be expressed as follows. The anti-nominalist hypothesis of abstract general ideas, he says, beginning with a point he doesn't expect to be questioned, is a hypothesis to the effect that "there can be attributes common to many individual objects," that – to take Reid's own example – linen and snow have the attribute of whiteness in common. Now this hypothesis that individual objects like these (i.e. ordinary objects) have something literally in common, he continues, here again making a point generally accepted, is a hypothesis to the effect that the individuals in question distinctly resemble one another, or – to use a fashionable equivalent – resemble one another in a certain respect but not in other respects. Now the question at issue with Hume, he proceeds, is a question as to whether this hypothesis of resemblance in a certain respect is an indispensable hypothesis for explaining the facts of the case in point, that is, for explaining our common sense beliefs about, and our ordinary mode of alluding to, the linen and the snow, and it is only in his answer to this question that Reid introduces any point that is a relative novelty. In the first place, Reid contends that the hypothesis of resemblance in a certain respect is a necessary hypothesis if the two individual objects in question – the snow and the linen – are each indissolubly complex, and is an unnecessary hypothesis if the individuals in question are not ultimately complex, but are each composed of simple objects like Hume's atoms of colour; and, in the second place, in explanation of the former part of this contention, Reid would apparently say that the hypothesis of abstract general ideas is indispensable in the case of the ultimate complexity of the individuals in question, because to call an individual object like the snow complex is to say that its qualities are not clearly and sharply distinguishable, if it is regarded by itself and without reference to other objects, and because, in that case our ordinary awareness of the individual object as having distinct qualities – our awareness of the snow as white – can arise only by comparing this individual object with another object like the linen, and by finding a resemblance in a certain respect.

In case it should be thought we are reading into our author things which aren't there, the following quotations are peculiarly instructive – the first one from an early page of the present chapter where Reid is defining his position generally in reference to Locke, Berkeley and Hume, and the second one from the aforesaid Essay 4, Chapter 3, which, we may remark, is taken up with what Reid regards as the most serious mistakes of his predecessors.

> It seems to me, that on this question, Mr. Locke and his two antagonists have divided the truth between them. He saw very clearly, that the power of forming abstract general conceptions is one of the most distinguishing powers of the human mind, and puts a specific difference between man and the brute creation. But he did not see that this power is perfectly irreconcilable to his doctrine concerning ideas. His opponents saw this inconsistency; but, instead of rejecting the hypothesis of ideas, they explain away the power of abstraction, and leave no specific distinction between the human understanding and that of the brutes.

The first quotation, then, shows that Reid does believe in the logical connection of nominalism and of the doctrines of simples (his doctrine concerning "ideas").

But now for the second quotation.

> A similar mistake, which is carried through the whole of Mr. Locke's Essay, may here be mentioned. It is, that our simplest ideas or conceptions are got immediately by the senses, or by consciousness and the complex afterwards formed by compounding them. I apprehend it is far otherwise. Nature presents no object to our senses, or to consciousness that is not complex. Thus, by our senses we perceive bodies of various kinds; but every body is a complex object; it has length, breadth and thickness; it has figure, and colour, and various other sensible qualities, . . . and I apprehend that brute animals, who have the same senses as we have, cannot separate the different qualities belonging to the same subject, and have only a complex and confused notion of the whole. Such also would be our notions of the objects of sense, if we had not superior powers of understanding, by which we can analyse the complex object, abstract every particular attribute from the rest and form a distinct conception of it.

When Reid speaks here of "our superior powers of understanding by which we can abstract," as compared with the inferior merit of the brute, he can hardly be speaking of anything else than of "the power of forming abstract general ideas" mentioned in the former quotation (and frequently – cf. the key-quotation on distinct resemblance) as putting a "specific difference between man and the brute creation." Accordingly, his point in this quotation is that there is a connection between the doctrine of abstract general ideas and the doctrine of individual objects as complex as the doctrine of vague experience.

It is not difficult to see what Reid probably means by saying that Hume is right in refusing to combine a doctrine of general abstract ideas with his theory of simples. The hypothesis of individual objects as composed of simple entities is the sort of hypothesis that allows awareness of colour apart from awareness of extension, and allows that awareness of colour by

itself in the form of awareness of Hume's atoms of colour. But now if – as on this hypothesis one certainly might – one had an experience of nothing but a series of these coloured atoms, then, in regard to this experience, the nominalist view would have to prevail, since one would here be able to speak of one atom as like or as unlike another, without being in the least able to speak of the likeness or unlikeness in question as likeness or unlikeness in a certain respect, i.e. to speak with the anti-nominalist formula. Moreover there can be little doubt that what Reid says here of Hume holds good of one, at any rate, of the discussions of abstraction in the *Treatise* – the one on page 41 of *Treatise* I, II, III. In that passage – the one about the purple colour – Hume certainly combines the one contention that the abstract idea we form of extension is not an abstract general idea with the other contention that the idea of experience is nothing but the idea of composition of coloured points, and it looks as if some kind of a connection is implied between the nominalism and atomism of the kind indicated above.

But here, by way of further comment – this time on Reid's own counter-position – let us see whether Reid is being altogether fair to Hume on the present subject. Granted, Hume's statements in the passage about the purple points answer pretty well to Reid's description of the Humean position, but what about Hume's other utterance on the same theme, the passage about the white globe, the black globe and the white cube? The pages in question, taken by themselves, do not involve any reference to atoms of colour, or, for that matter, to nominalism; and the doctrine they teach, it might be suggested, bears a considerable resemblance to Reid's own, being a doctrine to the effect that, if an ordinary complex object like a white globe is regarded alone and without reference to other objects, the common sense distinction between its shape and its colour cannot be drawn.

Reid himself would apparently repudiate any attempt to liken his own position with the position Hume takes here. This point is brought out by an *obiter dictum*, put in apparently as a final flourish at the very end of the chapter we have been reviewing – Essay 5, Chapter 6.

> He tells us gravely, "That in a globe of white marble the figure and the colour are indistinguishable, and are in effect the same." How foolish have mankind been to give different names, in all ages and in all languages, to things indistinguishable, and in effect the same. Henceforth in all books of science and of entertainment, we may substitute figure for colour, and colour for figure. By this we shall make numberless curious discoveries, without danger of error.

The thing that Reid takes exception to here is very likely Hume's claim that a uniformly white globe, if regarded alone and without reference to anything else, presents itself as – to use Hume's own term – simple; simple, that is to say, in the sense of not having visually distinct parts, i.e. parts distinct in colour, in different regions. For that matter, Reid, when dealing

with the subject of vision, is evidently prepared to regard our experience of uniform colour as the experience not of something simple but of something complex.

> In this case, the acquired perception in a sense obliterates the original one; For the sphere is seen to be of uniform colour, though originally there would have appeared a gradual variation of colour [i.e. the eye would have perceived only two dimensions and a gradual variation of colour on the different sides of the object].
>
> (Essay 2, Chapter 21, *Works*, p. 331)

In short, according to Reid, even in this experience, the regions of the object would be visually distinct from one another, in the sense at any rate of being vaguely demarcated by the gradual differences of shade.

But now to put aside guesswork and to stick more closely to the facts – it is very likely not this latter phenomenological consideration of vision that determined Reid to repudiate Hume's treatment of the white sphere, but rather the other wider consideration first mentioned – namely Reid's suspicions of the doctrine of the initial simple. In order to support our contention here, let us go back to the quite central passage in Essay 6, Chapter 1, quoted above, as containing Reid's resolution of the paradox of perception:

> It is acknowledged on all hands that the first notions of sensible objects are got by the external senses only, and probably before the judgment is brought forth; but these first notions are neither simple, nor are they accurate and distinct: they are gross and indistinct, and, like the *chaos*, a *rudis indigestaque moles*.

The relevant fact here is that, in order to illustrate his contention, the first thing Reid does is to give his own version of what is virtually Hume's question about the white sphere.

> You perceive, for instance, an object white, round and a foot in diameter. I grant that you perceive all these attributes of the object by sense but if you had not been able to distinguish the colour from the figure and both from the magnitude, your senses would have only given you one complex and confused notion of all these mingled together.

According to Reid, then, if one took away the judgment, i.e. abstract general ideas, i.e. the experience of similarity in a certain respect, and thus reduced oneself to the experience of the white ball by itself, one's experience would be that of something "indistinct and complex," and not of something simple.

That said, we come to the end of the exposition of Reid's doctrine so far as it is contained in the two successive chapters – Essay 5, Chapter 6, and Essay

6, Chapter 1 – and are left with the impression that these chapters contain a fairly systematic body of teaching. There remains, however, the question as to whether the doctrine Reid teaches in these chapters is consistent with the doctrine he teaches elsewhere, and, for the purpose of dealing with this question, it is necessary to draw attention to a passage containing a doctrine apparently inconsistent with the above doctrine, and, in the opinion of Dugald Stewart, really inconsistent with it.

The passage in question occurs at the beginning of Chapter 3 in this same Essay 5, and contains Reid's introductory remarks on the topic. He is discussing generalisation, i.e. noting two separate things to have an attribute in common, and abstraction, i.e. distinguishing the attributes of a single thing from one another, and he speaks as follows.

> It is difficult to say which of them goes first, or whether they are not so closely connected that neither can claim the precedence. For, on the one hand, to perceive an agreement between two or more objects in the same attribute, seems to require nothing more than to compare them together. A savage, upon seeing snow and chalk, would find no difficulty in perceiving that they have the same colour. Yet, on the other hand, it seems impossible that he should observe this agreement without abstraction – that is, distinguishing in his conception the colour, wherein these two objects agree, from the other qualities wherein they disagree.
>
> It seems, therefore, that we cannot generalise without some degree of abstraction; but I apprehend we may abstract without generalising. For what hinders me from attending to the whiteness of the paper before me, without applying that colour to any other object? The whiteness of this individual object is an abstract conception, but not a general one, when applied to one individual only. These two operations, however, are subservient to each other; for the more attributes we observe and distinguish in any one individual, the more agreements we shall discover between it and other individuals.

Let us set aside for the present the alleged contradiction between this doctrine of Essay 5, Chapter 3, and the doctrine of Essay 6, Chapter 1, and look at the present passage, or rather all of it except the opening sentence in the light of its context. Now on the very next page, and in the course of an attempt to elucidate the ambiguous paragraphs at the beginning, Reid speaks as follows. "It is certain," Reid says, "that there are innumerable attributes that are really common to many individuals." But he goes on,

> There are some attributes expressed by general words, of which this may seem more doubtful. Such are the qualities which are inherent in their several subjects. It may be said that every subject hath its own qualities, and that which is the quality of one subject cannot be the quality of another subject. Thus the whiteness of the sheet I write upon cannot be

> the whiteness of another sheet, though both are called white. . . . To this I answer, that the whiteness of this sheet is one thing, whiteness is another; the conceptions signified by these two forms of speech are as different as the expressions. The first signifies an individual quality really existing, and is not a general conception, though it be an abstract one: the second signifies a general conception, which implies no existence, but may be predicated of everything that is white, and in the same sense. On this account, if one should say that the whiteness of this sheet is the whiteness of another sheet, every man perceives this to be absurd; but when he says both sheets are white, this is true and perfectly understood. . . . It appears therefore, that the general names of qualities, as well as of other attributes, are applicable to many individuals in the same sense. [i.e. that the attributes too are common to many individuals].

Reid here is obviously opposing those nominalists who say that talk of this and that object as being white, i.e. of having whiteness in common, is, in the last analysis, reducible to nothing but talk of the whiteness of this object and the whiteness of that object. Or, if we want Reid's point in a somewhat more up-to-date form, it appears to amount to this, that it is a serious error to confuse the state of mind normally called something like "seeing the object to be white" with the other state of mind normally called something like "seeing the whiteness of the object" by claiming both in the last resort to be identical with an alleged state of mind, not normally mentioned or recognised, but apparently closer to the latter than to the former – a state of mind in fact called by philosophers "seeing white here now."

Let us now proceed to relate the doctrine here to the passage at the beginning of the same chapter in Reid and then to look at both in the light of Essay 6, Chapter 1. In the first place, it must be fairly obvious that the two sides of Reid's basic distinction here between "the whiteness of the sheet," on the one hand, and the "whiteness" on the other, correspond pretty closely, the former to "the whiteness of the paper" mentioned in the earlier paragraph, the latter to what is said there about snow and chalk, and that the one is concerned with the experience of seeing that the chalk and the snow are similar in respect of colour, and the other with the experience of seeing the whiteness of the snow, without bothering about its other qualities or indeed anything else in the world. But now, in the second place, it must also be fairly obvious that this distinction between seeing the object to be white and seeing the whiteness of the object corresponds pretty precisely to the distinction announced in Essay 6, Chapter 1 between the bare conception (apprehension without judgment) of the aspect of a thing in abstraction from everything else and the judgment of perception corresponding thereto. Accordingly what Reid is very likely doing here – i.e. in Essay 5, Chapter 3 – is to draw his favourite distinction between simple apprehension and judgment in order to correct what he regards as a mistake of some nominalists, but at the same time to leave unmentioned here the point about the distinction he mentions elsewhere –

namely that judgment precedes simple apprehension – because, in the argument he is making against Condillac or some other nominalist, that point is here irrelevant.

Having thus tried to interpret the second paragraph of the passage in dispute more or less independently of the first paragraph, we will next try to interpret that first paragraph quite independently of its successor. In doing this, we will concentrate our attention above all on the sentence which we expressly left out of our account in the part of the work just done – that is to say, on the first sentence in this first paragraph, the one that runs, "it is difficult to say which of them goes first, or whether they are not so closely connected that neither can claim the precedence." Now this paragraph, if considered by itself, would seem to state a problem concerning the relations of generalisation and abstraction, that is (according to Reid's definitions), of being aware of two or more numerically distinct things as having an attribute or attributes in common, on the one hand, and of being aware of one of these things as having various distinguishable attributes on the other. In the paragraph, Reid would seem to be first stating something he regards as basic and to be taken for granted, and then to be indicating the sort of problem that arises if this fact is taken for granted. Now the fact constituting the starting-point is the fact that abstraction and generalisation are intimately connected, the fact expressed near the beginning of Essay 5, Chapter 1, by saying, "The same faculties by which we distinguish the different attributes belonging to the same subject enable us likewise to observe that many subjects agree in certain attributes while they differ in others." The problem then arising out of this fact, is, Reid tells us, a twofold one; in the first place, is the connection so intimate that the one process and the other really coincide and are virtually indistinguishable, or is the form of intimate relation such that each is, so to speak, a distinct phase, in one complete process? And in the second place, if each thus forms a phase in a process, does the initial phase consist of noting resemblances between different things, or does it consist rather, of distinguishing from one another the features in one single thing.

What we want to argue now is that just as the second paragraph, considered independently of the first, but taken along with the kindred passage on the next page, makes sense when looked at in the light of Essay 5, Chapter 6 and Essay 6, Chapter 1, so too this first paragraph, considered by itself and interpreted in the above manner also makes sense when looked at in the light of the concluding chapter of this essay, and the first of the next. Indeed in the present case, we believe, this comparison will prove more illuminating than it did in the other case, in the sense that, whereas on the former occasion we did not thereby learn anything new about these crucial chapters on the subject, on this latter occasion we are likely to clear up certain of the most vexing difficulties and obscurities in Reid.

To make a beginning on the various points of view Reid distinguishes as to the relations of abstraction and generalisation, it is not perhaps very difficult to identify, or at any rate illustrate, out of what has gone before, the one of

these first mentioned, the one that makes generalisation and abstraction coincide, since Hume's theory is pretty much a theory of this sort. According to Hume, we first succeed in distinguishing between the shape and the colour of the white globe only when we observe a white globe and a black to be alike in one respect and unlike in another respect; and so too, in the other case he deals with – that of the purple patch – it is only afterwards when we see patches of various different colours in addition to this one that we found an idea of extension in the abstract that omits the peculiarities of colour. In short, on Hume's view, generalisation and abstraction, one might say, really become identical.

Here we turn to the other view of the matter, that these two operations of mind are quite distinct as being successive phases in one complete process. Now it is this view that Reid himself regards as more adequate to the facts, and, for that matter, there seem to be evident traces in Essay 5, Chapter 6 and Essay 6, Chapter 1 of both of the alternative versions of the view indicated in Reid's prefatory sentence, that is, of the version that gives abstraction the precedence as well as of the version that gives generalisation the precedence. Here, for example, is a passage already familiar.

> There is, therefore, an indistinct notion of resemblance when we compare the objects only in gross: and this I believe brute animals may have. There is also a distinct notion of resemblance when we analyse the objects into their different attributes, and perceive them to agree in some while they differ in others. It is in this case only that we give a name to the attributes wherein they agree, which must be a common name, because the thing signified by it is common. Thus, *when I compare cubes of different matter* [emphasis added], I perceive them to have this attribute in common, that they are comprehended under six equal squares, and this attribute only is signified by applying the name, *cube* to them all.
>
> (Essay 5, Chapter 6)

But now, without waiting to comment, let us cite a passage from Essay 6, Chapter 1 that works over much the same ground as the latter, but makes the process of *getting a distinct notion of a cube and its attributes take place in the absence of any second cube to compare it with*.

> Suppose a cube of brass to be presented at the same time to a child of a year old and to a man. The regularity of the figure will attract the attention of both. Both have the senses of weight and touch in equal perfection; and, therefore, if anything be discovered in this object by the man that cannot be discovered by the child, it must be owing, not to the senses, but to some other faculty which the child has not yet attained.

Reid has previously described the process, judgment, which the man goes through but not the child, as follows.

> Before we can have any distinct notion of this mass, it must be analysed, the heterogeneous parts must be separated in our conception, and the simple elements, which before lay hid in the common mass, must first be distinguished and put into one whole.

But to take up the initial passage when it speaks to the same effect:

> By this analysis and composition two effects are produced. *First*, from the one complex object which his senses presented, though one of the most simple his senses can present, he [i.e. the man "a man of ordinary judgment"] educes many simple and distinct notions of right lines, angles, plain surface, solid equality, parallelism; notions which the child has not yet faculties to attain. *Secondly*, when he considers the cube as compounded of these elements put together in a certain order, he has then and not before a distinct and scientific notion of a cube.

Now, to all appearance, there are three somewhat different lines of approach to much the same set of problems, and, in order to make each of them clear, it will be necessary to state them all in a common terminology. Fortunately, this translation will not be difficult to effect, since both Hume and Reid are evidently thinking of the traditional scholastic question of the distinction between form and matter, the latter speaking of cubes of a different substance, and of a cube of brass, the former primarily concerned with the relation of "body and body figured" and, while giving the question a phenomenological version in terms of colour and figure, nevertheless ready, it would seem, to regard "colour or substance" as alternatives. Accordingly, for the sake of clarity, let us follow Hume's formula rather than Reid's, and, for the sake of simplicity, speak of circles and squares, where they both speak of cubes and globes.

That done, we can now begin to disentangle the relation of these three cases, beginning with the first and the second. Now evidently, up to a point, there is a certain amount of common ground between Reid and Hume here, in the sense that, for both, the mere comparison of a red square and a blue square (supposing them "colour-patches") would enable us in the first instance only to judge them to be vaguely resembling, i.e. in some unspecifiable sense alike. The divergence between the two – I mean, of course, the two as examined according to the spirit rather than the letter – has, one might say, to do with the fact that, whereas Hume turns this vague notion of resemblance into a precise notion by bringing into comparison a third object – in this case, a blue circular colour-patch – Reid tries to do away with the vagueness by means of a part-by-part comparison of the two squares in respect of their vaguely resembling regions, and this difference in tactics no doubt has a good deal to do (we do not say, everything to do) with the fact that whereas for Hume each object considered by itself or internally is virtually a simple object, for Reid, on the other hand, each object is already, in

itself, a vague complex, in virtue probably, as we have already explained, of its containing, in the natural way of things, differences of shade in its colouring.

Let us pass now to the third case, which is a crucial one, in the sense that it exhibits a further difference between Reid and Hume over and above the difference constituted by Reid's explicit insistence on vagueness. The point here is apparently – to put the matter in our own way – that, in the first place, the single blue square colour-patch would present itself not merely as vaguely complex in the sense of having slightly different shades of blue in different places, but also as being vaguely regular in outline; and that, in the second place, if one continued to regard attentively the square in its singleness and without regard to any other similar object, one would never certainly manage to differentiate properly its attributes of colour and shape, but one would be able to pass from a vague to a precise grasp of the regularity relations holding between the parts of its outline. That is to say, the claim here – implicit in Reid rather than explicit – is that, in the case of this single object, we should be able to get by abstraction (i.e. a form of abstraction consisting of "analysis and composition") precise information as to the regular arrangement of its outer parts, even at a stage when it would be all one to speak of the "edges of the visible object" and "the place where the blue stops" and "the inside of the visible object" as "the place where the blue continues to shade into other blues."

Now at last we are in a position where we may venture a word as to the probable meaning of Reid's problem: "can we abstract prior to generalising?" In the first place, we may note that Reid introduces this passage about the single cube of brass preparatory to his criticisms of Hume's views about geometry, and that when he speaks of our being able to distinguish various attributes of the cube without comparing it with other cubes, the attributes he refers to are all attributes having to do with its extension-aspect, i.e. shape-aspect. In the second place, if the latter half of our above exegesis is sensible or even plausible, it would seem that the sort of knowledge we could get of the regularity of the cube is a knowledge of what is virtually the extension-aspect of the cube and the properties pertaining thereto – although no doubt we would not get an actual knowledge of these extension-properties in their ordinary significance until we had distinguished extension from colour as a result of a comparison of the object with other objects. But, in that case, when Reid speaks of abstraction prior to generalisation, the sort of thing he is very likely thinking of is – so to speak – the possibility of distinguishing certain of a thing's shape-attributes from one another prior to distinguishing the shape as such from the colour, or in other words, Reid is, to all intents and purposes, touching upon the problem of the relation between, on the one hand, the distinction of a thing's shape from its colour, and, on the other hand, the distinction from one another of the properties a thing has in virtue of its shape – distinctions which Reid equally regards as abstraction as the following passage will show.

> It ought likewise to be observed, that attributes may, with perfect ease, be distinguished and disjoined in our conception, which cannot be actually separated in the subject. Thus in a body, I can distinguish its solidity from its extension, and its weight from both. In extension I can distinguish length, breadth and thickness; yet none of these can be separated from the body or from one another. [The relations of solidity and extension are parallel, it should be remarked, to those of colour and extension.]
>
> (Essay 5, Chapter 3)

Here we can now turn back to the passage in dispute. As a preliminary, it may be remarked that this passage last quoted is on the same page, and is given by Reid as an illustration of the notion of abstraction as used in the preliminary passage, in much the same way as the other point used earlier, in the argument about the difference in meaning and usage between "whiteness" and "the whiteness of" is also, as we said, intended as an illustration of the other notions introduced into the preliminary passage. Indeed the fact that Reid uses the instance, previously discussed, of the relation of a circle's properties to one another, to round off these remarks about abstraction does strongly suggest that, in these opening remarks, Reid has in mind this kind of geometrical abstraction, from the start.

Accordingly, we suggest the following exegesis. When Reid in the first paragraph says it is difficult to elucidate the relations of generalisation and abstraction, he means that it is difficult to work out accurately the foundations or presuppositions of the various kinds of common sense judgment – for instance those about shape and those about colour or hardness – and trace them back to the more primitive vague judgments. But when in the second paragraph he refers to the existence of the case when the two are separated and abstraction indubitably occurs without generalisation, he is apparently saying that, whatever the difficulties as to the origins and foundations of the judgment, a clear and sharp distinction can be drawn between the judgment and the simple apprehension that is posterior to the judgment.

As for Dugald Stewart, who takes a very different view of this passage from that which we take, it is unlikely that he would raise any very strong objections to our interpretation. Witness this declaration.

> In comparing Dr. Reid's publications at different periods of his life, it is interesting to observe his growing partiality for the aphoristic style. Some of his *Essays on the Intellectual and Active Powers of Man* are little more than a series of detached paragraphs, consisting of leading thoughts, of which the reader is left to trace the connection by his own sagacity.
>
> (*Collected Works*, vol. 1, p. 465)

That said, we will close the controversy, and endeavour to pass from the

half-chapter dealing with the Reidian doctrine of perception as judgment to the half dealing with the Reidian doctrine of perception of an external world. And yet, in the meantime, as a sort of postscript to the one, and preface to the other, we had better say a word or two about the ellipses and ambiguities to which Dugald Stewart called attention and which do indeed infect many of Reid's pages – equally those on the external world as those on judgment. On this subject, all we claim is that, on the whole, the disputed points can be explained in Reid's favour – that is, as not being really fallings away, but plausible things to say from his point of view, and pretty well in accordance with the rest of his philosophy – as, for example, in the difficulty about the meaning of "abstraction," Reid can, for the most part, we think, be cleared up along the lines just indicated; or, again, in the equally troublesome difficulty about the meaning of "conception" and equivalent words and phrases, Reid can likewise be cleared along the lines indicated long ago by Sir William Hamilton.

By way of approach to the perception of externality, we had better briefly explain this latter controversy. The problem is something like this. It was pointed out that perception, i.e. awareness of a thing present to the senses, is always regarded by Reid as *conception* of the thing. Then it was further pointed out that imagination, i.e. awareness of a thing not present to the senses, is equally regarded by Reid as conception of the thing. Finally, in consequence of this fact, it was argued that Reid really treats perception as a department of imagination, that he virtually, if not actually, regards the object of perception as a species of mental image quite distinct from the externally existing body, and, accordingly, in spite of his professions to a direct or presentative theory of perception, is at bottom as much a votary of the indirect or representative theory as any of the philosophers he attacks.

To meet this difficulty Hamilton calls us not to study Reid's theory of the perception of externality in isolation from the rest of his philosophy. He goes on to point out that Reid's whole theory of conception (in the sense of *imagination*) is a protest against the view that "images in the mind serve to account for the faculty of conceiving things most distant in time and place" – "I can likewise," Reid says, "conceive an individual object which really exists such as St. Paul's church in London. The immediate object of this conception is four hundred miles distant, and I have no reason to suppose it acts on me or I on it, but I can think of it, notwithstanding" (*Works*, p. 374). But now, in virtue of holding a view like this, Reid must, Hamilton points out, "equalise perception and imagination" just as much as the philosophers he attacks, but this equalisation of perception and imagination in Reid means something very different, Hamilton goes on, from what it means in his opponents. "Other philosophers brought perception into unison with imagination by making perception a faculty of *mediate* knowledge; Reid, on the contrary, brought imagination into unison with perception by calling imagination a faculty of *immediate* knowledge" (Hamilton, *Lectures on Metaphysics*, vol. 2, pp. 79–80).

Of course, there are still many difficulties, as Hamilton points out over and over again, about the meaning of Reid's terminology here, and, perhaps, in the nature of the case they are inevitable. Granted that Reid wanted to avoid all language implying a mental image theory, he might (one would think) just as easily have formulated the distinction between imagination and perception in the form "experience without judgment" and "experience with judgment" as in the form "conceptions without judgment" and "conceptions with judgment," and it is obvious that difficulties and paradoxes arise either way.

3 Reid (2)

To begin, it should be pointed out that, while, in Reid's opinion, the part of his doctrine we have studied as well as the part we are going to study both seem to rank, in their way, as defences of common sense, he nevertheless regards the defence of common sense in the former case as no doubt preparatory to, but at the same time as in no way predetermining his defence of common sense in this latter case. That is to say, so far as Reid is concerned, it follows certainly from the doctrine already expounded, that common sense is right in regarding the object of perception as a thing, or rather a complex impression rather than a sense-datum, i.e. a simple impression, but it just as certainly does not follow from that doctrine, that common sense is also equally right in regarding this complex object of perception or perceived thing as an independent existent, i.e. identical with a real thing in the ordinary sense. (It may, by the way, be noted in passing that Reid seldom makes any attempt to discuss the relation of the one set of doctrines to the other, and that almost the only place where his intentions in this matter are at all discernible is Essay 2, Chapter 20 (*Works*, pp. 326–7).)

From Reid's point of view, the issue in the new case may be summed up as follows. In the first place, Reid and Hume are agreed – in opposition to Berkeley – on one vital point, namely that all men accept an unverifiable belief in an external world – unverifiable, at least as regards "continued existence" – and that the fact of this unverifiability constitutes in itself no objection to the belief. In the second place, Reid and Hume differ as to whether or not certain beliefs acquired through introspection – beliefs, that is, available only to phenomenologists – are found to be in contradiction to this unverifiable instinctive belief in externality.

It might be as well, before we go further, to show by quotation that Reid does in fact distinguish sharply between Hume and Berkeley in pretty much the way suggested here.

> In this acknowledgment [of the belief in the independent existence of body as "a natural instinct or prepossession"] Mr. Hume indeed seems to me more generous, and even more ingenuous than Bishop Berkeley, who would persuade us that his opinion does not oppose the vulgar opinion,

> but only that of the philosophers; and that the external existence of a material world is a philosophical hypothesis, and not the natural dictate of our perceptive powers. The Bishop shows a timidity of engaging such an adversary, as a primary and universal opinion of all men. He is rather fond to court its patronage. But the philosopher intrepidly gives a defiance to this antagonist, and seems to glory in a conflict that was worthy of his arm. *Optat aprum aut fulvum descendere monte leonem*.
>
> (*Works*, p. 299)

On the question of the external world, then, Reid's argument would seem to be an argument against Hume rather than against Berkeley, and the main point at issue is – to make it more precise – whether this natural belief in an external world can be reconciled with the findings of phenomenology on the two topics of sensible shape and size, on the one hand, and of independent (in Hume's sense of "distinct") existence on the other.

Here we had better say a word or two about these topics, as to how each is related to Reid's own discussion of the belief in externality in connection with the sense of touch, and his further discussion of the belief of externality in its relation to the sense of sight. Now this topic of sensible shape and size is naturally regarded by both Reid and Hume as having an intimate connection with the question of the independent reality of objects of vision, but is not regarded by either of them, so far as I can see, as entering into the parallel question of the independent reality of the objects of touch. On the one hand, Hume frequently tries to prove the existence of a discrepancy between the instinctive belief about the object of vision's shape or size and the introspective report about the object of vision's shape and size, and Reid, in his turn, takes account of this sort of argument and exercises all his ingenuity in trying to answer it. On the other hand, Hume never uses any kind of analogous argument in respect of the shapes and sizes of the objects of touch, and, Reid, taking advantage of Hume's silence here, feels at liberty to adopt Bishop Berkeley's view as to the identity of tangible shape and size with real shape and size, i.e. with the shape and size believed in by common sense.

But while it is in Reid's interest, as a defender of common sense, to adopt Berkeley's view on this point, Reid, it may be pointed out, does not take over this view of touch as being virtually illusion-free and never being out of accord with common sense, without in the first place carefully considering the one alleged case of tactual illusion that was well known in the schools then.

> Dr. Smith [a contemporary writer on optics] justly attributes to custom that well-known fallacy in feeling whereby a button, pressed with two opposite sides of two contiguous fingers laid across, is felt double. I agree with him, that the cause of this appearance is, that those opposite sides of the fingers have never been used to feel the same object, but two different objects, at the same time. And I beg leave to add, that as custom

> produces this phenomenon, so a contrary custom destroys it; for, if a man frequently accustoms himself to feel the button with his fingers across, it will at last be felt single; as I have found by experience.
>
> (*Works*, p. 175)

That is, this reputed case of tactual illusion is not, according to Reid, a real illusion, in the sense that seeing the convergence of the railway lines is a real illusion; the latter can't be made to disappear by habit as the former can.

The other topic of distinct existence, unlike the topic of sensible size and shape, does enter into the Reid–Hume debate, both in the case of belief in the externality of visible objects and in the case of the belief in the externality of tangible objects. Indeed, so far as Reid is concerned, the discussion of this matter on the visual side and the discussion on the tactual side are fairly closely linked, in the sense, at least, that the former aspect is to some extent subordinate to, and not fully intelligible apart from, the latter aspect. Accordingly, it seems best to exhaust this problem in its tangible aspect first, and, then, immediately afterwards, to take the visual half.

As a preface to our exposition, it has to be said that there are difficulties of interpretation in our present chapter, of a sort not encountered in Chapter 2. There, we were drawing on the *Essays*, a book based on class-lectures and indicating the actual passages in Hume and Locke relevant to the argument; here, we have to do with the *Inquiry*, a book of polite literature, referring only in very general terms to the authors criticised. Accordingly there is nothing for it here but to use guesswork if we are to understand with any precision the meaning of Reid's positions. (The *Inquiry* – as also what is later referred to as *Intellectual Powers* – is included in Reid's *Works*.)

Let us, then, without more ado venture the hypothesis that Reid, in his *Inquiry* chapter on touch, is arguing against the position about touch maintained by Hume in *Treatise* I, IV, IV, and, then, try to interpret Reid in accordance with this hypothesis. Reid, we will say, agrees with Hume about the tactual situation to this extent – that when one believes oneself to be feeling a flat, hard surface with one's hand, and the surface to be external to or beyond the impressing hand, one does not actually feel any such thing as two shapes or surfaces in contact with one another. But Reid goes on to deny Hume's allegation that the only thing felt here is one single object of sense, one indivisible presentation, and to assert on the contrary that two objects are in this case presented simultaneously, namely (to use Hume's own phrase) "a sensation conjoined with solidity." What happens in fact is that I feel both a strain or pain, and also a solid shape or surface of some kind, and, moreover, the feeling in question, Reid insists, quite plainly contains two distinguishable separable parts, because when I move my hand freely without encountering anything I feel the strain without feeling any solid shape at all. But, further, these so-called muscular strains, Reid continues, here following Hume's lead, are vague events, existing in time only, but not in space, and therefore are not material things in the sense in which the solid shapes are.

Accordingly the object of feeling. Reid concludes, is found to contain (if one observes oneself carefully) two distinguishable components, one of them an immaterial one and the other a material one, and Hume has simply made a mistake as to the introspectible facts, in maintaining there is only one indivisible presentation. But now, if this alternative analysis of the fact in question is granted, then the common sense belief in the distinct existence of the shape felt, i.e. the material component, is supported by experience.

But here let us quote Reid.

> Let a man press his hand against the table – *he feels it hard*. But what is the meaning of this? – The meaning undoubtedly is, that he hath a certain feeling of touch, from which he concludes, without any reasoning or comparing ideas, that there is something external really existing, whose parts stick so firmly together, that they cannot be displaced without considerable force.
>
> There is here a feeling, and a conclusion drawn from it, or in some way suggested by it. In order to compare these, we must view them separately and we will perceive them to be as unlike as any two things in nature. The one is a sensation of the mind, which can have no existence but in a sentient being; nor can it exist one moment longer than it is felt; the other is in the table, and we conclude, without any difficulty, that it was in the table before it was felt, and continues after the feeling is over. The one implies no kind of extension, nor parts, nor cohesion; the other implies all these. Both, indeed, admit of degrees, and the feeling beyond a certain degree is a species of pain, but adamantine hardness does not imply the least pain.
>
> (*Inquiry*, Chapter 5, Section 5, abbreviated)

Now, in the first place, what does Reid mean here by "having a certain feeling of touch"? His answer to this question is given in the very next section, where he tries to show what these feelings are like when they are isolated. Imagine, he says, the case of a man whose mind has become a *tabula rasa* and who is blind – the blindness being postulated so as to cut out visual experience. "Let us suppose he makes some instinctive effort to move his head or hand, but no motion follows on account of palsy. Can this effort [i.e. feeling of effort] convey the notion of space or motion to one who has never had it before. Surely it cannot." But further let us suppose he does manage to move the limb by instinct without its encountering anything.

> He has here a new sensation, which accompanies the flexure of joints, and the swelling of muscles. But how this sensation can convey into his mind the idea of space and motion, is still altogether mysterious and unintelligible. The motion of the heart and lungs are all performed by the contraction of the muscles, but yet give no conception of space or motion.
>
> (*Works*, p. 126)

On the other hand – to take a different sort of case, i.e. so-called passive touch – suppose the man to be immobilised, and "a body drawn across his face or hands while they are at rest. Can this give him any notion of space or motion. The motion of the blood along the arteries, when violent, is felt, but it would surely not give a conception of space or motion to one who didn't have them before." Secondly to the same topic, suppose into my two hands, thus immobolised, are put the extremities of a body – of a stick for instance. I will then certainly have two feelings, but "if I have no previous notion of hands at all, or of the distance between them, I can never get that notion (of the stick, for example, as having size) by their being touched" (*Inquiry*, Chapter 5, Section 6). Part of what Reid says here – indeed the main part – it will be remembered, had already been said by Hume, when in *Treatise* I, II, V, he examines "the perceiving of that sensation we call motion in our hand or organ of sensation."

Reid, then, means something fairly definite when he says "there is here a feeling," but what does he mean when he adds that there is in addition to the feeling "a conclusion drawn from it or in some way suggested by it"? Now it is the word "suggestion" that is Reid's normal word in a case like this, and his talk about "conclusion" is apparently only a variation, and he explains on one occasion, "when I say the one suggests the other, I mean not to explain the manner of the connection but to draw attention to a fact, which everyone may be conscious of – namely that . . . such a conception and belief immediately and constantly follows the sensation" (*Works*, p. 131). In other words, the relation of the first to the second is, Reid wants to say, a purely *de facto* sequence or concomitance, and "no man can give a reason why the sensation of smell or sound [which Reid, like Hume, regards as non-spatial objects] might not have indicated hardness [i.e. solid shape, since for Reid, "hardness implies extension"] as well as that sensation whereby our constitution does indicate it" – "indicate" being another synonym for suggest.

Finally a word as to the general scope of Reid's doctrine in this passage. As to the reference "we conclude, without any difficulty, that it was in the table before it was felt, and continues after the feeling is over," Reid is concerned to uphold here the belief in "continued existence" as well as the belief in "distinct existence" – to use Hume's convenient phrases. However, there is this very great difference between his treatment of the former topic, and his treatment of the latter topic, both in this passage and elsewhere – namely, that whereas he has a point, or rather series of points to make about *distinct existence*, he has nothing whatever to contribute on the subject of *continued existence*. Accordingly, his discussion of our perception of an external world, if read according to the spirit rather than according to the letter, is a discussion only about the problem of the belief in distinct existence.

The question now arises as to what opponents Reid has in view here; as to what heresies his arguments are designed to crush. All Reid tells us in the somewhat belletristic *Inquiry* is that "the sensation and the perception of hardness have hitherto been confounded by the most acute inquirers into the

principles of human nature" (*Works*, p. 122) and, again, "philosophers have entirely overlooked it [the sensation in question] or confounded it with that quality of bodies we call *hardness*" (*Works*, p. 120). But now, in the opinion of Reid, Locke and Hume rank pretty high as inquirers into human nature, and, in the *Essays*, he gives more space to them than to other philosophers. Now Locke does apparently *overlook* altogether the sensation in question; at any rate, as D. J. O'Connor notes, he does not take into account the physiology of sensation (D. J. O'Connor, *John Locke*, London, Penguin Books, 1952, pp. 42, 44). As for Hume, he does not overlook the sensation in question, since his description of the free movement of a limb corresponds entirely to Reid's and may well be Reid's source, but he might well be regarded, from Reid's point of view, as confounding the sensation of touch with the perception of solid body, since, in the very chapter when he discusses the experience of free movement, he tries to regard perception of solid body as a sort of logical construction out of perceptions of atoms of solidity, and does not clearly distinguish the perception of an atom of solidity from the sensation of touch, in Reid's sense.

It would seem then that Reid's insistence on the sharp distinction and *de facto* relation of the tactual sensation and the tactual perception is intended, in large part, as a protest against attempts like Hume's to define solid or tangible extension in terms of something rather like sensations of touch. Here, for example, is a passage from Reid strictly relevant to this very topic.

> It is true that we have feelings of touch, which every moment present extension to the mind; but how they come to do so is the question; for those feelings do no more resemble extension, than they resemble justice or courage – nor can the existence of extended things be inferred from those feelings by any rules of reasoning; so that the feelings we have by touch, can neither explain how we get the notion, nor how we come by the belief, of extended things.
>
> (*Works*, p. 124)

To make this point more clearly, let us view a passage in Hume in the light of Reid. Hume is here (*Treatise* I, IV, IV) propounding a sceptical crux of the following kind: "though solidity remains always invariably the same, the impressions of touch change every minute on us, which is a clear proof, that the latter do not represent the former." Now the point Hume wants to make is apparently that, in the present case of fingering a coin in one's pocket, whereas common sense unhesitatingly pronounces the object felt to be a solid shape whose parts maintain an unchanged relationship to one another throughout the duration of the experience, introspection on the other hand finds the object to be nothing but a shifting succession of "feels," and that, accordingly, the belief in the existence of a whole of stable parts cannot be based on the experience of successive, non-coexistent atoms of feeling. In short, Hume wants us to understand that in this case common sense and

introspection contradict one another about the same fact, whereas Reid, envisaging the same sort of situation, would want to report that the alleged contradiction does not occur at all, because, contrary to Hume's notions, introspection and common sense are not concerned with one and the same fact, but with two different facts contingently related to one another. That is to say, from Reid's point of view, introspection records the sensation and common sense the perception, and Hume's paradox is brought into being only because Hume expects the former (the sensation) to *be evidence* for the latter (the perception), i.e. wants the connection between the extended solids and the feelings of touch to be a logical one.

Let us here abruptly pass from touch to vision, keeping still the present problem of distinct existence. Here Reid's initial problem is probably that, whereas common sense regards the coloured shape seen as external in much the same way as it regards the solid shape felt as external, introspection on the other hand does not confirm the externality of the former in the same ready way as it confirms the externality of the tactual object. The point is that, whereas the solid shape presents itself to introspection as having an external, or distinct existence through its always presenting itself in contrast to the concomitantly felt muscular sensation of strain, the coloured shape does not present itself to introspection as being external, or having a distinct existence in any similar way, because – according to Reid – there are no contrasting concomitant visual sensations to fulfil a role here analogous to that of the tactual sensations there.

Reid draws attention to this kind of difficulty only by implication, when, in his chapter on the present topic, he says "there seems to be no sensation that is appropriated to visual figure, or whose office it is to suggest it" (in the way in which there is a sensation appropriated to tangible figure and with an office to suggest it); but Adam Smith, a man of the same country and of much the same time, does, it is worth noting, make an analogous point in a quite explicit way at the beginning of his discussion on vision.

> That the objects of sight are not perceived as resisting or pressing upon the organ which perceives them is sufficiently obvious. They cannot therefore suggest, at least in the same manner as the objects of touch, the externality and independency of their existence.
>
> (*Essays on Philosophical Subjects*, p. 148)

Indeed, it almost looks as if both Reid and Smith approach this part of the problem of the external world in the light of the Humean principle that "our senses offer not their impressions as the images of something *distinct* or independent, because they convey to us nothing but a single perception, and a single perception can never produce the idea of a double existence"; and one might express the starting-point common to them both by saying that, for each of them (though in somewhat different ways), touch does indubitably yield a double impression, despite Hume's claims to the contrary, and, in that

way, gives a foundation for the idea of the distinct existence of its objects, whereas sight, on the other hand, yields merely a single impression, and, therefore, doesn't in that way at all produce the idea of independent existence.

The next question for Smith, as probably also for Reid, is whether the common sense belief in the externality of the objects of vision or shapes seen can be justified in any other way; and to the question Adam Smith replies in the negative by developing a point already stated by Hume in the summary form: "sight does not inform us of distance or outness immediately." Smith puts the matter in this way: "We are apt to imagine that we see objects at a distance from us and that consequently the externality of their existence is immediately perceived by our sight." Berkeley, however, has corrected this common misapprehension, and shown us

> that all visible objects must be naturally perceived as close upon the organ, or, more properly perhaps, like all other Sensation, as in the organ which perceives them. That the objects of sight are all painted in the bottom of the eye, upon a membrane called the retina, pretty much as the like objects are painted in a Camera Obscura, is well known to whoever has the slightest tincture of the science of Optics; and the principle of perception, it is probable, originally perceives them as existing in that part of the organ, and nowhere but in that part of the organ.
>
> (*Essays on Philosophical Subjects*, pp. 148–9)

Reid's tactics at a corresponding stage of the argument are seemingly very different from Smith's. Like Smith, he accepts the position that distance from the eye is not seen, but, unlike Smith, he refuses to argue from the invisibility of *distance* to the invisibility of *outness*. Not that Reid himself formulates this distinction or expressly states his position in this form, but his arguments make better sense once it is imputed to him, and, in any case, one of the most competent judges of these matters among his more immediate successors seems to have interpreted him, and Stewart, who on this topic follows Reid, as intending some such doctrine. "Reid and Stewart," says Ferrier, writing in *Blackwood's Magazine* in 1842, kept quite distinct and separate "the question as to whether objects are seen by the unassociated vision to be at different distances from the percipient," from the question, "whether objects are immediately seen to be at an indefinite distance from the eye, and thus to be external," and, according to Ferrier, they answer "no" to the former question and "yes" to the latter (*Greek Philosophy*, p. 323). Reid's editor, Hamilton, it should be noted, disagrees with Ferrier on this point, asserting that

> we must be careful not, like Reid and philosophers in general, to confound the perceptions of mere *externality* or *outness*, and the knowledge we have of distance through the eye. The former may be and probably is natural, while the latter, in a great but unappreciable measure, is acquired.
>
> (*Works*, p. 177)

But Hamilton, as we shall see in due course, is not a reliable guide to Reid's meaning on the present problem.

From this point of view, we can perhaps put Reid's argument as follows. In the first place, the invisibility of outness does not, Reid probably thought, follow from the invisibility of distance, because the invisibility of distance is compatible with regarding the object of vision either as being at no distance from the eye and thus as being in the eye, or as being at some indefinite, i.e. so far as immediate experience goes, indeterminable, distance from the eye, and thus as being external. But, in the second place, if one takes the alternative of putting the object of vision in the eye, one is compelled, Reid certainly thought, to adopt the sort of position Adam Smith adopts – that all visible objects are naturally perceived as in the eye, printed upon a membrane called the retina – and this sort of position Reid dismisses at once as "unphilosophical" because "not founded on fact or observation," i.e. not empirically verifiable. The point of Reid's reply is, in fact, that this sort of hypothesis, though advanced cautiously by its votaries as probable (cf. Adam Smith, above), is not, strictly speaking, scientific at all. "There is no probability," says Reid, "that the mind perceives the pictures upon the *retina*. These pictures are no more objects of our perception than the brain is or the optic nerve. No man ever saw the pictures in his own eye, or indeed, in the eye of another, until it was taken out of the head and duly prepared" (*Works*, p. 156). But this is not Reid's last word on the matter, and there is another, stronger statement from him to be quoted below.

Here we had better state in our own way the point we conceive Reid to be driving at here, taking our cue, so to speak, from the declaration of Dugald Stewart that "Dr. Reid was the first person who had courage to lay aside all the common *hypothetical* language concerning perception." Now, looked at in this light, Reid's fundamental question would seem to be as to how far there is a foundation in fact for two philosophic doctrines, each in its way contradicting common sense – the one a doctrine to the effect that the objects of vision, though popularly believed to be seen at a distance or as having depth, are not actually seen as having depth or being at a distance; and the other a doctrine to the effect that the objects of vision, though popularly believed to be seen as being beyond the eye, are nevertheless seen – to use Adam Smith's expression – "as being in the eye." Now Reid allows the first of these two statements to be founded on fact – if you resolutely put aside all tactual association, when you look at a white globe, all you see is a flat circle of white (i.e. you can't tell the difference, *visually*, between a disc and a sphere), or, in other words, depth, in spite of the opinion of common sense to the contrary, is not actually seen. But, Reid apparently continues, in the sense in which the one assertion about "visibly lacking in depth" is a fact, the other assertion about "seen as in the eye" is not a fact at all. The relevant fact to bear in mind here – still using the word "fact" in the sense of phenomenological datum – is the fact that the eye is not normally seen by its possessor – a fact which Reid mentions in the philosophical orations as being of some significance for

philosophy, and which he cites in the form: "*oculus, quoquo versus prospiciens, se ipsum non cernit*"; and once this fact is borne in mind, no ground whatever is left to an assertion like Adam Smith's, that the principle of perception, it is probable, originally perceives the objects of vision as existing in the organ of vision. In short, Reid's point here is very likely something like this: that if I don't see my eyes, I don't ever see the objects of vision as being in my eyes.

So much then in regard to Reid's point "no man ever saw the pictures in his own eye." But he has another point to make on this subject in sequel to the first one. It is certainly the case, he says, that when I see objects, there occur imprints on the retina corresponding to these objects. But there is no ground, he goes on, for identifying the objects of vision with the pictures in the retina. The existence of the objects of vision is known naturally by sight, whereas the existence of the retinal imprints corresponding thereto is known by a very different kind of process, experimental research, and, when this point is taken into account, the one fact is obviously related in a purely contingent way to the other fact. Reid himself expresses his denial of the identification of objects of vision with occurrences in the eye in the paradoxical form: "the eye is a natural organ of sight, but it sees as little as a telescope. We know," he goes on,

> how the eye forms a picture of the visible object on the retina; but how this picture makes us see the object we know not: and if experience [he means, experience like that noted above of taking out the eye] had not informed us that such a picture is necessary to vision, we never should have known it. We can give no reason why the picture on the retina should be followed by vision, while a like picture on any other part of the body produces nothing like vision.
>
> (*Works*, p. 257)

The position Reid takes up here is fundamental to his whole theory of the perception of an external world, and, in order to make still clearer his meaning, let us quote the paragraph immediately preceding the last quotation. He is speaking there of the brain, but includes apparently with it, optic nerves, end-organs and so forth. "The *third* point in this hypothesis is, that the mind perceives the images in the brain, and external objects only by means of them." But, Reid retorts,

> If our powers of perception be not altogether fallacious, the objects we perceive are not in our brain, but without us. We are so far from perceiving images in the brain, that we do not perceive our brain at all; nor would any man ever have known that he had a brain, if anatomy had not discovered, by dissection, that the brain is a constituent part of the human body.

But here it might be reasonable at once to allow some force to Reid's reply to a theory of Smith's type denying externality to the objects of vision, and

yet at the same time to suggest that difficulties still remain in regard to the relation between visual experience and belief in externality. In particular, one could start by drawing attention to the first of the two citations from Smith, the one to the effect that "the objects of sight cannot suggest, at least in the same manner as the objects of touch, the externality and independency of their existence"; go on to point out that there is still in spite of everything a discrepancy of this kind in Reid's theory of the senses, a discrepancy finding expression in the distinction, already mentioned, between the existence of tactual sensations, as correlative to the experience of tangible shapes, and the absence of any corresponding visual sensations accompanying the experience of visible shapes; and end by asking whether this kind of discrepancy might not give rise to some serious problems respecting the externality of the objects of vision, which have no parallel in the tactual field.

For clarity's sake, let us put a question of this kind in our own way. On Reid's theory, there cannot be, we will say, any doubt that the tangible shapes are beyond the hand with which they are felt, because, in the first instance, we feel nothing but the tangible shape in contrast to sensations of touch, and, in the second instance, when we have happened to observe the hand as a material shape, we are naturally led to connect the sensations with the hand, i.e. to place them in it, and, by contrast, to locate the tangible shapes beyond the hand. (See *Inquiry*, Chapter 6, Section 12, *Works*, p. 159, for Reid's view of this sort of point.) Now, it would, on Reid's theory, be equally easy to be sure that the visible shapes were beyond the eye, if we had visual sensations, analogous to the tactual ones, if – to concoct an instance Reid doesn't himself discuss – the seeing of these coloured visible shapes were always accompanied with vague visual phenomena, like "spots dancing before the eyes," or the sort of stars one sees when one's eye is hit, since, in that case, one would naturally regard the visual sensations as connected with the eye and as in the eye, as soon as we observed the existence of the eye, and would equally regard the visible shapes as unconnected with the eye, and outside it. However, in fact, there are no such visual sensations on Reid's theory, and the question accordingly arises as to whether, in their absence, we can be as sure of the externality of the objects of vision, as we are of the externality of the objects of touch.

We do not claim that this question really did pass through Reid's mind, but we do claim that there is a passage in his *Inquiry* (Chapter 6, Section 8 – a section to be discussed later) which looks like a reply to a question of this sort. We will give the passage side by side with interpolated comments. "In answer, therefore, to the question proposed, there seems to be no sensation that is appropriated to visible figure, or whose office it is to suggest it" – in the way in which, he expects us to understand, tactual sensation suggests tangible or real figure. "It seems to be suggested immediately," he continues, "by the material impression upon the organ, of which we are not conscious: and why may not a material impression upon the *retina*" [understand, of which we are not conscious] "suggest visible figure, as well as the material

impression made on the hand, when we grasp a ball [of which impression, equally, we are not conscious] suggests real figure?" As for our interpolations here, the following passage from a crucial paragraph in *Inquiry*, Chapter 6, Section 21 is relevant: "The impression made by the object on the organ either by immediate contact" (as in touch) "or by an intervening medium" (as in vision) "as well as the impression made upon the nerves and the brain is performed behind the scenes and the mind sees nothing of it."

But to return to the original extract, Reid's next sentence, we find, is, as so often happens with him, a repetition of the one just quoted, adding only that whereas the one material impression suggests colour and visible figure, the other suggests hardness and real figure. Then, at once, he sets off into a new paragraph, and a new theme, beginning with the observation, "since the visible figure of bodies is a real and external object to the eye as their tangible figure is to the touch," which latter clause, read in its context, would seem to mean "it having been proved in the preceding paragraphs that the visible figure of bodies etc. etc.," since these preceding paragraphs have been concerned, in an allusive way, with the themes that have so far occupied us on vision.

Let us see what the argument just quoted means, if considered, perhaps arbitrarily, as a reply to the question formulated above, and if read, as Reid no doubt intended it to be read, in the light of the other relevant passages in his writings. Apparently, then, the point would seem to be that, even if there were no sensations of touch accompanying the perceptions of touch, the objects thus tactually perceived would be regarded as external to the hand just the same as before, and there would be not the least danger of their being identified with the material impression on the hand, or the events in the nerves and brain consequent on these material impressions. In the first place, to consider the sensations of touch as non-existent would be, on Reid's theory, to regard the tactual experience as now devoid of those elements that alone naturally point back to the hand as being the organ of touch – his doctrine on this subject being, apparently, that the sensations in question are instinctively associated with or located in the hand or relevant limb, as soon as that limb has been observed and taken notice of, in much the same fashion as the pain is automatically or rather instinctively associated with the part of the body affected. Instinct, we may mention, had to be brought in by Reid here to answer the question arising both for Hume and for himself as to how we come to regard an intrinsically non-spatial event like a strain or a pain as being located in a space-occupying limb (*Inquiry*, Chapter 6, Section 12, *Works*, p. 159, and Hume's *Treatise* I, IV, V, pp. 224–6). But now, in the second place, after the sensations of touch are in this way put out of account, tactual experience becomes more or less on a level with visual experience, in respect of the fact that the awareness of a connection between the tactual experience, on the one hand, and the bodily organ of touch and material impressions thereon, on the other hand, would be as much a matter of contingency as the awareness of the connection between visual experience and the

eye or organ of sight, and would take place in virtue of a set of experiences quite different from and additional to the tactual experience in question. Accordingly, in the third place, the same sort of facts as forbid the identification of the object of vision with the impressed parts of the eye would equally forbid the identification of the object of touch with the impressed parts of the hand. In this case, Reid's general principle that "we perceive no external object but by means of the organs given us for that purpose, but these organs do not themselves perceive" (Essay 2, Chapter 4) would apply in the form: we feel the solid shape, the object of touch, with our hands, but we do not in the same experience feel the hand as a hand, and consequently get no knowledge of the impressed portions thereof – this kind of formula being pretty well the exact analogue of Reid's formula: *the eye does not see*, according to his exposition of it, in the Essay 2 passage. That is to say, according to Reid, it is only later, by a different sort of experience, that we observe the object, whose tangible shape we feel, always to have a hand, i.e. our hand, pressing on it, and begin from then on to regard the hand as our organ of touch, but this new experience, far from introducing any confusion into the issue, tells us plainly that, as the organ of touch presses against the object of touch, so the object of touch is external to the organ and to us.

Without claiming that Reid had precisely this point in mind in the passage under review, we do claim that he was here considering whether the discrepancy between sight and touch in respect of the absence of any visual counterparts to the tactual sensations raised any kind of serious problem in the matter of externality, and our ground for making this latter claim is that a similar issue in regard to a discrepancy of this kind constitutes an important part, indeed the central part, of a discussion of perception which is very close to that of both Reid and, incidentally, Adam Smith, in the sense of being an immediate follow-up of Hume – the discussion which we find in Lord Kames, a man who formed the closest link between Hume and Adam Smith on the one hand, and Reid on the other, being at different periods in his life the close friend of all three.

Let us see, then, how Kames, in the chapter on the "Authority of the Senses" already referred to, proceeds in his attempt to justify the ordinary belief about the independent existence of the objects of touch and of sight. The case of touch, he thinks, is quite straightforward. I believe in the existence of the body felt as external to and pressing on the limb serving as organ of touch, but these two distinguishable things in just that form are precisely what I find in introspection. That is to say, Kames regards the contact between the two extended surfaces – the hand and the body tactually felt – as given immediately, and, unlike Reid, does not reckon the impressed surface of the organ of touch to be beyond experience. On the other hand, in the case of vision, only one single object, the coloured shape, is given, according to Kames's view of the matter, and he proceeds to deal with the ensuing difficulties very much in the same way as Reid did after him (though much more briefly) – considering the theory that perception at a distance is impossible

and the object of vision is really the image on the retina, and rejecting this theory because, in visual experience itself, one is quite unconscious of the material impression on the eye. But here he becomes aware that, on this view of the matter, there is a sort of anomaly in the visual situation as compared with the tactual situation, consisting in the absence from the visual field of the material impression on the organ, and the presence in the tactual field of the material impression on the organ; and he raises the question as to why vision, unlike touch, deceives to the extent of denying us awareness of its bodily organ, or the material impressions thereon. But let us state the matter in his own words.

> The operation of vision is, in one respect, on a footing with that of touch, both being performed by means of an impression made at the organ. There is indeed this essential difference, that the impression of touch [equivalent, as is quite plain from the context, to what Reid calls the material impression on the hand] is felt, as such, whereas the impression of sight is not felt; we are not conscious of any such impression but merely of the object itself which makes the impression.

But then why are we unconscious of the material impression in the visual field and why does sight deceive us in a way touch doesn't? "Nature," Kames replies, "has carefully concealed this impression from us to avoid all ambiguity, and to give us a distinct feeling of the object itself and that only," and he explains his point thus:

> In touching, the impression made at the organ is so closely connected with the body that makes the impression that perception creates no confusion or ambiguity, the body being felt where it really is. But were we conscious of [i.e. visually] an organic impression at the retina [as well as of the body seen], the mind would have a constant propensity to place the body there also [to see all objects as within the eye, or touching the eye] . . . [because] it is doubted by naturalists whether outness or distance is discoverable by sight.

That is to say, distance being invisible, it would be impossible to see any gap between the eye and the object, supposing the eye or its impressed portions were to be seen as well as the object, and this "could be a circumstance extremely perplexing in the act of vision as setting feeling and experience in perpetual opposition," i.e. if the eye were visible, feeling, i.e. the immediate information coming from vision, would always present the external object as being in contact with the eye, whereas "experience," i.e. tactual association, would suggest the existence of a gap between the eye and the external object.

This chapter of Kames on the "Authority of the Senses," is, in all probability, one of the chief sources Reid used; at any rate Reid had evidently

studied it closely in his formative years, since, in the philosophical oration giving to the world the original "preview" of his system (the oration of 1759), Reid mentions Kames as not having broken away from the ideal system – doubtless referring thereby to these difficulties of Kames about material impressions here, or perhaps to the fact, noted much earlier in this chapter, that Kames allows simple impressions in Hume's sense in smelling and hearing, or perhaps to both these facts together – it being a fixed idea with Reid that the one point is connected with the other, and that, if one begins by making the material impression on the organ the immediate object of consciousness, one is bound to end with a system like Hume's of simple impression. In short, then, Kames's chapter was in all probability an important influence on Reid, and, in that case, it becomes at once illuminating and credible to say that the theme of Reid in the passage about the relation of the material impressions on the eye and the hand to the objects of experience, visual and tactual, connected therewith, is much the same as the theme of Kames in the extracts just given. In that case, what Reid is contending here is, roughly speaking, that no such awkward questions arise out of his defence of the externality of the object of sight, and the objects of touch, as arose out of Kames's defence of common sense on the same subject, on account of the fact that he applies in both the fields of sense the ruling principle which Kames applies only in the field of sight: "*nature hath carefully concealed the impression from us in order to remove all ambiguity, and to give a distinct feeling of the object, and that only*."

With that, we come to an end of Reid's dealing with what we have called the problem of "distinct existence," both in regard to vision and to touch, and the only thing that remains to be done by way of summing up is to comment on the relations of the two arguments we have found in Reid on this subject. Of the two, the chief argument is the argument against the identification of the object of sense with the material impression on the corresponding organ of sense, and this argument, we have tried to show, is meant by Reid to apply as much to the facts of touch as to the facts of vision, although, to be sure, he discusses this point chiefly in connection with vision, the argument for the alleged identification finding its chief support, in his time, in the visual sphere. The other argument, however, has an application solely to the facts of touch and is a kind of corollary to Reid's protests against the kind of reduction of tactual perceptions to tactual sensations which he regards Hume as attempting.

Before we go further we had better try to relate our account of Reid to Reid's text. The complications here arise solely in connection with vision, and the reason for the occurrence of complications here is that the chief source of Reid's theory of vision – the extensive chapter in the *Inquiry* – has a great deal of matter in it which, even perhaps on the standards of Reid's day, pertained more to optics than to the "science of mind." Indeed, it would not perhaps be easy to distinguish what is of real philosophical interest there for Reid from what is not, were it not for the brief and exclusively philosophical account he

gives of his views about vision in the course of the *Essays*. For example, it is only in reading the *Essays* that we become quite sure about the central importance, to Reid's whole position on perception, of his protest against the identification of the objects of vision with the pictures on the retina. In the *Inquiry*, indeed, he says plenty under that head, but what he says there, is, for the most part, hidden away in odd chapters devoted to inverted images, binocular vision and what not; whereas, in the *Essays*, he makes this same point in a more general way, and makes it moreover as a kind of climax to his introductory discussion of the question of perception, prior to expounding his own more special distinction between sensation and perception.

It is necessary, therefore, to read the long, detailed, and perhaps over-literary *Inquiry* in the light of the much more professional *Essays*, and when this is done, the chapters of the *Inquiry* that stand out as of especial importance are the two chapters, 7 and 8, on *visible figure*. It is in these chapters, if anywhere, that we find Reid's leading opinions about vision set down, although, of course, owing to his mannered style of writing, he sets forth these opinions rather elliptically and seems to expect us to fill in the gaps from our knowledge of what he has said elsewhere.

In these chapters, Reid gets to grips with most of the problems. In the first place, he tries to separate very sharply indeed our experience of the visible figure from our experience of its colour, distinguishing the former as a perception and the latter as a sensation (though a sensation of a somewhat different kind from the sort of sensation found in sensations of touch), and his motive for insisting on this separation is, so far as can be made out, a desire to protest against the Humean view that visible extension is a logical construction out of extensionless atoms of colour, i.e. that – to say the same thing in Reid's terminology – colour-sensations of vision represent, i.e. are logically connected with, the perceptions of vision. In the second place, he goes on to argue that visible extension and figure, although distinct from tangible or real extension and figure, are nevertheless necessarily connected with these latter in the sense of being as spatial as they, and this argument is evidently meant as an objection, very like Hume's, to Berkeley's paradox that visible figure and extension are, so to speak, misnamed and have in fact no sort of resemblance to or identity with their tangible namesakes. In the third place, he takes up the question as to whether this visible figure or extension is indeed external to the eye in the way common sense wants its objects of vision to be external – a question very much to the point here, because nothing follows from a denial of the paradoxical Berkeleian severance of visible extension from tangible extension as to whether the former is external to the eye or not – and his page of discussion of this subject culminates in the passage we used above about the analogy between vision and touch in respect of the relation of each to the material impressions upon their appropriate sense-organs, and, on the way to the culmination, both introduces and presupposes ideas already dealt with at length by us a few pages back. Finally, he takes up the question as to whether his admission of "queer" objects like visible figures

and visible space, unknown to the plain man, in any way damages his general claim to be a defender of common sense and the plain man's standpoint. He had already, indeed, earlier in this same chapter touched on this very matter by a frank confession as to the dubious ontological status of his visible figure, but it is only in these closing paragraphs of the chapter, in this discussion of the plain man's disbelief in, or unawareness of, visible figure, that he succeeds in formulating the point at issue here in a version suitable to his own general approach to philosophy.

Let us start with the last-mentioned of these questions – the one concerning visible figure. The fact is, Reid says, that "the visible appearances are innumerable when we confine ourselves to one object," and, out of this fact, a problem arises. "If it should be asked," says Reid, "to what category of beings does visible figure belong, I can only in answer give some tokens whereby those who are better acquainted with the categories than I am may chance to find its place." He then goes on to give the following summary answer. "A projection of the sphere, or a perspective view of a palace, is a representation [i.e. of the real tangible figure] in the very same sense as visible figure is; and wherever they may have their lodging in the categories, this will be found to dwell next door" (*Inquiry*, Chapter 6, Section 8, *Works*, p. 144). However, Reid seems to be well enough aware that if this sort of answer is not very satisfactory, or at least is not very complete, and he goes on to reformulate the question in his own way – a way which might perhaps be restated as follows.

This sort of theory of perception obviously has some very paradoxical implications and Reid himself is perfectly aware of this fact. The visible figure of bodies is, no doubt, as real and external to the eye as the tangible figure to the touch, but, at the same time, each body has apparently *innumerable* objectively existing visible figures corresponding to its *one* objectively existing tangible figure according to the position and distance of the latter from the tangible eye-ball. (See *Inquiry*, Chapter 6, Section 8, and Essay 2, Chapter 14, *Works*, p. 304.) But now, a sophisticated doctrine of this kind implying the existence of objective perspectives waiting to be seen, though no doubt appropriate to other sorts of philosophers, sounds somehow out of place in the pages of a self-professed friend of common sense and the vulgar, like Reid, and we naturally wonder what kind of defence Reid would give, if criticised from this point of view.

The question at issue here is the question of common sense, and this question assumes in Reid's hands a definitely linguistic form, probably in virtue of his having been Turnbull's pupil. Indeed Reid's own statement of his guiding principles in these matters at once obviously echoes and deepens Turnbull's teaching. "A philosopher," says Reid,

> is, no doubt, entitled to examine even those distinctions that are to be found in the structure of all languages. . . . But when in his first setting out, he takes it for granted, without proof, that distinctions found in the structure of all languages have no foundation in nature, this, surely, is too

> fastidious a way of treating the common sense of mankind. . . . There may be distinctions that have a real foundation, and which may be necessary in philosophy, which are not made in common language, because not necessary in the common business of life. But I believe no instance will be found of a distinction made in all languages, which has not a just foundation in nature.
>
> (Essay 1, Chapter 1, *Works*, p. 224)

Reid constantly appeals to these principles in his philosophical work, and, in order to see what he means by them, we had better see how he uses them. The first instance we will give of Reid's practice in this respect has to do with the doctrine of perception as judgment, discussed in our Chapter 2. On the one hand, consider how he deals with Hume, when Reid is speaking of the doctrine "which teaches us that conception, perception by the senses and memory are only different ways of perceiving ideas in our own minds." "If that theory be well founded," he goes on, "it will indeed be very difficult to find any specific distinction between conception and perception. But there is reason to distrust any philosophical theory when it leads men to corrupt language, and to confound, under one name, operations of the mind which common sense and common language teach them to distinguish" (Essay 4, Chapter 1, *Works*, p. 362). On the other hand, note how he deals with his own counter-theory that the common distinction between conception and perception is indeed valid but that this distinction can be upheld only if perception involves judgment, i.e. if perception is – to use Reid's own terms – conception *plus* belief.

> When we speak of seeing or remembering anything, we, indeed, hardly ever add that we judge it to be true. But the reason of this appears to be, that such an addition would be mere superfluity of speech, because every one knows that what I see or remember, I must judge to be true and cannot do otherwise. . . . A woman with child never says, that, going such a journey, she carried her child along with her. We know that, while it is in her womb, she must carry it along with her. There are some operations of mind that may be said to carry judgment in their womb, and can no more leave it behind them than the pregnant woman can leave her child. Therefore in speaking of such operations, it is not expressed.
>
> (Essay 6, Chapter 1)

An instance will make the point in question clear. Reid and Hume, one might say, are both tampering with ordinary language, the latter maintaining that the sentence "I feel pain" really means "I am thinking about pain in a vivid manner," the former maintaining that the sentence "I feel pain" really means "I judge and believe I am really pained." But whereas Hume is intent on annulling a distinction commonly made, Reid is not interfering with any orthodox verbal distinction, but is making clearer the meaning of a phrase by

introducing his technical distinction between simple apprehension and judgment.

A new instance will perhaps explain better what Reid means by legitimate interference with ordinary language.

> It is indeed strange that a sensation which we have every time we feel a body hard, should yet be so much unknown as never to have been honoured by a name in any language. I think it is probable, that the novelty of this sensation will procure some attention to it in children at first; but, being in nowise interesting in itself, as soon as it becomes familiar it is overlooked. If this is the case, we must become as little children again, if we will be philosophers; we must overcome this habit of inattention which has been gathering strength, ever since we began to think.
>
> (*Inquiry*, Chapter 5, Section 2 – with omissions)

Reid is here, of course, justifying his introduction of the technical term "sensation of touch" to describe an event that doesn't get mentioned in ordinary language, because it is unnecessary to refer to the event for the business of life.

But, to return now to the question of the paradoxical relations of visible figure, on the one hand, and tangible or real figure on the other – ordinary language, Reid points out, knows nothing about visible figure, and when the plain man speaks about seeing the shape of anything, the shape he is referring to, as is evident from his description, is not the visible but the real (i.e. tangible) one. Ordinary language then has to be interfered with in order to make room for this distinction between visible and tangible shape, just as it had to be interfered with to make room for the distinction between feelings of touch and feelings of hardness, and for the same reason, namely that the distinction in question, though unnecessary in ordinary life, is necessary in philosophy. It is in fact failure to break away from the habits of ordinary language in this respect, i.e. failure to bear in mind the sharp distinction between visible objects and tangible objects, that has led to the sceptical doctrine about conflicts between the deliverances of the senses. For example, in regard to Hume's sceptical inference from the fact that "the table which we see, seems to diminish as we remove further from it," "it is evident," says Reid, "that this ingenious author has imposed upon himself by confounding real magnitude [tangible] with apparent magnitude [visible] and that his argument is a mere sophism" (Essay 2, Chapter 14). But if we are thus entitled to go outside common sense and ordinary language by admitting visible figure, are we not, it may be asked, entitled to go outside common sense and ordinary language by admitting the identity of the visible figure with the picture on the retina? But in reply to a point of this kind, Reid would very likely have suggested that just as *proof* has to be given of the existence of visible figure, so proof will have to be given of this identity. But take, if you like, a new argument for the identification of the object of vision

with the imprint on the retina or optic nerve – an argument this time based on the thesis that perception at a distance is impossible because action at a distance is impossible. Now action at a distance, Reid grants, is impossible so far as bodies are concerned, but as far as the claim that impossibility of action at a distance implies impossibility of perception at a distance, this sort of claim, Reid argues, can be valid only if "thought in the mind is conceived to have some analogy to motion in a body," that is, if it is held that

> as a body is put in motion, by being acted on by some other body; so we are apt to think the mind is made to perceive by some impulse it receives from the object. But reasonings, drawn from such analogies, ought never to be trusted. . . . And we might as well conclude that minds may be measured by feet and inches, or weighed by ounces and drachms, because bodies have those properties.
>
> (Essay 2, Chapter 14)

It is in the chapter from which we quote – Essay 2, Chapter 14 – that Reid's main defence of common sense is to be found, and it will be as well to look at its general trend. The common sense belief in the externality of objects of perception is generally regarded, he points out, as being already subverted by the admission of visible figure in addition to real figure, and, in the second place, as being totally destroyed by the consequent identification of the said visible figure with the perceiving retinal image. As regards this second point, Reid maintains that the thesis is not proved and can never be proved to the perceiver's satisfaction, and that therefore we are quite entitled to regard visible figure as existing external to the eye. As regards the first point, Reid argues that it is not, strictly speaking, a subversion of common sense to introduce a distinction between the visible and the tangible aspects of the external object, when the distinction in question is one irrelevant to the ordinary business of common life.

In short, then, Reid sticks pretty faithfully to the principles he announced in Essay 1, Chapter 1 on this subject. The only sort of theory that is contrary to common sense, he tells us there, is one that obliterates "those distinctions that are to be found in the structure of all languages," or, more precisely, modifications of ordinary language are not in themselves illegitimate unless they are "reductive" modifications. That is to say, the sort of doctrine Reid thinks illegitimate is illustrated by him, thus:

> If a man would persuade me that the moon which I see, and my seeing it, are not two things, but one and the same thing, he will answer his purpose less by arguing this point in plain English, than by confounding the two under one name – such as that of an *impression*.
>
> (Essay 1, Chapter 1, *Works*, p. 228)

On the other hand, the doctrine of representative perception (for example,

the identification of the visible object with the retinal image) no doubt involves a correction of common sense or language too, but not one that is illegitimate – provided a case be made out for it. But now to turn to the other topics.

As regards Reid's discussion of the relations of colour and visible figure, a quotation will perhaps help us to glimpse its point.

> There is a tribunal of inquisition erected by certain modern philosophers, before which everything in nature must answer. The articles of inquisition are few indeed, but dreadful in their consequences. They are only these: Is the prisoner an Impression or an Idea? . . . Before this dreadful tribunal, cause and effect, time and place, matter and spirit have been tried and cast: how then shall such a poor flimsy form as visible figure stand before it? It must even plead guilty, and confess that it is neither an impression nor an idea. For alas, it is notorious that it is extended in length and breadth.
>
> (*Inquiry*, Section 8)

Apparently, then, the position Reid is about to attack is the position of Hume that visible extension is nothing but a series of unextended colour-sensations. Now in opposition to Hume, Reid proposes the position that "visible figure is never presented to the eye but in conjunction with colour, although there be no connection between them from the nature of things," and, as a first step towards effecting this separation, he suggests it would be perfectly possible to conceive an eye whose operation "would be precisely similar to that of hearing and smell; it would give no perception of figure or extension, but merely of colour" – just as hearing gives no perception of figure or extension but merely of sound. "Nor is the supposition we have made," he goes on, in defence of this speculation, "merely imaginary." Certain of Cheselden's patients, Reid points out, "see things as through a glass of broken jelly; they perceive the colour but nothing of the figure or magnitude of the objects," and to be aware of an object of vision as something shapeless and sizeless, Reid might have gone on, is not to be aware of it as extended at all. Finally, building on this fact, or alleged fact, Reid concludes that colour is unextended in itself and a *sensation* in much the same sense as sound or smell is. Accordingly the only difference between seeing and hearing, Reid says, is that the sensation of colour is, as a matter of fact, always, in ordinary circumstances, accompanied by the perception of a position, indeed of a shape, whereas the sensation of sound has no analogous perception accompanying it.

Obviously, however, Reid has not yet gone very far towards establishing his thesis that the experience of colour and the accompanying experience of figure are contingently related as sensation and perception, and he now takes a further step in that direction by an argument of the following kind. Starting from the sort of sharp distinction between colour and visible shape described in the last paragraph, he goes on to maintain (for the most part arguing, like

Hume, against Berkeley's paradox – see Essay 2, Chapter 19, in the *Intellectual Powers*) that, in the sense in which it is proper to regard the colour of a body as being neither like nor unlike its tangible shape, in this same sense it is equally proper to regard the visible shape of a body as either like or unlike its tangible shape; indeed, "small figures such as can be seen distinctly at one view have not only a resemblance to the corresponding tangible figures, but are to all sense the same," provided these plain tangible figures – it is a tangible surface with length and breadth that he is talking about – are placed directly in front of the eyes. But – to come now to Reid's main point – the visible figure not merely resembles the tangible figure in question in a sense in which the colour doesn't resemble it, but, in addition, the visible figure is necessarily connected with tangible figure in a sense in which the colour is not. Reid's point here in fact is that "the visible figure and allied qualities of a body may, by mathematical reasoning, be deduced from the real or tangible figure," and he elucidates this position in the following way.

> May not a blind man be made to conceive that a body moving directly from the eye, or directly towards it, may appear to be at rest? and that the same motion may appear quicker or slower, according as it is nearer to the eye or further off, more direct or more oblique? May he not be made to conceive, that a plain surface, in a certain position, may appear as a straight line, and vary its visible figure, as its position or the position of the eye is varied? – that a circle, seen obliquely will appear as an ellipse? . . . Dr. Saunderson understood the projection of the sphere, and the common rules of perspective; and, if he did, he must have understood all that I have mentioned. If there were any doubt of Dr. Saunderson's understanding these things, I may mention my having heard him say in conversation, that etc. etc.

It follows from this fact, Reid continues, that the blind, who have no notion whatever of the colour of bodies, may attain a distinct conception of the visible figure of bodies. No doubt a blind mathematician, Reid admits, will in the first place associate the two-dimensional visible figure with hardness and smoothness, since he is accustomed to tangible diagrams. But, surely, he may in the next place eliminate this kind of difference, by doing very much what people do who form a distinct notion of a parabola or a cycloid without seeing them drawn, and from the definitions only. In the end, the figure the blind mathematician is conversant with will be, *qua figure*, indistinguishable from what is called visible figure, as any sort of discussion with Dr. Saunderson will prove. But, this being so, awareness of the sort of two-dimensional figures we call visible is, Reid concludes, conceivable apart from the experience of colour, and it follows that the relation of the one to the other is the quite contingent one of sensation to perception.

On subsequent reflection, Reid seems to have felt, or to have been made to feel, that he had gone a bit too far in these arguments based on his encounter

with Saunderson, during a visit to Oxford; Dugald Stewart took him to task about this very passage in the *Inquiry*, in a letter written about 1783–4, about the time the *Essays* were going to press; and it was very likely the same passage Hume had in mind when, in the letter he wrote Reid in 1764 about the MSS of the *Inquiry*, he speaks about an error in the chapter on vision. Accordingly, in the *Essays*, Reid makes no use of the point about the blind mathematician, nor, for that matter, of the point about Cheselden's patient, and indeed, what he has to say in this latter book about the relations of colour and extension is said, for the most part, not in the chapter on perception discussing the distinction between perception and sensation, but in the chapter on abstraction discussing the distinction between perception as judgment and simple apprehension. Even this new discussion of the subject, however, under the head of abstraction is, as we have suggested earlier, not as clear as one could wish it to be, and perhaps one reason for this unclarity is the continuing influence in his mind of some of the doctrines referred to in the present passage of the *Inquiry*, particularly the doctrine based on Cheselden's report, a doctrine which virtually concedes colour to be a simple impression in Hume's sense and is not very easy to reconcile with the general tendency of Reid's doctrine of abstraction.

4 Stewart

This new chapter is concerned with the same two questions as its predecessors – the question of the *external world* (i.e. do the objects of perception have a distinct existence?) and the question of the *primum cognitum* (i.e. are the objects of perception genuine complexes or sets of simples?) – and our purpose here is to describe the debate on these two points that comes as a sequel to Reid's reply to Hume. More precisely our theme will run from Dugald Stewart's attempt to clarify the two issues involved, through Brown's criticism of Stewart's assessment of the situation, to Hamilton's criticisms of Brown and Stewart and reappraisal of Reid. Not that these were the only philosophers who took up the questions where Reid and Hume left off, but this trio is especially interesting as constituting the chief intermediate links in an intellectual descent that went from Kames and Reid right down to Ferrier and beyond.

Dugald Stewart, although Reid's pupil in 1771 and his friend and admirer in later life, is nevertheless not to be ranked as a disciple of Reid, in the strict sense – at least on the problems concerning us here. The fact is that, in addition to being an admirer of Reid, he was almost equally an admirer of Adam Smith, being a close student of his occasional writings on the present themes contained in the essay "Of the External Senses" (in the posthumous *Essays on Philosophical Subjects*) and *A Dissertation on the Origin of Languages*. Accordingly, in this department of his work, Stewart went to work by comparing the rival views of Reid and Smith with one another, and, in the result, found himself almost as much indebted to the latter as to the former.

On the question of the belief in an external world, Stewart makes a careful attempt to define the exact scope of Reid's achievement, and he does so by saying that Reid's distinction between *sensation* and *perception*, so far as it is valid, has a bearing on Hume's point about distinct existence only and has no bearing on his point about continued existence.

> Although [Reid] has shown our notions concerning the primary qualities of bodies to be connected, by an original law of our constitution, with the sensation which they excite in our minds, he has taken no notice of the

> grounds of our belief that these qualities have an existence *independent* of our perceptions.

Stewart is here speaking about Reid, of course, and he goes on to explain his point more clearly in a footnote to this passage. "A distinction, coinciding exactly with that in the text, is stated by Mr. Hume in his *Treatise of Human Nature*, which makes it somewhat surprising that it should have been overlooked by Dr. Reid"; and having said that, Stewart proceeds to quote in full the *Treatise* passage about distinct existence and continued existence: "We ought to examine apart etc." In short, Stewart's point is that Reid's discussion of belief in an external world can be taken seriously, only if considered as a discussion of belief in distinct existence. (The references are to Dugald Stewart, *Collected Works*, vol. 5, pp. 105–6.)

Now if one grants Reid's distinction between sensations of touch and perceptions of touch, one has already gone most of the way, Stewart thinks, towards upholding the belief in distinct existence in a basic department of experience intimately connected with common sense, and accordingly it is a very important question for him as to how far this tactual version of the distinction can be upheld, in the sharp form it requires, to serve its purpose in regard to the problem of the external world. For example, is Reid's thesis, that the solid object felt is external in a sense in which the concomitant feeling of strain is not external, compatible with a fact, pointed out by Berkeley, and impossible to deny – the fact, namely, that "Both hardness and resistance," which words he (Berkeley) considers as perfectly synonymous with solidity, "are plainly relative to our senses; it being evident, that what seems hard to one animal, may appear soft to another who hath greater force and firmness of limbs." Now this Berkeleian point does, Stewart admits, make a certain difficulty for Reid, but not, he goes on, a serious one, and all will be well if we restate Reid's fact in a more precise manner than he did himself. What one must do, Stewart says, is to introduce a sharp distinction between the solidity of the body and the shape accompanying the solidity, and to point out that, whereas the solidity of the body is a quality varying from one observer to another, its shape is a quality constant for all observers. In that case, the solidity of the body will have the same sort of relationship to its shape and measurable features (what Stewart calls "the mathematical affections of matter") as the visible figure of the body already, in Reid's theory, bears to this tangible shape, and this tangible shape itself will remain real and external in a sharp sense of these words, just as before (*Collected Works*, vol. 5, pp. 98–100, 113–16).

Having introduced this alternation, Stewart is apparently satisfied that Reid's theory of touch can now serve its original purpose better; and the only other thing he does in this sphere of inquiry is to reaffirm one of the main points Reid made against Hume – namely, that our tactual perceptions are quite disparate from our tactual sensations, in the sense of its being impossible to explain the former as "logical constructions" out of the latter. What

concerns Stewart here, however, is not the Humean version of this reductive thesis, but an alternative version, now becoming fashionable, to the following effect. We get our experience of tangible or real shapes (i.e. of Stewart's "mathematical affections of matter") by moving our hands or fingers over the surface of the body whose size or shape is being ascertained, and this movement of the hand, which is – according to the argument – quite indispensable for measurement, appears in the experience of the person measuring by touch as a series of purely temporal feelings of strain. All this, it is contended, will be granted by everybody, and it is further laid down, as a quite reasonable supposition, that this series of feelings of strain varies concomitantly with the movement of the hand (i.e. the visible movement of the hand in its movement for the outside observer); and that, according as the hand moves over an area of greater or lesser extent, the chain of feelings is proportionately larger or shorter, in a temporal sense. But, this being so, there is no objection in principle, the argument concludes, to regarding the tactual perception of spatial extensions as reducible to the tactual sensations of non-spatial trains of feelings, or, in other words, we can apply Occan's razor to the tactual perceptions, considered as separate processes, and still, in their absence, talk intelligently about differences in real or tangible shape or size.

In reply to this argument, Stewart does not challenge the premises as to the exact co-relation of manual movement, and of internally felt strain, but proceeds to object to the reductionist tactics simply on the ground of their making nonsense of common sense. But let us quote the long note which is Stewart's first and last word about a matter which, evidently, interested him greatly.

> I intended to have introduced here some doubts and queries with respect to the origin, or rather to the history of the notion of *extension*: not with any view to an explanation of a fact I consider as altogether unaccountable; but to direct attention to a more accurate examination than has hitherto been attempted, of the *occasions* on which this notion is at first formed by the mind. . . . It was long ago remarked by Dr. Reid, (and, indeed, by other writers of a still earlier date,) that to account for the idea of extension by the motion of *the hand*, is a paralogism, as this supposes a *previous* knowledge of the existence of our own bodies. Condillac does not appear to have been sufficiently aware of this; nor even that most acute and profound philosopher, the late Mr. Smith. In his essay "Of the External Senses" (published in his posthumous volume) he all along supposes the mind in possession of the idea for the origin of which he is attempting to account. How do we get the notion of what Mr. Smith calls *externality*, and Berkeley *outness?* Is not this only a particular modification of the idea of *extension?* The same remark may be applied to some late speculations on the subject, by M. Destutt de Tracy. They are evidently the result of great depth and refinement of thought; but, like those of Mr. Smith, they will be found, on an accurate examination, to involve what

> logicians call a *petitio principii*. I am strongly inclined, at the same time, to think, that the idea of extension involves the idea of *motion*; or, to express myself more explicitly, that our first notions of extension are acquired by the effort of moving our hands over the surface of bodies, and by the effort of *moving* our own bodies from place to place. The reference which Smith and Destutt de Tracy, as well as many earlier inquirers, have made to *the motion of the hand*, in their attempts to clear up this mystery, furnishes a strong presumption, that motion is somehow or other concerned in the business. I differ from them only in this: that whereas they seem to have considered their theory as affording some explanation of the *origin* of the idea, to me it appears, if well-founded, to exhibit this problem in a form still more manifestly insoluble than that in which it is commonly viewed. . . . *One* observation I may add without the slightest hesitation, that if the idea of extension presupposes that of motion, it must, of necessity, presuppose also that of time. The prosecution of this last remark has led me into some speculations, which appear to myself to be interesting; but to which I find it impossible to give a place in this volume.
>
> (*Collected Works*, vol. 5, pp. 431–2. The passage is a footnote to p. 119. The concluding lines are cited merely to give a *taste* of Stewart's notes.)

For the purpose of exhibiting Stewart's point of view more exactly, we will try to elucidate in detail the reference to Adam Smith. Now our starting-point is the fact that Smith, as a glance at his *Essay* will show, is not explicitly following out a *reductionist* programme in the sense in which Destutt de Tracy is explicitly doing this, and, for that matter, is primarily interested in the origins of our idea of externality or independence, rather than in the origins of our idea of extension. What, then, is Stewart driving at in these remarks? Probably, we answer, something like this. In the first place, Stewart must be referring to the fact that Adam Smith does explicitly (though rather by the way) describe a baby as getting its first idea of its food, i.e. the object craved by its hunger as being something with a shape and extendedness, solely from the experience of the instinctive movements of its lips as they gape and clamour, and before ever food has actually touched the lips. But now, on the strength of this passage, Stewart very likely assumes Adam Smith to hold, first, that the experience of the lips' movement is nothing but an experience of non-spatial muscular strains, and, second, that, in consequence, to have experience of non-spatial strain is, *ipso facto*, to have experience of spatial extendedness, or, in other words, the latter is reducible to the former. (Stewart, we may remark, is very puzzled as to the meaning of Smith's teaching on this point – see *Collected Works*, vol. 1, p. 595 – but the line he takes of grouping Smith with de Tracy is a quite plausible line of interpretation.) In the second place, starting from this interpretation of Smith as a reductionist after the fashion of de Tracy, Stewart probably concluded that the doctrine of Smith deriving our notions of externality or independence from our experience of encountering obstacles that resist and press upon our fingers and

prevent the clenching of our first, is equivalent to a doctrine making our notion of external or independent existence consist in the experience of finding a habitual chain of muscular sensation (such as we have when we clench our fully extended fingers) suddenly stop short of its usual length. But now, if the difference between the experience of my own body by itself, and the experience of my own body in relation to (pressed by) a body not my own, reduces simply to the difference between a longer chain of muscular feelings, and one that stops short, despite my efforts to prolong it, how, Stewart presumably asks (using a standard retort), can such an experience give rise to the notion to be accounted for, the notion of a reality independent of me, or my feelings? In short, Stewart's point probably is this: if you take away the idea of extension, you take away the idea of independence or externality, because, once the idea of spatial extension is taken away, there is nothing left, so to speak, to be independent. That, or something very like it, is no doubt what Stewart means by his query: "how do we get the notion of what Mr. Smith calls externality? Is not this only a particular modification of the idea of extension?" Indeed, Stewart is here assuming that the notion of externality or independence is equivalent to the notion of extension as being distinct from and in contrast to the feelings of strain (*Collected Works*, vol. 5, p. 419, including footnote).

Before leaving the question of touch, it should be noticed that both Stewart and the philosophers he argues against here seem to accept, as much as did Reid, the Berkeleian doctrine of the identity of tangible shape and size with real shape and size. To be sure, this is not a topic they discuss directly, but their agreement with Berkeley on this important point is evident from a controversy of the time about the relation of touch (i.e. manual touch) and the other senses. The subject of this controversy was the "celebrated doctrine" of Helvetius that "if the wrist of man had been terminated by the hoof of a horse, the species would still have been wandering in the forest," and Stewart's contribution to the controversy was as follows.

> Suppose, for a moment, that in our species, the wrist had been terminated by a hoof like a horse, what would have been the consequence? . . . A considerable part of a man's life must necessarily have been employed, in learning to supply the defects of his original perceptions, by comparing them together and correcting them by each other, and, of course, much of the time would have been lost. . . . But he would have been still a man, in possession of all the faculties and powers which are characteristical of his nature, and would have attained in part, by experience and by the resources of his own mind, those advantages which other men enjoy in consequence of the use of the hand.
>
> (*Collected Works*, vol. 4, pp. 283–4)

That is to say, the question, so far as it is strictly concerned with the problem of cognition, probably took the following form, at any rate for Stewart. It

was agreed by all parties that touch, so long as the organ was the hand, was illusion-free, and a guide to real shape and size, whereas other avenues of sense – sight, for instance – were deceptive in the sense of giving inaccurate deliverances as to shapes and size. Now the doctrine of Helvetius, Stewart tells us, "was evidently suggested by the philosophy which teaches that all our knowledge is derived from our sensations" (*Collected Works*, vol. 4, p. 282). Accordingly, the point of Helvetius's doctrine, at any rate as interpreted by Stewart, would probably be that, if the only class of our sensations (i.e. perceptions) that is veridical were taken from us, our notions of things would be necessarily inaccurate, and science would be impossible. If so, then Stewart's rejoinder is that, even if we were reduced to those classes of our sensations which are deceptive, we would still be able to get accurate knowledge, because of our being *intellectual* and not sensational creatures, i.e. because of our exercising judgment, and comparing and correcting the sensations by reference to one another. (See also *Collected Works*, vol. 2, p. 15 para. 20.)

But let us now pass from touch to sight, and see how there too Stewart defines and reaffirms Reid's position by reference to Smith's. Smith, it will be remembered, is a votary of the sort of position Reid attacks, the one that regards the objects of vision as being naturally and originally seen as being within the eye, and, in the course of his discussion, cites a passage in Cheselden in confirmation of his position. Stewart's reply to Smith is hidden away in a footnote, and we had better quote it in full. (These footnotes, it may be remarked, are being quoted and brought together here, because, Stewart not having written systematically on perception because of his agreement with Reid, they constitute the only evidence of his having gone deeply into questions of this kind, and because, in addition, they sometimes (as here) provide an indispensable guide to what Reid probably meant.)

> When the young gentleman said (I quote Mr. Smith's words), that the objects which he saw touched his eyes, he certainly could not mean that they pressed upon or resisted his eyes; for the objects of sight never act upon the organ in any way that resembles pressure or resistance. He could mean no more than that they were close upon his eyes, *or, to speak more properly*, *perhaps that they were in his eyes*. Mr. Smith's idea in this last [underlined] clause was, I presume, that the local situation of the object was referred by the patient to the *retina* where the image of the object is painted. Now I confess, for my own part, that . . . I am by no means satisfied that the emendation Mr. Smith has suggested of the young gentleman's description is unexceptionable; for it does not appear to me, that the impression of a *moderate* light on the *retina* is accompanied with any perception of the part of the body on which the impression is made. When the light, indeed, is so powerful as to produce *pain*, the case comes to be different, for a sensation of *touch* [Reid and Stewart tend to class *pains* with *strains*] is then united with the proper sensation of *sight*; and

> it is characteristical of all sensations of *touch*, that they are accompanied with a perception of the *local situation* of their exciting causes [that is, of the local situations of the *unfelt* material impression or agitation of one's own body]. This, however, it is well known, does not take place with respect to the sensations of smell and of sound; nor do I imagine it to take place, prior to experience, with respect to the sensations received by the eye [i.e. by "prior to experience" is meant prior to becoming empirically aware of the connection between seeing and the tangible orb called the eye]. And, therefore, if a patient in such circumstances should be led by his first visual perceptions, to connect them *locally* with the organ by which they are received, I should be inclined rather to ascribe this to concomitant feelings of *pain* (produced by the recent operation, or by the too sudden impression of a strong light) than to any of those sensations which are exclusively appropriated to the sense of sight.
>
> (*Collected Works*, vol. 4, pp. 309–10)

Here Stewart is of course following Reid faithfully in the doctrine that we know the object of vision to be external to the eye, because we know of the existence of the former, before we know anything about the existence of the latter. Indeed Stewart, in this argument against Smith, is concerned with distinguishing between the ordinary cases of vision where there is no reference whatever to the eye, and the extraordinary ones where there is, and is probably elaborating a point made by Reid in the following striking passage.

> We say that we *feel* the toothache, not that we perceive it. On the other hand, we say that we *perceive* the colour of a body, not that we feel it. Can any reason be given for this difference in phraseology? . . . Though all philosophers agree that, in seeing colour, there is sensation, it is not easy to persuade the vulgar that, in seeing a coloured body when the light is not too strong nor the eye inflamed, they have any sensations or feeling at all.
>
> (Reid, *Works*, p. 319)

It is on the subject of the relation of colour to visible figure that Stewart begins to move away from Reid. The subject he brings up here is Reid's doctrine of *Inquiry*, Chapter 6, Section 8 that colour and sound are both unextended sensations differing only in the fact of the former's being accompanied – a matter of sheer brute contingency – by visible figure, and the latter's being unaccompanied by anything analogous. But now this doctrine of the brute relation of colour, as an unextended sensation, to visible figure is not, Stewart admits, easy to reconcile with the undeniable fact that people confess to seeing colour spread-out over shape, or, at any rate, to feeling an intimate connection between the one and the other (*Collected Works*, vol. 1, pp. 128–9).

Now, according to Stewart, it is only by criticising Reid's version of this sort of theory, that we can produce an alternative version more in line with the fact of common sense in question. Take the fact Reid relies on to prove the inexplicable contingency of the relation of the experience of visible figure to the experience of colour – the case, namely, of the "glass of broken jelly" through which we can see colour without seeing shape. But now this fact, Stewart argues, does not warrant the conclusion Reid bases on it – to wit, that there is no explaining why the seeing of colour is attended with perception of visible figure in most cases and with no perception of visible figure in other cases. On the contrary, there is a good enough reason, Stewart thinks, for the absence of visible figure in this one case and its presence in other cases – namely, that in the case where we see colour without any shape, the colour we see is a uniform colour, and the case where we see colour accompanied by shape, the colour we see is a diversified colour. But, this being so, it is, Stewart argues, quite proper to regard the seeing of colour as being in a certain sense regularly connected with the perception of visible figure, and, in this way, we can up to a point explain the feeling of common sense about the relation between colour and shape.

But here let us quote the words Stewart uses on p. 132 of Volume 2 of the *Collected Works* in dealing with the problem.

> All these sensations were plainly intended by nature to perform the office of *signs*, indicating to us the figure and distances of things external. Of their essential importance in this point of view, an idea may be formed by supposing for a moment the whole face of nature to exhibit only one uniform colour, without the slightest variety even of light and shade. Is it not self-evident that, on this supposition, the organ of sight would be entirely useless, inasmuch as it is by the *varieties* of colour alone that the outlines and visible figures of bodies are so defined, as to be distinguishable one from another?

Before we go further, we had better make it clear why we regard this observation of Stewart's as expressly directed against Reid, and as being significant for Stewart chiefly in relation to Reid. For this purpose, we will have to cite the footnote to the last quoted passage (beginning on p. 132 and continued over the next two pages).

> In Dr. Reid's *Inquiry*, he has introduced a discussion concerning the perception of *visible figure*, which has puzzled me since the first time (more than forty years ago) that I read his work. The discussion relates to the question . . . that "our eye *might* have been so formed as to suggest the figure of the object, without suggesting colour" – (*Inquiry*, Chapter 6, Section 8). To my apprehension, nothing can appear more manifest than this, that, if there had been no *variety* in our sensations of colour, and still more, if we had had no sensations of colour whatsoever, the organ of

> sight could have given us no information with respect to *figures*, and, of consequence would have been as useless.

(The *Encyclopaedia Britannica* Dissertation where this is written was published in 1815; Stewart's first reading of the *Inquiry* must therefore have taken place between 1771–2, when he was Reid's student, and 1775; a part of an old draft letter from Stewart to Reid on this very topic was included by Hamilton in the footnote.)

But now what Stewart is doing in this footnote is virtually to repudiate Reid's speculation as to the possibility of a blind mathematician's genuinely forming an idea of visible figure. But his main point in reference to these chapters of Reid is, we think, not so much concerned with what Reid says about the blind as with what Reid says by way of contrasting colour-experience with sound-experience. In raising this last point about sight and hearing in the present context, Stewart does not indeed mention Reid by name in this connection, but he does so in the other passage where the subject comes up, namely in the last paragraph of the *Collected Works*, vol. 2, pp. 495–7.

That said, it becomes possible to explain Stewart's full meaning here by contrast with Reid's. Both start from Hutcheson's point that, as a matter of brute fact, figure accompanies colour and doesn't accompany sound, and then disagree as to *how far* this is a matter of brute fact. According to Reid there are (one might say) two brute facts here; namely that, while no reason can be given why colour sometimes suggests figure and sound never does, no reason equally can be given with respect to colour by itself as to why it sometimes suggests figure, and sometimes doesn't (as in the Cheselden case). Now Stewart's main point would simply seem to be that Reid's brute fact number two is not a brute fact at all, that – to be more precise – the relation of colour to figure is up to a point invariable sequence, uniformity of colour suggesting no figure, diversity of colour suggesting figure. On the other hand, Stewart does not interfere with Reid's brute fact number one, except by way of stating it more precisely, i.e. he leaves it as an inexplicable fact that, on the one hand, uniformity of colour and uniformity of sound do not either of them suggest figure, and, on the other hand, diversity of colour does and diversity of sound does not suggest figure.

Stewart's root-problem here, it will be remembered, is the question as to how this "Cartesian" (*Collected Works*, vol. 1, p. 129) view of the disconnectedness of colour and figure as representing sensation and perception can be reconciled with the plain man's conviction about their relation. Accordingly he does not think that the point made in the last argument about there being a certain connection between the sensation of colour and the perception of figure has gone all the way to meet the plain man's feeling about the colour as being *out there* on the bodies, i.e. to account for the tendency of the mind to "transport its sensations out of itself and spread them, as it were, over a substance to which they cannot possibly belong" (p. 129).

Stewart tries to deal fruitfully with this point in a further argument. On

the Berkeleian theory, "lineal distance from the eye is not an original perception of sight." But "in the meantime" (i.e. before there is any evidence as to anything in the object of vision being distant or near (see p. 544, i.e. Stewart's own note to the passage)), "from the first moment the eye opens, the most intimate connection must necessarily be established between the notion of colour and the notions of visible extension and figure." This intimate connection, he tells us on the same page, involves our regarding the first, the sensation, merely as *the means to* the perception of, i.e. as the *sign*, of the second, and, from the nature of a *sign*-relation, involves in fact our disregarding the first in a certain sense, and regarding only the second. (He means by this, apparently, that we are attentive to, and take note of, in the first instance or naturally, differences of shape only, and do not, in the same way, take note of differences of colour.) But, this being so, at the next stage, "when a comparison between the sense of sight and touch has taught us to refer to a distance the visible figures, the indissolubly associated sensations of colour must of course accompany them, however far the distance may extend." That is to say, there is no regard paid to colour on its own account until after it has already been transported "out there" (pp. 131 and 132).

It should be mentioned that, according to Stewart's declaration, the problem ultimately interesting to him in this whole topic was the account, the somewhat confusing account, Reid gives of the contrast between the relation of colour-sensations to visible figure, and sensations of strain to tangible figure. Stewart's work here in fact can be viewed as an attempt to clear up points Reid leaves unclear, and he does this, first by pointing out the existence, unnoticed by Reid, of a *connection* between colour and visible figure, and second by bringing out in a way much clearer than Reid ever does (in order to make Reid clear at this point, we confess to having read back Stewart's doctrine into him) the absence of any kind of natural reference or instinctive reference to the organ of sight in our experience of the objects of sight, as in his argument with Smith over Cheselden's case.

But before going on to anything new we had better say a word about the relation of our few quotations to Stewart's voluminous works. The fact of prime importance here is that, although Stewart apparently lectured on perception (see his *Outlines of Moral Philosophy*), he never wrote systematically about it. That is to say, while his views on the other chief problems of philosophy are dealt with at length and in some order in the three volumes of his *Elements*, his views on perception and on Reid's theory are scattered, mainly in notes, through his *Dissertation* (a historical survey), and in his *Philosophical Essays*, and are touched on briefly and at random even there. This failure to treat perception fully is the more surprising as Stewart, it must be obvious, was very interested in the subject, but, as we shall find, it was quite usual for philosophers of Stewart's school to behave in this way, saying their best things in packed, brief footnotes.

On the other problem we have in view, the problem of universals and abstraction, Stewart was much less indebted to Reid than he was on the

problem of the perception of an external world. In this field, indeed, it was to the nominalism of Adam Smith, and not to the conceptualism of Reid that he adhered, and he seems to have taken from Reid only such points as enabled him to restate the nominalist position in such a way as to exempt it, apparently, from the reproach of being "atomistic," that is, tied to a metaphysic of simple isolated impression. As for the rest of Reid's discussion – that is, isolated parts like Essay 6, Chapter 1 of the *Intellectual Powers*, which are obviously incompatible with a nominalist approach – these parts he passes over in silence, presumably regarding them as confused, and it looks as if he regarded Reid's whole discussion as composed of two contradictory parts, one of them brief and lucid, and the remainder impenetrable by sense.

There is obviously no means of directly proving the thesis that Stewart passes over in silence many pages of Reid because of his finding them incomprehensible. However it is fortunately easy in this case to prove the thesis indirectly, first by showing that on the subject of origins of language Stewart and Reid were quite out of touch with one another, and second by showing that Reid's theory of the origin of language is intimately connected with the chapter in the *Essays* which Stewart overlooks.

On this question of language, Stewart is taken up with a kind of apparent antithesis between the position of Adam Smith, and the position of Leibnitz and Turgot, and he approaches the question by assuming that Smith must in the main be right, but that there may lurk in the pages of the rival speculators some partial truth missed by Smith but reconcilable with his position. However the details of this controversy must be left till later, and for the present we need only give a few basic facts.

Stewart approaches this whole matter by assuming, tentatively indeed, and with a view to reappraisal, the thesis that society originated before language, and asking, in respect of the origin of language, which parts of speech come first.

> According to Mr. Smith, the first step that men would take towards the formation of a language would be the assignation of particular names to denote particular objects – or, in other words, the institution of nouns substantive; which nouns, it is plain (according to this theory), would be all proper names. Afterwards, as the experience of men enlarged, these names would be gradually applied to other objects resembling the first; in the same manner as we sometimes call a great general, a *Caesar*, or a great philosopher, a *Newton*; and thus those words which were originally proper names would gradually and insensibly become *appellatives*.
>
> (*Collected Works*, vol. 4, p. 24)

But in a footnote, Stewart proceeds thus:

> It is somewhat curious that Leibnitz seems to assume the contrary of Mr. Smith's doctrine as an *axiom*. In the first sentence of the following

> paragraph, he lays it down as a self-evident principle, that all proper names were at first appellatives; a proposition, which must now appear nearly as absurd as to maintain, that *classes* of objects existed before *individual* objects had been brought into being.
>
> (p. 25)

Smith's theory of language, and Stewart's discussion of it, by the way, cover many topics besides this one – the meaning of the word "I" for example. However we will leave all that aside.

But now, while Stewart, on the question of the origin of language, is sympathetic to a theory like Adam Smith's, and indeed does not seriously take into account the possibility of any other sort of theory, Stewart's friend and master Reid, in touching upon this same subject in a letter written in 1787 to his relative Professor Gregory (co-dedicatee with Stewart of the *Intellectual Powers*), shows himself to be, beyond all doubt, hostile to theories like Adam Smith's as, for example, here:

> That the parts of speech should be conceived before speech was in use, and that speech should be at first formed by putting together parts of speech, which before had got names seems to me altogether incredible; no less incredible than if it should be said that before men had the conception of body, they first formed the conception of matter, then the conception of form, and, putting these two together, they got the conception of body, which is made up of matter and form.

As against this sort of theory, Reid states his own thus:

> In speech, the true natural unit is a sentence. No man intends less than he speaks; what is less than a complete sentence is not speech, but a part or parts of speech; to divide a sentence into parts requires greater abstraction than to divide the unit into fractions of a unit. It is, therefore, extremely probable that men expressed sentences by one complex sound or word, before they thought of dividing them into parts, signified by different words. One word signified, *give me bread*; another, *take bread*; another, *eat bread*; another, *bake bread*. As all these sentences have something common in their meaning, the natural level of analogy would lead to something common in the word by which they were expressed; and in the progress of language, that which was common in the sound of all these sentences might be separated from that which was proper to each, and, being thus separated, it becomes that part of speech we call a substantive noun, signifying *bread*, which substantive will be fit to make a part of many other sentences.
>
> (Reid, *Works*, p. 71)

Reid and Stewart, then, would seem to be here poles apart, the former

opposing, the latter advocating Adam Smith's theory of the origin of language. Nor is their divergence from one another on this point a mere incident, but rather must be regarded as part of a general cleavage between them on a whole range of topics. In the case of Reid, the view of the first words as being, so to speak, sentences is apparently bound up with his doctrine that perception involves a judgment, and not just a simple apprehension; whereas, so far as Stewart is concerned, the doctrine of the first words as the names of individuals evidently is meant to have a close connection with his doctrine that "by our perceptive powers we are made acquainted only with what is *particular* or *individual*" (*Collected Works*, vol. 2, p. 22), i.e. with the sort of doctrine Reid wants to oppose. Stewart, we may add, does not hold, and nowhere mentions, Reid's doctrine of perception as judgment.

Now Stewart is, on the present range of topics, aware of his divergence from Reid, but is not, apparently, aware (or does not own to being aware) of the *extent* of his divergence from Reid, and in particular, does not seem to suspect Reid of taking a very different view of the origin of language from the view he himself takes. Indeed, Stewart's ignorance in this respect comes out very clearly in the criticism he passes on the 83-year-old Reid in Volume I of the *Elements* (*Collected Works*, vol. 2), a book dedicated to Reid himself.

> The long experience I have had of the candour of this excellent author, encourages me to add, that in stating his opinion on the subject of universals, he has not expressed himself in a manner so completely satisfactory to my mind as on most other occasions. That language is not an essential instrument of thought in our general reasonings, he has nowhere positively asserted. At the same time, as he has not affirmed the contrary, . . . his silence on this point is the more to be regretted, as it is the only point about which there can be any reasonable controversy.
>
> (*Collected Works*, vol. 2, p. 191, abridged)

But Stewart is here obviously assuming in good faith that Reid would be willing to accept as crucial and ultimate a question as to whether – supposing appellative words or general terms were removed, or else not invented – we could still think and reason about classes and generalities, and, in so far as he makes this assumption, he is oblivious of the fact that Reid, in virtue of his doctrine of the original words as being sentences, the original perceptions as involving judgments (i.e. of appellations as being in some way implicit in all language), might very likely have refused the supposition basic to the question – the supposition, namely, of the removability or the adventitiousness of appellatives.

In the second place, Stewart is not apparently proceeding at random in his thus imputing to Reid a doctrine that the names of individuals are the first names we give, or (what apparently amounts to the same thing) that in perception we are acquainted only with the individual or particular, and, if his interpretation of Reid on this point had been challenged, he would in all

probability have referred us to the very text of Reid in Essay 5, Chapter 3 which we have already discussed – the text that "while we cannot generalise without abstracting, we can abstract without generalising." Certainly, it is to that text of Reid that Stewart reverts when he is engaged in defining quite precisely his own position.

> I shall only observe further, with respect to the nature and province of this faculty of mind [i.e. abstraction] that notwithstanding its essential subserviency to every act of classification, yet it might have been exercised, although we had only been acquainted with one individual object. Although, for example, we had never seen but one rose, we might still have been able to attend to its colour, without thinking of its other properties. This has led some philosophers to suppose, that another faculty besides abstraction, to which they have given the name of generalisation, is necessary to account for the formation of genera and species; and they have endeavoured to show, that although generalisation without abstraction is impossible, yet that we might have been so formed as to abstract without generalising.
>
> (*Collected Works*, vol. 2, pp. 164–5)

Stewart obviously has Reid in view here, and in particular the passage in Reid just cited, and he is indicating what he takes to be the points of agreement and the points of disagreement between himself and Reid. But the points of agreement are, in Stewart's estimation, that we become aware of a solitary object (like Hume's white globe) as a complex, simply by attending to one of its aspects to the exclusion of the other aspects inseparable from the first, and that, in the next place, perceiving another individual object, and analysing it in a similar way by shifts of attention, we then find a resemblance between that one of the inseparable aspects singled out from the second object and that one of the inseparable aspects singled out from the first object; and the point of difference, also in Stewart's estimation, is only on the question whether or not this awareness of resemblance that provides a foundation for using a general name involves some kind of awareness of a non-empirical entity called an "abstract or general conception."

Stewart, then, seems, we may conclude, to base his interpretation of this part of Reid's doctrine almost wholly on the first few paragraphs of Reid's Essay 5, Chapter 3, and, for that matter, we could never guess from Stewart's account (or rather accounts), that there are passages in Reid on the same subject, and in the same part of the same book, of a very different tendency. In particular, Stewart never refers (so far as I can find) to the most outstanding of these passages of a different tendency, namely the discussion, in Essay 6, Chapter 1 of the paradoxes involved in the doctrine of perception as involving judgment, and one cannot help wondering if Stewart saw Reid's point here.

Now we are inclined to believe that the sharp divergence between Stewart and Reid over this range of subject has to do with the latter's taking

paradoxes of a certain sort seriously, and the former's not taking them seriously at all. No doubt, our suggestion here is a mere guess in regard to the question of Stewart's silence about Essay 6, Chapter 1, but it is *not* quite a mere guess with regard to Stewart's divergence from Reid on the subject of language, as the following quotations from Stewart show.

> Mr. Smith, . . . it must be owned, has rather slurred over . . . a very specious and puzzling objection . . . recently stated by Rousseau, not only to the theory of Condillac, but to all speculations which have for their object the solution of the same problem. "If language," says Rousseau, "be the result of human convention, and if words be essential to the exercise of thought, language would appear to be necessary for the invention of language."
>
> (*Collected Works*, vol. 1, p. 361)

In connection with this difficulty Stewart makes mention of Reid, referring to a passage in his *Inquiry*, Chapter 4, Section 2.

> That men never could have invented an artificial language, if they had not possessed a natural language, is an observation of Dr. Reid's; and it is this indisputable and self-evident truth which gives to Rousseau's remark that imposing plausibility, which at first sight, dazzles and perplexes the judgment. I by no means say, that the former proposition affords a key to *all* the difficulties suggested by the latter; but it advances us at least one important step towards their solution.
>
> (p. 361)

The point of interest to us here is this. The speculations of both Stewart and Reid in reference to language have apparently a common source – a set of cautious observations in the latter's *Inquiry* of 1764 as to how to deal with the sort of paradox Rousseau evolves as to the impossibility of regarding language as in any degree man-made. From then on, however, the master and disciple proceeded on entirely different lines, Stewart seeing no difficulty in combining in one theory Reid's answer to this kind of paradox and Adam Smith's theory of the origin of language, and Reid on the other hand finding it impossible to work out the implications of his originally very sketchy answer without repudiating altogether theories like Adam Smith's; and, in short, whereas Stewart saw no reason to alter what was then the popular, almost the orthodox, view of the matter (Condillac and Adam Smith coincide here – as so often) on account of Rousseau's paradox, Reid felt the paradox could not be got rid of without abandoning this standpoint about the origin of language.

But now Stewart's discussion of the problem of universals, while being in the respects mentioned independent of Reid's discussion, is at the same time, in other ways, much indebted to Reid, or at least introduces themes which look as if they were adapted from Reid. In the end, therefore, there is perhaps

almost as much Reid as Adam Smith in Stewart's doctrine (as well as, of course, a great deal belonging to neither), and the main interest of his discussion consists in his attempt to develop a sort of nominalism that allows for, and does not neglect, some of the standard anti-nominalist arguments.

Our first task is to make clear just what it was in Adam Smith that especially appealed to Stewart. The important fact in this connection would seem to be this: while Smith allows the transformation of a proper name into an appellative to take place, "through the application of the name of an individual to a great number of objects whose resemblance recalls the idea of that individual, and of the name that expresses it," he at the same time insists on regarding this kind of thing as happening "*not by any deliberate or scientific exercise of abstraction*" but "*by a gradual and insensible process*." Now, to all appearances, it was the doctrine implied in these italicised clauses that took Stewart's fancy or, in other words, Stewart was encouraged by Adam Smith's example to regard the process whereby a name acquired general significance as being in a very considerable degree an arbitrary process, that is, a process not based on awareness of exact resemblance in a *certain* respect (i.e. not based on deliberate or scientific abstraction). The phrases used about Smith are to be found in Stewart's *Collected Works*, vol. 2, p. 164 and vol. 4, p. 24.

According to Stewart, then, the merit of Adam Smith's view of general names lies in its being on the whole a "conventionalist" view, and he tries on his own account to bring home the point of "conventionalism" in these matters by referring us to a story told by Captain Cook. The story is about some South Sea Islanders who were acquainted with no other land animals except hogs, dogs and birds, or rather a large number of species of birds, and the point interesting to Stewart is that these islanders, on being shown sheep and goats for the first time, confidently referred to them as birds. The odd nomenclature, Stewart goes on,

> probably did not arise from their considering a sheep or goat as bearing a more striking resemblance to a bird than to the two classes of quadruped with which they were acquainted; but to the want of a generic word, such as *quadruped*, comprehending these two species, which men in their situation would be no more led to form, than a person who had only seen one individual of each species, would think of an appellative to express both, instead of applying a proper name to each. In consequence of the variety of birds, it appears that they had a generic name comprehending all of them, to which it was not unnatural for them to refer any new animal they met with.
>
> (*Collected Works*, vol. 2, p. 161)

Here Stewart abruptly switches over from Smith to Reid and, having begun by saying that appellatives in some sense do not presuppose the deliberate exercise of abstraction, he goes on, with apparent inconsequence and without preparing us, to state in the next paragraph that appellatives do in

some sense presuppose something very like the sort of abstraction Smith had spoken slightingly of. As objects of sense are complex, and no two of them alike, the application of one name to two objects in virtue of a resemblance, "supposes," says Stewart, "a power of attending to some of their attributes, without attending to the rest" (*Collected Works*, vol. 2, p. 161). But now, to all appearance, a view of abstraction as an indispensable factor in the formation of general words is not at first sight easy to harmonise with a view of abstraction as, in some sense, an unimportant factor in the process, and, although Stewart never admits the existence of an apparent contradiction here, he was likely enough quite well aware of the difficulty, since most of the rest of what he says on this subject (whether here in vol. 2 of the *Collected Works*, or twenty years later in vol. 4 of the *Collected Works*) can very plausibly be viewed as an attempt to reconcile Reid with Smith by modifying both.

Stewart's chief step towards clearing up the riddle about the exact part played by abstraction in the formation of appellatives is not taken till vol. 3, pp. 173–6 of the *Collected Works* (i.e. vol. 2 of the *Elements*). "This remark of Smith – that appellatives originate insensibly out of proper names – becomes, in my opinion, much more luminous and important by being combined with another very original one, which is ascribed to Turgot by Condorcet" (p. 173), and which, resembling a little the Leibnitzian dictum about the priority of appellatives over proper names, is to the effect that "some of our most abstract and general ideas are among the earliest we form." Now Turgot's observation, Stewart assumes, in no way contradicts Smith's position that knowledge begins by being conversant solely with the particular, since, according to Stewart's interpretation, Turgot was engaged in objecting "to the common doctrine of logicians that our knowledge begins in an accurate and minute acquaintance with the characteristical properties of individual objects," and was proposing in its place the counter-doctrine that – to quote Turgot's own words – "we see at first only a small number of qualities" and fail to notice some that turn out to be distinguishing features. But a theory like Smith's, Stewart goes on, could be put in a much more satisfactory form, by distinguishing, in the light of Turgot's remark, between names which are vaguely generalised, due to imperfect observation of the objects the name in question applies to, and names which are methodically generalised, in virtue of "an abstraction based on a careful study of the particulars" of each of the objects a given name applies to. In short, the upshot is, according to Stewart, that those appellatives that originate insensibly and without the deliberate and scientific exercise of abstraction are for the most part appellatives of the vague kind, and the sort of appellative Stewart has in mind here is doubtless illustrated in a quotation he has given in vol. 2, p. 161. "They expressed great surprise at seeing a cow on board the 'Briton,' and were in doubt whether she was a great goat, or horned sow."

In the notes at the end, Stewart tries to bring home the point made here, by an argument that Smith's own version of the proper name theory is at one point infected by a confusion through failure to take into account the sort of

point Turgot had drawn attention to. In support of his theory, Smith, Stewart tells us, had cited the following fact: a child who is just learning to speak calls every person who comes to the house its *papa* or its *mamma*; and thus bestows on the whole species those names which it had been taught to apply to individuals. "Now this example," Stewart says, "is of no use to confirm the theory it was brought to support," and its irrelevance consists in the fact that it is not "an instance of any disposition to generalise proper names, but merely of imperfect and indistinguishing perception" in a period of infancy when "notions of similarity and identity cannot fail to be sometimes one and the same" (*Collected Works*, vol. 3, p. 382). In short, it is a case not of the transformation of a proper name into an appellative, even a vague appellative, but rather, perhaps, of the misapplication of a proper name.

For the rest, Stewart is engaged in trying to prove against Reid that nominalism is enough, and that there is no need to speak of "abstract general conceptions."

> In order to justify his own expression of conceiving universals, and in opposition to the language of Berkeley and Hume, Dr. Reid is at pains to illustrate a distinction between *conception* and *imagination*. . . . "A universal," says he, "is not an object of any external sense, and therefore cannot be imagined, but it may be distinctly conceived. . . . I can conceive a proposition or a demonstration, but I cannot imagine either. I can conceive understanding and will, virtue and vice, and other attributes of the mind: but I cannot imagine them. In like manner, I can distinctly conceive universals, but I cannot imagine them."

It "is granted on both sides," Stewart goes on, "that we cannot conceive universals in any way at all analogous to that in which we conceive an absent object of sense." But it appears from the passage that by *conceiving* universals, Dr Reid means nothing more than understanding the meaning of propositions involving general terms, "and, in the second place, when we speak of conceiving or understanding a general proposition we mean nothing more than that we have a conviction that we have it in our power to substitute, instead of the general term, some one of the individuals comprehended under it." "Therefore, Dr. Reid's argument does not in the least invalidate the doctrine of the nominalist" (*Collected Works*, vol. 2, pp. 191–3, abridged).

In this dispute, both sides are of course agreed that, if one understands one general term in a proposition, one must be able to produce a particular instance of the sort of thing referred to by the general term, and the chief point at issue is, accordingly, whether, in the case of certain basic general terms like colour-words or shape-words, it is possible to produce the particular instance in question by itself, in an uncomplicated way, or, in other words, in isolation from aught else. Now Stewart is quite cognisant of the difficulty here, and in a passage found first in vol. 2, p. 163, and repeated in vol. 3 about page 83, in his renewed discussion of Reid on universals, he is very insistent

that it is, in such cases, quite impossible to produce the instance by itself in a direct way, quite impossible, that is, to point at or imagine the blue of the sky without simultaneously pointing out or imagining the expanse of the sky. However, he believes himself able to overcome the difficulty by the claim that the isolating of an inseparable aspect can be virtually accomplished by a shift of attention.

> A person who had never seen but one rose, (it has been already remarked) might yet have been able to consider its *colour* apart from its other qualities; and, therefore, (to express myself in conformity with common language, [he means, the fashionable terminology, not colloquial language]) there may be such a thing as an idea which is at once abstract and particular.
>
> (*Collected Works*, vol. 2, p. 165)

Stewart, by the way, was a pioneer in the matter of attention, in general: "This act is one of the simplest of all our intellectual operations, and yet it has been very little noticed by writers on pneumatology" (vol. 2, p. 21). Oddly enough, however, the main effect of this innovation of Stewart's was to bring back an old exploded entity, Hume's simple impression, by a roundabout way. This fact emerges not merely in the doctrine of abstraction by shifts of attention, but also in a curious speculation on Stewart's favourite subject of visible figure somewhat out of line with his other speculations on the subject, and introduced by Stewart not to solve riddles about visible figure, but to illustrate the laws of attention. What he does there is to argue that our perception of visible figure is the result of a succession of perceptions of one point after another of the points constituting the outline, each point being equated, in Humean fashion, with a *minimum visibile*; and the grounds he gives for holding this paradoxical doctrine are first that all perception involves attention, and second that we cannot attend to more than one thing at a time, and cannot look in two directions at once. It should be added that Stewart regards this speculation as a sort of unproven hypothesis, implicit in his general approach to this new subject of attention (vol. 2, pp. 141–3).

5 Brown, Hamilton and Ferrier (1)

From Stewart, the pupil of Reid, we pass to Brown, the pupil of Stewart. Remarkably precocious, Brown produced his first philosophical work, the examination of Erasmus Darwin's views, before he was out of his teens, and almost before he was out of Stewart's classroom, and had already, by his mid-twenties, produced a book that was at once and still is accepted as being in its way a classic – the *Inquiry into the Relation of Cause and Effect* (1818). Accordingly, when Stewart retired from active duties in Edinburgh in 1810, Brown was appointed his colleague and successor, but died prematurely in 1820, leaving behind for publication his voluminous lectures, and a short book, on the human mind, which contains a summary of the first half of the lectures.

Without any further preamble, we will plunge into Brown's discussion of the problem of universals, a subject on which he sides with Reid and joins issue with Stewart. Naturally enough, he goes pretty circumspectly about the business of criticising views held by one who was his teacher, his patron, and his colleague in the chair, and names Stewart only once, although Stewart is apparently in his mind throughout the whole discussion. All the same, he leaves no doubt as to where he stands. "The view which I have given, though, I flatter myself, more clear in its analysis, is in the main the same with the doctrine of Locke and Reid" (*Lectures*, 46, p. 298, abbreviated).

Let us begin with Brown's theory of abstraction, and introduce the topic with a quotation indicating the way in which he puts the problem.

> Substances are not conceived by us, only as composed of certain elementary substances, which constitute them, by their mere juxtaposition, in apparent contiguity, and which may exist apart, after the division. They are also conceived by us, as subjects of qualities, which co-exist in them, and which cannot exist apart, or, in other words, . . . they are capable of affecting us as sentient beings, directly or indirectly, in various ways. . . . The conglomerated flakes in a snowball are not more distinctly parts of the mass itself, which we consider, than the coldness, whiteness, gravity, softness or hardness, and ready fusibility are felt to be parts of our complex notion of snow, as a substance.
>
> When I think of cases, in which the relation is of a substance to parts

> that are themselves substances – as when I say, that a room is part of a house, or that a tree has branches – it is quite evident that in these very simple propositions I merely state the relation of parts to a comprehending whole. But is the statement at all different in kind, when I speak, in the common forms of a proposition, of the qualities of objects, when I say, for example, that snow is white . . . ? Do I not merely state one of the many qualities, comprehended in that totality of qualities, which constitutes the subject as known to me? I do not indeed divide a mass into integral parts, but I divide a complex notion into its parts, or at least separate from that complexity a quality which I feel to belong, and state to belong, to that whole complex notion from which I have detached it.
>
> (*Lectures*, 48, p. 311)

Brown's point here is obviously a claim as to the existence of an analogy in a quite fundamental respect between a proposition like "this tree has trunk and foliage," and a proposition like "this tree has form and colour." As to the meaning of this claim, Brown's intentions become clear only when we read other lectures of his, on kindred themes, and find him primarily concerned with the question as to how we distinguish on the one hand between the trunk and foliage of the tree, and on the other hand between the colour and form of the tree, or, in other words, as to how we manage to verify either proposition.

For the moment, let us set aside the question as to the distinction between the tree's trunk and foliage, and confine ourselves to the distinction between the tree's colour and form. In this connection we find Brown emphatically repudiating Stewart's faculty of abstraction. This, he says, is

> a faculty by which we are supposed to be capable of separating in our thought certain parts of our complex notions, and of considering them abstracted from the rest. This supposed faculty, however, is not merely unreal as ascribed to the mind, but I may add that such a faculty is impossible, since every exertion of it would imply a contradiction. . . . But what is the state of mind immediately preceding this intentional separation – its state at the moment the supposed faculty is conceived to be called into exercise? Does it not involve necessarily the very abstraction it is supposed to produce? . . . If we know, what we single out, we have already performed all the separation which is necessary; if we do not know what we are singling out, and do not even know we are singling out anything, the separate part of the complex whole . . . cannot arise by the operation of my voluntary faculty.
>
> (*Lectures*, 51, p. 335)

Brown's remarks here are best understood in the light of the kind of experience he has in mind – the feel, say, of a snowflake. It is, he assumes, a matter of common sense that when we already know the snowflake to be both soft and cold we can single out for special attention its temperature alone, and

disregard the concomitant features. But it is, he further postulates, quite a reasonable supposition that one might quite well experience the feel of snow without knowing one had to deal with a twofold object; in the case for example of an initial experience of touch, one would have no evidence surely enabling one to distinguish between the two simultaneously given constituents. In these circumstances, when we don't as yet know the object of experience to have parts, or to be complex, it doesn't make sense to say that we can single out for attention a part at will. In short, the exercise of the supposed faculty, he concludes, is unnecessary in the case where we already know the object to be complex, and impossible in the case where we have no such knowledge.

Nevertheless, abstraction, Brown goes on, does unquestionably occur in the sense in which Berkeley denied it to occur, and if we are not to explain the process by reference to Stewart's faculty of abstraction, we must explain it by some other means. He then proceeds as follows.

> To that principle of relative suggestion, by which we feel the resemblance of objects in certain respects, to the exclusion, consequently, of all the other circumstances in which they have no resemblance, by far the greater number of our abstractions, and those which most commonly go under the name, may in this manner be traced; since, in consequence of this principle of our mind, we are almost incessantly feeling some relation of similarity in objects, and omitting in consequence, in this feeling of resemblance, the parts or circumstances of the complex whole, in which no similarity is felt. What is thus termed abstraction is the very notion of partial similarity. It would be as impossible to regard objects as similar in certain respects, without having the conceptions termed abstract, as to see without vision, or to hope without desire. The capacity of the feeling of resemblance, then, is the great source of the conceptions termed abstract.
>
> (*Lectures*, 51, p. 336)

Here, of course, we return to the theme we have already encountered in Hume, and it is likely enough that Brown, a very close student of Hume, as the "Essay on Cause and Effect" shows, has that very passage of Hume in mind. It will be sufficient, therefore, by way of comment, to quote Hume's concluding sentence.

> A person, who desires us to consider the figure of a globe of white marble without thinking on its colour, desires an impossibility; but his meaning is, that we should consider the colour and figure together, but still keep in our eye the resemblance to the globe of black marble, or that to any other globe of whatever colour or substance.
>
> (*Treatise* I, I, VII, pp. 32–3)

Brown, however, does not stop here, and goes on to raise a further problem about abstraction, which we might introduce thus. "Even though objects had

been concretes of many qualities – in the sense of presenting their look, their feel, their sound to us always simultaneously – the capacity of relative suggestions by which we feel the resemblance of objects," Brown says, in concluding the previous discussion, "would be of itself, as I have said, sufficient to account for the abstraction of which philosophers have written so much." But objects are not, he goes on, concrete in this way at all, in that, through the shutting of this or that avenue of our senses, they present themselves now with, now without a given quality. But now cannot this sort of experience account for a great many of our abstract ideas? For instance could we not account for the fact that we can imagine an aeroplane in flight without imagining its noise by reference to the experience of looking at it while holding our ears?

The sort of thing Brown has in mind here can best be brought out by a quotation from Laromiguière, a French philosopher of the same epoch.

> The human body, if we may so speak, is thus itself a kind of abstractive machine. The senses cannot but abstract. If the eye did not abstract colours, it would see them confounded with odours and tastes, and odours and tastes would necessarily become objects of sight. The abstraction of the senses is thus an operation the most natural; it is even impossible for us not to perform it. Let us see whether abstraction by the mind be more arduous than that of the senses.
>
> (Quoted by his great admirer Hamilton in his *Lectures on Metaphysics*, vol. 2, pp. 284–5)

Laromiguière, we should add, is arguing for the existence of the sort of faculty of abstraction Brown condemns, his point is that if the abstraction of the senses is automatic, so must be the abstraction of the mind.

Brown, of course, admits the occurrence of a difference here in that, whereas in the other sort of case we don't experience the parts in isolation from the whole, in this case we do experience the part in detachment, by itself. But he goes on to point out that in spite of this difference there is a fundamental resemblance between the two cases. The point is – to take the case of the aeroplane – that we do not become aware in retrospect of our original auditory-cum-visual experience as a complex experience immediately or automatically after first hearing the aeroplane in the dark or with our eyes shut, and that, in order to detect complexity in the earlier experience, we must, through comparison, become aware of a relation between the two.

But let Brown speak in his own peculiar terminology.

> The same power which thus without any effort of our volition . . . brings before us only three out of four circumstances that co-existed in some former perception, might as readily be supposed to bring before us two of the four, or only one; and that the abstraction would be thus as independent of our will, as the simple suggestion; since it would be, in

> truth, only the simple suggestion under another name, being termed an abstraction, merely because, in certain cases, we might be able to remember the complex whole, with the circumstances omitted in the former partial suggestion, and thus to discover, by comparison of the two co-existing conceptions, that the one is to the other, as a whole to some part of a whole.
>
> (*Lectures*, 51, p. 336)

It might be as well to say a word about Brown's point here, since, although it does seem to cover Laromiguière's case, it is concerned with a somewhat different matter. In order to understand it, then, we must make two assumptions, first that we are sometimes aware of the coming into consciousness of what Locke or Hume would call a simple idea, i.e. of our imagining a flavour by itself unaccompanied by any other sensible qualities, and second that, whereas in some cases, or normally, we would at once pronounce this new feeling to be a case of imagining the flavour of a pineapple, or some such thing, in other cases perhaps we would not be able, and perhaps wouldn't try, to identify the feeling. These assumptions made, Brown's point becomes clear enough and turns out to be that only in the former of these cases – the one where the flavour is identified – does anything occur deserving the name of abstraction, or singling out from a complex, and that, for the identification to occur, we must obviously remember the complex of qualities called a pineapple, and judge the present isolated flavour to be virtually part of this whole.

In the present context, Brown says no more, but what he has already said does provide some sort of clue to an understanding as to why he regards a proposition "the tree has trunk and foliage" as being in a fundamental way analogous to a proposition "the tree has colour and form." In the first place, the kind of distinction involved in the relationship between the trunk and foliage of a tree is clearly analogous to the kind of distinction involved in the cases covered by what Laromiguière calls "abstraction of the senses," since, just as we can taste the pineapple's flavour without seeing it or otherwise being directly aware of it, so we can see the foliage without seeing the trunk. In the second place, the principle involved in the other case, where we were dealing with sensible qualities of a thing never found in separation from one another, is not very different, according to Brown, from the principle involved in the case where we are dealing with sensible qualities of a thing found empirically by themselves. Accordingly we now have some light on the difficulty, to resolve which we started our discussion of Brown.

This feeling of a whole–part relationship is as basic in Brown as his feeling of resemblance in certain respects, and receives from him a peculiarly paradoxical formulation at which we must glance. Two quotations from successive paragraphs will suffice.

> It may still, indeed, be said with truth, that the different feelings – the states or affections of mind which we term complex, – are absolutely

> simple and indivisible, as much as the feelings or affections of mind which we term simple. Of this there can be no doubt.
>
> (*Lectures*, 10, p. 61)

He explains his meaning as follows.

> I use that word ["compound"] to express merely, that what is thus termed compound or complex is the result of certain previous feelings, to which, as if existing together, it is felt to have the virtual relationship of equality, or the relation which a whole bears to the parts that are comprehended in it.
>
> (*Lectures*, 10, p. 60)

These quotations come from Lecture 10, and a similar point is made in Lecture 45, and Brown illustrates the point by saying that the idea of an army is as much a simple idea as the idea of an individual soldier, the idea of two trees as much a simple idea as the idea of one tree.

Brown is here apparently on the same theme as before, when he gives us to understand that – to take an easy case – the sound of two voices singing together is just as much one indivisible object of experience as the sound of one of these two voices by itself. That is to say, his point is that we do not discover the sound of the two people singing in unison to be a blend of two sounds by listening to it by itself or by considering it by itself, and that the discovery of the sound as complex consists, first, in remembering the sound of one of the voices in question while one is listening to the duet and, second, in feeling the latter to be related to the former in such a way as virtually to contain it.

> It is this feeling of the relation of certain states of mind to certain other states of mind which solves the whole mystery of mental analysis, that seemed at first so inexplicable – the virtual decomposition, in our thought, of what is, by its very nature, indivisible.
>
> (*Lectures*, 10, p. 61)

That is to say, when Brown says that complex ideas or objects of experience are in a real sense simple, his meaning (roughly speaking) is that the parts of an object, like the sound of a choir singing, do not present themselves originally as distinct, and are distinguished from one another only by the *intellectual process* just explained, i.e. what we originally hear is *one sound*. But see later under Hamilton.

No doubt, a good deal remains to be explained, and in order to do this, we had better turn to a passage where Brown replies to the holders of the rival position. In the first place, they would, he seems to think, begin by criticising his account of singling out for attention as being seriously incomplete in the sense of omitting all reference to the most striking fact involved in the

process – the sudden fading out or disappearance of the parts of the complex whole other than the part that attracts one's attention, and they would go on to point out that this omission of features is a phenomenon taking place quite automatically and independently of the perceiver's will. In the second place, they would go on to argue that the fact in question is quite capable by itself of explaining what takes place in the singling-out process, i.e. of explaining what it is that makes one part of an object outstanding on its own account: for example, in the originally mentioned case of the feel of snow, all that would take place, on this view, would be that, while at first, no doubt, the cold and the softness present themselves together and, so to speak, equally, suddenly the cold becomes all-engrossing to the exclusion of the other features which cease to interest, and are as if they were not there. In short, what Brown calls singling out may well be explicable without reference to intellectual processes like feelings of relation.

This criticism contains two points – first, the strictures on Brown's theory for having left out of view an important feature of the process under discussion, and second, the formulation, in terms of this omitted feature, of a theory antagonistic to Brown's – and, accordingly, Brown's reply touches on both the topics in question. On the one hand, he tries to fill up the omission in his own theory, and, on the other hand, he criticises the rival theory in the version offered by Condillac. As to why he picks upon Condillac, the cause is likely to be found in the influence Condillac had on Stewart in this sort of topic, and indeed on Adam Smith too perhaps: it was doubtless from Condillac that Stewart took over his notions about the possibility of attending exclusively to one thing at a time – notions which are apparently involved in his postulation of a faculty of abstraction.

Brown proceeds by paraphrasing Condillac as follows:

> Though the whole sweep of country was shown to us but for an instant, we must have seen every object which it comprehends within our sphere of our vision. . . . This first instant, however, though it unquestionably showed us all the scene, gave us no real knowledge of it; and, when the windows were closed again there is not one of us who could have ventured to give even the slightest description of it, – a sufficient proof that we may have seen many objects, and yet have learned nothing.
>
> (*Lectures*, 31, pp. 198–9)

The paraphrase proceeds towards Condillac's main point:

> To have a knowledge of the scene, then, it is not sufficient to behold it all at once, so as to comprehend it in a single gaze; we must consider it in detail, and pass successively from object to object. This is what Nature has taught us all. If she has given us the power of seeing many objects at once, she has given us also the faculty of looking but at one, – that is to say, of directing our eyes on one only of the multitude; and it is to this

> faculty, – which is result of our organisation, says Condillac, – that we owe all the knowledge which we acquire from sight.

Brown thus proceeds with his criticism. "We see a multitude of objects and have one complex indistinct feeling," and thereafter the process of the singling out of one object, and of the fading from view of the other objects not singled out takes place. But:

> it is vain for Condillac to say, that it is in consequence of a faculty which we have of directing our eyes on one object, a faculty which is the result of our organisation and which is common to all mankind; for, in the first place, if this direction of our eyes, of which he speaks, on a single object, be meant, in its strict sense, of the eye itself, which we direct, it is not true that we have any such faculty. We cannot so direct our eye as not to comprehend equally in our field of vision, many objects besides that single object which is supposed to have fixed our attention.
>
> (*Lectures*, 31, p. 199)

Brown considers Condillac's point now sufficiently met, and he passes on to the other topic, without pausing to work out his own theory of singling out in connection with the present case. This omission, we believe, is to be regretted, and we must content ourselves, on this point, with a brief remark elsewhere, that our feeling of a scene such as Condillac speaks of would have remained one indistinct feeling, but for the rise in our mind of feelings of resemblance in a certain respect, and feelings of whole–part relationship.

The question then, according to Brown, has now to be put as follows. For some reason, the desire arises in us to know a certain part of the scene more accurately. (Of course, before this can happen, we must, in Brown's view, already know the scene to have parts.) Very well, then, we have a desire to know better one of the component objects, and we look at it intently.

> No sooner, however, has all this taken place, than instantly, or almost instantly, and without our consciousness of any new or peculiar state of mind intervening in the process, the landscape becomes to our vision altogether different. Certain parts only, those parts which we wished to know particularly, are seen by us; the remaining parts seem almost to have vanished. It is as if . . . some instant enchantment, obedient to our wishes, had dissolved every reality besides, and brought, closer to our sight the objects we desired to see.
>
> (*Lectures*, 31, p. 200)

Now, if the question is put in this way, the cause of the increased vividness in the one part of the scene, and of the comparative indistinctness in the other part, can, according to Brown, quickly be made plain, as existing in that

feeling of desire with which this transformation is always accompanied. "It is of the nature of emotions of every sort," he goes on,

> to render more vivid all the mental affections with which they are combined. The vivifying effect, however, is still more remarkable, . . . when the feelings with which the emotion is combined are themselves peculiarly faint, as in the case of mere memory or imagination. The object of any of our emotions, thus merely conceived by us, becomes, in many cases, so vivid as to render even our accompanying perceptions comparatively faint. The mental absence of lovers, for example, is proverbial.
>
> (*Lectures*, 31, p. 201)

With that, our exposition of Brown's fundamental arguments comes to an end, and we begin to want some kind of succinct exposition of what he regards as his central position. In fact we do find something of this kind in Lectures 32 and 33, the lectures immediately succeeding the one we have just drawn on. What Brown does there is to explain his position as being a kind of middle way between the excessive simplification of principles found in Condillac, and the excessive multiplication of principles found in Reid.

It is with Condillac that Brown is chiefly concerned, and it will be as well to cite the paragraph which Brown quotes as summarising Condillac's whole doctrine in respect of mind.

> If we consider that to remember, to compare, to judge, to distinguish, to imagine, to be astonished, to have abstract ideas, . . . to know truths, whether general or particular, are but so many modes of being attentive; . . . and that attention in [its] origin, [is] nothing but a mode of sensation, we cannot but conclude that sensation involves in itself – *enveloppe* – all the faculties of the soul.
>
> (Condillac, *Traité des Sensations*, Part I, Chapter 7, Section 2 – quoted by Brown in Lecture 33)

Now Condillac's position apparently stands or falls with his peculiar theory of attention, as a single quotation will make plain.

> A child gives the name of *tree* to the first tree which we show him. A second tree which he sees afterwards recalls to him the same idea; he gives it the same name; and so on with a third, with a fourth, and there you have the word *tree*, given first to an individual, becoming for the child a class-name, and abstract idea comprehending all trees in general.
>
> (Quotation given in Stewart, *Collected Works*, vol. 3, p. 381)

But obviously this theory has a good deal in common with Stewart's and Smith's, as the former indeed admits, and it obviously implies, in the present

case, the possibility of the empirical self-presentation in isolation on the part of the single tree – i.e. minus its environment.

Dismissing Condillac's theory of attention, Brown proceeds to sum up his position in somewhat the following manner. On the one hand, Condillac, misled by his view of attention, holds the unsatisfactory theory that judgment is nothing but a mode of sense, and Reid, by comparison, is on firmer ground in distinguishing sharply between sense previous to judgment as vague and uninformative, and sense posterior to judgment as alone yielding knowledge. On the other hand, Reid complicates the situation too much by speaking as if the faculty of judgment that transforms sense into knowledge is accompanied by the allied faculties of generalisation and of abstraction. The fact of the matter is that it is necessary to speak only of sense, as *one indistinct feeling previous to feeling the relationship* of resemblance in a certain respect (and the other relationships), and as *yielding information only posterior to the appearance* of these *intellectual* states called feelings of relation. Reid's faculties of generalisation and abstraction are really indistinguishable from the feeling of resemblance in a certain respect, while Reid's faculty of judgment is indistinguishable from these feelings of relationship in general.

Before we go further, we had best indicate the connection between the two groups of lectures we have drawn on – Lectures 31–3 and, again, Lecture 51. The point to note is that the earlier items and the later item are related not merely as being concerned with aspects of a single theme, but even as being respectively preface and postscript to an intermediary group, especially Lectures 45–7 dealing with the problem of universals.

The most striking passage of Lecture 33 is concerned with stating what one might regard as Brown's main premises for his discussion of the problem of universals. You find, he says, that a sheep resembles a cow in a certain respect, namely of being a quadruped. But now think away this resemblance in a certain respect, and you are left with a feeling of the object of perception as being two items, as being a whole with two co-existing parts. Finally, take away this latter feeling of comparison altogether, and you land in a position such that, while the object of perception remains just what it was before, words and sentences altogether fail you to describe anything.

But let us have Brown's words. This feeling of resemblance in a certain respect is a new state of mind as distinct from the perception of two objects as the perception of two objects is distinct from the perception of one of them.

> To compare one animal with another, is, indeed, to have different visual images, but the mere co-existence of visual images is only a group, larger or smaller as the images are more or fewer. . . . Innumerable objects may be, and are continually, present to us at once, so as to produce one complex affection of mind, fields, groves, mountains, streams; but the mere co-existence of these, so as to form in our thought one scene, involves no feeling of comparison; and if the mind had not been susceptible of other affections than those of sense, or of more remembrance of

> the past images of sense, either in whole or in part, it might, when such a scene was present, have existed for ever in a state which forms the complex perception of the scene, without the slightest notion of the relation of its parts to the whole, or to each other.
>
> (*Lectures*, 33, pp. 211–12)

That is to say, the mind would exist in the state, in which – to quote Brown's words from Lecture 31 (*Lectures*, p. 199) – "We see a multitude of objects and we have one complex indistinct feeling," i.e. in the state in which it would exist when, "vouchsafed only a momentary glance at a scene," it is not able to give the slightest description of it. (The last sentence quoted would seem to be Brown's final comment on Condillac's account of looking at "the whole sweep of country.")

Brown's thesis here, we believe, suffers from a certain amount of obscurity, due probably to his not explaining very carefully the relationship between his feelings of whole–part, and his feelings of resemblance in a certain respect. Accordingly we will try to go a little way towards elucidating this point, and we will take as our text his final summing-up of his main premises in reference to the problem of universals. It runs as follows.

> The feeling which constitutes our comparison of our sensations, or, in other words, our belief of their agreement of disagreement, is itself a state of mind, different from either of the separate sensations which we compare, and different from both, as merely coexisting.
>
> (*Lectures*, 33, p. 212)

Let us define the issue a little more closely. Brown's standard formula, repeated, as Hamilton grimly remarks, no fewer then nine times, is that the generalising process is, first, the perception or conception of two or more objects and, second, the feeling of their resemblance in certain respects. Now it is this making the perceptions of co-existing objects precede our comparison and judgment about them that is the fact giving rise to our problem, and the question at stake concerns the nature of this primary experience.

It appears that the difficulty can be cleared up if we interpret what Brown says above about this primary phase of the process, in terms of his doctrine of "virtual complexity" or virtual co-existence, as he sometimes calls it, that is to say, if we equate his "perception of two objects" with an experience involving awareness of the distinction between two sensations as co-existing and the same two sensations in their separateness. Accordingly, let us proceed to explain the matter with help of a speculation, on Hume's lines, about luminous bodies, and start from a previously dark sky wherein suddenly appear at the same time two bright objects, one round and white, the other round and yellow. Now, in the circumstances, the only description we could give there and then of this experience is, according to Brown's doctrine, that something

has appeared or that one thing has appeared, since, owing to the simultaneity of their appearance, there is, so far, no evidence of their being a pair. At this point, let us make one of the two objects disappear, the other remaining as it is, and, according to Brown's doctrine, there is now nothing to prevent the occurrence to us of the feeling that what we now have before us is in one way different and in another way the same as what we lately had before us, and that, in fact, the present object is related to the first object as part to whole. In the third place, let us now make the vanished object reappear beside the other, and our attitude towards the object of perception as it now is will be different from our attitude towards the same object of perception as it was originally before the vanishing of one of the items. That is to say, whereas we previously called the pair something or one thing, we are now in the position to call the pair, a pair, and to be aware of it as a complex of two items. That done, we have reached the end of the process, and explained what on Brown's view is involved in his initial state as generalisation, the perception of two objects. Only when this is done, is it possible for the feeling of resemblance in certain respects to begin.

We have said enough by way of introduction to Brown's discussion of the problem of universals, and we now turn to Lectures 46 and 47 where the discussion in question is to be found. It begins on a theme already debated between Reid and Stewart. "It remains for me," says Stewart, in a passage on pages 91–3 of volume 3 of his *Collected Works*, "to examine an attempt which Dr. Reid has made to convict Berkeley of an *inconsistency* in the statement of his argument against abstract general ideas." Now Reid, continues Stewart, does this, simply by citing the passage in Berkeley to the effect that "an idea, which, considered in itself, is particular, becomes general by being made to represent or stand for all other particular ideas of the same sort," and then proceeding to claim that Berkeley, in making use of the expression, "*of the same sort*" admits the existence of common attributes, i.e. abstract general ideas. "I must take the liberty," Stewart concludes,

> of remarking that in the present instance Berkeley appears to me to have been treated with undue severity. By *ideas of the same sort* it is plain he meant nothing more than *things called by the same name*, and consequently (if our illustrations are to be borrowed from mathematics) *comprehended under the terms of the same definition*. In such cases, the individuals classed thus together are completely *identified* as subjects of reasoning.

Brown enters this controversy on the side of Reid. Without general notions, he says, "there can be no restriction of any sign to ideas of the same sort." "If we have previously a notion of what Berkeley himself rather inconsistently calls a line in general, we can easily understand how the word line may be limited to ideas of one sort"; but otherwise not.

But of course there remains Stewart's point that by *ideas of the same sort* Berkeley means *things called by the same name*. Now, if this point is to have any

weight, Stewart, Brown thinks, must imply the doctrine that the name forms the class, and accordingly he proceeds to define the question arising out of this.

> If, indeed, it were the name which formed the class, . . . then might anything be classed with anything, and classed with equal propriety. All which would be necessary, would be merely to apply the same name uniformly to the same objects; and if we were careful to do this, John and a triangle might as well be classed together, under the same name man as John and William.
>
> (*Lectures*, 47, p. 303)

But, in fact, Brown goes on, words are not used in this way, our general terms extend to certain objects only and not to all objects; we give "the name of man, for instance to John and William rather than to John and a triangle." Accordingly the question at issue is whether or not our actual classification depends on "the mere giving of a name at random," whether or not it is "arbitrarily and without any reason whatever that we do not class a rosebush with birds, or an elephant with fish." (All the quotations are from Lecture 47, except the last which comes from a parallel passage in Lecture 46.)

Now the only piece of evidence Stewart ever produces for the random and casual origination of general names is the anecdote out of Captain Cook. This anecdote, however, is by no means, Brown thinks, as favourable to the conventionalist theory as Stewart would have it. Stewart, he points out with the utmost circumspection and politeness – this is the only place where Stewart is introduced by name – has altogether left out of account one vital circumstance in Cook's narrative, namely that the islanders were on that occasion shown for the first time not merely sheep and goats, but also horses and cows, and that while they interested themselves in the first-named pair, and classified them as birds, "they were afraid to come near our cows and horses, nor did they form the least conception of their nature" (Cook). Now the vital question is "why did they not class the cows and horses with birds as much as the goats and sheep?" Surely the omission was not accidental, but rather the bulk of the animals was the cause of their distinction.

> A bird, in their mental definition of it, was certainly a living thing [a land animal], of certain various sizes familiar to them, and not a dog or a hog. A sheep or a goat was seen by them to be a living thing, not a dog nor a hog, and of a size that implied no remarkable opposition to that involved in their silent mental definition of a bird. In such circumstances it was classed by them as a bird with as much accuracy as is to be found in [our ordinary classification of] the ant that creeps with the gnat that flies, – and, with equal accuracy, they excluded the cows and horses that did not coincide with the general notion, of which resemblance in size formed an essential part.
>
> (*Lectures*, 47, p. 309)

The first stage in Brown's argument is now over, and the position he conceives himself to have reached contains two items. In the first place, the very invention of a general term, and the extension of it to certain objects only, not to all objects, implies some reason for this limitation – some feeling of general agreement of the objects included in the class to distinguish them from objects not included in it. In the second place, this feeling of general agreement is no doubt a feeling of resemblance, but

> we surely cannot perceive objects to resemble each other without perceiving them to resemble each other in certain respects rather than in others; and this very notion of the respects in which they are similar, is all that is meant by the general relative feeling.
>
> (*Lectures*, 47, p. 302)

(Quotations of this kind abound in Lectures 46 and 47.)

In preparation for the second stage of Brown's argument, we had better cite Stewart once again, quoting his main comment on Reid's thesis that "a universal is not an object of any external sense, and therefore cannot be imagined, but it may be distinctly conceived." It will be granted, says Stewart, "that we cannot conceive universals in any way at all analogous to that in which we conceive an absent object of sense." But, this being so, "why," he asks, "should we employ the same word *conception*, to express two operations of mind that are essentially different?" (*Collected Works*, vol. 1, pp. 191–2).

Now there is perhaps more in this urbane remark of Stewart's than meets the eye. All he says, to be sure, is that a body existing out of sight and out of reach may plausibly be described as not being an object of the sense, and therefore as being, in its present situation, not imaginable but only conceivable, that a universal, whatever else it may be, is nothing like a body present to or absent from sense, and that therefore it is not illuminating to speak of the one in the same terms as one speaks of the other. But at the same time, he must have known perfectly well that Reid's way of speaking about universals, however awkward in other connections, has a fairly definite meaning in its own context, as employed in reference to certain nominalistic arguments of Hume. Accordingly, it is quite probable that Stewart is here trying to convey, in the politest possible way, his opinion of his then octogenarian friend's arguments against Hume on this point as being a total failure.

Here let us look at the passage in Reid in reference to which his description of universals as unimaginable but distinctly conceivable reveals itself as being at any rate meaningful. He begins by recapitulating the argument of Hume that "every object of sense – that is, every impression – is an individual having its determinate degrees of quantity and quality; but whatever is true of the impression is true of the idea," and therefore "all ideas are individuals" or, in other words, no ideas are unindividual, i.e. are things abstract and general. Now all this, Reid allows, is quite sound, provided idea, as used here, is taken as equivalent to image; but, he goes on, "though there should be no

abstract (general) ideas, it does not follow that things abstract and general may not be conceived." That is to say, in order to prove that there are no "things abstract and general," Hume, according to Reid, would have first to prove that our only states of mind are that of having impressions, and that of having ideas which are copies of impressions. But now, in the second place, Reid goes on to treat Hume's next point as being in effect a retort to his counter-move and as containing a claim that, even though there were states of mind other than that of having impressions and that of having ideas, these other possible states of mind could not have as their object "things abstract and general" since the very notion of these latter implies a contradiction. Hume's point, he notices, is simply that "everything in nature is individual, and it is utterly absurd to suppose a triangle really existent which has no precise proportion of sides and angles" – i.e. absurd to suppose unindividual beings really existing. Now the leading principle here – "everything in nature is individual" – is, Reid begins, a tautology, and therefore unexceptional no doubt, but settling very little. "I acknowledge," he says, "it to be impossible that any being should exist that is not an individual being; for I think, a being and an individual being mean the same thing." This being so, he proceeds, it certainly follows that it is a contradiction to speak of there being, in the same sense of "be," individual beings and non-individual beings, but it by no means follows that it is a contradiction to speak of there being attributes of beings as well as beings, of there being attributes common to individuals as well as of their being individuals, since in this case the word "be" is used in two senses. "Universals," he says elsewhere, "have no real existence and when we ascribe existence to them, it is not an existence in time or place" (*Works*, p. 407). Accordingly, there is no contradiction in the supposition that in addition to the faculties presenting the individuals – namely sense and imagination – there is also an additional faculty presenting the attributes common to the individuals (*Works*, pp. 410, 411).

Such, then, is Reid's main point, but, in what he says on the rest of the same page, we find indications of a more precise and discussable way of formulating his thesis. Now the difficulty here is the meaning to be attached to the phrase *attributes common to*, and Reid, in a passage already discussed at length, goes some way towards clearing this difficulty up by maintaining emphatically that the unfamiliar expression "attribute common to individuals" is presupposed in the more familiar expression "resemblance between individuals in a certain respect." There can be no resemblance between objects that have no common attribute, he tells us, if we understand by "resemblance" "distinct resemblance." Accordingly, in the light of this elucidation, his thesis in the last analysis would seem to amount to this: that while individuals are objects of the sense and are therefore imaginable, resemblances in a certain respect between individuals are not objects of the senses, and these cannot be imagined, but they can be distinctly conceived in and through some quite distinct and peculiar mental faculty.

It is here that Brown links up with Reid, since his statement of the conceptualist thesis differs from this one implicit in Reid only in being much more precise.

> The word conception . . . seems to individualize its object; and [is] commonly employed to signify some faint revival of a past feeling. [But in these general notions, according to the view of them taken by me] there is nothing which can be said to be in any respect a conception, or fainter transcript of the past. . . . The feeling of the relation of similarity is no part of the perception or conception of the separate objects which suggest it. It is a feeling of a different species, absolutely new – a relation and nothing more; and the general term, which is not expressive of what can be strictly termed a conception, is invented only to express all that multitude of objects, which, however different in other respects, agree in exciting one common feeling of relation – the relation of a certain similarity.
>
> (*Lectures*, 47, p. 304)

But Brown not only subscribes, in a manner of speaking, to Reid's thesis that universals are not objects of the external senses, and therefore cannot be imagined, but they may be distinctly conceived; he also subscribes, in his own fashion, to Reid's other point that an attribute common to individuals is not a being in the sense in which the individuals are beings. It is legitimate, he says, to regard individuals resembling one another in certain respects as individuals having "a common nature in certain respects," but it is illegitimate and contradictory to go further, and try to regard this "common nature," or something in common, as itself some sort of individual. It is absurd, he says, to "require that our mental notion of the common properties of triangles should itself be a triangle"; we must not "attempt to form an individual representation of what is in itself general and, therefore, by its very nature incapable of being individually represented" (*Lectures*, 47, p. 304).

The clearest statement he gives of this point is to be found in his unfinished *Sketch of a System of Philosophy* – the synopsis of his lectures.

> It is not in an *idea* or *conception* [i.e. image] that I find the source of our general term; it is in a feeling of a very different kind, the *relation of similarity*. . . . We have no *general idea of a triangle*; for a Relation is as little an Idea, and admits as little of individual representation as an Emotion. It is a feeling of its own kind, of which it is the very nature to extend always to more objects than one, and which may extend in its general bearings to innumerable objects, . . . Though we have no general idea of *a triangle*, . . . we have a general notion of the common nature of *triangles*, or, in other words, have a general feeling of a relation of similarity of all the figures.
>
> (*Sketch*, p. 288)

Brown's theory of universals, then, would seem to be a reply to Hume's theory, very much on the lines of Reid's reply to Hume, with, however – to return to Brown's general position – the fundamental difference that Brown, in effect, virtually tries to turn the concluding portion of Hume's chapter on universals against the preceding portions of it, or, more precisely, to show the incompatibility of Hume's admission of abstract particular ideas with his rejection of abstract general ideas. That is to say, Brown might be represented as starting from the dictum of Hume (found in his second defence of distinctions of reason) that "all abstract ideas are nothing but particular ideas viewed in a certain light," and going on to declare this dictum to mean, according to Hume's own explanation of it, that, while our only mode of awareness is awareness of individual objects (purple patches, white globes, etc.) in sense or imagination, yet we can be aware of these individual objects with or without attending especially to and singling out a particular aspect of them, according as we do or do not compare them in point of their resemblance in a certain respect. But now, on Hume's own view, he might go on, the attending to the particular aspect of the sensible individual is apparently posterior to "the viewing of the sensible individual in a certain light" or, in other words, being aware of its resemblance-relations in a certain respect with other sensible individuals. This being so, what Hume's main point would seem to amount to is that, while our only mode of awareness is awareness of sensible individuals, this mode of awareness occurs both attended by and unattended by awareness of the resemblance of these sensible individuals in a certain respect. But now here the crucial question, Brown might proceed, begins to arise – the question whether this awareness of resemblance-relations between sensible individuals is in some way nothing but the awareness of these sensible individuals, or whether the former is a quite different type of awareness from the latter. This, of course, is, Brown might admit, a difficult question, and many philosophers – for instance those who hold the sort of view of attention Condillac propounded – would certainly want to regard awareness of the resemblance of sensible individuals as being in some way nothing but the awareness of the sensible individuals. To be more precise, the main point at issue here is apparently whether or not the appearance of a set of sensible individuals alters according as we do or do not compare them in point of resemblance, whether or not for instance their appearance is different after the comparison with what one remembers it to have been before. But if the comparison or awareness of resemblance between the sensible individuals takes place after the manner in which Hume seems to regard it as taking place – that is, takes place prior to the singling out of the particular aspect of sensible individuals, let alone the brightening up of these particular aspects, and the fading out of the concomitant aspects – then in that case it becomes impossible to avail oneself of arguments like Condillac's for the identification of the awareness of resemblance-relation with the awareness of the sensible individuals that resemble, and, pending the appearance of some new counter-argument, it becomes hard to persist in the claim

that awareness of individuals in sense or imagination is the only sort of awareness, and, this being so, Hume's arguments in favour of Nominalism lose their foundation.

The kind of argument we find in Brown on the subject of universals is of much the same tendency as the kind of argumentation we find in Reid on the same subject, and some comparison of the two men is therefore quite appropriate. As soon as this question of *comparison* is raised, it becomes clear that Brown is in many ways immensely superior to Reid, but at the same time in a way falls short of Reid in certain, one might say subordinate, aspects of the problem common to them. A case in point is Brown's discussion of the Adam Smith–Condillac theory of proper names as being the first words, and of general names as evolving out of proper names. On this subject, Brown commends the Smith–Condillac theory as quite sound, provided that we take for granted the previous existence of general relative notions – i.e. their existence prior to their being expressed in a distinctive verbal form. Now Brown's doctrine here is too brief to be clear, but presumably his point is that, while from the beginning singular propositions are taken for granted both by speakers and by their audience as being asserted in verbal interchanges, yet, at the earliest stage, only one word or sound is spoken aloud, and that word a word which, if the unexpressed items in the proposition understood all round as being asserted were to obtain expression, would clearly reveal itself to be functioning as a proper name, as the subject of the sentence. But, if this is what Brown means, surely it would have made for clarity to bring out the fact that the solitary word uttered is only implicitly a proper name, and stands for the subject of the singular proposition mentally entertained, only potentially and not actually. This granted, however, it at once becomes a discussable issue as to whether it would not be better to follow Reid's suggestion about points like this and to say that the solitary word stands for the whole proposition and is understood by speaker and hearers as a sentence.

Brown, then, is not very clear on this subject of the invention of proper names, and, as we shall see later, has left the part of his doctrine dealing with our apprehension of the simple, the particular and the individual in an unelaborated and confusing state. However, in spite of this weakness, the fact is that, as far as the principle of the thing goes, Brown has indicated his position in reference to these matters with quite enough clarity. For example, take his doctrine that awareness of a resemblance in certain respects between the parts of a complex whole precedes the singling out of one of these points for special consideration. The very point he is concerned to make here is the point Reid makes in saying that a judgment of sense precedes a simple apprehension of an abstract aspect of a thing – i.e. the abstract particular – and the chief difference between the two would seem to be that, whereas Reid explains the point at issue better, Brown's arguments about the point are fuller and more decisive than Reid's.

*

Turning now to Hamilton, we had better begin by mentioning that he entered philosophy, or rather the philosophical movement we are considering, by a somewhat different route from the one his predecessors had taken. At Glasgow, he was probably not impressed by his teacher, Professor Mylne, a competent philosopher, by all accounts, in what one might call the Adam Smith tradition, but apparently more empiricist than Smith, i.e. indebted to Hartley as well as to Condillac. At Oxford, where he went next, he seems to have been chiefly occupied in acquiring a familiarity with the Aristotelian commentators and the medieval scholastics that was very unusual in those days, and would be almost as unusual now, and also in perusing the writings of the German Idealist philosophers in a somewhat more sympathetic and understanding spirit than almost anybody in these islands had done before. Accordingly, it is likely enough that Hamilton did not seriously commence philosophising in the rather special tradition we are discussing here until after settling in Edinburgh as an advocate in about 1815 and gaining the friendship there of the aged, but still alert and productive, Dugald Stewart. In a way, perhaps, Hamilton may be reckoned Stewart's disciple, and the impression Stewart made on him is peculiarly discernible in relation to the topic concerning us now–universals. At the time Hamilton arrived in Edinburgh, Brown, of course, was at the height of his fame, but towards Brown Hamilton took up a decidedly unsympathetic attitude, and one of his main purposes in philosophy might be said to be that of keeping alive Stewart's theories by detecting weak points in Brown's counter-positions.

We will start off with Hamilton's criticism of Brown's theory of universals, at the point where the topic is the proposition, "This individual object and that one are both triangular."

> In the example we have taken of the equilateral and rectangular triangles, . . . the resemblance between these figures lies in their triangularity, and the notion or feeling of resemblance in which Dr. Brown places the generality must be a notion or feeling of triangularity. Now the triangularity thus conceived must be one notion, – one triangularity; for otherwise it could not be, (what is supposed), one common or general notion, but a plurality of notions. Again, this one triangularity must not be the triangularity, either of the equilateral triangle, or of the rectangular triangle alone; for, in that case, it would not be a general notion – a notion common to both. . . . Of such a triangularity, however, it is impossible to form a notion, as Dr. Brown admits; for triangularity must be either rectangular or not rectangular.
>
> (*Lectures on Metaphysics*, vol. 2, p. 318)

But in this case, what, Hamilton asks, are we to make of the notion or feeling of similarity between the two triangles? "As a general notion, containing under it particular notions, it must," he replies,

> be given up; but it may be regarded as a particular relation between the particular figures. . . . And thus by a different route, we arrive again at the same conclusion, – that Dr. Brown has mistaken an individual, particular relation for a general notion. He clearly saw that all that is picturable in imagination is determinate and individual; he, therefore, avoided the absurdity involved in the doctrine of the old conceptualists; but he was not warranted (if this was, indeed, the ground of his assumption), in assuming that because a notion cannot be pictured in imagination, it is, therefore, general.
>
> (*Lectures on Metaphysics*, vol. 2, p. 319)

For the sake of bringing out a new point, let us quote from Hamilton another version of his main thesis. "Dr. Brown seems to have had some faint perception of the difference between intellectual notions and sensible representations" – a difference, he says on the previous page and elsewhere, which is of course undeniable and is understood much better in Germany, "the most metaphysical country in Europe" than it is here. "But Brown," Hamilton continues,

> mistook the nature of the intellectual notion, which connects two particular qualities by the bond of similarity, and imagined that there lurked under this intangible relation the universality which, he clearly saw, could not be found in a representation of the related objects, or of their resembling qualities.
>
> (*Lectures on Metaphysics*, vol. 2, p. 313, vol. 3, p. 136. See also Hamilton's footnote in Reid, *Works*, p. 412)

Hamilton's point then is this. Brown's argument, he observes, consists of two steps: the first issuing in the conclusion that, over and above "impressions" and "ideas" of individuals, there is the quite different mental state of feeling a relation of resemblance between these individuals; the second going on to maintain that a resemblance between individuals, in the sense explained, presupposes their having a common nature. Now there is no difficulty, Hamilton goes on, about accepting the first step, but bewilderment arises over the second step, and in particular over its implied thesis that a resemblance-relation, which becomes unpicturable, may be regarded as a general relation, a relation of having something in common.

> It was primarily incumbent on Dr. Brown to prove the reality of this basis. But he makes not even an attempt at this. He assumes all that is in question. To the noun-substantive "feeling of resemblance," he prefixes the adjective, "general"; but he does not condescend to evince that the verbal collocations have any real connection.
>
> (*Lectures on Metaphysics*, vol. 2, p. 315)

In his argument, Hamilton tries to settle this whole business for good and

all, by producing a proof that a similarity relation need not be interpreted as a general relation, i.e. as a relation involving so to speak community between individuals. On this subject, he makes two quite distinct points and it is the first of these we shall consider just now, reserving the other till later.

> What is a feeling or notion of resemblance? Merely this; two objects affect us in a certain manner, and we are conscious that they affect us in the same way as a single object does, when presented at different times to our perception. In either case, we judge that the affections of which we are conscious are similar or the same. There is nothing general in this consciousness, or in this judgment. At all events, the relation recognised between the consciousness of similarity produced on us by two different eggs, is not more general than the feeling of similarity produced on us by the successive presentation of the same egg. If the one is to be general, so is the other.
>
> (*Lectures on Metaphysics*, vol. 2, p. 311)

For the sake of precision, let us cite a passage where Hamilton puts his point about similarity more lucidly.

> Two objects have similar qualities only as these qualities afford a similar presentation in sense or a similar representation in imagination, and qualities are to us completely similar [he seems to mean, objects are completely similar in their qualities], when we are unable to distinguish their cognitions. But what we cannot distinguish, is, to us, the same; therefore, objects which determine undistinguishable impressions in us, are perceived and represented in the same mental modification, and are subjectively to us precisely as if they were objectively identical.
>
> (*Lectures on Metaphysics*, vol. 3, p. 124)

Now, no doubt, it is very true that in the case of objects as like as two peas, the likeness in question is equivalent to virtual sameness, or, in other words, the criterion of exact similarity is the indistinguishability of the one object from the other, when they are presented at different times. But even so, Hamilton's case against Brown is still far from conclusive, and the issue depends on whether the sort of similarity Brown is talking about – i.e. the similarity obtaining between a duck's and a hen's egg which one could perfectly well distinguish apart – can be regarded as a special case of the sort of similarity Hamilton is talking about, the similarity obtaining between two hen's eggs as like as two peas which one could not possibly distinguish apart.

Hamilton, however, has no doubt whatever about the feasibility of the reduction of Brown's similarity in certain respects to the other sort of similarity, exact all-over similarity, and, in the passage immediately succeeding the paragraph just quoted, he tries to show how such a reduction can be carried through.

> But the consciousness of identity is not merely the result of the indiscernible similarity of total objects, it is equally the result of the similarity of any of their parts, – partial characters. For by abstracting observations from the qualities, points, in which objects differ, and limiting it to those in which they agree, we are able to consider them as identical in certain respects, however diverse they may appear to be in others, which, for the moment, we throw out of view. For example, let B, C and D represent a series of individual objects, which all agree in possessing the resembling attributes of *y*, *y*, *y*, and severally differ in each respectively possessing the non-resembling attributes *i*, *o*, *u*. Now, in so far as we exclusively attend to the resembling qualities, we, in the first place, obscure or remove out of view their non-resembling characters *i*, *o*, *u*, while we remain exclusively conscious of their resembling qualities *y*, *y*, *y*. But in the second place, the qualities expressed by *y*, *y*, *y*, determine in us cognitive energies which we are unable to distinguish, and which we therefore, consider the same. We, therefore, view the three similar qualities in the three different objects as also identical; we consider the *y* in this, the *y* in that, and the *y* in the third object, as one, and, in so far as the three objects participate in this oneness or identity, we regard them also as the same. In other words, we classify B, C, and D under *y*; *y* is the genus, B, C, and D are its individuals or species, severally distinguished from each other by the non-resembling properties *i*, *o*, *u*. Now it is the points of similarity thus discovered and identified in the unity of consciousness which constitute Concepts or Notions.
>
> (*Lectures on Metaphysics*, vol. 3, p. 125)

Let us put Hamilton's point here in such a way as to show its bearing on Brown's point. The case we envisage is that of two pairs of Siamese twins so related by a freak of nature that one member of each pair is exactly similar to the correspondingly placed member of the other pair, whereas their respective yoke-fellows differ from one another in a normal way, and from the other two also. If now we call one pair the *Joneses* and the other pair the *Smiths*, then Hamilton's analysis of resemblance in a certain respect would work out all right, and to say that the Joneses exactly resemble the Smiths in one respect would be to say that one of the members of the Jones-pair is indistinguishable from one of the members of the Smith-pair, when the members in question are presented successively in circumstances where their fellow-members are hidden from view.

But here the same question recurs as before – namely, as to whether this Hamiltonian analysis of similarity in a certain respect is as well adapted to the kind of case Brown has in view – the partial similarity of a swan and a snow-ball – as it is to the present case of the Siamese twins. Hamilton however has no doubts about the analogousness of the one case and the other, and argues the point three times, always as a preface to a statement of the doctrine we have just studied. Here, for example, in summary form, is the

whole story as told in the *Lectures on Metaphysics*, vol. 2, pp. 293–4, in a passage that is introductory to the discussion of Brown on universals. He begins in a now familiar strain. "There is nothing necessarily connected with generalisation in abstraction. Generalisation indeed depends on abstraction, which it supposes; but abstraction does not involve generalisation." He goes on next to quote with approval the remarks of Stewart about the abstract particular and the person who had seen but one rose. Then, having thus made it clear that cognition begins simply in acquaintance with these abstract particulars, he goes on briefly to repeat the same account of the formation of general notions, as we have just quoted.

> A general notion is nothing but the abstract notion of a circumstance in which a number of individual objects are found to agree, that is, to resemble one another. In so far as two objects resemble each other, the notion we have of them is identical, and, therefore, to us the objects may be considered as the same. Accordingly, having discovered the circumstances in which objects agree etc. etc.

In order to make quite clear how very "atomistic" are Hamilton's presuppositions in relation to the present question, let us have yet one more version of his fundamental doctrine – this time a version which is not a mere paraphrase of Stewart, but is Hamilton's own work.

> The notion of the figure of the desk before me is an abstract idea – an idea which makes part of the total notion of that body, and on which I have concentrated my attention, in order to consider it exclusively. This idea is abstract, but it is at the same time individual; it represents the figure of this particular desk, and not the figure of any other body. But had we only individual abstract notions, what would be our knowledge? We should be cognisant only of qualities viewed apart from their subjects (and of separate phenomona there exist none in nature); and as these qualities are also separate from each other, we should have no knowledge of their mutual relations.

Thus, having said this, Hamilton adds as an afterthought in his margin: "we should also be overwhelmed with their number" (*Lectures on Metaphysics*, vol. 2, pp. 287–8).

Obviously, then, the issue of the debate now hinges chiefly on whether Hamilton can do anything to vindicate this Stewartian faculty of abstraction against the criticisms of it made by Brown as an essential part of the theory of universals under discussion. In fact, however, Hamilton does not seem to feel that this doctrine of abstraction stands in any need of defence, and, for that matter, is plainly unaware that it had ever seriously been attacked by Brown or Hume or anybody else, and, accordingly, his whole argument against Brown misses the mark as completely as any argument can.

Hamilton's case, however, is by no means complete, and he has yet another argument in store of a very different scope, which we will encounter in due course. Meanwhile, let us pursue further this interesting topic of Hamilton's misunderstanding of Brown, and, with this in view, set forth an account of a somewhat different aspect of Hamilton's discussion of the problem of universals, where he takes up the question already canvassed by Stewart about the rival theories of the origin of language: that of Adam Smith and Condillac, on the one hand, and of Leibnitz and Turgot on the other.

Now just as Stewart had modified Smith considerably in the light of Turgot, so Hamilton, proceeding further along this same line, but producing no new linguistic facts, proposes a theory intended to conciliate the two opposing views. "As our knowledge proceeds from the confused and vague to the distinct and the determinate, so, in the mouths of children, language at first expresses neither the precisely general, nor the determinately individual, but the vague and confused" (*Lectures on Metaphysics*, vol. 2, p. 327).

In fact, Hamilton is, as the extract suggests, interested in this question much more for its epistemological than for its philological bearings, and, at the outset of his discussion, at once refers us back to the question of our knowledge of the particular, as treated by him both in the *Lectures on Metaphysics*, vol. 1, pp. 240–52, and in vol. 2, pp. 144–52. The crucial point at issue, he tells us in the last-mentioned passage, is as follows:

> Whether, in Perception, do we first obtain a general knowledge of the complex wholes presented to us by sense, and, then, by analysing and limited attention, obtain a special knowledge of their several parts; or do we not first obtain a particular knowledge of the smallest parts to which sense is competent, and then, by synthesis, collect them into greater and greater wholes?
>
> (*Lectures on Metaphysics*, vol. 2, p. 144)

The point of contrast between the one theory and the other is something like this. On the one hand, we have Hamilton's holding forth thus.

> I say, then, that the first procedure of the mind in the elaboration of its knowledge is always analytical. It descends from the whole to the parts, – from the vague to the definite. Definitude, that is, a knowledge of minute differences, is not, as the opposite theory supposes, the first, but the last, term of our knowledge.
>
> (*Lectures on Metaphysics*, vol. 2, p. 328)

On the other hand, the rival theory regards as nonsensical the conception of a knowledge of the whole which can take place without there being any knowledge of the parts, and which, moreover, is described as a confused or vague knowledge. It is axiomatic surely, it maintains, that one cannot know the whole without knowing its parts, since the whole is nothing but the sum of

its parts, and that, therefore, the so-called knowledge of the whole by itself and apart from its parts, so far as any fact or phenomenon corresponding to this description occurs, must be nothing but a special form of the knowledge of the parts.

To illustrate the rival principle, Hamilton quotes two different versions, one from James Mill, and the other from his own, and Mill's, mentor, Stewart. The passage from Stewart is taken from his speculative working out of the hypothesis that we can only attend to one thing at a time, and is one that we have already mentioned. His point is that we can't attend to the chord, we can attend only to its component notes, one at a time, in rapid succession, and that what at first would appear to be the perception of the chord as a whole without distinguishing its notes is nothing but a series of acts of attention "performed with such rapidity that the effect with respect to us is the same as if the perception were instantaneous." Stewart himself states his paradox thus.

> It is commonly understood, I believe, that, in a concert of music, a good ear can attend to the different parts of the music separately, or can attend to them all at once, and feel the full effect of the harmony. If the doctrine, however, which I have endeavoured to establish, be admitted, it will follow, that in the latter case the mind is constantly varying its attention from one part of the music to the other, and that its operations are so rapid, as to give us no perception of an interval of time.
>
> (Stewart, *Collected Works*, vol. 2, p. 141, and Hamilton in both of his discussions)

It should be mentioned in passing that the clear-cut opposition here is between Hamilton and Mill. Stewart, on the other hand, is in a way the parent of both views, his speculations on attention perhaps suggesting Mill's, view and his borrowing from Turgot likely enough leading on to Hamilton.

Here we will quote from Hamilton's reply to Stewart on the experience of music.

> In this respect, it is, indeed, *felo de se*. It is maintained that as we cannot attend at once to two sounds, we cannot perceive them as co-existent, – consequently, the feeling of harmony of which we are conscious, must proceed from the feeling of the relation of these sounds as successively perceived in different points of time. We must, therefore, compare the past sound, as retained in memory, with the present, as actually perceived. But this is impossible on the hypothesis itself [since we cannot, according to Stewart, attend to two things at once].
>
> (*Lectures on Metaphysics*, vol. 1, p. 244)

Now Brown does not formally discuss this problem at all, but there is a passage, introductory to the discussions of Condillac's theory of attention,

which shows him to have been at one with Hamilton in his opinion of Stewart's doctrine here.

> Innumerable objects, then, are constantly acting together on our organs of sense; and it is evident that many of these can, at once, produce an effect of some sort on the mind, because we truly perceive them as a co-existing whole. It is not a single point of light only which we see, but a wide landscape; and we are capable of comparing various parts of the landscape with each other, – of distinguishing various odours in the compound fragrance of the meadow or the garden, – of feeling the harmony of various co-existing melodies.
>
> (*Lectures*, 31, p. 198)

Brown does not indeed at this point discuss the topic at issue in a regular way, but the ultimate trend of his thought is evident enough in the next two paragraphs.

> The various sensations, then, may co-exist so as to produce one complex affection. When they do co-exist, it must be remarked, that they are individually less intense. The same sound, for example, which is scarcely heard in the tumult of the day, is capable of affecting us powerfully if it recur in the calm of the night; not that it is then absolutely louder, but because it is no longer mingled with other sounds, and other sensations of various kinds, which rendered it weaker by co-existing with it . . . It may be considered almost as another form of the same proposition to say, that when many sensations co-exist, each is not merely weaker, but less distinct from the other with which it is combined.
>
> (*Lectures*, 31, p. 198)

Brown is here doing nothing more than pointing out features of ordinary experience, but what he says has a proper philosophical meaning only if one allows that one would never have been able in the first place to pick out the noise from the blended tumult of the day, if one had not already heard a noise exactly like that by itself in the still night.

At the risk of being wearisome, it would be as well to make clear the respective positions of Mill (*Analysis of Sensations*, 1828), Brown (*Lectures*, delivered as from 1810 and published in 1820) and Hamilton (*Lectures on Metaphysics*, delivered as from 1837) in relation to one another, taking as the whole in question a duet of two voices singing in unison. Now according to the standpoint that reduces the perception of the whole to nothing but the perception of the parts, it would be necessary to listen to, and indeed hear each voice only by turns, and – to bring out the chief paradox in the position – it would be possible, even if one had never previously heard either voice by itself, to pick on the first voice heard, concentrate thereon, and never hear the other voice at all. But according to the opposite standpoint – a standpoint

shared by Hamilton and Brown – it would be quite impossible to do this sort of thing, at a first hearing, and what one would hear, in the first instance, would be something called by Hamilton the general sound of the whole without the details, and, by Brown, "one indistinct feeling of sound," i.e. apparently, one sound, whose parts are not distinguished. So far, then, Hamilton and Brown are agreed, and the difference between them is that whereas Hamilton believes in the possibility of one's going on, without more ado, to single out and to hear each component voice separately, "by analysis and limited attention," Brown on the other hand evidently holds that this kind of thing would not be possible unless one had previously the experience of each of these voices singing alone, and were to compare the memory of what one heard then with what one is hearing now, i.e. the duet.

Here let us contrast Brown with Hamilton by explaining more precisely just what they have in common. First hear Brown.

> The mind . . . is susceptible of a variety of feelings, every new feeling being a change of its state; and indeed it is by such changes alone that it manifests itself . . . in our own consciousness . . . It is, perhaps, even not too extravagant an assertion of Hobbes, who supposes a mind so constituted as to perceive only one colour, and to perceive this constantly; and affirms that, in this case, it would be absurd to say that it had any perception at all, being rather, as he expresses it, stupefied rather than seeing. "Attonitum esse et fortasse aspectare eum, sed stupentem dicerem, *videre* non dicerem; adeo sentire semper idem, et non sentire, ad idem recidunt."
> (*Lectures*, 11, p. 66)

Now hear Hamilton, speaking of the conditions of consciousness.

> (Independently of the contrast between a subject and an object,) [there must be] a *plurality*, *alteration*, *difference* on the part of the perceived object or objects, and a recognition or discrimination thereof on the part of the perceiving subject. It has been well said by Hobbes [in regard to this fact]; *Sentire semper idem*, et *non sentire*, ad idem recidunt. (Elem. Philos. p. 4. c.25 §5).

Or to give another version of the fact, found a few lines below: "we are only conscious of perceiving, as we are conscious of perceiving something as discriminated from other co-existent things" (*Works*, p. 878, Note D).

Hamilton's position, as stated here, and indeed as stated in other places, and in other ways too, *sounds* very like Brown's position, and, in order to prevent all confusion, we had better explain just where the resemblance stops and the difference begins. On the one hand, one important consequence of this common acceptance of Hobbes's dictum is that Hamilton and Brown both regard perception as involving a judgment or feeling of relation. On this point, the evidence in regard to Brown's teaching has already been given, and,

as for Hamilton, our assertion can be verified in the paragraphs immediately after the one last quoted. On the other hand, in virtue of their difference about abstraction, or, as one might put it, about Hume's dictum on the subject of "the globe of white marble," Hamilton and Brown do not mean the same thing at all by judgment, the latter always referring to it as a *feeling* of *relation in certain respects*, i.e. between two complex individuals, or between a former state of one complex individual and a new state of the same individual; the former, on the contrary, speaking of it only as a *discrimination*, a feeling of difference between one simple particular and another: "discrimination, contradistinction, being in fact only the denying one thing of another" (*Lectures on Metaphysics*, vol. 2, p. 204, in a passage of which the one in the notes to Reid's *Works* just cited is nothing but a more careful restatement).

It would perhaps do no harm to state the same point thus. Brown, it will be remembered, lays it down that abstraction (or, if you like, awareness of the particular) and generalisation (or, if you like, awareness of the general) both coincide with (or presuppose) judgment of a certain sort, namely feeling of resemblance in a certain respect. Hamilton, on the other hand, while making abstraction prior to generalisation, at the same time makes abstraction coincide with or presuppose judgment in a rather special sense of the term, in the sense of discrimination – differing in this point from Stewart, who, whatever his position may be, certainly resembles Condillac in making abstraction, in the sense of singling out the particular, precede judgment.

Before we leave the whole question, a considerable digression will be required on the question as to whether Brown's position in relation to Hamilton's has not been somewhat misrepresented here. The fact is that, in Hamilton's opinion, Brown, on topics like the present one, is much closer to Stewart, or to Mill, than to himself, and that Hamilton tries to back up this opinion by producing evidence of a very plausible kind. The relevant part of Hamilton is *Lectures on Metaphysics*, vol. 1, pp. 242–3, and the paragraph quoted here occurs as the immediate sequel to a long quotation from Stewart on the topic of the impossibility of attending to more than one thing at a time, and of the consequent necessity of our experiencing a whole as a sequence of minimal parts. "On this point," Hamilton goes on,

> Dr. Brown not only coincides with Mr. Stewart in regard to the special fact of attention, but asserts in general that the mind cannot exist at the same moment in two different states, that is, in two states in either of which it can exist separately.

Let us now have the quotation from Brown in question. "If the mind of man," he says,

> and all the changes that take place in it, from the first feeling with which life commenced to the last with which it closes, could be made visible to any other thinking being, a certain series of feelings alone, that is to say, a

> certain number of successive states of the mind would be distinguishable, in it, . . . but all of them existing individually and successively to each other. To suppose the mind to exist in two different states, in the same moment, is a manifest absurdity.
>
> (*Lectures*, 11, p. 67)

Before examining this quotation we had better draw a distinction between what is almost certainly invalid in Hamilton's claim about Brown, and on the other hand the part of the claim that might perhaps have something in it. That is to say, we will dismiss out of hand Hamilton's claim that Brown coincides with Stewart in regard to the special facts of attention. This is a topic we have already considered, and, in the light of what we said about Brown's doctrine of attention, it is, in our opinion, pretty certain that Hamilton is simply mistaken here. Accordingly the question that is left is whether Hamilton is in any way justified in his suggestion that the tendency involved in Brown's general view of the mind as "never being in two states at once" is to some extent in line with the tendency of Stewart's doctrine and the peculiar view of attention involved in it.

What we have to do here, then, is to examine the quotation Hamilton gives from Brown – a quotation the purpose of which in its context (Lecture 11) is to sum up results obtained in previous lectures. But if we read the quotation carefully in the light of these previous lectures, we find there is apparently some point to Hamilton's view of Brown, as being, in a certain way, at one with Stewart, since the doctrine implied is a doctrine that reads very like Stewart's, being to the effect that each new successive object of awareness is a simple object, or, as Brown puts it, the mind exists in a series of successive states, each of these states being a simple state.

Here of course it will at once strike us that Brown and Stewart, though they coincide verbally, do not mean by any means the same thing by their expressions, and we might go on to note in confirmation of this that Brown spends a good deal of time and care in sharply distinguishing his own doctrine from Stewart's doctrine in the very respect in question. (See especially the whole remarkable passage in the second half of Lecture 39.) That is to say, whereas Stewart's successive simples are all *minima sensibilia*, Brown's successive simples include virtual complexes, as he calls them, as well as simples in Stewart's sense, the former being the predominant, and, as Brown tells us, usual sort of simple object.

For clarity's sake, let us remind ourselves here of the difference in point of view between the one man and the other, taking the same sort of example as we took before – i.e. the case of first hearing a violin and piano duet, and then hearing first the piano play the same tune over alone, and the violin do likewise. Now by this "case of hearing the instruments first together, and then solo" we mean – as Stewart and Brown, dealing with this sort of thing, meant – a case where the ordinary plain man would admit having the musical experiences so named, and the question at issue, to view the matter in pretty

much the light as it was viewed by Brown and Stewart, is a question as to the actual sense-data the said plain man would have on these occasions, that is to say, a question as to what residue would be left to the series of experiences, if we put out of account the "intellectual states" supposed to accompany the experiences and transform them into knowledge, the "feelings of relation" as they are called by Brown, and the "fundamental laws of belief" as Stewart styles them. But that part once understood, it becomes clear that there is the greatest possible difference between the views of the two protagonists, and that, whereas for Stewart, the first experience, the hearing of the two instruments together, is, in principle, nothing different from the second experience, the hearing of the instruments separately and in succession, except for the succession being in the former case much more rapid than it is in the latter case, for Brown, on the other hand, the first experience, that of the duet, is a quite different experience from that of hearing the instruments play solo and successively, and the former is not reducible to the latter. That is to say, to put the matter briefly, whereas for Stewart, there are only two "simples" in question here, the sound of the piano and the sound of the violin, for Brown there are three quite distinct "simples," the sound of the piano, the sound of the violin, and the sound of the violin–piano duet.

Stewart's doctrine, then, and Brown's are of very different tendency, and the question naturally arises as to whether, once allowance is made for the distinctive nature of Brown's doctrine, his coincidence with Stewart is any more than a verbal or accidental one, or whether, on the contrary, Hamilton was right in his impression of an ultimate kinship between Brown's doctrine, and Stewart's doctrine – or rather, to be precise, Stewart's speculation, since he doesn't quite fully commit himself to the position. In order to settle this point, we will have to explore to an extent we have not hitherto done the meaning Brown attaches to his doctrine, and we will begin by going over familiar ground yet again. Let us first fix our attention on the main fact on which Brown's doctrine is based.

> As, in chymistry, it often happens, that the qualities of the separate ingredients of a compound body are not recognizable by us, in the apparently different qualities of the compound itself, – so, in this spontaneous chymistry of the mind, the compound sentiment that results from the association of former feelings, has, in many cases, on first consideration, so little resemblance to these constituents of it, as formerly existing in their elementary state.
>
> (*Lectures*, 10, p. 62)

Here Brown is speaking with particular reference to the question of "association of ideas" – a subject he treats in a very original way – but what he says about "ideas" he also says about "impressions," since he regards the two cases as parallel. "Various conceptions," he says, "which arise at different moments, may co-exist and form one compound feeling" (by reason, he

explains, of the earlier continuing still in the mind when the latter arises) in the same manner as various perceptions, that arise together, or at different moments, may co-exist and form one compound feeling of another species" (*Lectures*, 41, p. 261). But this being so, it is pretty clear in what sense the duet – to keep to our example – is analogous to a chemical compound. The point is that we do not know and cannot tell the sound in question to be a compound except by a careful comparison of it with the sound of the solo piano, the sound of the solo violin, and various other sounds which turn out to be irrelevant but which we do not know beforehand to be irrelevant – a comparison which involves a certain amount of experiment with sounds, or rather, of close observation. Now here Brown takes his next step, a step we have not yet sufficiently considered, and his starting-point is a fact supposed to be established by what has gone before, that the sound of the duet – considered in itself, i.e. apart from the comparison described above, i.e. the sound as it is originally given – has been considered merely as one sound, new and strange no doubt, but bearing in itself no trace of composition. In view of this last point, he insists, we ought to call an object like the sound of the duet a *virtual* compound, a *seeming* complex (to use two of his terms), to mark the fact that the object in question considered in itself, or apart from the comparison, presents itself merely as one sound, and takes on the appearance of complexity only in the light of the said comparison. Here we had better have a long quotation to show how insistent Brown is on all this.

> Of the nature of this latter species of virtual, but not absolute co-existence, I have already spoken too often to require again to caution you against a mistake, into which, I confess, that the terms, which the poverty of our language obliges us to use, might, of themselves, very naturally lead you; – the mistake of supposing, that the most complex states of mind are not, truly, in their very essence, as much one and indivisible as those we term simple – the complexity and seeming co-existence which they involve being relative to our own feeling only, not to their own absolute nature. I trust I need not repeat to you that, in itself, every notion, however *seemingly complex*, is, and must be, truly simple. . . . Our conception of a whole army, for example, is as truly this one mind existing in this one state, as our conception of any of the individuals that compose an army.
>
> (*Lectures*, 45, pp. 289–90, emphasis added)

In the light of all this, let us reconsider the relationship of Stewart's position with Brown's. Each successive object of sense, Stewart suggests, is a minimum sensible and as such is devoid of composition. Brown on the other hand does not deal much in *minima sensibilia* at all, and he is apparently even willing to admit it to be possible (without however believing it to be, in fact, the case) that none of the successive objects of sense are ever *minima sensibilia*. Even so, however, he still insists that each successive object of sense

really is a simple, in Stewart's sense of that word. Take the case of the sound which, after comparison, and the "feeling of relation" we recognise as a duet; prior to this comparison, was it not the case that we were aware of the sound only as one sound, and could not detect the least trace of composition in its nature? It follows, then, that the said object of sense, considered in itself, or, as it really is, turns out to be a simple in the precise sense of the word.

To go back now to our original question, it is pretty clear that the coincidence between Brown and Stewart is not just an apparent or merely verbal one. But this being so, two points would seem to follow with respect to Hamilton's attitude to both. In the first place, we must allow him to be so far right in classing Brown with Stewart as an atomist, in spite of his errors as to the former's exact position on these topics; and, in the second place, we can now have some sort of understanding for his motives in failing to differentiate Brown's position carefully from Stewart's and in proceeding in his discussion as if Stewart's position were the only one, or at least the chief one in question; very likely, he thought that a sophisticated atomism of Brown's sort, whatever its exact drift might be, would never have arisen, but for Stewart's reintroducing and taking under his patronage atomistic doctrines of a more ordinary type, concerned with *minima sensibilia*.

It would appear, then, that we have here an aspect of Brown's doctrine not so far discussed, and an appropriate starting-point for such a discussion is to be found in the one and only passage where Hamilton ever makes an attempt to differentiate Brown's doctrine of simples from Stewart's. "Dr. Brown," Hamilton begins abruptly,

> calls the sensation of sweet one mental state, the sensation of cold another; and as the one of these states may exist without the other, they are consequently different states. But will it be maintained that we cannot at one and the same moment, feel the sensations of sweet and cold, or that sensations forming different states apart do, when co-existent in the same subject, form only a single state?
>
> (*Lectures on Metaphysics*, vol. 1, pp. 251–2)

There Hamilton stops, never again, so far as I know, to write another word on the subject.

Now Hamilton, while not, probably, understanding at all well Brown's position as a whole, has, we believe, got hold of an interesting point here, and the line of criticism we take to be implicit in his remarks might perhaps be developed along the following lines. The object giving rise to the co-existent sensations of cold and sweet, that is, the ice-cream, presents itself, says Brown, as being, really, or when considered in itself, simple, and presents itself as being only apparently, that is, when considered in relation to – say – the taste of sugar, complex; and the ground of this assertion of its original or essential simplicity is that, when considered in itself and apart from the said relationships, it exhibits not the slightest trace of parts or composition in its

nature. But now there is surely a difficulty here which Brown – at least if our interpretation of him be sound – has overlooked. The point is – to revert to our musical example – that in the sense in which the duet, if considered in itself, has no appearance of being anything twofold, the solo corresponding thereto, if considered in itself, and apart from comparison, must surely, by the same token, have no appearance of being anything onefold. Or, to put the matter more plainly, prior to comparing the sound we later recognise as the duet with the sound we correspondingly recognise as the solo, we could not, apparently, on the sort of principles Brown himself follows, tell the one sound to be complex or the other sound to be simple; and all we could say, in either case, is that we had to deal with one sound in the succession of sounds, and that the nature of this sound, whether it was simple or complex, was so far unknown. In short, one could describe what one had to deal with only as being one undifferentiated sound, or, perhaps more properly as something new in the sense of being a non-visual, non-tactual phenomenon, but in other respects mysterious or indeterminate.

Now we have made the claim that this line of criticism is implicit in Hamilton, and the grounds of our claim must surely be obvious. Hamilton and Brown, according to the interpretation we gave earlier, both agree as against Stewart and Mill that, when put in the presence of a complex object, we become aware of the whole prior to becoming aware of the parts, but whereas Brown speaks of our prior awareness of the whole as being an awareness of a special sort of simple object, Hamilton, by contrast, makes this sort of primary awareness consist in the awareness of a vague object; for example, he speaks of "the vague knowledge which makes every sheep as it were only a repetition of the same undifferentiated unit" (*Lectures on Metaphysics*, vol. 2, pp. 328–9), in reference to the case of the visitor to the countryside who sees sheep after sheep for the first time, and without instituting any comparison between them.

But let us show, how the contrast between the two standpoints occurs in Brown's own text. After a momentary glance at a scene through a window, "there is not one of us," says Brown, "who could have ventured to give even the slightest description of it – a sufficient proof that we may have seen many objects, and yet have learned nothing." Now Brown here is paraphrasing, he tells us, Condillac, and the standpoint expressed is pretty close to Hamilton's, i.e. all that is claimed is that something was seen, we can't say precisely what. But now, in the second place, when Brown, on the same page, is restating his paraphrase from Condillac, the passage becomes: "we see a multitude of objects and have one complete indistinct feeling" (Lecture 31), and still seems to keep pretty much the same meaning as before; indeed the words recall Reid, who is fond of speaking of such experiences as experiences of the indistinct and complex. Finally, when Brown in Lecture 33 returns to the attack on Condillac, he puts much the same point thus:

> If the mind had not been susceptible of other affections than those of sense . . . it might, when such a scene was present, have existed for ever in

> the state which forms the complex perception of the scene, without the slightest notion of the relations of the parts to the whole, or to each other.
> (*Lectures*, 33, pp. 211–12)

But here again it would be hard for Brown to say that this sort of complex perception, unaware as it is said to be of whole or parts, was a simple perception, in the sense that the perception of a minimal part would be a simple perception, and in short, it would appear as if, when Brown was analysing definite cases and not arguing in a general way, his language begins to resemble Hamilton's.

To make the issue clearer, let us recall (for the last time, we hope) Hume and his white globe:

> the mind would not have dreamed of distinguishing figure from the body figured [i.e. roughly speaking, shape from colour] as being in reality neither distinguishable, nor different, nor separable; did it not observe, that even in this simplicity there might be contained many different resemblances and relations.

Now here Hume plainly implies that the white globe, considered in itself, has to be regarded as a simple object, whereas Reid, it will be recalled, pronounces Hume's opinion on this point ridiculous and would seem to want to regard the object in question as vague. In short, much the same issue arises between Hume and Reid, as arose later between Brown and Hamilton.

But it is now time to hasten on to another philosopher, and, meanwhile, our last word on Hamilton, at least in his present role, will be to point out that while he perhaps regarded the issue last discussed to be the outstanding one between Brown and himself – the issue as to what it is we are aware of in being aware of the whole on its own account and independently of its parts – he seems to have been completely oblivious – far more oblivious than Reid, for example, was in the corresponding case – of the existence of the other, and, it would seem, more serious, point of difference between Brown and himself as to whether our awareness of the whole in its details and parts is due to Stewart's faculty of abstraction on the one hand, or to "feelings of relation in a certain respect," on the other. Indeed, so blind is Hamilton, in this respect, that it looks as if he had never bothered to read Brown's Lecture 51, the one on abstraction, or to understand the part of Brown that seems to be complementary thereto, the criticism of Condillac's theory of attention.

We come now to Ferrier, the last of our philosophers, and the only one of them to be born in the nineteenth century; and, for the understanding of his position, it is necessary to point out that, in the first instance, he had very likely been drawn to philosophy, not so much by the unspectacular analyses in, so to speak, black and white, traditional in his own country, as by the daring and dazzlingly coloured speculations of the German Romantic thinkers. In the sequel, however, Ferrier seems to have put all this somewhat

to one side after he had settled, as advocate, in his native Edinburgh, and, there, under the stimulus of the close friendship he had formed with Hamilton, he set himself to read Stewart and Brown, and to master the problems and the methods of philosophy, as they were understood in the circle he now mixed with. He continued to work, more or less, along these lines until 1845, in which year he went to a chair at St Andrews, and began to break, in *certain respects*, with the tradition of Reid – the common sense tradition – and to develop a new way of thought, very much his own, but having a certain amount in common with the way of thought now fashionable on the continent.

Ferrier died prematurely at the height of his powers, while his philosophy was still fluid and developing. Accordingly a question arises as to the relation of the new departure in philosophy he was trying to promote to the tradition he had inherited, and had originally worked in; and this question proves surprisingly difficult to answer, and surprisingly interesting, because of the fact that Ferrier, as his youthful writings show, was one of the greatest masters of the psychological or phenomenological tradition he was later trying to extirpate, root and branch; and that Ferrier himself, even at the height of his revolt and innovations, was quite well aware of the value, not perhaps of the "psychological" tradition as a whole, but at least of his own contribution to it – a contribution which had once been his pride, but which he seems to have temporarily set aside as irrelevant to the real purpose of philosophy, whatever its merits in other respects. But, this being so, it is always possible that Ferrier, if granted a longer life, would have had to qualify his hostility to contingent truth in philosophy, and would have come to see himself as standing much closer to Reid than, in his published works, he ever admits to being.

For the present, however, we must leave this large question aside, and concentrate simply on showing in reference to the narrow issue of universals, in the sense in which it has already been discussed, just how far Ferrier continues the line taken by Reid and Brown, and how far he breaks with this line. Accordingly we will go first to the *Institutes of Metaphysic* (1854), the book in which Ferrier's break was announced to the world, and proceed to discuss the small, but important, part of it concerned with making a pronouncement on Brown, Hamilton, Stewart and the others on the subject of universals.

Looked at from this point of view, Ferrier's argument in the pages that concern us has four distinct stages to it. The first three of these are each occupied with considering a different theory of universals, the theory being in all three cases of a Conceptualist tendency, and the question at issue is whether any of these theories can stand against the stock counter-arguments of the Nominalists. In fact, each of these theories is a sort of improvement on the preceding one, and whereas the first two do not manage to survive the ordeal of criticism, in the respect in question, the last one, in Ferrier's opinion, certainly does. Finally, we come to the fourth stage of the survey, the point of which is to note that the theory remaining intact involves a peculiar,

unfamiliar difficulty of its own. It has to be asked how this is to be met. However, we will not follow Ferrier in his attempt to overcome this obstacle; the sort of theory he produced is not one that it is customary to find entering into a discussion of the problem of universals, and it would take us far too long to explain why it came to be propounded. Accordingly we will miss out the fourth stage altogether, and, with it, everything that is subsequent to it, and confine ourselves solely to what goes before, that is, to the discussion of the three theories or, in other words, the introductory parts of Ferrier's doctrine.

Let us start with the third of these theories, Ferrier's own. "All knowledge," he says, "is of necessity a synthesis of the particular and the universal," meaning thereby "Particular cognitions, which involve no generality, are not conceivable, any more than general cognitions are conceivable which involve no particularity" (*Institutes*, p. 191), and he proceeds to explain what this means as follows.

> Our psychologists may guard and explain themselves as they please, but their attribution to man of a faculty called abstraction has been, from first to last, the most disconcerting and misleading hypothesis which either they or their readers could have entertained. We are supposed to have a power of forming abstract conceptions; but it is obvious from the foregoing observations that we have no such power, and that no abstract ideas, either particular or general, can be attained by any intelligence. Such conceptions can only be approximated. When the mind attends more to the particular than to the universal element, or, conversely, more to the universal than to the particular element of any cognition, the abstract particular – that is, a thing by itself, or the abstract general – that is, the genus by itself, is approached, but neither of them is ever reached. To reach either of them is impracticable, for this would require the entire suppression of one or other of the factors in all cognition, and such a suppression would not be equivalent to the attainment of the abstract, but to the extinction of knowledge and intelligence.
>
> (*Institutes*, p. 194)

Ferrier sums up the position now reached in the following words. "Abstract thinking is a contradiction, and has no place in the economy of the intellect. All knowledge and all thought are concrete, and deal only with concretions – the concretion of the particular and the universal" (*Institutes*, p. 195).

Now, at this point, it is important to grasp just in what sense Ferrier is denying abstraction, and, in order to make this point clear, we had better give his second, and fuller, statement of the first theory:

> They held . . . that all our knowledge is, in the first instance particular; that we start from particular cognition; but that the mind, by a process of

> abstraction and generalisation, which consists in attending to the resemblance of things, leaving out of view their differences, subsequently constructs conceptions, or general notions, or universal cognitions, which, however, are mere *entia rationis*, and have no existence out of the intelligence which fabricates them.
>
> (*Institutes*, p. 185)

The point to notice here is this: Ferrier, in his attack on abstraction, means to deny the other items in this theory, but does not, it would appear, mean to deny that abstraction occurs, in the sense of "attending to the resemblance of things, leaving out of view their differences."

This point is made clear when he distinguishes between the "ontological" theory of generalisation, and his own "epistemological" theory of generalisation. The "ontological theory," he says, "is this."

> We perceive a number of living creatures. Overlooking their differences and attending to their agreements, we give the name "animal" to the sum of agreements observed in these creatures. . . . by overlooking the differences and attending to the resemblances of singulars we form a genus. . . . The epistemological theory is altogether different. It has nothing to do with *things*, but only with *cognitions* of things. We have a number of cognitions of things – cognitions of living creatures, for example. Overlooking the differences as much as possible and attending to the agreements of these cognitions, we give the name of "animal" to the sum of these agreements – not assigning it, however, to any resemblance in the creatures, but only to a resemblance in our cognitions of them.
>
> (*Institutes*, pp. 206–8, much abridged)

But this difference in nomenclature, however important it may be for Ferrier's wider purposes, is not material for the small part of his doctrines that concern us here. Or rather, its only relevance to the present topic is that it enables Ferrier to equate the relation of universal and particular with the relation of sense and thought, and thereby to repeat the doctrines already delivered in other and more emphatic terms later.

> *Mere* objects of sense can never be objects of cognition; in other words, whatever has a place in intellect (whatever is known) must contain an element which has had no place in the senses; or, otherwise expressed, the senses, by themselves, are not competent to place any knowable or intelligible thing before the mind. They are faculties of nonsense, and can present to the mind only the nonsensical or contradictory.
>
> (*Institutes*, p. 257)

By now, we have completed our quotations from Ferrier on the subject of the last of the three theories of, as we said, a conceptualist tendency, and it is

now time to begin our commentary, starting at the end with Ferrier's discussion of the third theory, the one he approves of. Now the first thing that strikes us here is that Ferrier's opinions coincide to a remarkable extent with Brown's opinions. For example, take the assertion of Brown's, "This supposed faculty [of abstraction] is not merely unreal, but every exertion of it would imply a contradiction," or again, take Brown's complementary assertion as to what abstraction is: "We are almost incessantly feeling some relation of similarity in objects, and, omitting in consequence, in this feeling of resemblances, the parts or circumstances of the complex whole in which no similarity is felt" (*Lectures*, 51, pp. 335–6).

Moreover, we can define quite precisely the area of agreement between the two. Ferrier, in the long passage quoted against abstraction, apparently would seem to have been objecting to the same doctrine as Brown objects to – namely the doctrine of Stewart's adopted and commended by Hamilton, which runs as follows.

> A person who had never seen but one rose, . . . might yet have been able to consider its *colour* apart from its other qualities; and, therefore, . . . there may be such a thing as an idea which is at once abstract and particular. After having perceived this quality as belonging to a variety of individuals, we can consider it without reference to any of them, and thus form the notion of redness and whiteness in general, which may be called a *general abstract idea*.
>
> (*Collected Works*, vol. 2, p. 165)

Ferrier, we may add, is not expounding systematically the theory of universals in question, but simply indicating allusively its main points. Now the main point of Brown's theory is that the relation involving the general notion is one of resemblance in certain respects and difference in others. But this is also, apparently, the case with the theory Ferrier is expounding, and, up to a point, approving of.

> All the other resemblances in our cognitions are, from a higher point of view, regarded as differences. Thus the resemblance in the cognitions expressed by the word "animal" is a difference when set off against the resemblance in the cognitions expressed by the word "tree."
>
> (*Institutes*, pp. 208–9)

There is, then, a considerable coincidence of opinion between Ferrier and Brown on the topic of universals, and our business in the rest of the chapter will be to inquire just how far this coincidence goes. Now of the various questions at issue here, the first arises from the fact that whereas Ferrier would apparently be quite willing to admit the existence in Brown of an "anti-atomist" tendency similar to his own, he nevertheless goes on to accuse

Brown of taking up the contradictory position of admitting in one way, and denying in another way, the initial knowledge of this unrelated particular (*Institutes*, pp. 186–7).

Ferrier, as a matter of fact, is in the habit of accusing all philosophers, Kant included, and excepting only Plato, of the same crime as he accuses Brown, and one might be tempted, on that account, not to take the charge very seriously. However, the point had better be argued, since something might be said in favour of Ferrier's interpretation of Brown, by the simple process of referring back to some things we said about Brown's position in the latter part of our discussion of Hamilton. Brown, according to our statement there, admitted the existence of an original awareness of a succession of simples or singulars, i.e. an awareness of them antecedent to feelings of relation; and does not such a doctrine involve that very giving priority to knowledge of the bare singulars which Ferrier charges Brown with? Now, it is perfectly true that we described Brown's position in this way, but, as it happens, our description of it there was, intentionally, incomplete, and, when the missing bits are added to Brown's doctrine, it seems not to be liable to the sort of objection Ferrier brings, whatever other difficulties it may involve. A quotation will show what we mean.

> The belief of our identity is intuitive and irresistible, and the only inquiry that remains is as to the circumstances in which the belief arises. Identity is a relative term. It implies, of course, in every instance a double observation of some sort. The identity of our mind is its continuance as the subject of various feelings, or at least as that which is susceptible of various feelings. The belief of it, therefore, can arise only on the consideration of its successive phenomena; and is indeed involved in the mere consideration of these as successive.
>
> (*Lectures*, 13, pp. 80–1)

What we have here is a doctrine, quite central to Brown, and developed at great length (Lectures 11–15), and its point is, roughly speaking, that if we think away our feelings of resemblance in certain respects, and feelings of comprehensiveness, the fact we are left with is that of *myself aware of having some experience now and of having had some other experience* previously, but unable to give a description of these experiences except in the vague, restricted terms here employed; and that, in the second place, the fact, thus isolated as being prior to the feelings of resemblance and comprehension, has to be accepted as an *ultimate* fact, behind which analysis cannot penetrate. But, this being so, it would appear that Brown can be absolved on the spot from the sort of charge of "atomism" which Ferrier brings against him, since Ferrier's own doctrine, "That *mere* objects of sense can never be objects of cognition" is, as a glance at the *Institutes* will show, a doctrine very much of the same sort as Brown unfolds here – a doctrine, namely, that awareness of the successive sense-data involves awareness

of a continuing self. (See, especially, Ferrier, *Greek Philosophy*, vol. 2, pp. 489–92.)

It is not indeed very easy to catch Brown in a downright contradiction on this subject, but, in order to give Ferrier every chance, let us try another passage that might seem to tell in his favour. It comes in Lecture 51 also, just at the end of the passage on abstraction, and is Brown's last word on the subject.

> I have now, then, brought to a conclusion my analysis of the intellectual phenomena; and have shown, I flatter myself, or at least have endeavoured to show, that all these phenomena, which are commonly ascribed to many distinct faculties, are truly referable only to two – the capacity of simple suggestion, which gives to us conceptions of external objects formerly perceived, and of all the variety of our past internal feelings, as mere conceptions, or fainter images of the past; and the capacity of relative suggestion, by which the objects of our perception or conception, that are themselves separate, no longer appear to us separate, but are instantly invested by us with various relations that seem to bind them to each other, as if our mind could give its own unity to the innumerable objects which it comprehends, and, like that mighty Spirit which once hovered over the confusion of unformed nature, converts into a universe what was only chaos before.

Of course, it must be admitted that Brown does here own to holding the very position Ferrier charges him with holding. Brown, that is to say, does here speak as if the objects of perception appear to us as being separate, prior to our awareness of relations, such as comprehensions (whole and part) or resemblance. Even so, however, this fact is not enough in itself to establish Ferrier's case. The important point here is that, having first spoken as if pure sense were a manifold, Brown goes on to speak as if this manifold were a chaos. But now when this qualification of Brown's is taken into account, there is no longer any great plausibility to Ferrier's claim that Brown thinks differently from himself in this department of the subject, for the simple reason that Ferrier himself, in the solitary attempt he ever made on this subject to be specific and particular, describes the naked data of sense in pretty much the same terms as Brown – namely, as a chaos. "If the mind had no idea of resemblance etc." (see below). Indeed one might quite fairly go on to point out that Brown's doctrine is not only close to Ferrier's but is cleverer than Ferrier's. The fact is that Brown distinguishes quite sharply between the feeling of relation of the sense-data as being successive objects of a continuing mind on the one hand, and the feeling of relation of sense-data as resembling one another in certain respects, and related as whole and part, on the other, plainly regarding the former feeling of relation as prior to, and more fundamental than, the other, and, this being so, his point in speaking of the experiences as appearing separate but chaotic is probably that, prior to the

rise of the feelings of resemblance and comprehensiveness, one is aware of one's having present experiences and of one's having had other past experiences and accordingly of one's having in this sense, separate experiences, but at the same time one has no power, at that stage, to describe these experiences in any more precise way, and accordingly has perforce to regard them as being chaotic in the sense of indeterminate.

And yet perhaps we are being a little unfair to Ferrier here. The fact is that there are certain confused or apparently confused passages in Brown, which, if *read by themselves*, would tend to give the impression of his allowing a knowledge of the bare individual or particular. It is

> the general notion of the relation of similarity in certain respects, which is signified by the general term, – and without which relative suggestion, as a previous state of mind, the general term would little have been as invented, as the names of John and William would have been invented, if there had been no perception of any individual being whatever to be denoted by them.
>
> (*Lectures*, 47, p. 303)

Brown never discusses in any detail the point raised in the last part of this sentence – the point about the significance of proper names – except for the brief and not very satisfactory attempt to adapt to his own system the Condillac-Adam Smith theory of the prior invention of the names of individuals, and accordingly he leaves a good deal of room here for misunderstanding of his system. All the same, what he says should, it may be remarked, mislead no one who had read his Lecture 51 on "singling out."

However, now that a doubt has arisen about our fairness or unfairness to Ferrier, let us take up, in a more regular manner, the question as to whether Ferrier, in accusing Brown of atomism, was not perhaps concerned with atomism in a somewhat different sense from the one that has so far preoccupied us. Let us put the matter in this way. Ferrier presumably understood Brown pretty well; the proof is that his conclusions in this matter of universals not merely coincide with Brown's, but are recognised in a sort of way by Ferrier himself as coinciding with Brown's. But if Ferrier understood Brown in this way as being close to himself, presumably he took the trouble to find and look through the lectures containing Brown's fundamental argument in defence of these positions – that is, the Lecture 51 containing what one might call a restatement of Hume on the distinctions of reason, and the Lecture 31 containing the criticism of Condillac on attention. This being so, the question arises as to whether Ferrier did not detect, inherent in these lectures which are not, in the ordinary way of things, atomistic at all, certain traces of something which is atomistic in an aspect of things that has not hitherto struck us as important enough to mention.

When we reconsider Brown's arguments from this point of view, one fact suddenly stands out which we had neglected before – the fact that

Brown's chief arguments there are all factual, and do not try to convict the principle he is controverting as nonsensical or contradictory. The argument against Condillac is obviously a case in point: what Brown does there is simply to maintain that we never do in fact see one single object by itself, that we always in fact see object *plus* environment. But the factual nature of Brown's approach, his preference for treating all truth as contingent truth, comes out even more clearly in his version of the thesis that abstraction is involved in awareness of partial resemblance; that abstraction coincides with generalisation. On the one hand, he does not follow Hume's procedure of first positing the shape of a thing as inconceivable apart from (i.e. unimaginable apart from) its colour, and of then going on to ask how, in that case, we can ever manage to distinguish or single out the shape from the colour. On the other hand, he almost goes out of his way to admit that the sort of abstraction M. Laromiguière calls the abstraction of the senses – the abstraction that regards objects as distinguishable only in so far as they are empirically separable – might have been, so far as a priori considerations go, the only form of abstraction required; and he rests his case for regarding abstraction, as involving in Hume's sense a distinction of reason, on the brute fact that things, practically speaking, are concretes of qualities, and that, in so far as things are like this, the most important form of abstraction happens, as a matter of fact, to consist in awareness of resemblance in a certain respect. In short, none of Brown's arguments in those key passages are arguments concerned with logical necessity, with the one exception of his attack on Stewart's "faculty of abstraction," as being a kind of nonsensical addition to Condillac's straightforward scheme.

Let us turn at once to the Introduction to the *Institutes of Metaphysic*, and resume, in a few sentences, its central theme. "Our philosophical treatises," says Ferrier, "are no more philosophy than Eustathius is Homer or Malone is Shakespeare," and the cause of this, he goes on, is that philosophers occupy themselves with contingent truths, i.e. that "philosophy is not reasoned." "Philosophy," he explains, "executes her proper functions only when dealing with necessary truths," and, despite "the effrontery with which their investigation has been proscribed as an illegitimate pursuit," despite "the determined resolution to keep them down," "ultimately they will blaze out as lucent as the stars; and, like the stars, it will perhaps be found that they are numberless" (*Institutes*, pp. 6–29).

In the facts just detailed would seem to lie the ultimate reason for Ferrier's repudiation of Brown's theory of universals in spite of its being, in many ways, so like his own. From Ferrier's point of view, a theory like Brown's, however anti-atomist in its conclusions, was bound to appear favourable to atomism in a quite fundamental way, from the very fact that it did not presume to prove atomism to be nonsensical or logically impossible. Indeed it is likely enough that Ferrier, once having found Brown's arguments no good against atomism when they were considered under this – to him – all-important aspect of logical necessity, would not have stopped long to wonder

if these same arguments were some good against atomism when they were considered in their own terms.

But here we had better explain more precisely the difference between Ferrier's position on universals and Brown's, so far as it has to do with necessary truth, in the acceptation of this term peculiar to Ferrier. As a guide to Ferrier's contribution on this point, we will go to an English philosopher of the next generation, who had, we believe, no personal contacts with Ferrier, but who, like others of his time, and country, studied the *Institutes* to some purpose – Shadworth Hodgson. "It is," he says, "only on supposing things to be separate that the question of their nexus arises. It is a case of what should be called Ferrier's theorem, from the clear way in which it has been stated and due emphasis laid on it by him" (*Philosophy of Reflection*, vol. 1, p. 456). Now what Hodgson expresses somewhat obscurely as a *theorem about a nexus*, appears in Ferrier's pages as a doctrine asserting the reality and importance of a relation, both then and previously, in the circle we are concerned with, more or less ignored or denied by implication – the relation, namely, of *being distinguishable but inseparable from one another*. This being so, the difference between Ferrier and Brown would seem in the last analysis to be that, whereas Ferrier is very insistent about the need to regard the universal and the particular as distinguishable but inseparable from one another, Brown on the other hand refers to the universal and the particular as being distinct but always as a matter of fact found together, and never tries to describe their nexus as being anything more intimate than this.

In order to clarify how Ferrier goes about the business of introducing and defending this relatively novel notion, we must turn from the question of his relationship to Brown to that of his relationship with Hamilton. What we want to do is to show how the doctrine of Ferrier in question arises out of a criticism of a doctrine of Hamilton's. Now, in general, the difficulty in identifying Ferrier's opponent as Hamilton is much the same as the difficulty in identifying Brown's opponent as Stewart; in both cases, a favourite disciple is arguing against a friend and patron much respected in the land. Here, however, there is not much doubt about the point at issue, since it can be made pretty plain on internal evidence that a rather unusual distinction, taken for granted by Ferrier as fundamental, corresponds entirely with a rather unusual distinction found in one of the not very lucid summaries of points to be made which Hamilton put at the beginning of each argument in his volumes on Logic, presumably for dictation purposes. The lecture of Hamilton's, to which the passage to be quoted serves as a synopsis, is, it may be remarked, the lecture in his volumes on Logic from which we drew a good deal of matter some pages back when explaining the point of Hamilton's reply to Brown.

Here we had better have the passage from Hamilton.

> In our consciousness, – apprehension of an individual object, there may be distinguished the two following cognitions: 1. The immediate and

> irrespective knowledge we have of the individual object, as a complement of certain qualities or characters, considered simply as belonging to itself. 2. The mediate and relative knowledge we have of this object, as comprising qualities or characters common to it with other objects. The former of these cognitions is that contained in the presentations of sense and representations of imagination. They are only of the individual or singular. The latter is that contained in the concepts of the understanding, and is a knowledge of the common, general or universal.
>
> (*Lectures on Metaphysics*, vol. 3, pp. 121–2)

In order to complete Hamilton's point, let us also have a passage from the end of the same lecture.

> A concept or notion, as the result of a comparison, necessarily expresses a relation. It is, therefore, not cognisable in itself, that is, it affords no absolute or irrespective object of knowledge, but can only be realised in consciousness by applying it, as a term of relation, to one or more of the objects, which agree in the point or points of resemblance which it expresses. In this [last] paragraph (if I may allude to what you may not all be aware of) is contained a key to the whole mystery of Generalisation and General Terms; for the whole disputes between the Conceptualists and Nominalists (to say nothing of the realists), have only arisen from concepts having been regarded as affording an irrespective and independent object of thought.
>
> (*Lectures on Metaphysics*, vol. 3, p. 128)

*

Here let us turn to Ferrier, and look at the two other themes which we mentioned before as preoccupying him, over and above his own theory. The main point of the first of these is this. "Every cognition is either particular or universal. Thus, there is one kind of knowledge which is particular and another which is universal" (*Institutes*, p. 179 and *passim* throughout the chapter) – meaning, thereby, that each kind of knowledge is independent of the other, that the general is thinkable out of relation to the particular, and vice versa. But, now, this position, as stated and explained by Ferrier, coincides exactly with the position Hamilton is, by implication, attacking in the above note; it is the position which allows us to have "an immediate and irrespective knowledge of the individual," and, at the same time, allows our "knowledge of the common, general, or universal" to be, in some sort also "absolute and irrespective." Moreover, Hamilton and Ferrier coincide entirely in their mode of illustrating historically this very general theory; it is, they say, found in one form in the old exploded Realism, and in another less implausible form in the old Conceptualism – for example, Locke's.

Next we go to the other theory that interests Ferrier. Conceptualism, he says,

> is supposed to recover her position or at least to effect a compromise with her adversary [i.e. with Nominalism], by affirming that the object which the mind contemplates when it employs a general term is some resemblance, some point or points of similarity, which it observes among a number of particular things.
>
> (*Institutes*, p. 186)

This theory, Ferrier points out, will not allow "our knowledge of the common, general, or universal," to be "absolute and irrespective" but it leaves our knowledge of the individual in the same irrespective state as it was on the old theory. "This is proved by the consideration that in the estimation of [this theory] of Conceptualism, our particular cognitions *precede* the formation of our general conceptions, which they could not do unless they were distinct and completed" (*Institutes*, p. 187). But here again we have nothing but pure Hamiltonianism, i.e. Hamilton's own theory. In the first place, the statement in Ferrier as to the object the mind contemplates when it employs a general term is precisely equivalent to the statement in Hamilton that "a concept or notion, as the result of comparison, necessarily expresses a relation." In the second place, the rest of what Ferrier says corresponds entirely with Hamilton's assertion that we have an irrespective knowledge of the individual as a complement of qualities, but a mediate or relative knowledge of the individual as having these qualities in common with other objects, and consequently no absolute or irrespective knowledge of the common at all. In the third place – and this is the most important point because the least obvious – Ferrier's description of this position as being one in which *conceptualism effects a compromise with its adversary*, is probably sufficient in itself to identify the position as Hamilton's, since, as above, he always maintains that, in a sense, the controversy between Conceptualists and Nominalists was never a real controversy, and ceases when the notion of an irrespective knowledge of the general is given up. At first sight, indeed, this would seem, Hamilton points out, to be an outright victory for Nominalism. But really, he goes on, this is not so. The position reached is that "a concept, as the result of comparison, necessarily expresses (only) a relation," but the relations in question – those of similarity and difference – cannot seriously be regarded as objects of sense or imagination, and, this being so, the conceptualists are so far right, at least against the extreme Nominalists, and it becomes nonsense to say that "concepts are mere words," that "there is nothing general in thought itself" (*Lectures on Metaphysics*, vol. 3, p. 136).

By means of this tedious preamble, we have at length established the fact that Ferrier has Hamilton's position in view in a precise way. This done, we can now go on to show how Ferrier criticises this position, and we will quote a long passage to the effect that the position Hamilton wants to set up in place of the old Conceptualism is no better than the old Conceptualism.

> Conceptualism . . . perishes in consequence of the principle from which it starts – the division, namely, of our cognitions into kinds, and not into elements. The dilemma to which it is reduced is this: it must either stand to that distinction, or it must desert it. If conceptualism stands to the distinction, and maintains that the general conceptions are distinct cognitions – are ideas cognisable by themselves, and independently of the particular cognitions – in that case the general conceptions evaporate in mere words; for it is certain that the mind cannot think of any genus without thinking of one or more of the particulars which rank under it. . . . Again, if conceptualism deserts the distinction and admits that general conceptions are not cognitions which can be entertained irrespective of the particular cognitions – in that case the general cognitions are reduced from cognitions to mere elements of cognition; for a thought which cannot stand in the mind by itself is not a thought, but only a factor of thought. And thus we have a most incongruous doctrine, – an analysis which divides our cognitions into a kind and into an element. For conceptualism still cleaves to the doctrine of particular cognitions as distinct from the general ones, although, when hard pressed, she seems willing to admit that the latter are not distinct from the former. Here the confusion becomes hopeless. This is as if we were, first, to divide human beings into men and women, and were then to affirm that the men only were human beings, and that the women were mere elements of human beings, – and finally, were to declare that although the men were different from the women, the women were not different from the men.
>
> (*Institutes*, pp. 188–90)

Ferrier's line of argument is obvious enough here. He starts from Hamilton's point about our having an absolute knowledge of the individual object, as a complement of qualities considered in their particularity, and a relative knowledge of the individual object, as a complement of qualities considered in their universality. Then, following the Hamiltonian elucidation, he asserts the meaning of the thesis here to be that we can have a knowledge of the said qualities in their particularity without having a knowledge of them in their universality, but that we cannot have a knowledge of the said qualities in their universality without having a knowledge of them in their particularity. This done, he concludes that we have a contradiction here, that it is nonsense to speak of No. 1 as distinguishable from and separable from No. 2 and, in the same breath, of No. 2 as distinguishable from but inseparable from No. 1. The fact is, according to Ferrier, that No. 2 cannot be inseparable from No. 1 unless No. 1 is inseparable from No. 2.

Now the thing to note here is the mode of argument Ferrier uses to defend his view of the relation between particular and universal as being one of distinguishability but inseparability. Obviously, the mode of argument in question is an *ad hominem* mode of argument, intended to be valid against Hamilton and valid against Brown. (In introducing the argument he speaks

of it as being against Brown, and does not mention Hamilton, although in fact it is Hamilton he is directly concerned with.) The point is that Hamilton, in allowing our knowledge of the universal to be a merely relative knowledge, and Brown, in allowing, in a like manner, no knowledge of the universal apart from knowledge of the individuals, have already introduced the notion of the universal as distinguishable from, but inseparable from, the particular, and that Ferrier, starting from this concession, tries to deduce therefrom, by a brief, neat argument of a kind we have not met with before, the impossibility of the bare or absolute knowledge of the particular which Hamilton had believed to be a fact, and which Brown had not been able to attack except by means of psychological arguments.

Here let us cite a passage which would seem to show Ferrier as being conscious of doing what we say he is doing.

> All knowledge . . . is of necessity a synthesis of the particular and the universal. Particular cognitions (the cognition, for example, of this pen absolutely by itself) are mere words, just as much as the general ideas expressed by tree, man, animal, and so forth, taken absolutely by themselves, are mere words. Particular cognitions, which involve no generality, are not conceivable, any more than general cognitions are conceivable which involve no particularity.
>
> (*Institutes*, p. 191)

Now the important sentence here is the middle one, since it contains one of Ferrier's rare attempts – rare, that is, so far as the *Institutes* is concerned – to explain or illustrate what he is doing in any terms other than technical ones, or metaphysical ones of a general kind. As a help towards understanding his point, let us cite one of these not very illuminating passages in Brown, remarked on a few pages back, in which the meaning of proper names is mentioned.

> The circumstances in which all individual men agree form my general notion of man or human nature. . . . When I hear the term man, these general circumstances of agreement occur to me vaguely, perhaps, and indistinctly, but probably as distinctly as the conception of the individual John or William, which recurs when I hear one of those names.
>
> (*Lectures*, 47, p. 302)

First let us mention the point which seems to be actually present to Brown's mind here, in order to dismiss it as irrelevant. Very likely he has in mind a dispute between Reid on the one hand, and Hume and Principal Campbell of Aberdeen on the other as to whether general terms do not have precise meaning at all in the sense in which proper names have a precise meaning, and his thesis here is that Reid is right in claiming for general terms at least as much definiteness in meaning as, and indeed more than can

be claimed for proper names. But now, if all this is set aside as irrelevant, we find with regard to Brown that, while he states explicitly that words like "man" or "humanity" have no meaning for us unless we are already aware of the fact of the resemblance to one another in certain respects, and unlikeness to one another in other respects, of John, William, Thomas, etc., on the other hand he does not state at all that a word like "John" has no meaning for us unless we are already aware of the fact of the resemblance to one another, in the same respects as those just mentioned, of this individual, that individual, and that other individual. Here now we can return to Ferrier with the remark that the sentence in the above quotation, to which we have especially drawn attention, would seem to have been written in view of passages like that just cited from Brown, and written, moreover, with the special purpose of pointing out the very thing Brown has omitted to say, explicitly and directly, at any rate. That is to say, Ferrier's point is that proper names and general names have a meaning only in contradistinction to one another as parts of speech in sentences, after the fashion indicated above.

Here we will leave Ferrier's discussion of universals in the *Institutes of Metaphysic*, since the rest of it, though interesting in itself, is not so much concerned with the problem as inherited from Reid and Brown, and go instead to his discussion of the same subject in the *Lectures on Greek Philosophy and Other Philosophical Remains*, written between 1857 and 1861. The doctrine in both books is, we shall find, exactly the same, but whereas in the earlier work the exposition tries to be as a priori as possible, and does not exactly rely much on empirical illustration, in the new work the principal emphasis is on the factual side. Perhaps this difference is due to the fact that Ferrier seems to be becoming dubious of the notion of philosophy as a quest for necessary truth by itself, free from empirical contamination. "Absolute truth," he says, in his introduction to the *Lectures* (*Greek Philosophy*, vol. 1, p. 10), "is the principal, indeed the proper object at which philosophy aims," but nevertheless, "philosophy must not overlook altogether the consideration of relative truth, because perhaps a finer analysis will show us that the two are ever blended together in an essential and inseparable contrast" (he uses the terms "absolute" and "relative" truth here instead of "necessary" and "contingent" truth). On the other hand, in the *Institutes*, his claim about necessary or absolute truth as the object of philosophy is put forward in an unmodified form.

Ferrier's main point here is one like Reid's, and possibly even deriving from Reid's – the point, namely, that perception involves a judgment of a proposition to be true (compare *Greek Philosophy*, vol. 1, pp. 330–2 with vol. 2, pp. 515–19). But here let us give the main steps in Ferrier's argument in his own words in the *Greek Philosophy*, vol. 1.

> When you look at a chair, so long as you have merely a sensation of it, your sensation is a sensation of that particular chair, and of nothing else. Such a state of mind is scarcely conceivable; but we may conceive it to be the predicament in which our domestic animals are placed when they

> contemplate our household furniture. Such a state of the *human* mind, I say, is hardly conceivable, because in looking at a chair we instantly think it. But in thinking it, what do we do? We think not only it, but much besides.
>
> (*Greek Philosophy*, vol. 1, p. 225)

Thought, then, does not begin with the singular; but, he says, "begins absolutely with something more than the particular thing before us." He dwells on this latter point at some length. "You now know what the *fact* is, that in all thinking, there is 'something more' than the thing directly thought of, and that this fact has given rise to the problem, what is that 'something more'?" (*Greek Philosophy*, vol.1, pp. 229–34). "This 'something more' cannot," says Ferrier, proceeding to his second point,

> be again the particular. . . . For example, suppose that in thinking a particular object, the additional something I thought of were *one other* particular object, or *ten other* particular objects; in that case, I maintain that no thinking would have taken place, for I would still be confined to the particular, and ten particulars, *per se*, cannot be thought of any more than one particular can be thought of. When ten particulars, or ten hundred particulars, are thought of, there always emerges in thought an additional something, which is the possibility of other particulars to an indefinite extent. In the operation of thinking, any given number of particulars are always reduced to so many instances, and the indefinite something which they are *instances* of is a universal.
>
> (*Greek Philosophy*, vol. 1, p. 336)

But what is involved in this reduction of particulars to instances of a universal? Ferrier replies that it consists in awareness of the particulars as resembling one another in certain respects. Universals, he says,

> are not merely indefinite possibilities which no given number of instances can exhaust, but they are principles by which the variety and multifariousness of our sensible impressions are reduced to order. Resemblance, for example, is the great principle of arrangement and classification. . . . But resemblance does not come to us through the senses, or by the way of sensation; it is no sensible impression, it is a pure idea [he means, in the Platonic sense, i.e. a universal]. . . . Resemblance is a relation, and, as such, it cannot be seen, or touched, or apprehended by any of the senses. These apprehend only the things. Their relations of resemblance and difference are apprehended only by the intellect. If the mind had no idea of resemblance, and no idea of difference, . . . it is manifest that our cognitions would have no unity, order or coherence; our mental state would be no better than a chaotic dream. So essential are ideas [i.e. universals] to the existence of knowledge, so impotent are

> sensations, without ideas, to instruct us even in the most elementary truths.
>
> (*Greek Philosophy*, vol. 1, pp. 339–40)

So far as we have gone with Ferrier's statement of what is *the fact*, as he calls it, there is nothing here that differs very much from Brown or even from Reid. However, in the sequel, we come upon a feature of Ferrier's position that has no parallel in that of the two others, and arises from Ferrier's innovation in regarding the relationship of universal and particular, of thought and sense, as a relationship of being distinct from but inseparable from one another.

> It is of the utmost consequence that you should verify in your own consciousness the truths in regard to thought and sensation which I have laid before you, and which I have yet to lay before you. You must practise the "know thyself," otherwise all I am saying will go for nothing. There is one thing, however, which I must impress upon you by way of caution; you must not expect to be able to verify the fact of sensation and the fact of thought apart from each other. . . . That is impossible: because, in the very act of studying the sensation, you must think it; so that it is impossible to lay hold of it by itself. . . . But still, although the two must be taken together, this need not prevent us from obtaining a distinct conception of each, or from perceiving that the one element is quite different from the other, that each is, indeed, the opposite of the other.
>
> (*Greek Philosophy*, vol. 1, pp. 238–9)

This passage, by the way, comes at the end of the first part of the discussion of universals (vol. 1, pp. 220–35), the second part (more or less a continuation) being found in the same volume (pp. 330–44).

A difficulty arises out of this last part of Ferrier's theory, to some extent comparable to the difficulties arising in the case of Brown, out of his peculiar doctrine of *proper names* or, in the case of Reid, out of his vague or ambiguous remarks about abstraction without generalisation. That is to say, it is here, if anywhere, that we find an apparently weak point in Ferrier's front such as to give some sort of opportunity for the doctrine opposed by him to counter-attack with some hope of success.

The point at issue here could be put in a variety of ways. To take the simplest first, it might have been asked what justification Ferrier could offer for his assertion that "although the two [sensation and thought] must be taken together, this need not prevent us from obtaining a distinct conception of each"? Or again, to put the matter in a way it might have presented itself to someone of Ferrier's own generation, a query might have been put as to whether Ferrier, by the very fact of allowing this kind of unexplained distinction between inseparables, is not perhaps reintroducing in a somewhat new role that very "faculty of abstraction" to which he himself, like Brown, had

objected so strongly. Or, in the third place, to look at the thing from the point of view of people a generation or so later than Ferrier, it might have been possible to find cases where an appeal to what Shadworth Hodgson called "Ferrier's theorem" of the peculiar sort of nexus in question had been used to justify as ultimate and undeniable certain very debatable distinctions, such as that of act and object of sense, which Ferrier himself would never have accepted as ultimate, and which he would never have dreamed of defending by a mere appeal to his "theorem."

Ferrier, we believe, would have coped better with this sort of difficulty if he had been willing to make a still closer study of "*the facts*" than he ever seems to have done in this part of his philosophy, and if, in particular, he had been willing to overcome his strange disrespect for the man who had studied most closely the facts especially relevant to this difficulty – namely Reid. Take, for example, Reid's remarks, made in connection with his doctrine of the relation of the judgment of perception to the simple apprehension, on the distinction between the usage and meaning of, on the one hand, "whiteness" and, on the other hand, "the whiteness of." The relevant fact here is that the distinction Reid draws between "whiteness" as expressing the common attribute and "the whiteness of" as expressing the individual quality would seem to be nothing but a more precise formulation of the very distinction that formed Ferrier's starting-point – the Hamiltonian distinction of a character or quality, considered in its particularity, and the same character or quality, considered in its universality. But, if so, then it would be possible to restate Ferrier's main point that knowledge of the universal and knowledge of the particular are distinct but inseparable, in the kind of form suggested by Reid, namely, in the form that the understanding of the statement "I see the ball to be white" is distinguishable from, but inseparable from the understanding of the statement "I look absorbedly at the whiteness of the ball." But when the thing is put thus, it begins to be easier to understand how we manage, in the first place, to distinguish between these inseparable aspects, the universal and the particular. The point is, it would seem, that, when the various items involved are made explicit in some such way as this, we are in a position to compare the one half of this inseparable whole with the other, and make what Hume calls "*a distinction of reason*". However, this sort of elucidation would have availed Ferrier very little against critics of another type. The traditional distinctions of metaphysics, they would admit, rest doubtless on the distinctions of ordinary language in very much the way Reid said they did, but then distinctions of ordinary language, they would go on to say, are themselves arbitrary, and misleading; for example, there is really no difference whatever between "whiteness" and "the whiteness of" since both expressions must ultimately be explicable by reference to a simple unanalysable ultimate expression such as "white here now." But in order to deal with and assess this kind of criticism it would most likely be necessary still to produce more "*facts*" – but, in this case, facts of a kind that pretend to go behind and throw light on the meaning of ordinary language; facts, for example, like

those Reid tries to call attention to when he claims that judgments with vague notions precede judgment with clear-cut notion, like those Hume tries to call attention to in what he says of the white globe of marble, or those which are dealt with by Hamilton and Brown, when they discuss wholes and parts.

In justice to Ferrier, it ought to be pointed out that, on the side of the topic most interesting to him, i.e. on the, so to speak, unhackneyed side, he was very seriously concerned indeed to deal with the difficulties involved in this notion of universals and particulars as distinguishable but inseparable. The basic question, he says, is this:

> Is Plato's analysis of knowledge and of existence a division into *elements* (a particular element and a universal element), or is it a division into *kinds* (a particular kind and a universal kind)? . . . When the chemist (to illustrate this matter) analyses certain substances – salts, for example – into elements, finds a common base on the one hand, and certain specific differences on the other, we should fall into a serious error, were we to suppose that each of the elements was a *kind* of salt; just as we should fall into an equal error, if, on his dividing salts into classes or kinds, we were to suppose each of these classes was a mere *element* of salt.
>
> (*Institutes*, pp. 171–2)

But here Ferrier has to cope with the objection that there is really no analogy between the elements combining to form a salt, and the elements related as distinguishable but inseparable, since the former sort of elements are not merely not salts, but are something on their own account outside the salt, whereas the latter sort of elements, while doubtless not being forms or kinds of cognition, apparently have no existence on their own account outside the compound entity comprising them. This sort of objection, Ferrier retorts, is without foundation, or, in other words, the analogy in question can be shown to hold in a fairly legitimate way.

> Take away from the . . . system of things by which we surrounded the essential element which enables us, and all intelligence, to know and apprehend it, and it must lapse into utter and unutterable absurdity. It becomes – not nothing – remember that – not nothing, for *nothing*, just as much as a *thing*, requires the presence of the element we have supposed to be withdrawn [i.e. the universal element]; but it becomes more than nothing, yet less than anything: what the logicians term "an excluded middle."
>
> (*Institutes*, pp. 278–9)

To conclude this part of our discourse, we had better go back to a point mentioned earlier, namely that Ferrier himself subscribed only with certain reservations to the theory we have been treating as his. Our business now is to indicate in a rough way just what these reservations were, and, to do this, we

must first go back to Hamilton. "In the explanation of the process of generalisation," says Hamilton (*Lectures on Metaphysics*, vol. 2, p. 295), "all philosophers are at one; the only differences that arise among them relate to the point – whether we can form an adequate conception of that which is denoted by an abstract general term." Now Hamilton's point here is the very same as that which we have represented as Ferrier's point, namely that all philosophers accept the distinction between a *kind* of knowledge concerned with the particular, and another *kind* of knowledge, having as its object the universal, that all philosophers make the kind of knowledge concerned with the particular the initial kind of knowledge, and that the great debate between them is whether the subsequent and separate knowledge of the universal is to be interpreted *realistically*, *conceptualistically*, or *nominalistically*. Now Ferrier doubtless took over this doctrine from his friend, but, in the statement he gives of it, he differs from Hamilton sharply on one historical point: whereas Hamilton says that all previous philosophers accepted this division of knowledge into kinds, Ferrier never tires of saying that Plato, the inaugurator of the problem, is an exception to this rule, that Plato virtually divides knowledge into *elements*, not *kinds*, that, in a word, Plato was not a *realist* in the sense he is usually supposed to be.

Now these notions of Ferrier about Plato are of considerable interest and even historical importance on their own account. He never tells us, indeed, what exact grounds he has for this opinion, but we know that he was a diligent student of the *Theaetetus*, and dialogues of that kind, and accordingly his point very likely amounts to this: that Plato's maturist views on knowledge are to be found in the *Theaetetus* group of dialogues. In any case, he was very well aware of having novel views to propound about Plato, and is always coming back to the theme that the interpretations of Plato's theory of ideas current in his time are unsatisfactory and vague, and make Plato look ridiculous.

In order to bring out the novelty and the importance of Ferrier's notions about Plato, it is necessary to remember that in 1854 the *Theaetetus* group of dialogues was not regarded as late; and that the work of Lewis Campbell on the chronology of the dialogues was not published till some twenty-five or more years later. Indeed it is worth noting that Campbell, on coming as Professor to St Andrews as a young man, tells us of having some conversations with Ferrier on Greek philosophy in the few months in 1863–4 that intervened between his first arrival and Ferrier's death, and that, therefore, perhaps Ferrier had something to do with the direction of Campbell's researches.

Now Ferrier quite clearly regarded his rediscovery, or what he took to be a rediscovery of Plato's main point, as being of immense importance for the problem of universals as then conceived. Accordingly, both in the *Institutes* and in volume 1 of *Greek Philosophy*, what he professes to be doing is to expound an approach to the problem of universals, which is not perhaps exactly Plato's approach, but is implicit in the *Dialogues*, and is, in that sense, genuinely Platonic. Volume 1 of *Greek Philosophy* is, indeed, a history of

Greek philosophy, and there is nothing surprising in its being preoccupied with Plato exclusively, where the question of universals is concerned. But the *Institutes*, which is a systematic exposition of a system of philosophy, is nothing different, in this respect, from volume 1; there, too, Plato is the central theme of the fifty pages on universals, and there is no mention by name of any other philosopher, except the passing uncomplimentary reference to Brown. Apparently Ferrier's point is that there is much more to be learned on that subject from Plato – at least the Plato of the *Theaetetus* – than from Brown, and that no further advance on this topic can be made except by going back to Plato, assimilating his insights, and then considering in what way the Platonic theory is still defective.

Here we must leave the topic of universals. We have no time to explain in what way Ferrier proposed to emend the "Platonic" theory, or where he found it defective, but, if anyone is curious about these matters, the requisite information can be obtained in the observations on Proposition Seven of the *Institutes*, where the whole thing is explained with Ferrier's "incomparable lucidity." Accordingly there is no need for us to say anything more on the subject, except to point out that the line taken by Ferrier in his criticism of Plato coincides pretty nearly with the line taken by Hamilton in his most telling criticism of Brown, in a passage which, unfortunately, we had to omit from our discussion entirely, but which is to be found towards the foot of page 311 of Hamilton's *Lectures on Metaphysics*, vol. 2 – not that we mean thereby to imply any criticism of Ferrier's original suggestion about the meaning of Plato, or of his advocacy of an approach to philosophy that was not so exclusively centred on Locke, and Locke's followers in France and Scotland, Condillac, Hume, Reid, Maine de Biran and so forth, but we do not, at the same time, want it to be forgotten that Ferrier, probably, would never have got anything out of the *Theaetetus*, if he had not first been to some extent taken with Brown's doctrines.

6 Brown, Hamilton and Ferrier (2)

In dealing with the problem of the external world, Brown, Hamilton and Ferrier each bear characters very different from those they bore in dealing with the problem of universals. Brown, who, on the other subject, upheld the orthodox common sense distinctions, is here the most venturesome of reductionists; Hamilton, who hitherto has shown himself to be somewhat unsympathetic, and even superficial, manages at more than one turn of the ensuing discussion to strike a note of genial surprising originality; and as for Ferrier, we are going to see him in the course of this chapter behave in a fashion which belies his claim to be the root and branch opponent of Reid and his methods, and reveals instead a sort of profound latent affinity between himself and Reid, beneath the difference. Moreover, the interrelations of the three thinkers are correspondingly different, and whereas on the problem of universals Ferrier was much closer to Brown than to Hamilton, on the present problem, Ferrier and Hamilton stand united against Brown.

Two questions, we shall find, are at stake on the present theme. One of them is an argument about what is given, about the exact nature of sense-data; the other is an argument about what is beyond the given, about the exact nature of transcendence. For clarity's sake we will try to keep the two questions pretty separate, and we will begin with the former.

Almost from the outset of Brown's discussion of perception, he calls in question the assumption basic to Reid's whole rather easygoing approach to the question of externality – the assumption, namely, that tangible magnitude and shape are identical with real magnitude and shape, or in other words that we have an original tactual perception of real shape and magnitude.

> When a body which we do not see, is pressed on any part of our tactual organ, do we immediately discover its form – as immediately as we are sensible of . . . sound, when a cannon is fired beside us? This we certainly should do, if figure were as direct an object of the sense of touch as . . . sound is of the sense of hearing. [To settle the question] let an irregular figure, of any shape, and of the same temperature with the hand, to render the experiment as simple as possible, be pressed on the palm of any one whose eyes have been previously closed; and let him be required,

> in these circumstances, to state its magnitude and figure. It will be found, that he will form a very obscure and inaccurate guess as to its magnitude; and that he will very seldom, or, I may say, never, be exactly right as to its figure.
>
> (*Lectures*, 22, and *Sketch of a System*, p. 87)

Of course, to complete the criticism of Reid's thesis that touch is, so to speak, illusion-free, it would be necessary to produce a case of a genuine illusion of touch. But this is just what Brown proceeds to do.

> Let any one try an experiment with any surface that is familiar to him, – the desk, for example, at which he is in the habit of sitting, or the book which he may have been reading. If he shut his eyes, and move his finger from one end of the desk to the other, or from one end of the volume to the other, . . . he will find, in spite of all his previous exact knowledge of the form which he presses, his notion of the length of the surface to vary exactly with the time. I may venture with perfect confidence to assert, that, when he moves his finger with great slowness, he will believe that he is on the point of touching the extremity of the surface before half the necessary motions have been performed. The previous knowledge will be as little capable of correcting the illusion, while the slow motion is continued, as the previous knowledge of the exact distance of any object in a familiar scene can prevent us from regarding the object as nearer, or farther, when we look alternately through the different ends of a telescope.
>
> (*Sketch*, pp. 96–7)

In the light of new facts like this, Stewart's rejection of de Tracy's "reductionism" or Reid's rejection of Hume's seemed to Brown to be no longer particularly plausible, and he proceeds to reopen the old question, while, at the same time, being careful to note, by way of preface, that the point he has just made about tactual experience is an important contribution on its own account, and will still stand even if his speculation about the "muscular strain" hypothesis prove unacceptable. "The proof that our perception of extension by touch is not an original and immediate perception of that sense, is altogether independent of the success of any endeavour which may be made to discover the elements of that compound perception."

Here we had better inquire as to why this novel fact about tactual illusion made the reductionist thesis a live issue within the common sense school, i.e. for a philosopher like Brown who, in his way, and, up to a point, seems to have genuinely wanted to follow Reid in the matter of respect for common sense, and of anti-reductionism on principle. In order to get some light on the subject, let us contrast Stewart's views about it with Brown's. On the one hand, so far as Stewart was concerned, whereas our feelings of non-spatial muscular strain are no doubt exactly correlated

with our perception of tangible shape and magnitude, these latter, or rather our reports about these latter, coincide entirely with our common sense beliefs about the shape and size of the things in question and, on the other hand, so far as Brown is concerned, whereas the said strains are no doubt correlated with the tactual perceptions in question, our reports about the latter by no means coincide with the corresponding common sense beliefs about the things in question. This being so, it would seem that while, for Stewart, our tactual perception and common sense beliefs are virtually one, and accordingly any proposal to treat tactual perceptions as unnecessary entities is tantamount to a proposal to reject common sense, for Brown, by contrast, our tactual perceptions do not coincide with our common sense beliefs, and therefore any proposal to apply Occam's razor to the former, will not necessarily affect the latter. Accordingly, for some such reason as this one – he doesn't say precisely what – Brown feels it possible both to be a sort of common sense philosopher, and at the same time to make a daring essay in reductionism.

Brown does not spend long in explaining the details of his reductionist scheme, and neither will we. The hand, he tells us, is the great organ of measurement, and he carefully directs our attention to the sort of experience we would have of our hand, and of our fingers' movement, if we had never actually looked at our hand, or explored its contours with another limb – i.e. to the sort of original experience a baby will have of its hand, in the process of opening it out and then clenching its fist. "In the early half-instinctive contractions of the fingers," he points out,

> sometimes more, sometimes fewer, of these are brought down upon the palm; and though the complex feeling, which arises from the simultaneous contraction of the whole fingers, would be, relatively to the sentient mind, like one simple feeling, if the contraction of the whole were uniform, it ceases to be regarded as simple, when frequent repetitions of the partial contractions have shown the elements of which that complex whole was composed.
>
> (*Sketch*, p. 103)

But now, as the result of making this analysis, what information will the infant get, purely in terms of muscular strains, about the clenching of its outstretched fingers of a hand – leaving for simplicity's sake the thumb altogether out of account? According to Brown, it will already be able to distinguish the simultaneous occurrence of four successions of muscular strains, each of them parallel to the other, in the sense of having four outstanding successive internal twinges corresponding to the sequence formed by the bending at the knuckles, then the bending at the middle joint, next the bending at the upper joint, and lastly the contact of fingers with palm. But now, the infant, granted it can distinguish all this, has already a serviceable criterion for differences of spatial extension, at least in two dimensions;

for example, when it closes its fist on different material objects, it will be able to compare them as differing in one way – say in respect of the fact that one involves only three finger's breadths, the other four finger's breadths – and as differing in another way – in respect of the fact that one of the objects, say a pencil, permits all three joint-bending sensations, and prevents only the last item, the sensation of contact, whereas another object, say a matchbox, allows of only the experience of the first two bends. In short, the infant has experience of only pure temporal, non-spatial strains, and yet is able to recognise differences in size, at least in two dimensions. In principle, then, the reduction, Brown thinks, is effected; for example, it would not be sufficient to work out a theory as to how the infant could tell the difference between a curved body and a rectilinear body, and, as for the third dimension, it was considered quite proper for speculations in this field to leave it to one side as constituting an especially difficult problem.

Brown is perfectly frank as to the basic principle behind this speculation. "I am inclined to reverse exactly the process commonly supposed; and instead of deriving the measure of time from extension, to derive the knowledge and original measure of extension from time" (*Lectures*, 23, p. 145). The decisive fact here, according to him, is that "Conceiving the notion of time, therefore, that is to say, of feelings past and present, to be thus one of the earliest notions which the infant mind can form, so as to precede its notions of external things, and to involve the notions of length and divisibility." That is to say, the principle of the reducibility of space to time is based, according to Brown, on the idea that we can distinguish and count, on the one hand, the numbers of co-existent but separable *chains* of muscular strain, and, on the other hand, the numbers of individual strains to each chain.

What now remains for us on this subject is to explain more exactly in what sense Brown permits the existence, side by side with these sensations, of the perception of an external world.

> Though the notion of extension may arise in the manner I have supposed, this, it may be said, is not the notion of external existence. To what, then, are we to ascribe the belief of external reality, which now accompanies our sensations of touch? It appears to me to depend on the feeling of resistance, – . . . a muscular feeling . . . breaking in, without any known cause of difference, on an accustomed series [of these sensations], and combining with the notion of extension, and consequently of divisibility, previously acquired. . . . Extension and resistance; – to combine these simple notions in something which is not ourselves, and to have the notion of matter, are precisely the same thing.
>
> (*Lectures*, 24, p. 150)

Now we can approach the main point Brown has in view here only by understanding that, *so far as reason goes*, awareness of independent reality, of the kind spoken of here, is nothing but awareness of one of our customary

chains of muscular sensations as stopping short of its full unrolling as the result of the operation of some cause, not consisting of ourselves and our desires, but otherwise unknown, and unknowable. But now, this being so, the question arises as to whether it is worth preserving the belief in externality at all, when it is reduced to this attenuated form. Faced with this question, Brown would apparently agree that, from the standpoint of mere reason, this sort of objection is quite cogent, but would go on to argue that, in the last analysis, the deciding factor here is not reason, but instinct, and that the same instinct which forces the belief on us, also invests its unknown and unknowable objects with all the characteristics of material realities.

> To this scepticism, as to a world of masses that have qualities corresponding with our perceptions, there is no evidence of mere reasoning which can be opposed, except that which is founded on our actual impossibility of disbelieving the existence of such masses.
>
> (*Sketch*, p. 116)

Turning now to the subject of vision, we find Brown taking for granted the doctrine common to Reid and Stewart that we are aware of colours as being, in the first instance, unextended, and going on to consider the question that troubled Stewart so much, as to how it is, if colours are in themselves unextended, that we can't help seeing them as spread out over visible figure, and can't conceive them apart from visible figure. But now, Brown suggests a short and ingenious way of disposing of this whole problem. Taking his cue, perhaps, from a naive remark of Reid that, prior to Berkeley, no one had so much as suspected the existence of two-dimensional shapes peculiar to sight, Brown proceeds to denounce the whole notion of visible figure as a fashionable crochet of metaphysicians, and the whole problem it creates as a bogus problem. Sight, Brown goes on to maintain, is an entirely subordinate sense, exactly on a level with hearing, taste and smell, and, just as the only objects the plain man regards as noisy are the solid material shapes encountered in touch-experience, so too, he points out, the only objects the plain man regards as coloured are, in precisely analogous fashion, these same solid material shapes encountered in tactual experience. There is, he goes on, no more reason to suppose the existence of so-called visible figure than there would be to suppose the existence of audible figure.

Brown's chief argument for this thesis is as follows. He draws attention to the notorious discrepancy between the metaphysician's visible shapes, and the plain man's real shapes. He argues in the first place that, if colours were originally regarded as spread out over certain two-dimensional objects of experience, it would be next to impossible for them ever to be regarded as they are in fact everywhere regarded as spread out over certain quite distinct three-dimensional objects of experience. Moreover, this alleged process of dissociating colours from one kind of extension, and of reassociating them with another kind of extension, reveals itself, he thinks, as a sheer

impossibility, once we remember that the shapes and sizes of the first kind, the metaphysician's kind, are admitted to be in some way logically incompatible with the shapes and sizes of the normal kind. Or, in other words, how is it that we now associate brownness with the ordinary *round* object we call a penny, if in the first instance the object we associated the brownness with was not this round object at all, but an oval or ovalish object, according to the accepted account of its nature, and moreover, according to the same supposition, of a peculiar two-dimensional kind.

Brown makes another point relevant to his position, of a different sort. He cites – in opposition to Berkeley's thesis that we are originally aware by sight of these so-called visible figures, and only by a slow process come to associate the visible figure with the corresponding real or tangible figure – a series of observations developed at length by Adam Smith in his "Essay on the External Senses," to the effect that new-born animals do not seem to have to go through this long process of associating visible figures with real figure, but get notions by sight of real figure and distance as soon as they open their eyes. But, this being so, Brown argues, "There is no physical impossibility in the supposition that a similar original suggestion may take place in man." Of course, a hypothesis of this kind is a matter, he goes on, for "observation and experiment," and its relevance to the present topic consists solely in the fact that it shows how animals in fact do, and men might, get on quite well in a situation where there is no meaning in talk of visible figure, where vision somehow suggests real figure or distance immediately. (This argument is found at the end of Lecture 28; the other arguments are contained in Lecture 29.)

In addition to these sophisticated arguments, Brown has another argument of a more solid type, and, in order to understand its force, we must first explain what we take to be its presuppositions. Roughly speaking, it may be said that Brown is here taking for granted one of the main points made in Reid's discussion of the view (found, for example, in Adam Smith) of the object of vision as identical with the material impression on the retina. That is to say, he agrees with Reid that the experience informing us of the existence of the object of vision is quite separate from, and previous to, the experience informing us of the existence of the eye, and the material impression thereon, and that therefore there is no necessary connection between the former entity and the latter. This being so, the undeniable fact of the extendedness of the material impression on the eye, Brown probably went on, cannot afford the least presumption that the object of vision corresponding thereto is also extended and figured.

Such presumably is Brown's silent preamble and, if he does not make the point explicitly, the reason is that he has already made the same point at great length in regard to the fact of touch, and that, in the present context (*Sketch*, p. 155, and the parallel passage in the *Lectures*), he is content to mention and refer us back to what he said about the matter, while dealing with touch. For example, "we, the observers, know that in touch an object of a certain form is pressing on an organ of a certain form," but it does not follow "that the infant

must also have this knowledge. The infant does not know that he has any organs, but he is susceptible of many feelings which may arise successively and be remembered as past" (*Sketch*, p. 93).

Brown's argument, then, supposes this sharp distinction between the material impression on the organ of sense, on the one hand, and the object of sense, on the other. He then proceeds to rest his conclusion on an analogy. It is granted that in smell and hearing the extendedness of the material impression does not involve any extendedness, in the corresponding object of sense; why, then, granted the principle of uniformity, expect the object of vision to possess extendedness in the way the material impression on the eye does? Now there is nothing difficult here, but as Brown's point is important for subsequent discussion, we had better underline it, by repeating it in his own words.

> If this supposition of the necessary perception of form, in consequence of the mere extension of the number of coincident rays of light at the retina, were truly of any force, it must be of equal force wherever there is a similar extension of particles of any kind that are capable of inducing sensation, in contact with the nervous expanse which they affect. There should, therefore, in conformity with this supposed result, be a gustual figure and an odorous figure as much as a visible figure; for, though we cannot show the fragrant or sapid corpuscles, that are at any particular moment acting on the nerves of any one [of these senses], we are not the less sure, that these particles, to a certain limited extent in contact with the organ, are truly affecting a certain nervous expanse. . . . But, though a figured surface [of the organ] is affected, it does not follow, nor has it ever been asserted, that in smell, or taste, or hearing, we have a perception of fragrant, or sweet, or melodious figure; and as little are we entitled, from the mere fact of the affection of a definite portion of the nervous surface, in contact with a definite number of corpuscles, – which is common to sight with all the other senses, – to affirm, that, where there is no conscious perception of any small visible figure corresponding with the extent of the rays of light at the retina [he means by "no conscious perception" the plain man's unawareness of visible figure], there yet must have been, at every moment of our vision, that very perception, of which we have no present consciousness and no remembrance.
>
> (*Sketch*, pp. 156–8)

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Here we must pass from Brown to Hamilton, and in our preliminary statement of the latter's position, we will note carefully the extent of his agreements and disagreements with Brown, but leave aside till later the crucial argumentation in defence of these disagreements. The fact of most importance here is that Hamilton at no time accepted Brown's paradoxes about vision. In the *Lectures*, for example, after a careful restatement of the last

argument of Brown's considered above, the "physiological" argument about vision, Hamilton, abruptly and without attempting to answer the point at issue, proceeds to expound the following position.

> Now in all their elaborate argumentation on this subject, these philosophers seem never yet to have seen the real difficulty of their doctrine. It can easily be shown that the perception of colour involves the perception of extension. It is admitted that we have by sight a perception of colours, consequently a perception of the difference of colours. But a perception of the distinction of colours necessarily involves the perception of a discriminating line; [and therefore of extension.]
>
> (*Lectures on Metaphysics*, vol. 2, p. 165)

Brown, that is to say, admits that we are aware of the co-existence of different colours, but awareness of such co-existence, Hamilton flatly asserts, involves awareness of extension.

However, at the time of writing the lectures (1837), Hamilton seems to have coincided with Brown in regard to the facts of touch as much as he differed from him as regards the facts of vision. He cites the same sort of point as Brown about tactual errors. "A blind-folded person will make the most curious mistakes in regard to the figure of objects presented to him, if these are of any considerable circumference" (*Lectures on Metaphysics*, vol. 2, p. 176). Moreover, the interpretation of these facts he favours is quite similar to that favoured by Brown. To persons whose sole source of information about extension and shape is the sense of touch, "in fact, to those born blind, time serves instead of space. Vicinity and distance mean in their mouths nothing more than the longer or shorter time, the greater or smaller number of feelings, which they find necessary to attain from some one feeling to some other" (*Lectures on Metaphysics*, vol. 2, p. 174; Hamilton is quoting with approval from a German source).

However, when we come to the *Works* of Reid, published in 1846, which contain his maturer doctrines on the subjects discussed, we find that Hamilton has brought his doctrine about touch into line with his doctrine about vision. He admits indeed more emphatically than ever the fact of tactual illusion, but he now accounts for it by allowing that the object of touch is tangible figure, i.e. figure which is "unreal" in the same way as visible figure is unreal. For instance, take this footnote to Reid. "If there be external objects," Reid is saying, "which have a real extension and figure, it must be either tangible extension and figure, or visible, or both." But on this assertion of Reid's Hamilton comments thus: "*Or neither*. And this omitted supposition is the true. For neither sight nor touch give us *full* and *accurate* information in regard to the *real* extension and figure of objects" (*Works*, p. 326). Indeed Hamilton is constantly referring to the fact that "the magnitude perceived by touch is as purely relative as the magnitude perceived by vision; for the same magnitude does not appear the same to touch at one part of the body and to touch at another" (*Works*, p. 885).

This change of view of Hamilton's about touch is not however a drastic one. He continues to regard Brown as being on one essential point right as against Reid: "the views touching the functions of the will, and of the muscular sense, constitute, in this relation certainly, not the least valuable part of Dr. Brown's psychology" (*Works*, p. 868). That is to say, Hamilton still refuses to accept in an unqualified way Reid's view that extension and figure are perceived through the sensations of touch, and insists instead that "to allow this statement to pass, it would be necessary to suppose that under touch it is meant to comprehend the consciousness of locomotive energy, and of the muscular feelings" (*Works*, p. 885). Nor is there any doubt as to the meaning of this modification of Reid: Hamilton's point, to all appearance, is that the experience of a body as a solid tangible shape is nothing but the experience of the movement of a limb, and the arrest of that movement, and that our awareness of this movement and its arrest is awareness of more muscular strains as being space-related as well as time-related. Accordingly, Hamilton does not dispute Brown's point that awareness of tangible figure is nothing but awareness of co-existing series of muscular strains, but simply insists that this awareness of co-existence is not merely awareness of simultaneity, but also awareness of space-relatedness, or mutual externality.

> In the deduction of the notion of *superficial extension* [Brown] is equally illogical; for here, too, his process of evolution only in the end openly extracts what in the commencement it had secretly thrown in. The elements, out of which he constructs the notion of extension, in the second dimension, he finds in the consciousness we have of several contemporaneous series of muscular feelings or lengths, standing in relation to each other as *proximate*, *distant*, *intermediate* etc. – Proximate! In what? In time? No; for the series are supposed to be in time co-existent; and were it otherwise, the process would be unavailing, for proximity in time does not afford proximity in space. In space, then? Necessarily.
>
> (*Works*, p. 869)

Having now stated Hamilton's counter-position, we must indicate the point at issue. Hamilton's claim is, as we have seen, that just as awareness of the co-existence of colour-sensations involves awareness of a boundary line and so of outline, so awareness of the co-existence of certain kinds of sensations of strain – those in the touching hand – involves, in some analogous way, awareness of outline and of space. But now the difficulty here is that awareness of co-existing sensations does not always involve awareness of outline or space – for example, awareness of sounds does not, nor does awareness of sensations of strain when I move a limb freely. That is to say, the difficulty springs from Brown's insistence on the necessity of respecting uniformities, and the principles of analogy. If awareness of co-existent sensations sometimes does not involve awareness of outline or space, why should it ever do so? In any case, Brown maintains, there is no need to postulate awareness of

outline or space; it can be "logically constructed" according to the principle explained. But now Hamilton does not in fact dispute the possibility on principle of such a logical construction. How then does he propose to vindicate his assertions about space-perception?

Hamilton's discussion of this topic is found in volume 2 of his edition of Reid's *Works*. It is perhaps his most notable achievement in philosophy, and, in order to comprehend his starting-point, we had better recall the doctrine of Stewart's that varieties in our perception of colour are the means to our perception of visible figure. At any rate, this doctrine of Stewart's is one which Hamilton very much admires – he goes to considerable trouble to prove Stewart's claim to be the first of the moderns to announce it (*Collected Works*, vol. 5, pp. ix–x) – and Hutchison Stirling is probably quite right in seeing in it the key to the meaning of the Hamiltonian theory of sensation.

Hamilton, then, seems to have argued in this way. Stewart, he commenced, states it to be a fact that while the perception of co-existing colour-sensations is attended by the perception of a line of demarcation, and so by the perception of space, the perception of co-existing sounds is not accompanied by the perception of outline, and therefore not by the perception of space. Now the second item in Stewart's doctrine, Hamilton saw, goes back to Hume and Reid, at any rate, and is based on the fact that it is neither sense nor common sense to speak of sounds as having shapes, and on the inference drawn therefore that, because sounds are shapeless, they must also be spaceless. But this latter inference, Hamilton seems to have thought, involves a very dubious step indeed; on the one hand, its conclusion – that sounds are nowhere – is almost as much at variance with common sense as its premise – that sounds do not have shape – is in accordance with common sense; and, on the other hand, the presuppositions sustaining the inference are the presuppositions behind Hume's theory of simples, the presuppositions about the clearcutness of primitive notions and data. But now Hamilton, as we saw in the last chapter, considered it both legitimate and necessary to allow our notions of data to be vague and indefinite, and, accordingly, would find no difficulty in maintaining *that sounds*, in spite of their having no definite whereabouts, are nevertheless not *nowhere* in respect of one another.

In the upshot, therefore, he proposed to restate Stewart's *fact* in the form: awareness of co-existing colours is accompanied by awareness of their definite place-relations, whereas awareness of co-existing sounds is accompanied by awareness of their indefinite place-relations. In this way, he thought to get rid of Hume's paradox about most things that exist existing nowhere, and, at the same time, to defend our ordinary view of objects like sounds as being somewhere.

Any doubts as to the approximate accuracy of our interpretations will, we believe, be removed by reading the sequel to the page 861 passage – a sequel which extends to page 864. In that passage, Hamilton is attempting to explain this thesis of his that awareness of the co-existence of sensations is attended, in the case of some of the senses, by awareness of definite

space-relations, and in the case of others by awareness of indefinite or less definite space-relations. He indicates roughly which senses fall into which class, and apparently regards touch as falling into a class by itself. But here let us have the quotation, premising that by "perception" Hamilton means here awareness of primary qualities, i.e. of the shape of things, of their size, of their location, of their movement.

> If we take a survey of the senses, we shall find, that exactly in proportion as each affords an idiopathic sensation more or less capable of being carried to an extreme either of pleasure or pain, does it afford, but in inverse ratio, the condition of an objective perception more or less distinct. . . . In this sense [of sight], therefore perception, – the objective element, is here at its maximum. . . . Hearing is, much less extensive in its sphere of knowledge or perception than sight; but in the same proportion is its capacity of feeling or sensation more intensive.
>
> (Interpolated from parallel passage in *Lectures on Metaphysics*, vol. 2, p. 100)

> In Touch or Feeling, the same analogy holds good and within itself; for in this case, where the sense is diffused throughout the body, the subjective and the objective vary in their proportions at different parts. The parts most subjectively sensible, those chiefly susceptible of pain and pleasure, furnish precisely the obtusest organs of touch; and the acutest organs of touch do not possess, if ever even that, more than an average amount of subjective sensibility.
>
> (*Works*, p. 863)

(The passage is intended here by Hamilton simply to illuminate his main point about the difference between those various avenues of sense-perception so far as it consists in the fact of their all perceiving space-relations, but perceiving them with various degrees of distinctness.)

By this time, we have set forth what we take to be Hamilton's most distinctive and important contribution on the present subject. However, in addition to making this point, he makes several other points also relevant to the problem, and, in order to explain the significance of these latter, we will have, for the moment, to leave him, and to institute an inquiry on our own account into the sort of premises which the Hamiltonian argument sketched above requires.

To put the matter briefly, the problem here has to do with the "law" which we, like Hutchison Stirling, conceive to be Hamilton's starting-point – the law that the perception of a variety of co-existing colours involves the perception of outline, and that the perception of a single colour does not. But obviously we have two theses here: the one already explained as being generalised by Hamilton in the form that the awareness of co-existing sensations involves the awareness of space-relations, in some cases of the definite kind

involving outline and in other cases of the indefinite kind not involving outline; and the other thesis of an indefinite kind not so far explained, to the effect that if we have a single sensation at a time, we are altogether unaware of space; and it is this latter thesis, the unexplained one, that we must now consider with a view to finding how much meaning and value there is in it.

Here we will take up the total thesis as stated in reference to vision, and show that this latter item in it would seem to have been transmitted from Hamilton's friend and mentor Stewart to Hamilton's friend and protégé Ferrier, presumably through the intermediary of Hamilton, although perhaps without his agreement. First let us hear Stewart.

> Supposing for a moment the whole face of nature to exhibit only one uniform colour, without the slightest variety even of light and shade. Is it not self-evident that, on this supposition, the organ of sight would be entirely useless, inasmuch as it is by the *varieties* of colour alone that the outlines or visible figures of bodies are so defined as to be distinguishable from one another?

*

Now we turn to Ferrier, to an article he published in 1842. What we have to note is how Hamiltonian is Ferrier's terminology on this subject: for example, he speaks of sight as having an "original intuition of space or of the reciprocal outness of its objects – in other words, of colours out of colours" (*Greek Philosophy*, vol. 2, p. 363). But now let us have his restatement of Stewart's thesis.

> Let us ask, then, what do we mean when we say that a colour is *seen* to be external? We mean that it is seen to be external to *some other colour* which is before us. Thus we say that white is external to black, because we see it to be so. It is *only* when we can make a comparison between two or more colours that we can say that they are seen to be external – i.e. external to each other. But if there were no colour but one before us, not being able to make any comparison, we should be unable by sight to form any judgment at all about its outness, or to say that we *saw* it to be out of anything.
>
> (*Greek Philosophy*, vol. 2, p. 327)

Here we can raise our question as to what meaning, if any, can be attached to the part of the thesis regarding the alleged experience of a single colour and occurring in one version in Stewart and another in Ferrier. Here, however, it is proper to observe, as we already observed in dealing with Stewart, that the part of the clause in question here very likely had a pretty precise meaning for Stewart, and certainly had a very precise meaning in the passage in Reid which Stewart has in view in formulating his law – i.e. the passage about "the

glass of broken jelly" where certain patients of Cheselden are said to have been able to report with fair accuracy the colours of things shown to them, but not to have been able to report their sizes, or shapes. Accordingly, we will transform our question as to the meaning of the one-colour experience into a question about the meaning of the kind of situation implicit in the account given by Cheselden.

The question at issue here with respect to Cheselden's account is not whether it is true or false, but whether it makes sense. But once the question is put in this way, the following observation becomes an obvious one. On the one hand, there seems nothing unreasonable in the supposition of there being an intelligent creature, gifted with sight, who lives surrounded by a fog or a fluid permeated successively by light first of one uniform hue, now of another – reddish, then yellowish, then greenish and so forth. On the other hand, it seems equally reasonable to suppose that, while such a creature would be able to talk and think about the likeness and unlikeness between colours, and shades of colour, and about the colours as varying in intensity, or "warm" or "cool," it would surely be impossible for him to think of the colour as spread out or space-occupying because he would have no experience of the likenesses and difference of shapes, or even (on the hypothesis followed of a succession of uniformities in the visual field) of nearness or farness, however vague, in the matter of position. In short, there seems to be sense in Cheselden's point at least if understood in this speculative way.

Here let us sum up the position so far reached. In our opinion, Stewart and Ferrier are very likely right in stating the fact or law in question in the form: awareness of co-existent sensations involves awareness of space, and awareness of the single sensation, or rather of a succession thereof, in so far as it is possible, involves no awareness of space. At any rate, as we see the matter, the important thing here is not only that the second clause is not devoid of sense, but also and especially that the first clause loses most of its point, if the second clause is annulled.

Hamilton, it would appear, was not of this opinion at all. It would damage his case against Brown (he perhaps thought) even to admit the possibility of colour experience that is not also experience of extension and space. Had not Reid's citation of the Cheselden report been, in a way, responsible for restarting the very trend of reductionism against which Reid himself had fought so long? Accordingly, Hamilton seemed to think it necessary to the conclusiveness of his case against Brown to hold not merely that awareness of co-existent sensation is impossible without awareness of space, but even that awareness of one uniform sensation is also impossible without awareness of space.

"Reid," Hamilton says, "misinterprets Cheselden, in founding on the expressions of this report a proof of his own paradox, that colour can possibly be an object of vision, apart from extension." The report, he goes on,

> contains absolutely nothing to invalidate, and much to support the [counter-] doctrine – that, though sensations of colour may be experienced

> through the medium of an imperfect cataract, while the figures of external objects are intercepted or broken down; yet that, in these sensations, colour being diffused over the retina, must appear to us extended, and of an extension limited by the boundaries of that sensitive membrane itself.
>
> (*Works*, p. 145)

Hamilton, then, is of the opinion that, in cases like this, one could describe oneself as seeing coloured extension devoid of shape, and the question arises as to whether he means, as he well might in view of the doctrine reported earlier, that we are aware of vaguely differentiated coloured blurs as being vaguely distributed in space, or that we are aware of seeing a uniformly coloured extension. But now, apparently it is the latter and much more dubious line that Hamilton in fact intends here rather than the former, and quite readily defensible, line. "We are conscious," he says, "of the affection of colour either as one colour, or as a plurality of colours. On the former alternative, one homogeneous colour occupies the whole field of vision" (*Works*, p. 919). But now to the question whether we are not in this case aware of the colour as unextended. Hamilton proceeds to reply as follows.

> The apprehension of parts exterior to parts is, in like manner, but even more obtrusively, involved in the latter case, where a homogeneous colour is supposed to occupy the whole field of vision. For this field has a right and a left, an upper and an under side, and may be divided into halves, quarters etc. indefinitely.
>
> (*Works*, p. 920)

In order to understand what Hamilton is doing here, we had better recall the case, discussed at length by Hume, of the experience of seeing nothing but the pitch-black night, of a uniform darkness. Apparently, then, Hamilton is making claims as to what we could immediately apprehend in the situation directly counter to the claims made by Hume as to what we could immediately apprehend.

However, the real difficulty for Hamilton here is not Hume, but the fact rather that his own assertions about space-apprehension in this part of his doctrine run counter to his own assertion about space-apprehension in the other part of his doctrine, given earlier on the same page. In this latter passage, he is making his main point about Brown's theory of vision, and his doctrine is this: "It is admitted that we have by sight a perception of colours, consequently a perception of the difference of colours. But a perception of the distinction of colours necessarily involves the perception of a discriminating line" (*Lectures on Metaphysics*, vol. 2, p. 165). (The same point is repeated on the page we have been dealing with, *Works*, p. 919.) Obviously there is a marked discrepancy between Hamilton's approach to the matter in this passage, and in the one about one homogeneous colour. In both cases, indeed, we are said to end up with an apprehension of space or the mutual exteriority of

parts, but between the two cases there is this great difference: that, whereas in the case of the co-existence of colours we really do see the parts on their own account, independently of the spatial relation, in the case of the homogeneous colour (for example, the pitch-black), we don't really see any parts at all on their own account, and so don't have any plurality to consider as spatially related.

As to Hamilton's reason for giving his initially acute and promising doctrine this strange turn, the following extract is illuminating. He is speaking about "the doctrine of those philosophers who, as Condillac in his earlier writings, Stewart, Brown, Mill and J. Young [Professor in Belfast College, 1815–29] hold that extension and colour" can be, and are, given separately. He ends up his criticism of their position thus.

> Though I reject this doctrine, I do not reject it as absolutely destitute of truth. It is erroneous I think; but every error is a truth abused; and the abuse in this case seems to be in the extreme recoil from the counter-error of the common opinion – that the apprehension through sight of colour, and the apprehension through sight of extension and figure are as inseparable, identical cognitions of identical objects.
>
> (*Works*, p. 860)

Although Hamilton does not explain himself further, his description of "the common opinion" seems to contain an echo of the language Hume uses in discussing the white globe. Apparently, therefore, Hamilton's suggestion that colour and extension are not quite identical would seem to be inspired by his doctrine, which we have already considered at great length, about "the faculty of abstraction."

Let us conclude this whole discussion by indicating tentatively, on our own account, what we take to be involved in the doctrine under review, that awareness of the co-existence of colours, or sounds, involves awareness of their being in some ways spatially related. In order to make this doctrine clear, we have, it would seem, to indicate the limiting case (if we could call it that) mentioned by Ferrier, that if we were aware of nothing but a single uniform colour or sound, or even a succession of such sounds, and colours – uniform in the sense of filling the auditory or visual field, though each differing from the other in quality, intensity, etc. – then we would not be aware of spatial relation. But now, in addition to this reservation, there is another equally important one, not mentioned by Stewart or Ferrier, to the effect that if we were to be shown a varying plurality of colours in fixed spatial relations – if, for example, our visual field were always to be divided into quarters, fixed and constant, but the four different colours occupying these quarters were to change from time to time – it is (or so it would appear) very doubtful as to whether, in that case, we would get any notions at all of shape or space. Granted, of course, this matter is a difficult one and perhaps can't be disposed of in a couple of sentences, but it does appear to be the case, at least if Hume's

point about the white globe is sound, that, in order to get a proper notion of outline, we would have to see the colours related by variety of boundaries – now straight, now curved.

Here, however, we had better try to glimpse Hamilton's doctrine on this matter as a whole. But when we do this, it becomes reasonable to say that, while he probably got lost in details and went astray as to foundations, his main point against Brown and his reductions still stands as quite a notable achievement. No doubt of course, people will debate endlessly about the merit or demerit of this or that doctrine of this or that philosopher, but in confirmation or rather explanation of our high opinion of Hamilton on this one point, it would be as well to mention that these doctrines of his about space-apprehension, so far at any rate as they are a development of Stewart's original point – i.e. so far as they are sound and fruitful – would seem to constitute the part of Hamilton's teaching that Ferrier most admired and took over. That is to say, so far as Ferrier ever was Hamilton's disciple, he was his disciple in these matters and followed his lead in the attack on Brown's clever, but, as it was generally felt, too clever, reductionism. But, if this is so, does it not tend to establish the fact that, at least for the point of view of the present study, concerned as it is with a certain tradition or movement, the doctrines and discussion in question here are Hamilton's most notable achievement?

However, to put our contentions about Ferrier here beyond reasonable doubt, let us cite the evidence regarding his relation to Hamilton on this point. Part of that evidence we have of course already cited – namely that he speaks in much the same way as Hamilton about awareness of the "reciprocal externality of colours," and it remains only to add that Ferrier puts this doctrine or way of talking to precisely the same use as does Hamilton, i.e. he uses it to expose certain confusions created by Brown's reductionism. (See especially *Greek Philosophy*, vol. 2, pp. 352–4, though the whole context has to be read if Ferrier's point is to be understood.) Moreover, another point emerges in the same passage which is decisive, not in an indirect way, but in a direct way, of our contention about Ferrier's relation to Hamilton on this topic. In dealing with the physiological argument of Brown's in favour of his theory of vision, Ferrier produces some counter-evidence in the form of a passage from "Miller's Physiology," and acknowledges thanks to Sir William Hamilton for drawing his attention to that passage. Hamilton himself in a subsequent publication (Ferrier published in 1842, Hamilton in 1846) deals with the same sort of topic as Ferrier, the significance of Treviranus's physiological discoveries for refuting Brown (*Works*, p. 862), and, contrary to what usually happens, Hamilton's discussion is subtler, in this case, and more critical than Ferrier's.

About the physiological side of all this we will be brief, although it is perhaps, despite its inchoateness, the most interesting thing in Hamilton. Apparently, this line of speculation had its immediate source in Brown, in the argument of his on vision to the effect that there is no more reason to expect

the object of vision to be visible figure because the impression on the retina is extended, than there is to expect the object of hearing to be audible figure, although, in fact, the impression on the auditory nerves is, in all probability, extended in space just as much as the impression on the optic nerves is. Now Ferrier, in the passage already referred to, tries to reply by pointing out that Brown's argument would be plausible if the structure of the mechanism of the retina was analogous to the structure of the auditory end-organs, but that, in fact, recent physiology has shown this supposed analogy to be groundless. Hamilton, then, is concerned with the same sort of question as Ferrier, and in particular with the claim, implicit in Ferrier, that the sharp distinction of outline found among co-existent colours, and the merely vague place-difference found among co-existent sounds, have their counterparts respectively in the fine and delicate distinctions between the *papillae* in the optic nerves, and in less delicately defined distinctions between the fibres in the other nerves. The point at issue here interested Hamilton very much, and, like Ferrier, he takes it up in the course of his reply to Brown's reductionism, and of his development and explication of his main thesis in that connection about the reciprocal externality of sensations of all sorts, and about its vagueness in some cases, and well-definedness in others. In fact, his management of this question is very impressive indeed, and, while he is mainly concerned to make and defend the same kind of claim as Ferrier does, as to the existence of an analogy between the structure of the auditory field as revealed by phenomenology, and the structure of the auditory nerve as revealed by a different but appropriate kind of experience, and as to the existence of the same thing with regard to the other senses, nevertheless, at the same time, in spite of his being thus favourable to the claim, he gives much of his space to citing out of physiological textbooks facts which seem to be exceptions to the law he would like to believe exists. In short, his discussion constitutes a very stimulating presentation of a problem, and it is a pity that space forbids us to quote it. (See *Works*, pp. 861–3.)

Granted this point of view, a problem is already raised as to how far the object of a given sense is to be identified with the *material impression* on the corresponding organ of sense; for example, how far the object of hearing is to be identified with certain physical events supposed to occur in the tangible visible ear (visible in a mirror, anyway), i.e. with something which in its way is an object of experience too, at least in the sense that we can understand as occurring in our own case what the physiologists tell us about it. Now Hamilton is preoccupied with this problem as well as the other, and, in the same passage (p. 861) considers the issues very carefully. Whereas in his earlier statements in the same book – *Works*, vol. 2 – he has spoken as if the object of sense and the material impression on the organ could be unhesitatingly identified, in the present passage he expressly speaks of that doctrine as too precipitate and raises the question as to whether the nervous events identifiable with the object of sense are not perhaps rather events high up the sensory nerve in question, where it unites with the rest of the brain, rather

than the events at the periphery. His discussion of this matter is, on any standard, very acute indeed, and what he does is in effect to produce some evidence suggesting that, while it is still proper to regard the object of sense as being identifiable with or the counterpart of the physical events in the sensory nerve in question, it is nevertheless perhaps in principle impossible to answer the question as to whether the object of sense is to be identified with the events at the periphery, i.e. in the organ, or with the events at the centre, i.e. in the brain. The fact Hamilton cites as decisive, or rather suggestive, here is the case of the "phantom limb"; it would appear that, no matter how much a nerve or set of nerves is cut short, much the same set of sensations is felt – in this case, a set of vague organic strains and twinges, related in a familiar pattern of spatial connections and, this being so, it does not seem reasonable to identify the area felt with any particular section of the group of nerves in question. "A whole line of nerve affords, at all its points, only the sensation of one determinate point" or, in other words, what is inwardly or, for feeling, a point is outwardly, for physiology, a line.

So much, then, for the second phase of the argument against Brown, i.e. the argument conducted by Hamilton, apparently in collaboration with Ferrier, against Brown's physiological defence of his paradoxes. The most important aspect of it for further developments is that just as Brown had, it will be remembered, started the argument in question by accepting Reid's view of the "material impression on the organ" as having nothing to do with the object of sense, so Hamilton, and, likewise, to some extent, Ferrier, are led, in the course of rejecting Brown's conclusion, to the point of going back on Reid, and of regarding the object of sense as being, for all practical purposes, identical with the material impression on the organ or in the nerves. (Previously Hamilton had followed Reid here, but more about that later.) Hamilton, in particular, takes this whole matter so seriously as to abandon, as often as not, the "sense-data language," i.e. the phenomenological mode of stating the facts of perception, and to adopt instead physiological language. In his official formula, he says, "I hold that the only object perceived is the organ itself as modified" (p. 885), and statements to that effect abound in his writings, i.e. *Works*, vol. 2.

All the same, it would be wrong to see in this development any radical departure from the "phenomenological" or mainly phenomenological standpoint inherited from Hume and Reid. That is to say, the physiological question at issue between Brown, on the one side, and Hamilton and Ferrier, on the other, is simply a question as to whether – say – the object of hearing, i.e. the co-existence of sounds, is the counterpart of, has a parallel structure, to a certain object of touch – possessing therefore size and shape – called the ear, or rather to certain movements, in principle explorable by instruments, within that tangible ear. In short, the physiological aspect of the problem of perception can apparently be stated in phenomenological terms.

Here, in conclusion, we had better say a word about the relevance or irrelevance to the total problem at stake – the problem as to the nature of the

sense-data, and (to mention the other half) as to the nature of transcendence – of these physiological speculations and inquiries that come into prominence with Brown, and are taken very seriously by Hamilton and Ferrier. All we want to point out is that it is surely not possible offhand, and in an a priori way, to pronounce this line of inquiry as useless and leading nowhere, and that, in consequence, it will be as well to be patient with Hamilton's often confused attempts to use the physiological data to some purpose. Who knows but that something of interest may suddenly leap to the light?

Here let us pass to Brown's discussion of the belief in an external world. This belief, of course, is something which he never dreams of calling in question, and the only point at issue, therefore, for him is how far anyone has ever done anything to elucidate its foundations. In particular, the main object of his discussion is to inquire whether the chief difficulties of the problem have been, in any way, lessened by Reid's distinction of sensation and perception.

Let us begin with Brown's final answer to this topic, noting how it sharpens the issue by making prominent a point Reid slurs over.

> The philosophy of Mr. Hume and the philosophy of Dr. Reid, on this subject, on which, to ordinary observers, they may seem to be wholly at variance, will appear, if we examine them more closely, to have no real discrepancy. The doctrine of both is composed only of two propositions; one of which is, That no argument can be offered to show by mere reasoning the existence of external causes of our feelings, – The other, that it is absolutely impossible for us, in the various states of mind which we term Perception, not to believe in external causes of our feelings. The whole seeming difference is merely this, – that each philosopher, though affirming both propositions, dwells a long time on one of them, and a short time on the other; and that the particular proposition they dwell on the longer, is not, in both cases, the same.
>
> (*Sketch*, pp. 143–4)

There is really nothing here which Stewart has not already conceded. Granted, Brown says in effect that Reid does prove against Hume "distinct existence" or "double existence" to be a fact of experience; nevertheless this correction of Hume – if correction it be – does nothing whatever to *prove* against Hume the validity of belief in independent existence, since the belief in independent existence is a belief about something which is, by definition, beyond experience, and so not a fact of experience.

In his criticism of Reid, Brown apparently has in mind one passage especially from the *Inquiry into the Human Mind*, where the distinction between sensation and perception is formulated in a somewhat different, and clearer, way than it usually is in Reid. Here is the passage; it is not, it may be noted, vital to Reid in that it states more than Reid ever tries to prove, but it is important in itself as raising the problem of "realism."

> The same mode of expression is used to denote sensation and perception; and, therefore, we are apt to look upon them as things of the same nature. Thus, *I feel a pain*; *I see a tree*: the first denotes a sensation, the last a perception. The grammatical analysis of both expressions is the same: for both consist of an active verb and an object. But, if we attend to the things signified by these expressions, we shall find that, in the first, the distinction between the act and the object is not real but grammatical; in the second, the distinction is not only grammatical but real.
>
> (*Works*, pp. 182–3)

The first point Brown makes is a quite simple one and is easily comprehended, or regarded as plausible, in the light of Reid's extended doctrine on the subject as it was given before. "It is only in a single class of sensations – that which Dr. Reid ascribes to touch – that perception, which he regards as a peculiar faculty, extending to all our sensations, can be said to have any primary operation"; and again, "even on his own principles, I repeat, it [perception] must be confined to the single class of feelings which he considers as tactual" (Brown, *Lectures*, 25, p. 161). That is to say, according to Brown, Reid's distinction between sensation and perception, if we stick to Reid's *clear* statements about the matter, is applied in a serious way only to the facts of touch, is not applied in the same systematic way to facts of hearing, taste and smell, and is not, on Reid's own showing, applied at all to the facts of vision.

This preamble over, we come to Brown's main point which consists in asking on what evidence is based the doctrine implicit in the passage quoted, that there is a real distinction between the act and object of feeling, where it is a case of feeling a solid shape, but no real distinction between the act and object of feeling, where it is a case of feeling pain or strain. " 'Sensation' says Dr. Reid, 'can be nothing else than it is felt to be. Its very essence consists in being felt; and when it is not felt, it is not.' " But this, Brown goes on, "is surely equally true of the mental state he terms perception. Its very essence consists in being felt and when it is not felt, it is not" (*Lectures*, 25, p. 159). The decisive consideration here, according to Brown, is that there is no more empirical evidence in this latter case – the case of feeling a solid shape – to justify us in regarding the object of feeling as detachable from the act of feeling, than there is in the former case – the case of feeling pain – where the distinction is universally admitted to have no foundation.

Brown goes on to take a pretty strong line in this matter, and to assert that the sharp distinction between act and object of perception, though no doubt relevant in grammar, has no real foundation, and is, in fact, meaningless.

> Though he [Reid] does not inform us what he means by the term *object*, as peculiarly applied to perception, – (and, indeed, if he had explained it, I cannot but think that a great part of his system, which is founded on the confusion of this single word, must have fallen to the ground,) – he yet tells us, very explicitly, that to be the object of perception, is something

> more than to be the external occasion on which the state of mind arises which he terms perception . . . Did Dr. Reid then, suppose that the feeling, whatever it may be, which constitutes perception as a state of mind, or in short, all which we are exclusively conscious of in perception, is not strictly and exclusively mental, as much as all of which we are conscious in remembrance, or in love and hate; – or did he wish us to believe that matter itself, in any of its forms, is, or can be, a part of the phenomena or states of mind – a part, therefore, of the mental state which we term a perception?

But if Reid believed that, Brown concludes, he believed in something absurd.

> [Matter] what we thus regard as extended and resisting is known to us only by the feelings which it occasions in the mind. What matter in its relation to the percipient mind, can be, but the cause or occasion, direct or indirect, of that class of feelings which I term sensations or perceptions, it is absolutely impossible for me to conceive.
>
> (*Lectures*, 25, p. 160)

Brown's meaning is clear enough here. When Reid says that we are aware of the extended solid object of feeling as being really distinct from our act of feeling it, his meaning, according to Brown, might at first sight seem to be that we are aware of ourselves as perceiving or experiencing a part of the material world. But the material world, Brown goes on, is, by definition, what exists independently of us, i.e. what exists whether it is perceived or not; and accordingly the notion of unperceivedness or unperceivableness is inseparable from the notion of the material world. Accordingly, if we were to take Reid's doctrine about acts and objects seriously, we would have to credit him with the view that we are aware of ourselves as perceiving a world that is in some way beyond reach of perception, and surely Reid, whatever expressions he used, did not mean to propound any doctrine so ridiculous, and, on the point in question, really saw eye to eye with Hume.

Brown concludes his criticism of Reid thus.

> Dr. Reid, it is evident, was not sufficiently in the habit of considering the phenomena of mind, – its perceptions, as well as its remembrances, judgments, passions and all its other affections, whatever these may be, – in the light in which I have represented them to you, merely as the mind affected in a certain manner, according to certain regular laws of succession, but as something more mysterious than the subject of this sequence of feelings; for, but for this notion of something more mysterious, the object of perception, and the external occasion of that state of mind which we term perception, must have conveyed precisely the same notion.
>
> (*Lectures*, 25, p. 160)

Here, in Brown, discussion of the question of belief in externality is very much mixed up with a rather special discussion as to what Reid really meant by certain formulae, and the same thing happens in Hamilton, and even, to some extent, in Ferrier. Accordingly a word had better be said about this latter discussion, the discussion about Reid, in order to discover its relation to the former discussion, which is the one that really matters to us. Brown, then, in the passages under review, opens the debate by accepting Reid's point that I feel a solid shape only when I feel, in the first place, certain sensations of muscular strain; and proceeds to raise a question which, read in the light of Reid's text, has a very definite meaning. The question he raises is, in effect, a question concerning the preferability of one or other of two apparently alternative analyses offered by Reid of the fact in question, the one that – to quote his usual formula – I have a conception and belief of a solid, external body, on the occasion of having sensations of touch; and the other – the one in question above – that I am aware of a solid, material object of feeling and, in contradistinction, of my act of feeling it, on the occasion of having the said sensations. Now, according to Brown, the latter, act–object formula is indefensible and not seriously intended by Reid, but the former is acceptable enough, provided it be understood as meaning that, on the occasion of feeling the sensations of strain, a belief arises as to the existence of external corporeal causes of these strains. But, at this point. Hamilton enters the debate, and maintains, on the contrary, first, that an analysis of the act–object was not a blunder at all but represents Reid's real position, because the act–object analysis alone does justice to the facts of common sense belief, and because Reid, professedly, wants to defend common sense distinctions of this kind; and, in the second place, because Reid's formula about having a conception and belief of an external body is not really in contradiction with the other formula, because, on account of Reid's denial of the existence of mental images, conception is for him a species of immediate awareness, and is distinguished as imagination or perception according as it is accompanied or unaccompanied by belief. Hamilton's view, that is to say, is that Brown has completely misinterpreted Reid, although he goes on to concede that Reid's terminology is so vacillating and vague as to invite misinterpretations like Brown's. Finally, Ferrier tries to settle the dispute, by advancing the thesis that, while Hamilton is doubtless right against Brown on the question as to what Reid's position really was, the act–object analysis, as put forward by Reid, is even more indefensible than Brown had, in the beginning, said it was.

(This debate, it may be remembered, is a very long and complicated one. It began with the publication of Brown's *Lectures* in 1820, was entered by Hamilton in 1830 with his *Edinburgh Review* article on "Perception," and again in his *Lectures* (delivered from 1837, published 1859–60) and in his edition of Reid's *Works* (1846), and was concluded by Ferrier's long review of this in *Blackwood'sMagazine* in 1847 (*Greek Philosophy*, vol. 2, pp. 407–59). As regards its complexities, a considerable part of it is taken up with a learned

argument as to who, if anybody, accepted what Reid calls "the ideal system." Our account, accordingly, is only rough and ready.)

But what, then, is the significance of this famous, or rather, notorious, controversy for the events which form the substance of our narrative? In one respect, indeed, it was very important, in that it was the means of bringing once again to the light those more difficult aspects of the problem of the external world which had constituted the original issue between Berkeley and Hume, and which Reid – almost deliberately, one might say – had kept in the background. Aside of this, however, the twenty-five years debate would seem to have contributed very little to philosophy, or even to have added to the confusion in certain ways. In the first place, concerned as it was with the question of the meaning of Reid's doctrines on the one part of the problem of perception on which he had very little to say, it offered very little guidance as to the meaning of his doctrine on the parts of the problem where he had a lot to say, and even perhaps had the effect of producing a general impression that there is nothing else to Reid's theory of perception but a few ambiguous or indefensible formulae. In the second place, while Brown uses the discussion of Reid as a means of making clear his own personal views on the point at issue, neither Hamilton's views about the problem, nor Ferrier's, are illuminated very much by their respective contributions to the Reid controversy.

Our notion, then, is that the debate about Reid is to be regarded as a by-product, and that, accordingly, serious misunderstanding will result if we read what Hamilton and Ferrier say about the belief in externality in general in the light of what they say about Reid. But let us illustrate the point by reference to the case of Ferrier. The amusing article on Reid in 1847 is, we must admit, a kind of manifesto in favour of Berkeleianism, and is, in fact, a deliberate attempt to reverse a trend which had been dominant since the days of Turnbull and the Rankenian Society. But the impression which we get there, and which we are apparently intended to get there, of Ferrier as being overwhelmingly Berkeleian, while being accurate enough so far as the major portion of his philosophical career is concerned, does not in the least hold good of the period we are discussing in this chapter, i.e. the very early period in Ferrier's life, when, in fairly close association with Hamilton, he was busy wrestling with the problem of belief in externality as it had been posed by Reid and Hume. Consider, for example, this extract from a footnote to a *Blackwood's* article of 1838.

> When the immaterialist or mentalist, then, comes forward, it is his business either to displace matter entirely, substituting "mind" in place of it. . . . [But] if he attempts [this], he involves himself in a mere play of words. If he maintains that all the *material* phenomena are in fact *mental* phenomena, he does nothing but quibble. The author of the "Natural History of Enthusiasm" has grievously mistaken the potency of this position. (See The *physical*(!) Theory of another life, p. 14.) It is plain, we say, that in this case the immaterialist resolves himself into a mere

> innovator upon the ordinary language of men. He merely gives the name of "mental" to that which other people have chosen to call "material." The *thing* remains precisely as it was.
>
> (*Greek Philosophy*, vol. 2, p. 48)

But now, if we follow up the reference and read pages 13–17 of Isaac Taylor's forgotten book, we find the thesis there sustained of a Berkeleian kind, to the effect that an independently existing external world might quite well be treated as an unnecessary entity, i.e. that one can't prove the existence of, and perhaps can dispense with, unperceived objects. In that case, it seems plain that Ferrier is here doing something which nobody would ever guess from his 1847 article on Reid – namely, accepting as in some sense conclusive against Berkeleianism the traditional objection about tampering with the distinctions of colloquial language.

Now Hamilton and Ferrier – to resume once more our main narrative – when they make their most serious attack on the question of externality, have Brown chiefly in mind, and accordingly we had better set forth shortly the doctrine on the subject which Brown develops in the course of his critique of Reid. In the first place, he accepts the notion common to Hamilton and Ferrier (at least, in those days), as also to Hume and Reid, that the belief in externality, as being a common sense belief, has to be accepted and respected as a *fact*, and he agrees moreover, with Reid and the others, that, if one is not to get rid of the belief in externality and regard it as nonsensical, one must make some sort of a distinction between sensation and perception. Now in his closer examination of the issue, it is, of course, taken for granted that in sensation there is no discernible distinction between the act and the object of feeling, and the only question at stake for him is whether the perception that accompanies the sensation differs from this latter in respect of its involving a distinction between act and object of sense, or whether on the other hand the perception is an inference, or perhaps intuition, of the external corporeal cause of the sensation. He goes on to argue that, in reference to the kind of cognition acknowledged on all hands to be a perception – the case of being aware of a solid external body on the occasion of feeling sensations of strain – the alleged act–object analysis is quite unmeaning and devoid of empirical foundation, whereas the alternative theory that speaks of a causal inference, or intuition, is quite legitimate. His great point is that in this latter case no mystery is involved, since the relationship of sensation to perception is, in that case, only the normal relationship of a *de facto* invariable sequence of sensation followed by belief as to the existence of something beyond corresponding to it. (See Brown's *Sketch*, pp. 125–6, for a particularly clear statement of this point.) Finally, he passes to the question as to whether this perception is to be regarded as an intuition, as Reid holds, or at least ought to hold, or as an inference, as he himself holds, or is inclined to hold. Brown, however, does not waste time on this last issue, since the decision of it, he tells us, depends mainly on one's attitude to the "reductive" theory of tactual

experience. The relevant point here is that, on the reductive view, the external body is something regarded as the cause of the sensations of strain, and described in the shape and size language rendered meaningful, in the first place, only by reference to the sensations of strain, but instinctively applied to the external, inferred counterparts of these strains.

We pass at once to Hamilton; and we must note, in the first place, that his discussion of the problem of the external world falls into two quite distinct parts. On the one hand, we have a set of arguments beginning in the 1831 article and continued in the *Lectures on Metaphysics*, written in 1837–8, which are chiefly taken up with a reply to Brown and which, so to speak, are concerned only with presenting a realist theory of perception; on the other hand, we have a long discussion in the notes to volume 2 of the *Works*, which, in a way, begins from where the *Lectures on Metaphysics* stop, but tries to elaborate a very different theory of perception. But now between these two parts there is a very decided gap; the second part is not intended as a sequel to the first part, there is no logical connection between the two, and the earlier discussion can be understood and profitably studied without reference to the later discussion.

Our first concern at this moment, for reasons that will appear later, is with Hamilton's earlier discussion in the *Lectures on Metaphysics*, and such parts of the notes to the *Works* of Reid which develop and clarify points already made, or almost made in the *Lectures*. Accordingly, let us begin with his criticisms of Brown. In the hands of Brown, "the distinction" between sensation and perception is, according to Hamilton, "superficial and manifestly of no import" (*Lectures on Metaphysics*, vol. 2, p. 105). His point here is that the distinction between sensation and perception does not serve the purpose for which it is introduced – that of doing justice to the fact of common sense belief in externality – when Brown's view of perception is adopted. The natural conviction of mankind in this case, Hamilton says, is that "the external reality itself is the object of which I am conscious in perception" (*Discussions*, p. 89) or, to quote a phrase of Hume's used by Hamilton, that "the very perception of sensible image is the external object" (*Discussions*, p. 95). Now what Brown does, Hamilton points out, is to admit one half of this natural belief – namely, the half asserting the existence of an external reality – and to reject the other half of it – namely, the half asserting the identity of the external reality with the object of perception. But surely this procedure, Hamilton argues, is illegitimate; if it is permissible to reject one half of a natural belief, it is surely equally permissible to reject the whole of it. In other words, James Mill would seem, in Hamilton's opinion, to be quite justified in taking over Brown's reductive theory of sight and touch, and in rejecting as a superfluity Brown's perceptual inference to a transcendent source of the sensations. In short, if one is going to be a reductionist at all, one might as well go all the way.

> This philosopher [Brown] denies an immediate knowledge of aught beyond the accidents of mind [i.e. the muscular strains]. The accidents

> which we refer to body, as known to us, are only states or modifications of the percipient subject itself; in other words, the qualities we call *material* are known to us to *exist*, only as they are known by us to *inhere in the same substance as the qualities we denominate mental*. There is an *apparent* antithesis, but a *real identity*. On this doctrine, the hypothesis of a double principle losing its necessity, becomes philosophically absurd; and on the law of parsimony, a psychological unitarianism is, at best, established.
>
> (*Discussions*, p. 98)

Now Hamilton's first step in defence of the "hypothesis of a double principle" would seem to be that of restating Reid's doctrine of a double object of experience in such a way as to elude Brown's criticisms of it. The position of Reid, it will be remembered, had been – to confine ourselves to touch – that, on the occasion of feeling muscular strains, I have experience of a solid shape. Then Brown had produced the retort that there are not two objects of experience here, but only one, namely the muscular strains, that our notions of shape, size, solidity are "logically constructed" out of the muscular strains, and that so far as a second or external object enters into the question it has to be regarded as an inferred object, or an intuited object, not an object of experiences. Now Hamilton does not, apparently, dispute Brown's criticism of Reid; according to him, too, nothing is experienced but the co-existence of muscular strains, and, although he takes a very different view of the nature of the co-existence from the one Brown takes, he is, even so, still left with only a single object. But here Hamilton goes on to differentiate himself sharply from Brown by drawing attention to a new aspect of the tactual situation; and whereas Brown would seem to regard the muscular strains that give information about shape and size as indifferent, i.e. neither pleasant nor painful, Hamilton explicitly and emphatically takes a very different view of them. Accordingly, for Hamilton, our tactual experience of the co-existence of muscular sensation has after all two aspects – one of them that of giving information about shape and size, and the other that of being agreeable or disagreeable – and in this way we get a double object – a subjective object or subject-object, and an objective object or object-object, to use Hamilton's peculiar terminology.

Hamilton was quite well aware that there are objections to this denial of indifference. "Whether such a state of indifference do ever actually exist; or whether, if it do, it be not a complex state in which are blended an equal complement of pains and pleasures, it is not necessary, at this stage of our progress, to inquire" (*Lectures on Metaphysics*, vol. 2, p. 437). However, as sometimes happens with him, he never seems to have set down his reasons for the opinion he formed on the point at issue, and all he does is merely to make it perfectly clear that the version he favours of the distinction between sensation and perception is founded on this denial of indifference.

> Cognition and feeling are always co-existent. The purest act of knowledge is always coloured by some feelings of pleasure or pain; for no energy is absolutely indifferent, and the grossest feeling exists only as it is known in consciousness. This being the case of cognition and feeling in general, the same is true of perception and sensation in particular. Perception proper is the consciousness, through the senses of the qualities of an object known as different from self; sensation proper is the consciousness of the subjective affection of pleasure or pain which accompanies that act of knowledge.
>
> (*Lectures on Metaphysics*, vol. 2, pp. 98–9)

So far, we have discussed only Hamilton's application of his formula to touch, and we must now go on to note that he claims an analogous relation exists in all the five senses. (See *Works*, pp. 883–4.) Now the crucial case here is that of sight, where, according to Stewart and Reid, the sensation–perception concomitance is not found, and, in order to exhibit more thoroughly than we have done the foundations of Hamilton's doctrine, we had better recall a passage in Stewart.

> It does not appear to me, that the impression of a *moderate* light on the *retina* is accompanied with any perception of the part of the body on which the impression is made. When the light, indeed, is so powerful as to produce *pain*, the case comes to be different, for a sensation of *touch* is then united with the proper sensation of *sight*; and it is characteristical of all sensations of *touch*, that they are accompanied with a perception of the *local situation* of their exciting causes.
>
> (*Collected Works*, vol. 4, pp. 309–10)

This passage exhibits pretty closely some of the chief opinions that the Hamiltonian version of the distinction between sensation and perception is intended to correct, and the relevant points to note are that Stewart in the first place regards a feeling of pain as a feeling of the same kind as a feeling of strain, and in the second place regards pains and strains as instinctively localised in the organ affected, and in the third place regards the experience of vision as normally indifferent. But now Hamilton, on the contrary, rejects as did Brown before him the notion that pains or strains are instinctively localised. It is indeed not a question explicitly touched on by him (though it is by Brown), but the grounds of his opinions are pretty obvious; instinct, it will be remembered, had been introduced by Reid to explain how *non-spatial* pains and strains come to be *localised*; and the need to postulate instinct accordingly disappears as soon as it is suggested that we are originally aware even of pains as in some way space-occupying. But, this being so, it becomes possible to reject the doctrine implied by Stewart above as to the existence of a certain discrepancy between tactual experience and visual experience, and to regard the relation of our tactual experience, and the strains therein, to our

knowledge of the hand as a body, as being in all respects parallel to, and just as empirical and non-instinctive as, the relation of our visual experience to our knowledge of the eye. But now, in the second place, the parallel between sight and touch does not stop here for Hamilton, but, in virtue of his denial of indifference, can be carried much further. The particular means of this advance would seem to consist in denying the thesis of Stewart that pain is a sensation of touch, that pain is, so to speak, severe strain; and in teaching, on the contrary, that pain (and pleasure) are distinct from but co-exist with awareness of strain just as, in much the same way, pain (and pleasure) are distinct from and co-exist with awareness of colour – or, to put the matter in a more precise and Hamiltonian way, that awareness of co-existent strains or of co-existent colours, as it involves awareness of outline, tangible or visible as the case may be, also is accompanied in both cases by feelings of the experience in question as agreeable or disagreeable.

Our account of Hamilton's reasons for holding this position is, to be sure, pretty conjectural, but that this is the sort of position he holds there can be hardly any doubt. The important point here is that there is a close connection between the doctrine studied here about sensation and perception and the doctrine studied earlier about the perception of space and outline, and that Hamilton's total programme (though not the mode of its elaboration) is clearly and strongly stated in those places in volume 2 of Reid's *Works* where he utters his final word on the subject. Here, for example, is a decisive quotation already introduced to explain Hamilton's point about the perception of space and outline, and how it varies in distinctness from sense to sense, and now relevant again to explain the relation of sensation and perception.

> If we take a survey of the senses, we shall find that exactly in proportion as each affords an idiopathic sensation, more or less capable of being carried to an extreme either of pleasure or of pain, does it afford, but in an inverse ratio, the condition of an objective perception more or less distinct.
>
> (*Works*, p. 863)

(We quote here only the first sentence. But there are many passages in the *Works* which reveal Hamilton's intention to produce a connected doctrine. See, for example, p. 880, column 1.)

We have now said enough about the foundations of Hamilton's doctrine about the co-existence of sensation and perception, and we must now go on to explain the particular aspect of his doctrine which he regards as especially novel and important. He introduces the matter by speaking of

> the ignorance of our psychologists in regard to the law by which the phenomena of . . . perception and sensation are governed in their reciprocal relationship. This law is simple and universal: perception and sensation, though always co-existent, are always in inverse ratio of one another.
>
> (*Lectures on Metaphysics*, vol. 2, p. 99)

To show what he means, we had better cite some of his illustrations. First, we will quote from his comparison of one sense with another.

> Hearing is . . . much less extensive in its sphere of knowledge or perception [e.g. about the whereabouts of events] than sight; but in the same proportion is its capacity of feeling or sensation more intensive. . . . concords and discords, in the one sense, affect us more agreeably and disagreeably, than any modification of light in the other.
>
> (*Lectures on Metaphysics*, vol. 2, p. 100)

The same sort of relationship as obtains between sight and hearing also obtains between the different avenues of tactual experience.

> In those parts of the body where sensation predominates perception is feeble; and in those where perception is lively, sensation is obtuse. In the finger points, tactile perception is at its height, but there is hardly another part of the body in which sensation is not more acute.
>
> (*Lectures on Metaphysics*, vol. 2, p. 101)

So much, then, for the exploration of the generality of Hamilton's principle. But if we are to understand its relevance or alleged relevance to the problem of belief in externality, we must go on to study Hamilton's further claim that "the analogy which we have seen to hold good among the several senses in relation to one another prevails likewise among the several impressions of the same sense." The case Hamilton takes is the sense of sight, and he begins stating, more accurately than hitherto, the facts that give rise to his law. Perception and sensation, he points out, do indeed vary inversely but this variation takes place only in certain limits, and the business before us is to make clear just what these limits are.

> It cannot certainly be said that the minimum of sensation infers the maximum of perception; for perception always supposes a certain quantum of sensation: but this is undeniable, that, above a certain limit, perception declines, in proportion as sensation rises. Thus, in the sense of sight, if the impression be strong we are dazzled, blinded, and consciousness is limited to the pain or pleasure of the sensation, in the intensity of which, perception has been lost.
>
> (*Lectures on Metaphysics*, vol. 2, p. 102)

Now here, in this visual experience where we are aware only of being pained by the dazzle and brightness, and where we get no knowledge of the colour of things, let alone their outlines, sensation is at its maximum, and perception has disappeared altogether. In this way, we fix one of the limits within which the two vary, and the next thing to do is to fix the other limit. In order to do this, Hamilton proceeds in this way, analysing ordinary visual experience.

Sight is cognisant of colour, and, through colour, of figure. But of course there can be perception, Hamilton implies, of colour as well as of figure; for example, we can get the information that the colour of this thing is brighter than or matches the colour of that, as well as the information that the shape or size of this thing is so and so, compared with the shape and size of this other thing. But all the same,

> in the vision of colour, there is more of sensation, in that of figure, more of perception. Colour affords our faculties of knowledge a far smaller number of differences and relations than figure; but at the same time, yields our capacity of feeling a far more sensual enjoyment.
>
> (*Lectures on Metaphysics*, vol. 2, p. 102)

His main point here is that, "though figure is known only through colour, a very imperfect cognisance of colour is" sufficient "for a clear and distinct cognisance of figure," and the impression in general conveyed by the discussion is that for Hamilton visual perception is at a maximum and visual sensation at a minimum when one is getting information by sight about the relations of figures which are in black and white, and in which therefore the distraction of colour is as far as possible removed.

Here we will try to make Hamilton's point clearer still by citing, first, another statement from him of his general point, and then by showing how the two contrasting extreme cases appear, in the light of his general point.

> Although we can only take note of, that is perceive, the special relations of sensations, on the hypothesis that these sensations exist; a sensation, in proportion as it rises above a low degree of intensity, interferes with the perception of its relations, by concentrating consciousness on its absolute affection alone.
>
> (*Works*, p. 880)

Apparently, the cases covered by "perceiving the special relations of sensations" are, in the case of sight, those both of getting information about colour-relations, and of getting information about shape, size, etc., and it is in this latter case that perception is at its maximum.

> Where the objective element predominates, – where matter is known as principal in its relation to mind, and mind only known as subordinate in its relation to matter, – we have perception proper rising superior to sensation; this is seen in the Primary Qualities.
>
> (*Lectures on Metaphysics*, vol. 2, p. 115)

It is to be noted that by "mind" here Hamilton intends to refer to pains and pleasures, i.e. to what he comes to call "subject-objects" – i.e. objects not regarded as independently existing. So much for the one extreme. The other

extreme is apparently reached when the perception of what Hamilton calls "the special relations of sensations" is abolished through the intensity of the sensations, as when we are dazzled. "Consciousness is limited to the pain and pleasure of the sensation, in the intensity of which perception has been lost." That is to say, we have only a subject-object here, not a subject-object plus an object-object. Perception, then, disappears, but not, Hamilton is careful to state, knowledge. "The grossest feeling exists only as it is known in consciousness" (*Lectures on Metaphysics*, vol. 2, p. 98).

For the sake of clarity, it might be as well to illustrate more carefully what we take to be Hamilton's meaning. We awake in the middle of the night in a dark room, and we switch on the light. Now, in this situation, the tactual side of our experience remains constant; and our tactual sensations are accompanied by and, indeed, overshadowed by our tactual perceptions; but, by contrast, in the first moments of switching on the light there is no correspondence between our visual experience and our tactual experience, and the difference could be put in Hamiltonian language by saying that we have visual sensations – the experience of being painfully dazzled – but no visual perceptions, i.e. no visual information about shape, sizes, places.

It might be as well to show how the same pair of extremes is found in tactual experience. For this purpose, we will have to go back to Reid, who, for the matter, cites most of the facts Hamilton cites, without, however, trying to relate them systematically.

> If a man runs his head with violence against a pillar, . . . the attention of the mind is . . . entirely turned towards the painful feeling; and, to speak in the common language of mankind, he feels nothing in the stone, but feels a violent pain in his head. It is quite otherwise when he leans his head gently against the pillar; for then he will tell you that he feels nothing in his head, but feels hardness in the stone. Hath he not a sensation in this case as well as in the other? Undoubtedly he hath; . . . but . . . he cannot, without great difficulty, attend so much to the sensation as to be persuaded that there is anything distinct from the hardness it signifies.
>
> (*Works*, p. 120)

Now in order to come at last to the point, and to grasp the bearing of all this analysis on the problem of belief in externality, we must remember that Hamilton has chiefly Brown in view throughout. In his Lecture 24 – the one we have been expounding – Hamilton sums up the position thus.

> Brown . . . misstates the phenomenon, when he asserts that, in perception, there is a reference from the internal to the external, from the known to the unknown. That this is not the fact, an observation of his phenomenon will at once convince you.
>
> (*Lectures on Metaphysics*, vol. 2, p. 106)

Hamilton's intention then is to show that the fact of experience in question involves not, as Brown claims, our being aware immediately of one object, and our believing the existence of a second object outside experience and inferred, but rather our being immediately aware of two objects, one of which is not regarded as independently existent, and another – the object of perception, i.e. the shapes – which is regarded as external, and distinct from the act. But now while it is by a comparison of what we have called the extreme cases that the facts about the object of perception are most clearly brought out, nevertheless a reference to these extreme cases would, taken by itself, prove nothing except when viewed in the light of the whole preceding argument. Accordingly, Hamilton sums up his position by saying that his inverse law is meant to defend, especially against Brown, the intuitive theory of perception, i.e. the theory that "in this act [of perception] I am conscious of myself as the perceiving subject, and of an external reality as the object perceived."

Here we had better look at Hamilton's own account of his position.

> That the doctrine of an *intuitive* perception is not without its difficulties, we allow. But these do not affect its possibility; and may in a great measure be removed by a more sedulous examination of the phenomena. The distinction of *perception proper* from *sensation proper*, in other words, of the *objective* from the *subjective* in this act, Reid, after other philosophers, has already turned to good account; but his analysis would have been still more successful, had he discovered the law which universally governs their manifestation [i.e. the law of inverse ratio].
>
> (*Discussions*, p. 68)

In this passage, Hamilton perhaps overemphasises what he has in common with Reid, and it would probably be more accurate to present their relationship thus. On the one hand, there is certainly an analogy between Reid's point against Hume, that the object of perception believed to be external by common sense can be isolated by contrasting the cases where we experience nothing but twinges, or strains or pains (*Works*, pp. 125–6), and the case where we experience these strains or twinges *plus* a solid shape, and Hamilton's point against Brown that the object of perception believed to be external by common sense can be isolated by contrasting the case where I am aware of nothing but sensations – for example, of the painful dazzling brightness or (as in carrying a very heavy object) of the painful strain, and the case on the other hand where I am aware of sensations *plus* perception – for example, both see the things in the room, and feel, at the same time, the disagreeableness of the colour scheme. But on the other hand, it is obvious that Hamilton's version of the distinction between sensation and perception is as much a criticism of Reid as of Brown, and, indeed, amounts to a pretty complete revisal of Reid's position in the light of Brown's criticisms of it – that is, of the facts brought to light in Brown's attempt at reductive analysis.

We must now pass to the second and more interesting part of the

discussion in Hamilton's *Lectures on Metaphysics* – that is, we now leave Lecture 24 on the *distinction between sensation and perception*, and pass on to Lecture 25 on *objections to the doctrine of natural realism*. So far as he has gone, Hamilton has been analysing the ordinary consciousness, and arguing that, for all the avenues of sense, there are two objects of experience: the one, feelings of pleasure and pain, regarded as subjective or internal to our act of consciousness; the other, the outline or situation of things, regarded as objective, or external to (distinguishable from) our act of consciousness. But, at this point, Hamilton has to face the objection of Brown that, if the facts of common sense are such as Hamilton represents them to be, then common sense is deluded and false, that these outlines and shapes, so far as they are objects of experience, must have the same kind of status as pains and pleasures, and that, in fact, the alleged sharp distinction between act and object of mind has no foundation whatsoever.

In order to understand Hamilton's point of view about this sort of problem, we had better look at Chapter 25 as a whole. When we do this, the most striking and distinctive feature is that Hamilton takes very seriously this sort of objection – the objection, that is, that insists in regarding perceived shapes as "modifications of mind," i.e. as having the same status as pains – and, by contrast, does not take seriously at all the other standard objection to realism, the objection, that is, that insists on the discrepancy between the real shape and size on the one hand, and the visible and the tangible shapes and sizes on the other. Or rather, to put this point in a somewhat more accurate manner, the characteristic turn Hamilton gives to the discussion is that he is prepared to be "positivistic" about this latter difficulty, provided he can make a stand against "positivism" on the former difficulty.

But here we had better explain what we mean by asserting that Hamilton seems to be, to all intents and purposes, a positivist on one side of the question. In fact, Hamilton does not explain himself very much on this topic of shape and size at all, but in so far as he sets aside as frivolous the objection that common sense is deluded, because the visible size is not the same as the real size – the size believed in by common sense – his point probably is that, so far as experience is concerned, real size and shape are a "logical construction" out of tangible and visible size and shape; that, for example, in pronouncing the cavity in one tooth to be really bigger than the cavity in another, we are claiming to have felt the size of both cavities with the same visible finger, and not claiming to have felt the size of the one with this visible finger, of the other with a visible toe. This sort of topic, indeed, is not one which Hamilton ever dwells on in detail, in the way Ward was later to do, but the solitary quotation of Hamilton's on the subject, once it is translated into more intelligible language, would seem to suggest that he does not regard a "positivistic" treatment of this side of the subject as being out of place in a defender of common sense belief. The quotation is this:

> The primary qualities of things external to our organism . . . we only learn to *infer*, from the affections which we come to find that they determine in our organs; – affections which, yielding us a perception of organic extension, we at length discover, by observation and induction, to imply a corresponding extension in the extra-organic agents.
>
> (*Works*, p. 881)

What he appears to be saying here is first that "neither sight nor touch gives us *full* or *accurate* information about real shape and size," and second that this information about real shape and size is got by "observation and induction," i.e. by comparing the size and shape of a thing as revealed in experience with the help of one empirically known organ of sense, with the shape and size of the thing revealed in experience on the same occasion with the help of another empirically known organ of sense. That is to say, the *inference* spoken of above would seem to be the same thing as the *observation* and *induction* spoken of later in the same passage, and so, from first to last, the process of discovering real shapes and sizes would seem to be a process concerned with noting uniformities holding, in the respects indicated, between objects of sight and objects of touch.

But let us try to make this same point in another, and perhaps more accurate, way. Hamilton, we may note, takes up much the same attitude as Reid does to Hume's difficulty that "the table which we see seems to diminish, as we remove further from it; but the real table which exists independently of us suffers no alteration." Reid, we may remember, dismisses this difficulty on the grounds of its arising from Hume's failure to distinguish the visible size from the real size, the size for common sense. But Hamilton, we find, does much the same thing. "This objection to the veracity of consciousness will not occasion us much trouble. Its refutation is, in fact, contained in the very statement of the real, external object of perception" (*Lectures on Metaphysics*, vol. 2, p. 131). But now Reid, it will be remembered, goes on to complete this approach to the matter by adopting a very "sophisticated" or, if you like, "positivistic" view of the relation of the common sense size to the visible size. Presumably, therefore, Hamilton's line is pretty similar to Reid's, in this latter part of the problem too, with, of course, the difference that, whereas for Reid the only problem is that of the relation of visible size and shape to real (= tangible) size and shape, Hamilton has to consider the relation to real size and shape not merely of visible size and shape, but of tangible size and shape.

Here, however, we had better take steps to prevent this last statement of ours about the relations of Reid and Hamilton being misunderstood. It would indeed seem natural to regard Hamilton as following Reid on this point, because the doctrine of the one is pretty much parallel to the doctrine of the other. However, it is very likely the case that Hamilton is not indebted to Reid here; the proof of our assertion here lies in the fact that Hamilton has apparently no idea as to how "sophisticated" Reid is on problems like this. For

example, Hamilton several times quotes as an instance of Reid's naivety a statement of his that "when ten men look at the moon they all see the same individual object" (*Lectures on Metaphysics*, vol. 2, p. 158). Reid, in fact, however, did insist very explicitly that "the visible appearances are innumerable when we confine ourselves to one object" (*Works*, p. 304), and, accordingly, while he sees no reason to disavow the common sense account of seeing the moon, he argues explicitly in favour of his right to interpret that statement of the plain man in a "philosophical" way.

This failure to appreciate Reid's point is, we may remark, a very noticeable feature of the phase of the philosophical movement we are considering. The fact is that both Hamilton and Ferrier are strangely unsympathetic to "the apostle of common sense," as Ferrier calls him, and tend to underrate him very much. No doubt, this attitude taken up to some extent by Hamilton and even more by Ferrier is understandable enough in view of the fact that the really hard part of the problem of the external world had been almost deliberately set aside by Reid. But, all the same, the tendency was brought into being by them, and more especially by Ferrier, to suppose that because there is nothing good in Reid on one aspect of the problem of externality, there is nothing good in Reid on the problem of externality at all.

Here let us pass abruptly to Hamilton's discussion of this latter aspect of the problem, the aspect concerned with externality and independency. His position on this new problem is probably best understood in the light of his position on the part of the problem just treated. That is to say, in order to appreciate his point of view, or what seems to have been his point of view, we had better in the first place regard him as setting aside real shape and size as constructions or inferences, and in the second place regard him as concerned solely with visible sizes and shapes, and tangible sizes and shapes. That is to say, the fact giving rise to the great problem in Hamilton's case – to repeat quotations given earlier – is the fact that, in Hume's words, the very perception or sensible image is believed to be the external object, or that, in Hamilton's own words, the external reality itself is believed to be the object I am conscious of in perception. The belief in question here is of course the plain man's irresistible natural belief, and the question at issue is whether this belief can be justified, or at any rate whether this belief can be defended against objections.

The problem facing Hamilton here is a generalised form of the problem facing Reid in the case of sight, and, by reference to Reid's discussions, it is easy to show that the problem has two parts to it. On the one hand, there is a question touching the foundations of the common sense belief that the object of sense is beyond its respective organ of sense, and is external; and on the other hand, there is another question touching the foundation of the common sense belief that the object of sense in question isn't an object with the status of pain or pleasure, and, in other words, that the object of sense is distinct from the act of sense. That is to say, there is the problem, which Reid discussed especially with reference to sight but also with reference to

touch, of the relation of the object of sense to the material impression on the organ, and there is also the problem, which Reid is aware of, but omits altogether to discuss, of the validity of the notion of distinct existence, so far as distinct existence implies a reference to transcendence or existence beyond sense.

Now Hamilton's treatment of the total issue here is most easily comprehended by means of a comparison with Reid's treatment of the parallel issues. (Indeed, it may be remembered here that not merely Hamilton, but also Ferrier, very often begins to appear incomprehensible and even eccentric except when viewed in relation to their background, and especially to Reid, and that, in consequence, Hamilton and Ferrier were unwittingly preparing the way for their own oblivion, by treating Reid as if he were of very little account, and even (in Ferrier's case, anyway), by wanting to discourage the study of Reid altogether.) If, then, we look at Hamilton's discussion of the problem of the external world in the light of Reid, the case stands pretty much as follows. With the second part of the problem, how can we become aware of the objects of sense like visible shapes as being independent of sense? How in short can we become aware of *shapes existing unperceived*? Hamilton, we may say, deals in a much franker and fairer manner than often happens in the case of other champions of common sense, and speaks out where Reid is silent. On the other hand, with the first part of the problem, the part in which Reid is very much at home, Hamilton does not by any means do well, and his remarks on that head are *at first sight* full of confusions and even contradictions. A quotation from Ferrier will show the confusions into which Hamilton got here. It is from the letter, written in 1851, but (perhaps, understandably) never actually sent.

> My Dear Sir William,
>
> There is an ambiguity or inconsistency in your doctrine . . . which I have often intended to speak to you about. You say [*Works*, p. 805], "In a presentation or immediate cognition there is *one sole object*." What is this one sole object? Our organism, you answer. From which it of course follows that everything beyond our organism is a mediate object of cognition. This is indeed expressly admitted. "The primary qualities of things external to our organism we do not perceive – i.e. *immediately know*" [*Works*, p. 881]. And yet, in the face of this statement, I read, "The primary qualities of matter or body, now and here – that is, in proximate relation to our organs – are objects of immediate cognition to the natural realists" [*Works*, p. 810]. These two statements are absolutely contradictory and irreconcilable. Of course, the primary qualities, when "in proximate relation to our organs" are, therefore, according to passage in p. 881, *not* immediately known; and yet, according to passage in p. 810, they "*are* objects of immediate cognition to the natural realist." Does not this require some amendment?
>
> (*Greek Philosophy*, vol. 2, pp. 542–3)

Hamilton was undoubtedly very confused on this whole subject but a few more quotations will show that he was struggling with a quite difficult point. Let us begin by showing, in the first place, that he understood pretty well the grounds given by Reid and Stewart for regarding as justifiable the plain man's belief of the object of sense as being beyond the organ of sense.

> We must be careful not . . . to confound the perceptions [visual] of mere *externality* or *outness*, and the knowledge we have of *distance*, through the eye. The former may be, and probably is, natural; while the latter, in a great but unappreciable measure, is acquired. In the case of Cheselden . . . the patient, though he had little or no perception of distance, i.e. of the *degree of externality*, had still a perception of that externality absolutely. The objects, he said, seemed to "touch his eyes, as what he felt did his skin"; but they did not appear to him as if in his eyes, far less as a mere affection of that organ.
>
> (*Works*, p. 177)

It should be mentioned in passing that, in the course of this passage, Hamilton mentions Reid as differing from him on this point. But Hamilton, exaggerated the differences, and is silent about like areas of agreement. He, as so often happens, is unaware of his own relationship to Reid. The fact is rather that Reid generally (though not in the actual passage Hamilton is commenting on) takes up a position like Hamilton's, and that, moreover, this very passage from Hamilton would seem to derive from a passage already quoted in which Stewart restates Reid's position in opposition to some views expressed by Adam Smith about this aspect of the Cheselden case.

But, in the second place, Hamilton not merely coincides with Reid and Stewart as regards the general thesis that the object of vision is seen as external to the eye; he also understands and appreciates one of the reasons given by Reid in defence of this position. The passage in Reid is one already quoted. "Nothing can be more unphilosophical" than the identification of the object of vision with the pictures on the retina. "This notion hath no foundation in fact and observation" because the images found in the bottom of the eye "are not perceived at all or felt by the mind." Now Hamilton, instead of indulging in his usual practice of making unsympathetic and sometimes unnecessary objections to Reid, here writes a footnote commending and developing the above remark. "This [the perception of the retinal images] would require a second eye behind the retina; which eye would see the images as bent, as they are pictured on the concavity of that membrane." Accordingly, therefore, Hamilton understands quite well Reid's line of objection to the Adam Smith position.

Hamilton, then, agrees on this point more or less with Reid and Stewart, and the point which brings on his head difficulties that did not trouble them is a point previously dwelt on at length, namely that Hamilton, unlike Reid

and Stewart, takes very seriously the evidence indicative of an identity between the objects of sense and the material impression on the organ in the nervous system. That is to say, Hamilton's difficulties, in our opinion, arise from the fact that, whereas he understood the arguments already mentioned in favour of the common sense belief of the object of vision as beyond the eye, he also understood and took seriously the arguments – explained much earlier in this chapter – in favour of putting the object of vision in the eye. In a word, Hamilton very likely did not find a means of reconciling the two different pieces of evidence.

But let us be more precise. The difficulty here is that of reconciling the evidence derived from within, i.e. from one's own vision, and the evidence derived from without, i.e. from one's other senses or from physiology, on the question of the relation of the object of sense to the organ of sense. Now the interesting point is that, originally, Hamilton was as little troubled by this difficulty as were Reid and Stewart. That is to say, the sympathetic account of the doctrine identifying the object of sense with the material impression on the organ or with the events in the sensitive nerve is given in volume 2 of the *Works*, the section of the work which apparently was written latest. In earlier writings, the *Lectures on Metaphysics* or the footnotes to volume 1 of Reid's *Works*, Hamilton would seem to be unaware of the difficulty, and to have accepted the opposite view.

Let us quote a footnote from Reid's *Works*, which indicates Hamilton's earlier position.

> The image on the retina is not itself an object of visual perception. . . . The total object of visual perception is thus neither the rays in themselves, nor the organ in itself, but the rays and the living organ in reciprocity: this organ is not, however, to be viewed as merely the retina, but as the whole tract of nervous fibre pertaining to the sense. In an act of vision, so also in other sensitive acts, I am thus *conscious* (the word should not be restricted to self-consciousness,) or immediately cognisant, not only of the affections of self, but of the phenomena of something different from self, both, however, always in relation to each other. According as in the different senses, the *subjective* or the *objective* element predominates, we have *sensation* or *perception*.
>
> (*Works*, p. 160, in a footnote to the text of Reid's *Inquiry*)

Now the doctrine given here is nothing but a fuller statement of the doctrine of the *Lectures on Metaphysics*.

> To say . . . that we perceive by sight the sun or moon, is a false, or an elliptical expression. We perceive nothing but certain modifications of light in immediate relation to our organ of vision; and so far from Dr. Reid being philosophically correct, when he says that "when ten men look at the sun or moon, they all see the same individual object," the

> truth is that each of these persons sees a different object, because each person sees a different complement of rays, in relation to his individual organ. . . . It is enough that perception affords us the knowledge of the non-ego at the point of sense. To arrogate to it the power of immediately informing us of external things which are only the causes of the object we immediately perceive, is either positively erroneous, or a confusion of language, arising from an inadequate discrimination of the phenomenon. Such assumptions tend only to throw discredit on the doctrine of an intuitive perception; and such assumptions you will find scattered over the works both of Reid and Stewart. I would therefore, establish as a fundamental position of the doctrine of an immediate perception . . . that all our senses are only modifications of touch; in other words, that the external object of perception is always in contact with the organ of sense.
> (*Lectures on Metaphysics*, vol. 2, pp. 153–4)

To understand the point of these passages, we must recall the original question: is common sense justified in its natural tendency to regard the shape seen or felt as being external, in the sense of beyond or outside the organ of sense? According to Hamilton's notions, the point at issue here is something like this: on the one hand, we perceive a visible shape, and feel certain agreeable, though faint, sensations; on the other hand, as we learn from physiology or with the aid of another sense, light rays are proceeding from a certain body to the eye, and there is a consequent agitation in the optic nerve. But, this being so, is the plain man justified in regarding the shape seen as having its counterpart in the phase of the external process that occurs prior to the nervous disturbances? To this question, Hamilton replies that there is no reason to suppose the retinal image is the object of vision, and that there is nothing to prevent us regarding the light rays in their impingement on the eye as the external counterpart of the object of visual perception, and the disturbance in the nerves as the external counterpart of visual sensation. The common sense belief, he concludes, is quite justified.

This, then, is the kind of view we find in the *Lectures on Metaphysics* and in the footnotes to volume 1 of Reid's *Works*. It does not, it may be noted, differ very greatly from the view taken by Reid and Stewart. Hamilton, indeed, is very fond of drawing attention – as in the above passage – to the points of difference between himself and his masters, but, from an external point of view, i.e. for people who are outside the common sense "school," the differences are not very important ones.

Now, some time after the lectures were written, there seems to have arisen, out of the attempt to answer systematically Brown's reductive theory, a line of speculation tending towards the identification of the object of sense with the material impression on the organ, a line of speculation already described early in this chapter. As regards the dating, the facts are that there is no mention in the *Lectures on Metaphysics* of the doctrines in question here, or of

the terminology adapted to them, and that the first reference to this new development occurs in the 1842 article of Ferrier, where he speaks as if he were almost collaborating with Hamilton. It is only in volume 2 of Reid's *Works* (published with volume 1 in 1846, but presumably written later than were the contents of that volume) that Hamilton announces his version of the position, and it may be noted that his most emphatic statement is found in the passage where, taking for granted the identification of the object of sense with the processes in the organ of sense, he asks whether the nervous processes to be thus identified are those at the centre or the periphery (*Works*, p. 861).

However, we need not repeat our account of this part of the theory all over again, and in any case the position is clear enough. The plain man regards the object of sense (say, the visible shape) as being beyond the organ and external, and the question arises as to whether this belief is justifiable. But as the result of these new developments, Hamilton now has to say that physiology, i.e. the evidence about the sensory processes in question from the outside, instead of identifying the object of vision with light rays entering the eye, identifies the object of vision with processes in or behind the eye. This being so, it is obvious that, according to the standard of justification adopted, the plain man's beliefs about the externality of the object of vision are delusive, and accordingly the question arises as to whether a new way can be found of defending common sense.

The important thing for our purpose here is that the theory of perception found in Hamilton's official statement of his position in volume 2 of Reid's *Works* is probably best regarded as an attempt to get round this difficulty by means of a new defence of common sense, and, in any case, is utterly different from anything found on the subject in the *Lectures on Metaphysics*. Here is a summary statement of it.

> In Perception proper, the object-object perceived is, always, either a *Primary* quality, or the *quasi-Primary* phasis of a Secundo-primary. The Primary qualities are perceived as *in our organism*; the Quasi-primary phasis of the Secundo-primary as *in correlation to our organism*.
>
> (*Works*, p. 881)

Now the new defence of common sense is to be found in these references to *Secundo-primary* qualities, and a longer quotation will begin to bring home Hamilton's point.

> I hold . . . that, on the one hand, in the consciousness of sensations, out of each other, contrasted, limited, and variously arranged, we have Perception proper, of the primary qualities, in an externality to the mind, though not to the nervous organism, as an immediate cognition, . . . and, on the other, as a correlative contained in the consciousness of our voluntary motive energy resisted, and not resisted by aught within the limits of mind and its subservient organs, we have a perception proper of the

> secundo-primary quality of resistance, in an extraorganic force, as an immediate cognition, and not merely as a notion or concept, of a resisting something external to our body.
>
> (*Works*, p. 883)

It is easy to understand, in a very general way, what Hamilton's point is here. It is impossible, he concedes, to uphold the common sense belief in the object of vision as, in any way, beyond the eye, or the object of touch, as beyond the organ of touch. Even so, might it not be possible, he wonders, to uphold, in a limited way, the common belief about being aware of existence beyond the organ, by conceding that, in a special, but very important, case of the awareness of resistance to our voluntary motion, we are actually aware of something, i.e. of an existence beyond the organ? Of course, our awareness of this external something cannot, he concedes, be sensuous awareness, since there is no going against the fact that the object of sense – the coloured or solid shape – is to be identified with the organ, and the nervous processes therein. But could not one claim, in this special case, a non-sensuous intuition?

Obviously this is not going to be a very easy theory to defend, or, for that matter, understand, but, fortunately, Hamilton, in this case, gives a fairly ample indication of his intentions. As he seems to have viewed the matter, there are two separate difficulties he has to get over. The first concerned of course the claim about non-sensuous intuition in general, and what he wants to prove here is that we have information about our voluntary movements impossible to derive from sense. But, of course, it is not enough to establish even this fact; one must also produce some evidence that, granted an intuition of some sort here, this intuition gives us what we want – namely an intuition of an extra-organic existence.

A word of introduction is necessary about the sources of Hamilton's answer to the first difficulty, since, apart from his reference to a source, or rather an analogous and antecedently published doctrine with which he admits acquaintance, this part of Hamilton's teaching would be difficult to follow. In the first place, we had better have the facts, most of which are important only for dating purposes. Hamilton made his first brief mention of his doctrine of the inverse relation of sensation and perception in 1830; in 1834, he received from Victor Cousin a copy of a book by Maine de Biran containing a similar theory, but did not, he gives us to understand, notice the parallel; in 1840, he saw, in Ravaisson's review, in the *Revue des Deux Mondes*, of the French translation of his own *Edinburgh Review* articles, a notice not merely of the parallel between de Biran's and his own doctrine of sensation and perception, but – what is really of importance here – an account, which has, in some sort, become a classic of French philosophy, of the relationship, in general, of Maine de Biran to de Tracy, and through de Tracy to Condillac. (This information is given in, and, where not given, surmisable from, Hamilton's fairly full account of the matter in volume 2 of Reid's *Works*, p. 888.) In the second place, we must show the bearing of all this on Hamilton's defence of

intuitionism. The important fact here is that, just as Brown's treatment of the problem of the external world derives from de Tracy's, as Hamilton frequently mentions, so Hamilton's second or later theory of the external world (the one we are discussing here) is admitted by Hamilton to be very close to Maine de Biran's reply to de Tracy, at least so far as the defence of intuitionism is concerned, i.e. so far as the first part of the theory is concerned (*Works*, p. 866: "the preceding doctrine coincides, in result, with what M. Maine de Biran has so ably developed").

Here we will give an account of the doctrine in question which is less indebted to Hamilton's brief remarks than to M. Henri Gouhier's restatement of Ravaisson (Maine de Biran, *Oeuvres choisies*, pp. 28–33). Take the experience of pushing at a stiff door, so as to open it. One sees, of course, one's hand in contact with the door, and one feels the flat surface of the door against one's hand. But now, according to Brown and Hamilton, as also to de Tracy and Maine de Biran, the object of touch here, the door, has its counterpart in the visual field, not in the visible door, but in the visible hand. That is to say, nothing is felt but co-existent muscular strains, and there is no question in the present part of the argument of the claim arising that the object of touch or pressure is in any way beyond the hand. The sole question here is whether or not in being aware of the fact of my hand's pressure against the door we have to do only with the intimations of sense, as Brown and de Tracy claim, or whether there also enters into the situation certain intuitive intimations as Hamilton and de Biran claim. In order to see the point of the empiricists here, let us recall Brown's analysis of this experience: all that happens here, he says, is that we find by experience that a desire to experience the unfolding of a customary series of muscular strains is followed only by the partial unfolding of the customary series in question, i.e. that the only thing to occur in the experience of pressing one's hand against something is the stopping short of its usual length of the chain of sensations. But now, according to Hamilton and Maine de Biran, this sort of analysis is not at all adequate to the common sense facts of the case, i.e. to the fact, namely, that I would normally describe myself as "making an effort" on such occasions to force the door open. That is to say, the total fact to be explained is that I desire to extend my arm (to experience the complete evolution of a customary chain of muscular sensations), make the effort to fulfil the desire, and find, despite my efforts, the chain of sensation will not completely unroll itself. But now Brown's analysis does nothing to explain these facts of effort, and indeed he refuses, without giving any reason, to admit the distinction, relevant to these facts, between will and desire. (See *Works*, p. 531.)

But the role of this "effort" in voluntary movement is most clearly seen, not where I am pushing against a door, but simply where the desire to stretch out the arm is followed by the stretching out of the arm, i.e. where there is no external impediment to its movement. In this case, I have, according to the common sense statement of the matter, to make sometimes greater efforts, sometimes lesser efforts to carry out the desire, that is to say, here too I am

aware of resistance to my efforts, and in this case the object resisting my efforts can be described only as something in the organism, i.e. this chain of muscular sensations, or other connected muscular strains, are felt as containing the impediment. But, in view of this fact, it is quite proper to distinguish my will – the source of these efforts of mine to make the organism move – as hyperorganic, the word being introduced by Maine de Biran, and adopted by Hamilton (*Works*, p. 864).

Now let us note carefully where the argument has led us. The first point established is, strictly speaking, that this technical phraseology about there being evidently in myself a hyperorganic force opposed to an organic force is not an arbitrary innovation, but is rendered inevitable by the facts of common sense and ordinary language. The second point established is that this "hyperorganic force" is left out of account by Brown and by de Tracy, and is not directly at any rate explicable in terms of feelings of desire and aversion, and feelings of muscular strain – in terms of the data cited by the empiricists. Accordingly, the conclusion of Hamilton and de Biran is that, for the present and pending the rise of counter-arguments, it is quite legitimate to regard our knowledge of this fundamental aspect of ourselves as non-sensuous.

In order to pass from the first part of Hamilton's argument to the second, we will have a quotation from M. Gouhier.

> The typical example of the "fait primitif" is not the effort to raise a burden or break a stick, that is to say, the experience of a conflict between two forces, the one internal, the other external. The muscular effort gives me the feeling of a force that deploys itself against a resistance, of a hyperorganic force which deploys itself against an organic resistance, without any reference to an external object; the two terms are interior; their opposition is not in any manner that of the subject to the object, but that of the active to the inert, and of the one to the multiple.
>
> (Maine de Biran, *Oeuvres choisies*, pp. 31, 32)

Hamilton has no quarrel with the position as so far stated, and would be willing enough, in a provisional way, to regard, with de Biran, the organic and the hyperorganic as related, so to speak, as non-ego, and ego. The difference between Hamilton and de Biran arises rather on the question whether this statement of the case is, to any extent, compatible with a realism like Reid's. De Biran, here, for his part – as is evident from quotations from his letters to Ampère – thinks not, and regards Reid as attempting the impossible in his distinction of the object of sense from the act of the sense. Hamilton, very naturally, would like to think otherwise, since obviously, if he gave up the claim to know directly existence outside the body and beyond the organ of sense, he would be giving away his case, on this vital point at least, to Brown, and would be making external reality inferential.

Let us define this part of the problem as Hamilton saw it, and, for that purpose, go back to the case of making an effort to push the door open. The

fact here, according to the above analysis, is that there is myself making the effort (i.e. the hyperorganic, intuitable non-empirical force) to prolong beyond a certain point a series of muscular strains and not succeeding. Now, so far as we have gone, it is obvious that my experience of the door and my hand against it is definable wholly in terms of co-existent muscular strains, and that the experience of the door's resistance to the arm's movement is as much an experience of the organism or muscular strain as is the experience of the arm's unimpeded movement. Hamilton, however, in trying to get a way round the difficulty, is struck by the idea that, if there is evidence for the intuitive, the non-sensuous knowledge of a hyperorganic force, there might be somewhat analogous evidence for the intuitive, non-sensuous knowledge of an extra-organic force. Now, as a matter of fact, Hamilton thought that he had found some quite solid evidence confirming this notion of his in the experimental data cited by Sir Charles Bell in support of his discoveries in physiology, that the spinal nerves are the organs of motion through their anterior roots, of sensation through their posterior. As regards the cases which interested Hamilton, these were all cases of paralysis where the sensation nerves were out of action, but the motor nerves were not, i.e. where the patient was able to move his arm, to push things and to grasp things without feeling any of the so-called muscular sensations, or the cutaneous sensations, i.e. where the patient had no notion of the object pushed or grasped as a solid tangible shape with a certain tangible size, and yet, apparently, was aware of the effort to move (the hyperorganic force) and of a force resisting these efforts. But now, these being the facts as cited by Bell, the inference Hamilton draws from them is that this knowledge of a counter-force to my efforts, being admitted to be in no wise a knowledge of a tangible shape, hard or soft, i.e. to be in no wise a knowledge in empirical terms, will have to be regarded as an intuitive knowledge. But if so, why not, he concludes, identify this intuited counter-force with the extra-organic force believed in by common sense? Indeed, what else can one make of the facts, if one does not do that, since in this case one's body is not felt at all?

Accordingly, Hamilton puts his conclusion thus.

> When I am conscious [of an external impediment to a movement of my limb] I cannot be conscious of myself as the resisted relative without at the same time being conscious, being immediately percipient, of a not-self as the resisting correlative. In this cognition there is no sensation, no subjectivo-organic affection. I simply know myself as a force in energy, the not-self as a counter-force in energy. . . . But though such pure perception may be detected in the simple apprehensions of resistance, in reality it does not stand alone; for it is always [he means, apart from the paralytic cases] accompanied by sensations [muscular and cutaneous].
>
> (*Works*, p. 866)

In order to clarify Hamilton's position, we had better have a look at the

facts he cites from Sir Charles Bell. Our standpoint in doing this will be to concede that Hamilton has made out quite a good case for his intuition of an extra-organic force, *provided* the paralytic's knowledge of that force does not come from some sense other than touch. In fact, however, in one case cited by Hamilton, and that the only illuminating one, it looks as if the knowledge of the counter-force, and of what to do with the hand, came from vision.

> Sir Charles Bell records the case of a mother, who, while nursing her infant, was affected with paralysis or loss of muscular motion on one side of her body, and by stupor or loss of sensibility on the other. With the arm capable of movement she could hold the child to her bosom; and this she continued to do as long as her attention remained fixed upon the infant. But if surrounding objects withdrew her observation, there being no admonitory sensation, the flexor muscles of the arm gradually relaxed, and the child was in danger of falling.
>
> (*Works*, p. 865)

Here, of course, the question at once arises as to whether the mother would know whether or not she was moving her arm against an obstacle, and having its movement impeded, or else moving it freely, if, by some further accident, she lost her sight and also the sensibility of the half of her body that still supplied her with tactual experience. That is to say, the mother is certainly here conscious of making efforts to do certain things, and also of resistance to these efforts, but, so far as the evidence goes, it would seem that she is conscious of these efforts as efforts to move certain visible things with the help of a visible arm, or, again, as efforts to keep that visible arm steady in a certain position in relation to other visible things. But, this being so, one can perfectly well account for the woman's behaviour without having to postulate in her an intuition of extra-organic forces; or, in short, there is apparently no fact that makes it necessary to postulate an intuition of an extra-organic force, in the sense that there are facts that make it necessary to postulate, in reference to the same situation, an intuition of a hyperorganic force.

If this is so, then this second attempt on the part of Hamilton to defend the ordinary belief in the object of perception's externality to the organ of sense has failed as completely as his earlier attempt. Maine de Biran, apparently, will not, so to speak, blend with Reid. In other words, in order to preserve intact the "fait primitif" of oneself as a supersensible force making efforts in the face of empirical obstacles – for instance, making efforts to push a door open – one has apparently to identify both the limb under one's control and the body pressing against the limb as being both nothing but objects of sense – of sight or of touch. And, of course, in regarding the elements present in the situation (other than the effortful self) as mere objects of sense, one is regarding them as not being beyond the organism, i.e. as being the primary

qualities, which, according to Hamilton, are perceived as in the organism (*Works*, pp. 865–7).

Here we will pass from Hamilton to Ferrier, taking as our starting-point the 1851 unposted letter from which we quoted at the opening of the present section of our discourse. Now, apparently, this letter is intended as a kind of comment on volume 2 of Reid's *Works*, i.e. on Hamilton's exposition of his second and later theory. But in the course of this letter (or fragment of a letter), Ferrier is doing two things. In the passage already quoted, he is drawing attention to a glaring contradiction in Hamilton that is in itself quite accidental and removable without damage to his argument, and that has crept into the text because part of one of the notes (Note B), out of which the volume is loosely pieced together, contains statements belonging to the earlier theory (the theory of the *Lectures on Metaphysics*) and inconsistent therefore with most of what is said in the rest of the book. However, as the letter proceeds, Ferrier ventures upon a criticism of his friend's position of a more fundamental sort, the general tendency of which is that Hamilton would improve his theory somewhat if he gave up all claim to an immediate knowledge of the extra-organic.

"You expressly state," says Ferrier, terminating an argument of an obvious tendency, "that the sole immediate object in perception is the organism; all that lies beyond is mediate. The organism is also the sole immediate object in imagination; all that lies beyond is mediate. How, then, can these two powers be discriminated as presentative (immediate) and representative (mediate)?" (i.e. it does not make sense to say that what cannot be presented can be represented, that one can imagine what one can never perceive). Ferrier, then, proceeds thus.

> The argument by which you find an immediate non-ego in the organism I do not meddle with at present. But it seems to me that this argument, if sound, would be sufficient to establish your natural realism, without complicating the case with the distinction of presentative and representative knowledge, a distinction which seems to me to be untenable as you put it, and which at any rate requires some *redding up* at your hands. It is also very misleading; for I believe that unwary readers of Note B may be of the opinion that you advocate an immediate knowledge of external objects beyond the organism, and are thus a champion of common sense.
>
> (*Greek Philosophy*, vol. 2, pp. 543–4)

Now, in order to come at Ferrier's point here, a little must be said about dates. Ferrier and Hamilton first met about 1831, according to tradition, and, after their friendship ripened, saw one another almost daily until Ferrier was appointed Professor in St Andrews in 1845 (*Greek Philosophy*, vol. 1, p. 488, in an "Appendix to the *Institutes of Metaphysic*"). At the time of their first meeting, Hamilton had already published his two celebrated articles, but he

published nothing more on philosophy except a short article in 1839, until 1846, the year of the publication of the *Works* of Reid, being occupied in the meanwhile first with his writing of the *Lectures on Metaphysics* for delivery (1837–8), and then with preparing the *Works* of Reid. By contrast with Hamilton, Ferrier published a great deal in those years, contributing at least twelve long papers on philosophical topics to *Blackwood's Magazine* between 1838 and 1843. Now, in these papers, Ferrier shows himself conversant with a good deal that Hamilton must have been thinking and discussing in those years, and, as we have seen, alludes to the line Hamilton took against Brown's reductionism some four years before Hamilton published his doctrine on the subject. However, there is nothing in Ferrier's papers that would indicate his being acquainted with the part of Hamilton we have been explaining, namely the second theory defending the view that the object of perception, i.e. in a certain special case, is beyond the organism.

What Ferrier says here reads as if it were his judgment on certain parts of volume 2 of Reid's *Works*, which came as something of a surprise to him, i.e. for which he had not been prepared by anything he had heard from Hamilton before. Now Ferrier's opinion is summed up in the fact that he is willing to let pass as more tolerable than the rest the part of Hamilton's theory that finds an immediate non-ego in the organism. For our purposes at any rate, it is the sentence containing this assertion that matters, and we can leave aside as irrelevant the rest of his remarks; that is to say, we can leave aside the argument to the effect that Hamilton is not even justified in claiming a mediate or indirect knowledge of what is beyond the organism, i.e. of the extra-organic, and also the reminder to Hamilton (or what looks like a reminder) that at one time he was agreed with Ferrier about the impossibility of an immediate knowledge of the extra-organic.

Ferrier, then, is prepared, one might say, to let Hamilton's theory pass only in so far as it coincides with Maine de Biran's theory, i.e. in so far as it asserts our being immediately conscious only of the hyperorganic force on the one hand, and of the organism on the other, and of the opposition between them. But if this is so, what grounds, we want to ask, has Ferrier for his further assertion that a limited theory of this kind is sufficient to establish Hamilton's natural realism? On the one hand, natural realism – as Ferrier knows well enough (*Greek Philosophy*, vol. 2, p. 387) – is a theory that tries to defend common sense belief, a theory that regards the object of perception as being beyond the organ. On the other hand, the theory that finds an immediate non-ego in the organism is a theory that "the primary qualities are perceived as in our organism," i.e. a theory that identifies the shape seen as tactually felt with the material impression on the organ. But, this being so, the latter theory is apparently just as much contrary to common sense as the former theory is in favour of common sense, and in fact it would seem as if the one was inconsistent with the other, the one maintaining the impossibility of our getting beyond the organ in perception, the other maintaining the possibility and indeed the fact of our getting beyond the organ in perception. But if so, is

it not nonsense to assert as Ferrier does that the theory of the organism as non-ego is compatible with natural realism?

Ferrier, however, very likely knows what he is doing here all right, and, in fact, in one of his 1843 articles, he discusses the problem at issue here with great care.

> We are assured by optical metaphysicians, or metaphysical opticians, that, in the operation of vision, we never get beyond the eye itself, or the representations that are depicted therein. We see nothing, they tell us, but what is delineated within the eye. Now the way in which a plain man should meet this statement is this – he should ask the metaphysician *what* eye he refers to. Do you allude, sir, to the eye which belongs to my visible body, and forms a small part of the same? . . . Is *this*, then, the eye which the metaphysician refers to and which he tells us we never get beyond. If it be – why, then, the very admission that this eye is a part of the visible body (and what else can we conceive the eye to be?) proves that we must get beyond it. Even supposing that the whole operation were transacted within the eye, and that the visible body were nowhere but within the eye, still the eye which we . . . fill in as belonging to the visible body . . . – *this* eye, we say, must necessarily exclude the visible body, and all other visible things from its sphere. Or can the eye (always conceived of as a visible thing among other visible things) again contain the very phenomenon (i.e. the visible body) within which it is itself contained? . . . The fallacy we conceive to be this, that the visible body can be contained within the eye, without the eye of the visible body also being contained therein. But this is a procedure which no law either of thought or imagination will tolerate. If we turn the visible body, and all visible things, into the eye, we must turn the eye of the visible body also into the eye; a process which, of course, again turns the visible body, and all visible things, *out* of the eye.
>
> (*Greek Philosophy*, vol. 2, pp. 394–6, abridged)

We might perhaps explain the point at issue here in this way. We ordinarily believe the objects of vision to be beyond the eye, and the same sort of objection to this common sense belief is to be considered as had given Hamilton so much trouble – the objection, namely, that the objects of vision are, according to the combined teachings of phenomenology and physiology, more properly to be identified with certain impressions in the back of the eye rather than with the bodies external to the eye that give rise to these impressions. Now, in order to do justice to Ferrier here, we had best envisage him as restating to himself the physiological–phenomenological thesis in the form: the objects of vision are to be identified not with the tangible bodies external to the tangible eye-ball and reflecting light into it, but with the impressions this light makes in the back of the tangible eye-ball. Accordingly, the idea behind Ferrier's suggestion here is very likely this: that while we are doubt-

less not aware of the objects of vision as being beyond the eye, conceived of as a tangible object, we may well be aware of the objects of vision as being beyond the eye conceived of as a visible object. Now the difficulty here is, of course, how we can manage to conceive of our own eyes as visible objects, or, to put the same point in another way, how, if we turn the visible body and all other visible things into the (tangible) eye, one can also turn the eye of the visible body into the (tangible) eye. The fact is that, while our tangible nose-tip, can, and sometimes does, imprint a coloured impression of itself on the canvas of our retina, our tangible eye could not possibly imprint a coloured impression of itself on the canvas of our retina. Now Ferrier, as we shall see somewhat later, is quite cognisant of this difficulty, but, in the present context, he contents himself with pointing out that, while we are never aware of our own eyes – grey, brown, blue or green – as *actual* colour-patches, we would seem to be aware of our eyes as *virtual* colour-patches in some sort of mutual externality to the given colour-patches. In saying this, he is presumably insisting on it as a fact that in addition to being *immediately aware* of other things as present given colour-patches, we are *immediately aware* of our own eyes as absent unseen colour-patches, and that, furthermore, in being aware of this, we are aware of the other objects of vision as being out of and beyond our eyes. But, this being so, Ferrier's conclusion is that the common sense belief of the objects of vision as being beyond one's eye is quite compatible with the scientific notion of the objects of vision as being within one's eyes.

But let us quote a passage where Ferrier puts his case in this way.

> In the operation of seeing, admitting the canvas or background of our picture to be a retina, or what we will, with a multiplicity of colours depicted upon it, we maintain that we cannot stop here and that we never do stop here. We invariably go on (such is the inevitable law of our nature) to complete the picture – that is, we fill in our own eye as a colour within the very picture which our eye contains – we fill it in as a sensation within the other sensations which occupy the rest of the field; and, in doing so, we of necessity, by the same law, turn these sensations out of the eye, and they thus, by the same necessity, assume the rank of independent objective existences. . . . *How* this operation [of filling in] is accomplished, is a subject of but secondary moment; whether it be brought about by the touch, by the eye itself, or by the imagination, is a question that might admit of much discussion; but it is one of very subordinate interest. The *fact* is the main thing – the fact that the operation *is* accomplished in one way or another – the fact that the sense comes before itself (if not directly, yet virtually) as *one* of its own sensations – *that* is the principal point to be attended to; and we apprehend that this fact is now placed beyond the reach of controversy.
>
> (*Greek Philosophy*, vol. 2, pp. 393–4)

(The statement of this same point on p. 391 bears out our interpretation fully.)

By this time, we are in a better position to understand what probably lay behind the remark of Ferrier in this unposted letter that the theory of the organism as the non-ego, i.e. of the primary qualities as perceived within the organism, is not incompatible with a standpoint like natural realism, a standpoint upholding common sense. The fact of the matter would seem to be that Hamilton's first defence of natural realism – i.e. the theory on the same lines as Reid's found in the *Lectures on Metaphysics* and footnotes to Reid's text – had to be given up about 1842 in the days when Ferrier and he were criticising Brown's reductionism; that, from then on, Ferrier and Hamilton both faced the common problem of trying to defend common sense without denying, as Reid did, the identity of object of sense and material impression on the organ; that Ferrier quickly found a solution satisfactory (for the time being) to himself, and published it in *Blackwood's Magazine* in two articles (the one cited and another) in 1843; and that Hamilton, working now independently, elaborated a quite different solution on his own account, the one which is to be found in volume 2 of Reid's *Works*, and which Ferrier in this letter is criticising. No doubt, we are here guessing on scanty evidence as regards dates but that something of this kind happened we see no reason to disbelieve.

However, our business here is concerned not so much with discovering the influence of one man on another, as with understanding one man's theory in the light of other theories, propounded by other men working in the same place at the same time, and it will accordingly be proper to look at Ferrier's theory from this standpoint. On the one hand there is the position of Adam Smith.

> A pair of spectacles . . . form a sort of projected retina, not much, if at all, larger than your real retina. {Look at the tower} attending in some degree to the size of your spectacles, and you shall see that it does not stretch across one half or perhaps one fourth, of their diameter. And if a fairy pencil, as Adam Smith supposes etc. etc.

On the other hand, against the inference drawn therefrom that the visible tower is painted on the retina, we have the previously quoted reply of Reid that this inference is unphilosophical, in the sense of being contrary to observable fact, because neither the optic nerve nor the eye are ever seen. Finally, we have Hamilton's elucidation of Reid to the effect that to speak of the retinal paintings as seen would be to suppose an eye within the eye. But now, having got all these positions together, we have all the materials that went to the making of Ferrier's theory, and all that is required to produce it is a clear statement of the various positions and counter-positions that we get in Reid or Hamilton or Smith. (The quotation is from Ferrier himself: *Greek Philosophy*, vol. 2, p. 343; and on p. 323 he shows some knowledge of the subtleties of Reid and Stewart about vision.)

We must now proceed to say something about Ferrier's theory of perception in general, i.e. the theory presupposed in his solution of the difficulty

which he and Hamilton had faced in common. It is indeed a theory that had a strange destiny. Nowhere systematically expounded, it grows up bit by bit in the anonymous *Blackwood's* articles of 1838–43; and thereafter, apart from one or two brief references, not of an explicit sort, but merely implied, it is never again mentioned by Ferrier, apparently for the reason that he set it aside as being unphilosophical, i.e. as being concerned with speculations about contingent truth.

We start then from the series of seven long articles published in 1838–9 (*Greek Philosophy*, vol. 2, pp. 1–257). Now this "Introduction to the Philosophy of Consciousness" as it is called, is certainly unlike anything we have had occasion to mention in the course of our study. Indeed, on a superficial glance, the thing one immediately tends to be reminded of is not phenomenological analysis in the style of Brown or Hamilton, still less a priori analysis in the style of Ferrier's own *Institutes of Metaphysic* (1854) but rather, perhaps, the metaphysical flights of *Sartor Resartus* – a book, be it noted, conceived in the same city and by another friend and admirer of Sir William Hamilton. At any rate, the basic point of view is much the same, and the style, though very different, equally mannered and poetical.

> Look at thought, and feeling, and passion, as they glow on the pages of Shakespeare. . . . Look at the same as they stagnate on the dissecting table of Dr. Brown. . . . Behold, how shapeless and extinct they have become! Man is a "living soul"; but science has been trained among the *dead*.
>
> (*Greek Philosophy*, vol. 2, p. 17)

However, on a closer view, it becomes evident that the author of the "Introduction to the Philosophy of Consciousness" (contained in vol. 1 of the *Lectures on Greek Philosophy and Other Philosophical Remains*) is by no means a more genial and less powerful version of Carlyle, but rather a figure with every right to be included in the gallery we have been visiting. Leave out of account the rhapsodical moralisings and rhetorical embellishments which take up nearly half the book, and what you are left with is pure philosophy of a sort that derives from the tradition we have been considering and yet is strikingly original and up to date. The romantic attack on analysis turns out to be a protest against the kind of analysis which, like Brown's, tries to explain away the mystery of perception, and it is accompanied by a plea for a more searching kind of analysis that does not fight shy of mysteries. Indeed the fundamental theme of the book is the theme that has been constantly with us from the time of Reid – the theme of the relations of sensation and perception.

Let us, then, consider the "Introduction" with a view to discovering how it serves as a transition from theories like Hamilton's to the sort of theory found in Ferrier's 1841–3 articles. The main problem facing us here is that of understanding the peculiar terminology which Ferrier uses in this book, but never subsequently, and which is often "romantic" in the bad sense of the word. Accordingly, our starting-point had better be a consideration of

certain passages which make tolerably clear the intentions behind Ferrier's language.

The argument we want to consider is one which recurs several times in this repetitious book – for example, pp. 68, 69, 115–26, 181–3. Its importance for us consists in its being expressly directed against a passage from Brown to the effect that "the relation of cause and effect is exactly the same in perception as in all other mental phenomena, a relation of invariable sequence of one change after another" (Brown's *Sketch*, p. 125–6, cited in *Greek Philosophy*, vol. 2, p. 115–16). Now, in order to understand Ferrier's doctrine we cite a few sentences from these pages of Brown in question, which Ferrier does not quote but which he evidently had in mind. Brown is criticising Reid's doctrine about acts of sensation and acts of perception.

> Dr. Reid, . . . considering all the processes of thought in a more mysterious view, and attaching to the words *act* and *operation* no very precise meaning, was influenced by an error of the same kind in supposing the word *object* to express a relation different from the relation of simple and invariable antecedence, which is all that we mean when we speak of causation, in other sequences of events, material or mental. . . . The belief or perception of something hard and figured is merely an intuition like any other intuition, in which we do not suppose the relation of the intuitive feeling to the feeling that preceded it to be at all different from the relation of any other feeling to any other antecedent feeling.

Now Ferrier evidently wants to defend against Brown a version of the "more mysterious view" of sensation and perception, though not indeed the one attributed by Brown to Reid, but one of his own devising, of which he evidently has high hopes. Accordingly he proceeds by first defining and explaining Brown's view, in this terminology peculiar to himself, with a view to criticising Brown. His first step is to set forth a preliminary fact which Brown, at any rate, would not deny. "Perception," he says, "is a synthesis of two facts, sensation, namely, and consciousness" (*Greek Philosophy*, vol. 2, p. 121), and then he proceeds to define the sort of view Brown takes of perception as being the view that "consciousness" is, to quote the most apt statement of the point, "the harmonious accompaniment and dependent . . . of sensation" (*Greek Philosophy*, vol. 2, p. 182). That is to say, on a view like Brown's,

> these two poles agree and act so harmoniously together, that the vividness experienced at one pole [the pole of sensation] is answered by a proportional vividness at the opposite pole of consciousness; and that a depression at this latter pole again takes place in accordance with a diminished intensity at the former pole.
>
> (*Greek Philosophy*, vol. 2, p. 69)

But if so, the conclusion follows or ought to follow "that sensation and consciousness are really identical, and that the two poles are in fact, not *two* but *one*." That is to say, if Brown's view is carried to its logical conclusion, the distinction between sensation and perception (as Hamilton, we may note, had already said) becomes impossible to maintain.

But is Brown's view correct? Ferrier replies thus.

> This point, however, is not to be settled by speculation or by abstract reasoning. What says *the fact?* The fact is notorious . . . that the degree of our consciousness or self-reference always exists in an inverse ratio to the degree of intensity of any of our sensations, passions, emotions, etc.; and that consciousness is never so effectually depressed, or, perhaps we may say, never so totally obliterated within us, as when we are highly transported by the vividness of any sensation. . . . This is decidedly the fact, and there is no denying it. Look at a human being immersed in the swinish gratifications of sense. See here how completely the man is lost in the animal. Swallowed up in the pleasurable sensations of his palate, he is oblivious of everything else, and consciousness sinks into abeyance for a time.
>
> (*Greek Philosophy*, vol. 2, pp. 69–70)

Accordingly, Ferrier concludes the matter by expressing the following opinion. "This, then, proves that consciousness or the act of negation, is not the harmonious accompaniment and dependent, but is the antagonist and the violator of sensation." Accordingly a path is cleared for the "more mysterious view" of perception (*Greek Philosophy*, vol. 2, p. 182).

Now these doctrines of Ferrier quoted here are obviously reminiscent of Hamilton: for one thing, there is a law of "inverse ratio" spoken of here which seems to be like Hamilton's, in a general way; and for another thing Ferrier makes the point against Brown which Hamilton also makes in the *Lectures on Metaphysics* that the intuitive feeling of an external reality, when said to accompany the sensations, is a superfluity and unnecessary entity. But, all the same, side by side with these resemblances between Hamilton and Ferrier, there is one striking difference: namely, that, whereas Ferrier tries to use his version of the "inverse law" against Brown, Hamilton never tries to use his corresponding doctrine against Brown, and indeed tends to regard it as, in a way, compatible with Brown's position. "The distinction between perception proper and sensation proper, though recognised as phenomenal by philosophers who hold the doctrine of a representative perception, rises into reality and importance only in the doctrine of an intuitive perception" (*Lectures on Metaphysics*, vol. 2, p. 104).

In order to understand why Hamilton and Ferrier are not here unanimous in their treatment of Brown, it is necessary to take note of the great difference between their respective versions of the law of inverse ratio. For this purpose, it will be sufficient to take what we have called the extreme cases – the case

where perception accompanies and predominates over sensation, and the case where perception is lost and only sensation remains. Now the typical extremes for Ferrier, as our quotation from *Greek Philosophy* vol. 2, pp. 69–70 shows, are the experiences of the glutton and the epicure, and the difference between the two is best brought out if we think of them as both eating the same food. That is, the difference between them may be said to consist in this: that, while the same or very similar tastes are felt by both, in the one case the flavours are not discriminated from one another, much less regarded as in some sense objectively existing, and the whole attention is absorbed in the pleasurable thrill of eating, and in the other case the flavours are discriminated and regarded as objective, while the thrill of eating, though not neglected, is given proportionately less attention. On the other hand, the typical extremes in the Hamiltonian version of the facts are those of ordinary visual experience and of bedazzlement. But obviously the extremes here are not related as in the previous case. In the experience of bedazzlement, there is no doubt absorption in the sensation, accompanied by a failure to discriminate colours and coloured shapes and to regard them as objective; but in this case the failure to have perceptions arises not through any lack of attention, but simply because there are no colours or coloured shapes to perceive – the experience being one of blinding light.

But, this being so, it is obvious that Hamilton's view of the relation of sensation and perception, despite his "inverse law," is, at bottom, more like Brown's view than Ferrier's. According to Brown, the relationship between sensation and perception is a causal relationship; when certain sorts of muscular strains are felt, the *intuition* of an external reality always in fact arises, and when other sorts of muscular strains are felt (those occurring, for instance, when I move a limb freely) no such intuition occurs. But so also in Hamilton's case the relation is also causal: certain kinds of visual expression contain an objective element as well as a subjective element, and, in that case, I regard the objective element (the visible shape defined by the co-existence of colours) as independently existing, whereas other kinds of visual experience, like that of blinding light, contain no objective element, and hence prevent the rise of the notion of independence. On the other hand, according to Ferrier, the relationship between sensation and perception is not a causal relationship at all. The inverse variation of sensation and perception is, for Ferrier, an undoubted fact, but this inverse variation, in his estimation, takes place altogether independently of what is *given* in experience; that is to say, a similar experience may, in one man, constitute a perception and in another man a sensation. In other words, on the subject of inverse ratio, Ferrier agrees not with Hamilton, but with Maine de Biran. "The more eminently *animal* the sensation would be, the less it would have the true character of a human perception" (Maine de Biran, quoted in Reid's *Works*, p. 888; it is likely that Ferrier was shown the volume Cousin sent Hamilton in 1834).

Let us now see what exactly Ferrier takes the relation of sensation to perception to be.

> But does "the philosopher of mind" now ask us to redeem our pledge, and to inform him what it is that takes place between "matter" and "me" (matter presenting itself, as it always does, in the shape of a sensation)? Then we beg to inform him that *all that takes place* between them is an act of negation, in virtue of which they are what they are; and that this act constitutes that link (or rather *unlink*) between body and mind, which many philosophers have sought for, and which many more have declined the search of, out of despair of ever finding it.
>
> (*Greek Philosophy*, vol. 2, pp. 179–80)

But what does he mean by "unlink"? That is the vital question, and the following passage will make his intentions clearer.

> Thy consciousness [in childhood] was faint in the extreme, for as yet thou hadst but slightly awakened *to thyself*; and thy sensations and desires were nearly all-absorbing. Carry thyself back still further into days yet more "dark with excess of light," and thou shalt behold, through the visionary mists, an earlier time, when thy consciousness was altogether null; a time when the discrimination of thy sensations into *subject* and *object*, which seems so ordinary and inevitable a process to thee *now*, had not taken place, but when thyself and nature were enveloped and fused together in a glowing and indiscriminate synthesis. . . . But thy destiny was to be free; to free thyself, to break asunder the chains of nature; . . . and thy first step towards this great consummation was to dissolve the strong, primary and natural synthesis of sensation. In the course of time, then, that which was originally *one* in the great unity of nature became *two* beneath the first great exercise of a reflective analysis. Thy sensations was now divided into *subject* and *object*; that is, thyself and the universe around thee.
>
> (*Greek Philosophy*, vol. 2, pp. 142–3)

What is Ferrier doing here? If we had only the "Introduction" to go by, we could not say, any more perhaps than he himself could have said, when he was writing this page. However, we have not merely the "Introduction"; we have also the 1841–3 articles, and on the basis of these we can say that the meaning of his *negation*, of his *unlink*, has to do, fundamentally, with the question of the ground of this distinction.

For Ferrier, then, sensation proper (to use Hamilton's term) is sensation (for example, visual experience, tactual experience) wherein no distinction is drawn between *act* and *object* of sense; while perception proper is sensation after a distinction has been drawn between *act* and *object* of sense. Accordingly, to get his meaning better, we should consider first what he says about the extreme of sensation, and then how he approaches the question of the transformation of sensation into perception.

Now in pure sensation, we are aware, Ferrier insists, of nothing but the *given*.

> These sensations are, like all other changes in man's given existence, purely passive in their character. They are states of suffering, whether the suffering be of pleasure or of pain, or of an indifferent cast. There is nothing in them except their own contents, and these are entirely derivative. In the smell of a rose, for instance, there is nothing present except the smell of the rose. In a word, let us turn and twist, increase or diminish any sensation as we please, we can twist and turn it into nothing but the particular sensation that it is.
>
> (*Greek Philosophy*, vol. 2, pp. 173–4)

In order to see what Ferrier is driving at here let us look at a passage he wrote on the same theme in 1861, in an isolated class lecture on Ethics, where the doctrine implicit in the above passage is set forth with all possible lucidity.

> The characteristics of sensation are twofold. *First*, it is either pleasurable or painful; *secondly* it is individual and particular. Of the first of these points little requires to be said. Some degree of pleasure or of pain is involved in all our sensations. It may be thought that some of them are neutral or indifferent. But this indifference seems either to be a mixture of pleasure and pain in which these balance each other, or else it is a state of tranquillity brought about in some other way. But in whatever way the tranquillity which looks like indifference is brought about, it is still a pleasurable condition. Or if the state of apparent indifference be a state of ennui and satiety, in that case, it is a condition of pain. A sensation which was absolutely indifferent to us would be no sensation; it would not be felt at all. All sensations, then, even those which seem to be indifferent, involve either pleasure or pain as their constant and inseparable ingredient.

(The passage is interesting as being the longest one in either Ferrier or Hamilton on a theme rather important for both of them.) "The second characteristic of sensation," Ferrier continues,

> is that it is strictly individual or particular. . . . By this, I mean that . . . A sensation has no general or indefinite confines. Hence no sensation, and no series of sensations, can ever carry the being who experiences them out of and beyond himself. He is tied down by sensation and confined exclusively to himself. . . . not a hairsbreadth beyond his own sentient states can the creature experiencing his own sensations travel. His condition is one of utter and entire isolation. No sensations, transform them as we may, can ever transport a being beyond the limits of itself.
>
> (*Greek Philosophy*, vol. 2, pp. 507–9)

Ferrier has two points to make here. The first of these is a development of

Hamilton's doctrine that experience is never indifferent. That is to say, the purely sensational state is a complex state, involving on the one hand awareness of smell or colour, according to the sense in question, and on the other hand the feelings pleasurable or painful attendant on these colours or smells. Moreover, these two aspects may be discriminated from one another, or may not be discriminated from one another, but, even if the discrimination be made, the state remains purely sensational so long as one is aware of nothing but *the given*, and perception does not arise, since perception, by definition, involves awareness of the *not-given*.

But let us be more precise. Suppose one's only sense is that inherent in the mouth and palate, and suppose, too, one gets only one kind of food, so that one could not discriminate the taste from the feeling, so long as one's state of health remained constant. Now suppose an illness struck one without one's being conscious of its oncoming – and, of course, as one's experience is solely gustual, one would know nothing about one's health until feeding time came round – then, in one's first experience of food, one would be conscious of the taste as the same, but of the attendant feeling (nausea) as different, and the comparison of the new experience with the old one would make one aware of one's experiences as a complex of two elements. Even so, however – to come now to Ferrier's second and main point – one would still be in no position to discriminate the feeling as subjective and the taste as objective, i.e. one would have no grounds for regarding the taste as in some way existing in the food, whether it is being eaten or not, since to know about that one would have to be aware of things as existing when not given in sense. Accordingly, in this sensational state, the tastes, though discriminated from the pleasures or pains accompanying them, would be equally regarded as feelings, and, in the absence of the knowledge of the external world, would not be regarded as interesting on their own account. Hence the state as a whole would be one of absorption in oneself, and, in this way, the experience would always be the sort of glutton's experience.

But now let us go to the other state – that of perception – and see what Ferrier says of it. The question here is what is involved in awareness of the feelings (pleasures or pains) as subjective, and the colours etc. as objective and the distinctive contribution of Ferrier on this subject is discernible in sentences like this. "This act of negation, breaking up the great natural unities of sensation, at once displaces the various modifications of man's given existence, and by a necessary consequence, places the being that was not given, namely the "I" of humanity." Now Ferrier's point here is not very clear, but, roughly speaking, it would seem to amount to this: that the subjective–objective distinction involves the notion of a beyond, of a not-given, but that the beyond in question is a "beyond which is within us" – "Must not this fact (of consciousness) and the man himself be held *transcendent* to this object, and incapable of being objectified or conceived of as an object?" (*Greek Philosophy*, vol. 2, p. 59).

Ferrier, however, was well aware of the difficulties involved in laying claim

to the conception of anything beyond the given, and indeed Hamilton had already managed to make the point at issue pretty clear.

> The first and highest ground on which it may be held, that the object immediately known in perception is a modification of the mind itself, is the following. Perception is a cognition or act of knowledge; a cognition is an immanent act of mind; but to suppose the cognition of anything external to the mind, would be to suppose an act of the mind going out of itself, in other words, a transeunt act; but action supposes existence, and to act out of self is to exist out of self, which is absurd.
>
> (*Lectures on Metaphysics*, vol. 2, p. 118)

Accordingly, since Hamilton had spoken out on this subject, Ferrier contents himself with putting the same point in a more intelligible way.

> Can a man overstep the limits of himself – of his own consciousness? If he can, then . . . the reality of the external world is indeed guaranteed; but what an insoluble contradiction is here – that a man should overstep the limits of the very nature which is *his*, just because he cannot overstep it!
>
> (*Greek Philosophy*, vol. 2, pp. 381–2, an article of 1843)

However, it will be well to pause here for the purpose of making clear just what the problem of the external world was for Hamilton and Ferrier. In fact, the form the question took derived, as might be expected, from Brown. That is to say, the question as to whether the object of perception – the coloured shape, the solid shape – is a modification of mind, is simply the question as to whether there is any foundation for the common sense notion of pains as not distinct from the act of feeling, but of coloured shapes as being distinct from the act of seeing. Accordingly the task Ferrier set himself was to inquire into what an act of sense might be.

The first intimation of the result of Ferrier's attempt to observe the facts of perception afresh comes in his 1841 article.

> The distinction which lay at the foundation of all the older philosophies is not to be rejected and set aside altogether. Unless we make some sort of discrimination between our perceptions and outward objects, no consciousness or knowledge would be possible. This principle is one of the laws of human thought. . . . But we allow it only a relative validity. It gives us but one half of the truth. We deny that it is an absolute, final and permanent distinction, and we shall show that, if by one law of intelligence we constantly separate the subject and the object, so by another law we as constantly blend them into one. . . . It is this latter law that is now to engage our research.
>
> We shall illustrate our point by first appealing to the sense of sight. Light or colour is the proper objective of this perception. That which

> is called, in the technical language of philosophy, the *objective*, is the light; that which is called, in the same phraseology, the *subjective*, is the seeing. . . . Let us begin with the consideration of the objective – light. It is very easy to *say* that light is not seeing. But, good reader, we imagine you will be considerably puzzled to *think* light without allowing the thought of seeing to enter into the thinking of it.
>
> (*Greek Philosophy*, vol. 2, pp. 269–71)

Now it is important to understand exactly the "law" Ferrier proposes as valid in the present case. The question he raises is, of course, whether one can think of colours existing unseen, of "flowers born to blush unseen," and the principle of the answer he returns is simply that, so long as we confine ourselves to visual experience, it is impossible to think of colour divorced from seeing, because, of course, confined as we are to visual experience, we have no notion whatever as to what light and colours are like when they are not seen.

He then goes on to point out that what happens in the case of sight, happens in the case of each of the other senses.

> What holds good with regard to [sight and hearing] holds equally good with regard to all our other perceptions. The moment the objective part of any one of them is thought, we are immediately constrained by a law of our nature which we cannot transgress, to conceive as one with it the subjective part of the perception. We think objective weight only by thinking the feeling of weight. We think hardness, solidity and resistance, in one and the same thought with touch or some subjective effort.

Here let us pass to the first of the 1843 articles, beginning with a passage which summarises the main point of the 1841 article. "Let us begin by supposing that man is a mere 'power of seeing.' " In that case,

> the Seeing Power, the Seeing Act, and the Seen Things coexist in a synthesis in which there is no interval or discrimination. . . . In mere vision, the sight and its objects cling together in a union or synthesis which no function of that sense, and no knowledge imparted to us by it (and according to the supposition, we have, as yet no other knowledge), can enable us to discriminate or dissolve. . . . But man is not a seeing animal.

"He has" Ferrier continues, introducing a quite new point,

> other senses besides. He has, for example, the sense of touch, and one of the most important offices which this sense performs, is to break up the identity of cohesion which subsists between sight and its objects. And how? We answer, by teaching us to associate *vision in general*, or the

> abstract *condition* regulating our visual impressions, with the presence of the small tangible body we call the eye, and *vision in particular*, or the individual sensations of vision (i.e. colours), with the presence of immeasurably larger bodies revealed to us by touch and tangibly external to the tangible eye.
>
> (*Greek Philosophy*, vol. 2, pp. 366–8)

Now, guided by this illustration, Ferrier goes on to propound the other half of his law – i.e. the law regulating the separation between act and object of sense.

> Here we may hazard an observation, which, simple as it is, appears to us to be new, and not unimportant in aiding us to unravel the mysteries of sensation; which observation is, that, in no case whatever, does any sense inform us of the existence of its appropriate organ, or of the relation which subsists between that organ and its objects, but that the interposition of some other sense is invariably required to give us this information.
>
> (*Greek Philosophy*, vol. 2, p. 366)

He goes on to illustrate this point in the following way.

> It would not be difficult to show, that as, on the one hand, *distance* is not involved in the original intuitions of sight, so, on the other hand, *proximity* is not involved in the original intuitions of touch; but that, while it is the touch which establishes an interval between the organ and the objects of sight, it is sight which establishes *no* interval between the organ and the objects of touch. Sight thus pays back every fraction of the debt it has incurred to its brother sense. This is an interesting subject, but we can only glance at it here.
>
> (*Greek Philosophy*, vol. 2, p. 366)

(Unfortunately, he never takes up the subject again.)

It would seem, then, that the principles regulating the blending and the separation of the subjective and of the objective ought to amount, in Ferrier's opinion, to something like this. No distinction between sight and its objects can be drawn in a purely visual experience, and no distinction between touch and its objects can be drawn in a purely tactual experience – that is the law of blending. On the other hand the law of separation is that an experience combining both sight and touch permits a distinction to be drawn between the act of sense and the object of sense in either case.

But here of course the question will arise as to whether this second principle does really enable us to effect the separation which the first principle prevents. In order to disentangle properly the sight, for example, from the colours, one would have to be able, so the first law says, to be aware of colours

existing unseen. But now, after a fashion, this new law does seem to make possible this very thing, at any rate to the extent of allowing us to conceive of our tangible but invisible eyes as having colours – the conception being validated here by some kind of analogy, which it would be hard to deny. If, however, it is now proper for us to regard these utterly and permanently invisible objects as being coloured, it is certainly also proper for us to regard other relatively and temporarily invisible objects as coloured, and in this way the identity between sight and its objects dissolves away.

Ferrier does develop this latter point to some extent in his second 1843 article, in the part quoted in connection with his solution of the problem common to himself and Hamilton. Unfortunately he does not try to work out the position fully in regard to vision, and, still more unfortunately, he does not try to apply the analogous thesis to the case of touch. And yet, it would seem that, if this kind of point has any validity in regard to vision, it ought also to have validity in regard to touch. That is to say, if one can begin to introduce the notion of colour existing unseen by reference to the colours of the tangible but invisible eyes, one could also begin to introduce the notion of bodies being solid while remaining unfelt, by reference to the case of seeing the organ of touch as it presses on the object which it tactually explores.

It is not easy to understand why Ferrier did not push his speculations to this length. Perhaps the cause is that he became aware of our having some ability to discover our organs of touch with the help of one another. At any rate, in the discussion of touch in the second 1843 article, the standpoint adopted no longer involves the view expressed in the earlier article of that year, that sight is necessary to uncover the relation of the objects to the organ of touch, but rather seems to imply the view – originating with Condillac, adopted by Adam Smith and propounded by Ferrier's own uncle Professor Wilson, i.e. "Christopher North" in *Blackwood's Magazine* (vol. 40, p. 328) in 1836 – that touch can by itself reveal the relation of its objects to its organs:

> When the obstacle to the body's motion takes place, from its touching not another object, but itself, then the double sensation thus produced (i.e. when two of one's limbs press against one another), compared with the single sensation which arises when the impeding object is external (i.e. when a single limb touches a foreign body), must very much quicken and confirm its apprehension of the existence of things unconnected with its own body.

Such is Professor Wilson's account of our tactual knowledge of alien bodies as external to our own, and Ferrier's account would seem to be similar.

> In the finger-points more particularly, and generally, all over the surface of the body, the touch manifests itself not only as that which apprehends hardness, but as that which is itself hard. The sense of touch vested in one of its own sensations (our tangible bodies namely) is the sense of touch

> brought within its own sphere. It comes before itself as *one* sensation of hardness. Consequently all its *other* sensations are necessarily excluded from this particular hardness; and falling beyond it, they are, by the same consequence built up into a world of objective reality, of permanent substance, altogether independent of the sense, self-betrayed as a sensation of hardness.
>
> (*Greek Philosophy*, vol. 2, pp. 398–9)

All the same, it is a pity that Ferrier's speculations, instead of taking this turn, did not proceed to explore further his original law. For one thing, the fact he now relies on – that the organs of touch to some extent reveal one another – would seem to be a special case of the fact he relied on before – that the organ of one sense and the organs of another sense reveal one another, and the relationship of the one fact with the other calls for exploration. For another thing – and this is the important one for the business in hand – sight reveals one fact about the relation of the organ of touch to objects of touch which touch itself cannot reveal; the fact, namely, of the relationship of the hand, outstretched on its own account, and untouched by any other limb of the body, to the objects it touches. But, in the absence of information about this fact, and similar facts, touch does not supply sufficient information to permit its having a full ordinary understanding of the relation of its organs to external bodies, and, in particular, supplies no means of information about the existence of its organs when they are in the state of being *unfelt solids*. Accordingly, while touch by itself in a certain sense reveals foreign bodies as being external to our own body, and so reveals independence, it cannot apparently enable us to form the idea of a solid existing unfelt, and accordingly does not furnish us with the sort of independence required for the problem of the distinction between act and object of touch.

However, Ferrier did not pursue this promising speculation. Instead, he finishes the second 1843 article by stating that the great law of sensation is this: the senses are not merely *presentative*, i.e. they not only bring sensations before us, but they are self-presentative, i.e. they bring themselves before us as sensations. Apparently, he had, even then, set aside the earlier and clearer version of his law where the vital fact is said to be that the senses present one another.

Ferrier never discusses the matter again, but it would appear from his one passing reference that he stuck to the 1843 position of the senses presenting themselves.

> We must suppose [Dr. Reid] to have held that we apprehend material things without apprehending anything else at the same time. If that position could be made good, it would at once establish both the independent existence of matter, and a doctrine of intuitive perception. But the position is one which runs counter to every law of human knowledge, both contingent and necessary. Whenever we know material

> things, we are cognisant of our own senses (sight and touch, etc.) as well; it thus runs counter to the contingent laws.
>
> (*Institutes of Metaphysic*, pp. 493–4)

Oddly enough, in condemning Reid here, Ferrier is, in a way, condemning his own earlier formulation of the "contingent" law. Reid's defence of common sense, just as much as Ferrier's defence of common sense, is centred on the fact that the sense-organs don't present themselves, but only things other than themselves. However, Ferrier was by that time (1854) probably not interested seriously in this range of problems at all.

However, our business here is not with the later philosophy of Ferrier but with his first and youthful philosophy, and, in order to round off our discussion of it, we want to show that Ferrier, in his youthful phase, was intending not in the least to rebel against the speculative traditions of his country, but rather to accept them faithfully, and, in accepting them, to introduce into them such new ideas as were in the air at the time. It is folly, he says, to set aside common sense and the distinctions of colloquial language, since these are the very facts that constitute the problem for philosophy. But at the same time it must be recognised, he goes on, that in order to defend and justify common sense and colloquial language one must inevitably, in the first instance, go beyond both, and say things not in accordance with either. The mistake of Reid and Stewart, he concludes, is not their attempt to defend common sense, but rather their attempt to do this within the boundaries of common sense. (See the remarkable passage to this effect in the "Introduction," *Greek Philosophy*, vol. 2, pp. 63–5.)

Now the common sense distinction here most in question is that of the act and the object of sense, and it is a significant fact that Ferrier starts his "Introduction" with a review of previous discussions of this topic. As he sees it, the issue has hitherto been between Hume who argues that the distinction can't be founded on experience and hence can't be justified at all, and Reid who argues that the distinction must be justifiable, and can, in some partial way, be shown to rest on experiences which have escaped Hume's notice. But on this question as to whether the distinction can be justified by reference to experience, Hume, Ferrier insists, is obviously right and Reid is wrong, and, accordingly, if the distinction is to be justified, it will be necessary to find some new hitherto unnoticed mode of justification; and, in order to do this, we must, Ferrier concludes, go into the business of phenomenology, in a more thorough way than either of them did.

The imbroglio between Hume and Reid, says Ferrier, "proves that there must have been some flaw in the original observation of the facts of perception" ("Introduction," *Greek Philosophy*, vol. 2, pp. 11–12).

Ferrier, then, regards his task as being that of the justification of a common sense distinction, and regards the method appropriate for the purpose as that of self-observation or introspection, and his only difference from his predecessors lies in this: that he expects the facts crucial for the solution of the

problem to be out-of-the-way facts, too familiar to common sense to be describable in colloquial language. (Reid, however, is at one with Ferrier on this point, though the latter did not seem to know this.) Accordingly he sets out in search of a fact of this kind, and, by 1843, he thinks he has found it in

> the gradual steps by which each man is led to *appropriate* his own body. . . . To entitle a person to claim a human body as his own, it is not enough that he should find it in the same way in which he finds his other sensations, namely, as impressions that interfere not with the manifestation of one another. This is not enough, even though, in the case supposed, the person should be the first finder. A subsequent finder would have the preference if able to show that the particular sensations manifested as this human body were essential to his apprehension of all his other sensations whatsoever.
>
> ("Introduction," *Greek Philosophy*, vol. 2, pp. 401–2)

However, to elucidate the common sense distinction in question, it is not sufficient to explain the empirical difference between our own bodies and foreign bodies; it is also necessary to elucidate the foundation of our belief in, so to speak, the existence of unsensed sense data. But now it is in this part of the problem that Ferrier suffers his great set-back, the nature of which becomes pretty evident in his last discussion of vision. It is touch, not sight, he begins, that reveals the empirical given existence of the organ of sight. Now of course this fact, though not without importance, does not take us beyond sense. However,

> somewhat less directly [than touch] and by the aid of the imagination, the sight operates the same introtraction (pardon the coinage) upon itself. It represents [i.e. imagines] itself, in its organ, as a minute visual sensation, out of and beyond which, are left lying the great range of all its other sensations [i.e. the given, present sensations].
>
> ("Introduction," *Greek Philosophy*, vol. 2, p. 391)

Now this visual introtraction is, Ferrier believes, a fact, an observed fact, and a fact, moreover, of a sort that gives us the transcendence of sense we are looking for. The difficulty, however, is to explain and elucidate this fact, i.e. to explain how this indirect visual awareness of the eye can be justified by reference to tactual experience, reason or imagination; and while Ferrier is aware of this difficulty, and mentions it at least three times, he makes no attempt to solve it, and tries to make light of it.

Here, then, we probably have the obstacle which stopped Ferrier's progress. But it is perhaps not an insuperable obstacle, and Ferrier, in our estimation, would have been in a fair way to overcome it, if he had continued to keep in view the thesis of the complementariness of sight and touch that he had propounded in the other article written earlier in the same year. At any rate, a

move of this kind, though it would doubtless have produced fresh difficulties of its own, would have enabled him to argue that the correlation of the data of sight and of touch with one another would make possible a kind of simultaneous inference, hard to elucidate but probably justifiable, to the existence both of one's invisible eye as a colour, and of one's impalpable hand as a solid.

Now, even if this line should turn out to be an utter blind alley, it is still a pity that Ferrier did not explore its possibilities, since it seems to accord so well with his original intentions. That is to say, not only does it promise to help somewhat (though by no means altogether) with the difficulty about self-transcendence, but it might even have enabled him to work out in a plausible way the notion of the relation of sensation to perception sketched in the "Introduction" of 1838. For example, he might have developed a little further his thesis about our appropriation of our own bodies, and gone on to suggest that the basic feature of perception as distinct from sensation is this inferential indirect appropriation of our organ of touch as a solid part of ourselves and of our eyes as a coloured part of ourselves. But in thus explaining perception as indirect self-appropriation he would perhaps have opened the way to expounding, in a circumstantial manner, the claim, so vehemently and so vaguely enunciated in the "Introduction," that there is an intimate connection between perception and self-possession ("Introduction," *Greek Philosophy*, vol. 2, p. 122), in the moral sense of the term, and, in general, to fulfilling the programme sketched there in a manner analogous to that in which Maine de Biran had fulfilled his similar programme. However, despite this similarity, Ferrier does not follow Maine de Biran and Hamilton in their emphasis upon making an effort. Instead, he stresses the natural process of reflection in which we compare one sense with another.

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