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## LORD MONBODDO

AND SOME OF HIS CONTEMPORARIES



# LORD MONBODDO

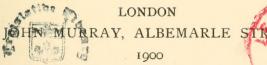
AND SOME OF
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By WILLIAM KNIGHT, LL.D.

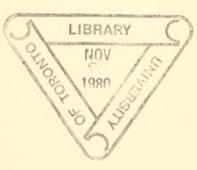
PROFESSOR OF PHILOSOPHY IN THE UNIVERSITY OF ST ANDREWS





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#### THE RIGHT HONOURABLE

#### LORD KINNEAR

Senator of the College of Justice

THIS VOLUME, REGARDING ONE OF HIS MOST DISTINGUISHED PREDECESSORS,

IS INSCRIBED BY

THE AUTHOR



#### PREFACE

In this book I separate the letters of Lord Monboddo and his friends from the short biographical sketch which will precede them; instead of conjoining the letters with the story of his life. His career was not eventful, in the ordinary sense of the term. It was that of a scholarly Philosopher and Judge rather than a man of action, or a great lawyer; and his biography would have been broken up into shreds and patches, had the long essayletters, written by himself and his friends, been inserted between the casual incidents of his professional life. His personality was a striking one, many-sided and unusually magnetic. It would have formed a picturesque centre round which to group the Scots "Men-of-Letters," who belonged to the latter half of the eighteenth century. The social life of that time—as brought out e.g. in the Ochtertyre MSS.\*—was rich in incidents, both grave and gay. Numerous gossipy anecdotes, belonging to a transition period in Scottish opinion, as well as in manners and customs, could easily be collected, seria mixta jocis: and many characteristic personalities would be seen, David Hume being perhaps the central figure. But Hume has been already dealt with by several writers, from different points of view. It is the same with most of the other eighteenth-century representative "men of the time." Were there room for such a volume, Monboddo's would

<sup>\*</sup> See Scotland and Scotsmen in the Eighteenth Century, by John Ramsay.

be only one figure out of many; and his letters—which form the distinctive feature of the present book, and are a valuable supplement to his published writings—would require to be greatly curtailed.

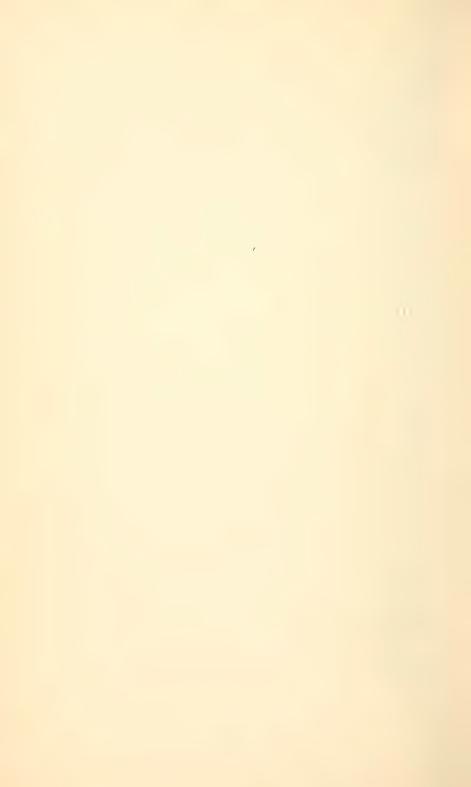
I am of opinion that the philosophical correspondence of a distinguished Scottish Judge, dealing with the profound problems he discussed, will be of some importance to the students of the period to which he belonged, and to reflective men in general. Even those to whom the realm of Metaphysics is a terra incognita, and the Newtonian theory enigmatical, may be interested, and may find the flavus liquor mellis in Monboddo's discussion of literary questions. His letters disclose the personality of a man of remarkable scholarship, of striking individuality, and of great literary ability. He was one of the most outstanding figures in the metropolis of Scotland, during the later years of the eighteenth century; a patron of letters, an enthusiastic friend, a host of rare geniality, an eminent and a just Judge. He had some undoubted eccentricities, and was easily caricatured by those of his contemporaries who had less scholarship and no philosophic eye. Had he done nothing else than vindicate the study of the classical languages of Greece and Rome, point out the importance of the historical method of dealing with all problems, and foreshadow the doctrine of the evolution of man, he would deserve the lasting gratitude of his countrymen.

I have to express my thanks to Captain Burnet (Lord Monboddo's heir), and to his sister, Mrs Badenoch Nicolson of Glenbervie (great-grand-daughter of the Judge), as well as to her late husband, for their great kindness in giving me full access to all the existing

MSS. of their ancestor. Sir Thomas Burnet of Leys has also supplied me with some facts. I should add that two excellent papers on Lord Monboddo, by the late Mr James Marshall, S.S.C., Edinburgh, appeared in *The Scots Law Times* of May 13th and May 20th, 1899. Mrs Marshall has kindly sent me the MSS. on which her husband's articles were based, from which I have derived some information that was new to me.

In the transcription of Monboddo's letters I have retained some archaic spellings (but not all of them), and have corrected obvious *errata*. In his use of capital letters he was most capricious, often giving them to adjectives, and withholding them from nouns, and the result was chaotic. It was a habit of his time to make excessive use of capital letters. In addition to this, his punctuation, and even his spelling, was arbitrary. He would sometimes write "Lock" for "Locke," and use the old French "soy-disant" for "soi-disant." These are trifles; but it is desirable to state that his use of capitals, and commas, has not been followed in this volume.

One thing more be noted. As the book is on "Lord Monboddo, and some of his Contemporaries," I have felt justified in including a long essay-letter by Dr Samuel Horsley, (1780), in criticism of Ancient Metaphysics. It is inserted both for its own intrinsic merit, and for the light it casts on the philosophical correspondence of the two men. Only two out of the forty-seven letters in this volume—and these the first two—have been previously published.



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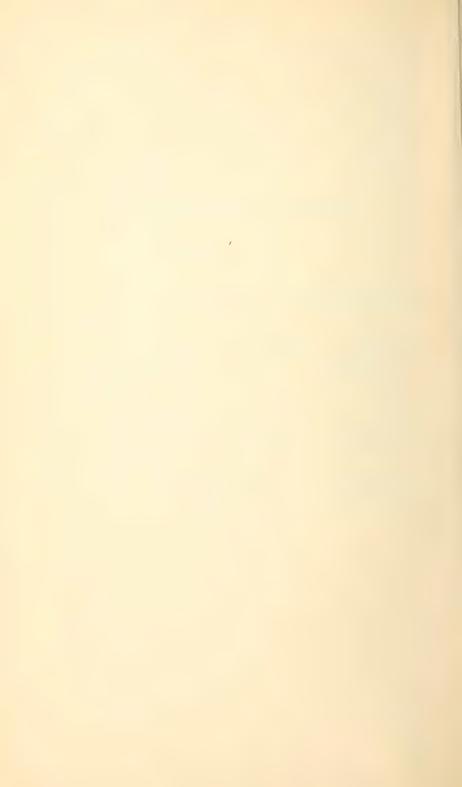
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#### CHAPTER FIRST.

#### BIOGRAPHICAL INTRODUCTION.

THE life and writings of James Burnet, Lord Monboddo, form one of the most curious and interesting links in the literary and philosophical history of Scotland during last century. Although to the ordinary reader, and even to the professed student of Philosophy, little more than a name—his works being scarce, and some of them repetitive, lacking in symmetry, and cumbered with irrelevant detail—he stands out as a conspicuous, if not a monumental figure, in the group of remarkable Scotsmen belonging to the eighteenth century: a time when the Philosophy of our northern island was as vigorous as that of any European country, and when so many of the lawyers of Scotland were philosophically-minded men.

Perhaps the most remarkable thing about Monboddo was his anticipative wisdom, his prevision of future theories as to the origin of man, and his descent or ascent from lower types. As an atomist, he unconsciously followed Epicurus and Leucippus; while, as a virtual evolutionist, he holds an honoured place between Lucretius and Darwin. More distinctively still, as an ardent advocate of the wisdom of the Ancients (especially of Plato and Aristotle)—and a champion of the Classical Languages and Literatures, as affording the best kind of culture for the modern world—his position and work are distinctive.

His writings have been well known to historians of

Philosophy, but very little of his correspondence has as yet been published. Through the kindness of the present representative of the family, Captain Burnet of Monboddo—and urged, I should add, by the enthusiasm of a devoted American Platonist, Mr Thomas M. Johnson, of Osceola, Missouri—I have examined all the correspondence which survives; and since it casts a good deal of light on the man, and on the controversies in which he was engaged with his contemporaries, those portions of it which bear upon Philosophy are now published. A brief sketch of his life and career seems to be a fitting preface to that correspondence.

The future philosopher was the son of a small northcountry laird, as the father of the greater Scottish philosopher, David Hume of Ninewells, was a small Berwickshire squire. He was born at Monboddo, near Fordoun, on 14th October 1714. His paternal ancestors owned the property of Leys, on Deeside, from the times of Robert the Bruce. Mr Ramsay of Ochiltree tells a story of Burnet's father, who was at the battle of Sheriffmuir: "An English officer who had been stunned by a fall from his horse, perceiving on his recovery a gentleman on horseback near him, said, 'Sir, I am your prisoner.' 'No,' answered the other (who perceived the King's troops coming fast upon them), 'I am your prisoner.' 'If that be the case,' said the officer, 'dismount, and I will protect you.' Monboddo walked, while the other rode his horse, and carried him to Stirling Castle."\*

In an MS. volume of "Copies of Letters to Robert Craigie of Glendoick, Lord Advocate for Scotland during the Forty-five" is a list of landed gentlemen who were concerned in the late Rebellion [N.D. but obviously 1715, as Viscount Kilsyth comes in] "and are now gone abroad, or skulking at home." Under Kin-

<sup>\*</sup> See Scotland and Scotsmon in the Eighteenth Century, vol. i. p. 351.

cardineshire comes, with eight others, "James Burnet of Monboddo."

His mother was a sister of Sir Arthur Forbes, Bart., of Craigievar. Lord Monboddo's daughter writes: "The rudiments of his future eminence in learning was laid by a Robert Milne, designated (as witness to some leases) as 'Tutor to Monboddo's bairns.' But, in 1722, his father wrote to his mother from Edinburgh, fearing the effect of home-indulgence, 'Jamie will be lost if you don't send him to school.' He was then sent to the parish school of Laurencekirk, but it would seem—although it is not certain—that he returned from his Laurencekirk experiences to his ancestral home, before going to the University of Aberdeen, to which Seat of Learning (King's College) he went in his fourteenth year."

At the parish school he was under a learned master, Ruddiman; \* and after leaving it he was taught by a second private tutor at Monboddo—Dr Francis Skene—who subsequently became Professor of Philosophy at King's College. To him young Burnet owed much. Skene lived on at Monboddo till he was elected to the Aberdeen Chair; and having instilled into his pupil the love of Philosophy and Literature, he induced the father to send his boy to the Northern University. The youth probably lived with Skene, while he was a student at King's College. Principal Blackwell, who had been Professor of Greek before he was raised to the Principalship, had done much to promote the study of that language in the north of

<sup>\*</sup> Lord Monboddo's daughter, writing to Mr Burnet, from Lawton, 11th February 1812, "Upon his sending a life of my father, intended to be published in a few days by Dr Brewster, in his Encyclopædia, for my inspection," comments on the errors, omissions, etc., in a very emphatic manner. At the close she says: "It may be worthy of remark that he was for some years at the parochial school at Laurencekirk—brought up, as Henry the Fourth was, with the boys in the village, undoubtedly the best mode of education for the early years." Ruddiman, who became librarian of the Advocates' Library in Edinburgh, afterwards gave young Burnet admission to it.

Scotland: and young Burnet caught the contagion both from the Principal and the Professor, became a Greek enthusiast, and disparaged all other studies in comparison. He regarded Roman Literature as a mere copy of the Greek while physical research was totally subordinate in his estimation to the study of Mind. He graduated as Master of Arts at Aberdeen, and then proceeded to Edinburgh for the study of law.

He next went to Groningen in Holland, where he spent three years, that he might be initiated into Civil Jurisprudence, as the basis of the law of Scotland. He also studied at Leydon. During these years he acquired a knowledge of French. It is said that, when he returned from Groningen to Edinburgh, he lived in lodgings at the foot of the West Bow, Lawnmarket. Hearing a tumult, late one evening, he went out to see what was going on, got entangled in the crowd, and was hurried to the Grassmarket, where he became a spectator of the whole of the Porteous Riot, to its final catastrophe. Being recognised, he was reported as one of the ringleaders of the mob; and it was only because he could prove his recent arrival from Holland that he escaped arrest as one of the rioters. The incident affected him greatly, and led him seriously to consider whether Edinburgh was a desirable place for residence.

However, on the 17th of February 1737, he was admitted a member of the Faculty of Advocates at Edinburgh, when twenty-two years of age, and at once began the practice of his puries on. It was a troubleus time, however, in the civil affairs of the enumy; and the events which led to the Jucobite Rising in 1745, and that episode itself, interfered scriously with the work of the Court of Session.\*

<sup>&</sup>quot;A simple of the first of the first of the present of the present in without the control of the present of the

He had not much to do at the bar, and taking no part in politics, Burnet went up to London for a time, where he formed many friendships, more of them literary than legal. He became acquainted with such men as Thomson the poet, David Mallet, Lord Lyttelton, John Armstrong, James Harris, and many others. After his return to Edinburgh he was engaged in one of the most famous litigations of the century, the great Douglas Cause; his success as an advocate, on the side that was victorious, being one of the chief reasons for his subsequent elevation to the Bench. This Douglas Cause had important issues; and it became, amongst Scotsmen, almost a national question. Burnet went over to France three times to collect evidence, as counsel on the Douglas side, spending thirty-one days in doing so. The Paris lawyers thought of abandoning the case, and a letter to that effect was prepared, and addressed to the Duke of Oueensberry, the litigant for whom Burnet acted. The young and determined advocate would not consent to this, and the letter was accordingly burned. The successful result of his pleadings before the Court of Session, as ratified on appeal by the House of Lords, justified his pertinacity and zeal.

As the details of this famous Douglas Cause are not so well known in England, and elsewhere, as they are in Scotland, a few particulars in reference to it may be mentioned. It turned on a really small point, with regard to which, however, the evidence was complex, and very difficult to unravel, viz.: "whether Archibald Stewart was or was not the son of Sir John Stewart of Grandtully, and

mouth of the North Esk. The tacksman of the Edzell fishings and the laird of Stracathro had raised an action against Mr Scott of Brotherton, in reference to his cruives. These had to be inspected, and in pursuance of the same Burnet missed his footing, and fell into a well-known deep pool. While efforts were being made to save him, Scott, the defender, said: "Let him alone, the young man wants to go to the bottom of the cause!" Burnet, however, was rescued, and won his cause.

Lady Jane Douglas, sister of the Duke of Douglas." It was without doubt the most important law-suit in the Scottish Court of Session during the eighteenth century; and, as it involved the succession to the great estates of the last Duke of Douglas, the interest in it was wide-spread, and there were several competing claimants.

Lady Jane Douglas was privately married to Sir John Stewart in August 1746, she being then forty-nine years of age. Soon afterwards they went abroad, and lived successively at the Hague, Utrecht, and Aix-la-Chapelle, until May 1748. At Paris, in July 1747, Lady Jane gave birth to twin boys, and nearly a year and a half later they returned to England. One of the boys died in infancy, the other became defender in this famous case. When the Duke of Douglas died, the Duke of Hamilton claimed almost the whole of the landed estates; the Earl of Selkirk claimed a portion, under deeds executed by the father of the late Duke, and the surviving twin son of Lady Jane Stewart claimed the whole estate, under a settlement by the Duke of Douglas shortly before his death. He was served heir, unopposed, according to the forms of the law of Scotland. Rumours were afloat, however, that he was not the son of Sir John and Lady Jane, but of a poor Frenchman, Nicolas Mignon, and his wife, from whom the twins had been obtained fraudulently. Four years after the boy's birth Lady Jane died, blessing her son as she passed away; and nine years afterwards Sir John, on his deathbed, bore witness to the genuineness of the story of the boy's paternity. All Scotland was excited over this case to an extraordinary degree, and some of the most famous Edinburgh lawyers were sent to France to collect evidence in reference to it. The interest was so keen that it almost led to open hostilities between the opposite sides.

The case was first heard in the Court of Session, from

the 7th to the 14th of July 1767. Seven Judges voted on each side, and the Lord President gave his casting vote against the son of Sir John Stewart. It was immediately carried on appeal to the House of Lords, and distinguished English as well as Scottish barristers were engaged upon it. Socially it became a rival faction-fight between the two great houses of Hamilton and Douglas. Monboddo was the chief pleader on the Douglas side. The Lord Chancellor (Camden), Lord Mansfield, and others, were convinced by him; and the House of Lords, without a vote, reversed the decision of the Scottish Court of Session, thus confirming Monboddo's judgment.

In 1760, Burnet married Miss Farquharson, a beautiful woman, a relative of Lord Marischal, and of Marshall Keith. Her father, like his own, had been in the battle of Sheriffmuir. They had one son and two daughters, Mrs Burnet dying on the birth of the second. In 1764 he was elected Sheriff of Kincardineshire, and in 1764 was made a Lord of Session in succession to Lord Milton. There was some delay in his appointment, owing to intrigues in connection with the Douglas Cause, which was at the time sub judice; and it was not unnaturally surmised that, if elected to the Bench, he would vote in favour of the man whose counsel he had been. His friend, the Duke of Queensberry, who was indignant at the delay, went to the King, and secured his election. Monboddo was offered, but declined to take, a seat in the Justiciary Court; in order that he might have more leisure for literary study and work. Its acceptance was pressed upon him, both by the Duke of Queensberry, and Viscount Melville; but, as his attendance at Circuit trials would have seriously interfered with his favourite pursuits, he relinquished that legal honour.

While a practising barrister he lived in Advocate's Close, and when he became a Judge, he removed to No.

13 St John's Street, where he soon became a great social power in Edinburgh circles; convivial, but always temperate. Lord Woodhouselee wrote of him: "It was his daily custom to unbend himself, after his professional labours, amidst a select party of literary friends at an early supper. The entertainment itself partook of the costume of the Ancients: it had all the variety and abundance of a principal meal; and the master of the feast crowned his wine like Anacreon with a garland of roses. His conversation, too, had a race and flavour peculiarly its own. It was nervous, sententious, and tinctured with genuine wit. His apothegms (or, as his favourite Greeks would rather term them γνωμαι) were singularly terse and forcible; and the grave manner in which he often conveyed the keenest irony, and the eloquence with which he supported his paradoxical theories, afforded the highest amusement of those truly Attic banquets, which will be long remembered by all who had the pleasure of partaking in them."\*

Monboddo had an enthusiastic love for theatrical entertainments. The Edinburgh theatre in his time was in the Playhouse Close, in which Home's tragedy of Douglas was first performed. The history of this play is a curious one. It was completed in 1754; and a rehearsal of it took place in a room in an old house in Horse Wynd. It is worth recording that in this performance the Revs. Dr Robertson and Carlyle represented the male characters, while Professors Blair and Ferguson took the female ones. We do not know that Monboddo was present at the first performance; but, whenever the play was performed subsequently, he was always in attendance.

A Scot, with the refined manners of a highly educated

<sup>\*</sup> See Tytler's Memoirs of the Life and Writings of the Honourable Henry Home Lord Kames, vol. i. p. 181.

Englishman, a most kindly country gentleman, a philosopher, linguist, and judge, there is no doubt that Lord Monboddo was also eccentric in many ways, especially in costume and in habit. On his return from France he came to an Assembly in Edinburgh in a suit of white velvet, of which he was not a little vain; but when he went down for vacation to his country seat in Kincardineshire he dressed like a farmer.

For many years he paid an annual visit to London, always riding up to town on horseback. He would never enter a stage coach, or be in what he called a "box" carriage. He thought the true position of man was to be on a horse's back, not to be dragged by a horse behind its tail! And so, with a single servant accompanying him, he made his regular equestrian journeys to and from the metropolis, until he was eighty years of age. Unfortunately, when he took his daughter with him, he insisted that she too should ride on horseback all the way to town, a procedure which proved injurious to her health.

His love of riding, even in the severest weather, continued till his death. Once returning from Dalhousie Castle to Monboddo, he told Mr Ramsay of Ochtertyre that they had "met but one traveller, who rode with his face to the tail to avoid the blast."\* In London he was often an honoured guest in the house of Mrs Montague, and still more especially in that of his friend James Harris. In the pleasant home of the author of *The Castle of Indolence* at Richmond he met many friends, and greatly enjoyed the poet's talk, and that of another writer of verse, Dr Armstrong. In the circle of his friends were included the Earls Stanhope and Mansfield, Lords Thurlow, Lyttelton, and Grantby, the Archbishop of York, and Bishops Horsley, Lowth, Porteous, Shipley, and Burgess, Sir John Pringle, etc. At the Court of St James's, his

<sup>\*</sup> See Scotland and Scotsmen in the Eighteenth Century, p. 354.

Majesty George III. is said to have been much interested in him. On one occasion he asked Monboddo and a soldier successively how they had come up to Town; and, after getting their respective answers, replied, "Very odd, very odd, my Judges gallop to Town on horseback. My cavalry officers travel singly in the mail coach!"

In 1785, when he was the guest of the London Judges, and seated on the King's Bench, part of the floor gave way, and all the English Judges made a quick retreat to the door. Monboddo sat still, being near-sighted and rather deaf. He was asked why he did so, and replied that he "thought an annual ceremony was taking place, with which, as an alien to their laws, he had nothing to do"! The incident is thus recorded in one of the journals of the day. In this connection it may be mentioned that, as a Scottish Judge, he did not sit on the Bench with the other Senators of Justice, but beneath it, along with the clerks. He had two reasons for doing so: the first was the deafness just mentioned. From the Bench he could not easily hear the pleadings at the bar. The second was that on the first occasion on which he had to take the place of a Senator, the Douglas Case came up for decision; and as he had been the leading advocate on one side he preferred to give his judgment from the table below. As a Judge he often differed from his colleagues on the Bench, but none of his judgments were ever reversed by the House of Lords. If they happened to be opposed to the views of the majority on the Scottish Bench, they were invariably sustained on appeal to the English Judges. While he was by far the most learned of his legal contemporaries, no Judge excelled him in uprightness.\*

He was an original and a very prominent member of

<sup>\*</sup> He did something to expedite business in the Court, getting the work done by "hearings" instead of "pleadings."

the "Select Society," founded at Edinburgh in 1754, by the painter Allan Ramsay, only son of the poet of the same name. This Society met weekly on Friday evenings, in the Advocates' Library, for literary and philosophical discussion, and for the improvement of its members in the art of public speaking. Its debates were occasionally very able, sometimes brilliant. Dugald Stewart, in his Account of the Life and Writings of Dr William Robertson, says (p. 15) that in it were heard "debates which have not often been heard in modern assemblies -debates where the dignity of the speakers was not lowered by the intrigues of policy, or the intemperance of faction; and when the most splendid talents that have ever adorned the country were roused to their best exertions by the liberal and ennobling discussions of Literature and Philosophy." Even if we deduct something from this panegyric, due to the perfervidum ingenium of the writer, it must have been a remarkable and "select" Society, in the best sense of the term. It numbered in its ranks fifteen members, who then were, or became peers; and eighteen who were, or became, judges in the Court of Session. They included such men as Sir Gilbert Elliot, Alexander Wedderburn (afterwards Lord Loughborough), Andrew Pringle (afterwards Lord Alemoor), Professor Hugh Blair, Professor William Wilkie, author of The Epigoniad, Lord Kames, Lord Hailes, Lord Elibank, Charles Townshend,\* Sir John Dalrymple, Dr Robertson the historian and afterwards Principal of the University of Edinburgh, David Hume, Adam Smith, and Fergusson the poet. Dr Carlyle of Inveresk speaks of Lords Monboddo and Elibank as the members "who had the peculiar talent of supporting

<sup>\*</sup> Of whom Burke said, "He was the delight and ornament of the House of Commons," and on whom Macaulay's verdict was, "the most brilliant and versatile of mankind, who had belonged to every party and cared for none," and was known as "the weather-cock."

their tenets by an inexhaustible fund of humour and argument." In 1759 there were one hundred and thirty members enrolled. It had perhaps a more illustrious history than the later "Speculative Society" of Edinburgh, or the "Philosophical Society" of Aberdeen.\*

The mention of Aberdeen brings us back to that pleasant north-country, where the Judge spent so much of his time, of which he was so fond, and where he was such an admirable landlord and host. The rent-roll of Monboddo was very small, not more than £300 in Burnet's time; but he never raised his rents, and never dismissed a poor tenant for the sake of a larger sum offered by a newcomer willing to occupy the farm. His personal habits were frugal, if somewhat eccentric. Very fond of exercise in the open air, he rose early—six o'clock and always took a cold bath, summer and winter (even during frost), in a house erected for the purpose at some distance from the mansion, near a running stream which supplied it with water. He took a light dinner early during the day, supper being his chief meal. Before going to rest he had an air-bath, and then anointed himself with oil, in imitation of the Ancients, his lotion being composed of "rose-water, olive oil, saline, aromatic-spirit, and Venetian soap."

<sup>\*</sup> David Hume, in a letter to Allan Ramsay, wrote: "The Select Society has grown to be a National Concern. Young and old, noble and ignoble, witty and dull, laity and clergy, all the world, are ambitious of a place amongst us; and on each occasion we are as much solicited by candidates as if we were to choose a member of Parliament." Would that, in these days, shorthand reporting had been possible, and that we now had an authentic record of the debates in the "Select Society." David Hume, in the letter from which a quotation has been made, tells us some other things of interest to posterity; but the only note we have of the transactions of the Society bearing on Monboddo is this. Mr Wedderburn (afterwards Lord Chancellor) having, to his own satisfaction and that of a large number of members, turned a theory of Monboddo's (who was present) into ridicule, the latter replied: "Mr Preses, the Ancients roasted above the fire; the Moderns roast before the fire; but methinks this young gentleman would fain roast without any fire at all!"

Monboddo's only son died early. His eldest daughter was married to a Mr Williamson, who had acted as his clerk and secretary, and afterwards held office in the Court of Session as Keeper of the Rolls of the Outer House. His second daughter, who was singularly beautiful, devoted herself exclusively to her father. She was the very light of his eyes, and the joy of his heart in old age. She had a fine literary sense, and was admired by every one. On Robert Burns' first visit to Edinburgh - when he came in to look after the publication of his poems — he saw much of Monboddo and his daughter, having been introduced to the Judge by Henry Erskine; and, at the supper parties in St John Street, the best social qualities of the bard came out. When he returned to Ayrshire from this first visit, his friend Geddes said to Burns: "Well, and did you admire the young lady?" Burns replied: "I admired God Almighty more than ever. Miss Burnet is the most heavenly of all his works."

In his *Address to Edinburgh* our poet wrote (though not in his most perfect manner):—

Thy daughters bright thy walk adorn,
Gay as the gilded summer sky,
Sweet as the dewy milk-white thorn,
Dear as the raptured thrill of joy!
Fair Burnet strikes th' adoring eye,
Heaven's beauties on my fancy shine;
I see the Sire of Love on high,
And own His work indeed divine!

Writing to William Chalmers at Ayr on 27th December 1786, he said: "'Fair B——' is heavenly Miss Burnet, daughter to Lord Monboddo, at whose house I have had the honour to be more than once. There has not been anything nearly like her in all the combinations of beauty, grace, and goodness the great Creator has formed since Milton's Eve, on the first day of her existence." On the last day of the year 1786, Burns wrote to Monboddo:

"I shall do myself the honour, Sir, to dine with you to-morrow, as you obligingly request. My conscience twitting me with having neglected to send Miss Eliza a song which she once mentioned to me as a song she wished to have, I enclose it for her, with one or two more, by way of peace-offering." On Miss Burnet's death, in 1790, when twenty-five years of age, Burns wrote to Mr Cunningham: "I have these several months" (they were the months in which he was also writing Tam o' Shanter) "been hammering at an elegy on the amiable and accomplished Miss Burnet. I have got, and can get, no farther than the following fragments. . . ." The elegy consists of seven stanzas. His daughter's death was a terrible blow to Monboddo.

Amongst his Edinburgh friends must not be forgotten Miss Alison Rutherford, afterwards Mrs Cockburn, the author of *The Flowers o' the Forest*, who for more than half a century was a unique figure in the society of the metropolis, the friend of David Hume, and of Burns, as well as of Monboddo. In her parlour in Crichton Street, she assembled around her a circle of Scotsmen, and Scotswomen, as distinguished and accomplished as Madame Racamier used to do in her Paris *salon*. We must go back, however, to the earlier years when the Judge had many a honoured guest in his Kincardineshire home.

Samuel Johnson and Boswell visited him during their famous *Tour*. Johnson and he had a good deal in common, but they also differed widely. The theoretical difference was mainly this, Monboddo's aim was to conform our modern life to ancient ideals; Johnson's to bring all ancient ideals into actual or utilitarian modern practice. And there was wisdom and good sense on both sides of the difference. Interesting details of the visit of the lexicographer to Monboddo are to be found in the *Life of Johnson*, written by Boswell. The two men were at St Andrews in August

1773, en route for Aberdeen. The latter was doubtful of the wisdom of taking his friend to Monboddo, as he was aware that the two men "did not love each other"; but, with Johnson's concurrence he sent his servant from Montrose with the following letter:—

"Thus far I am come with Mr Samuel Johnson. We must be at Aberdeen to-night. I know you do not admire him so much as I do; but I cannot be in this country without making you a bow at your old place, as I do not know if I may again have an opportunity of seeing Monboddo. Besides Mr Johnson says he would go two miles out of his way to see Lord Monboddo. I have sent forward my servant that we may know if your Lordship be at home.—I am ever, my dear Lord, most sincerely yours,

"JAMES BOSWELL."

In his account of the interview which followed Boswell refers to "the two turrets which mark an old baron's residence." "Lord Monboddo received us at his gate most courteously, pointed to us the Douglas arms upon his house, and told us that his grandmother was of that family. 'In such houses,' said he, 'our ancestors lived, who were better men than we.' 'No, no, my Lord,' said Dr Johnson, 'we are as strong as they, and a great deal wiser.' To this Monboddo made no reply, but the attack on one of his favourite opinions showed him to be a man of remarkable courtesy." Boswell wrote, "His Lordship is distinguished not only for his 'Ancient Metaphysics,' but for ancient politesse."

Monboddo was "drest in a rustic suit, and wore a little round hat. He told us we now saw him as farmer Burnet, and that we should have his family dinner, a farmer's dinner. He said: 'I should not have forgiven Mr Boswell, had he not brought you here, Dr Johnson.' He produced a very long stalk of corn as a specimen of his crop, and said:

'You see here the *lætas segetes*' (joyful crop), and added, that Virgil seemed to be as enthusiastic a farmer as he himself was, and was certainly a practical one: on which a discussion followed as to men who were not practical having yet written practical books."

They "spoke highly of Homer," and Boswell narrates the following conversation: - "Johnson. 'He had all the learning of his age. The Shield of Achilles shows a nation in war, a nation in peace: harvest sport, war stealing. Monboddo. 'Ay, and what we would call a parliamentary house scene: a cause pleaded.' Johnson. 'That is part of the life of a nation in peace. And there are in Homer such combinations of qualities of heroes, that the united powers of mankind ever since have not produced any but what are to be found there.' Monboddo, 'Yet no character is described.' Johnson. 'No; they all develop themselves. Agamemnon is always a gentleman-like character: he has always βασιλικόν τι. That the Ancients held so is plain from this: that Euripides, in his Hecuba, makes him the person to interpose.' Monboddo. 'The history of manners is the most valuable. I never set a high value on any other history.' Johnson. 'Nor I; and therefore I esteem biography, as giving us what comes near to ourselves, what we can turn to use.' Boswell. 'But in the course of general history we find manners. In wars we see the dispositions of people, their degree of humanity, and other particulars.' Johnson. 'Yes; but then you must take all the facts to get this; and it is but a little you get.' Monboddo. 'And it is that little which makes history valuable."

They together bewailed the decrease of learning in England, and its partial extinction in Scotland. Johnson said to Boswell that, from the Judge's conversation in London, he had imagined him "all paradox, which would not do"; but that at Monboddo he (Johnson) "would have pardoned him for a few paradoxes." They

discussed the respective merits of the savage and the London shopkeeper. Monboddo preferred the savage, and Johnson said; "I don't know, but I might have taken the side of the savage equally, had anybody else taken the side of the shopkeeper."

As there is a difference between the literary photograph of Monboddo taken by Dr Johnson, and that left to us by others, it may be desirable to reproduce what Sir Walter Scott said of him, in a note to Guy Mannering: although part of it repeats in a different way what has been already said. "The B." (Burnet), "whose taste for the evening meal of the Ancients is quoted by Mr Pleydall, was the celebrated metaphysician and excellent man, Lord Monboddo, whose cana will not be soon forgotten by those who have shared his classic hospitality. ... His philosophy was of a fanciful and somewhat fantastic character; but his learning was deep, and he was possessed of a singular power of eloquence, which reminded the hearer of the os rotundum of the Grove or Academe. Enthusiastically partial to classical habits, his entertainments were always given in the evening, when there was a circulation of excellent Bordeaux, in flasks garlanded with roses, which were also strewed on the table after the manner of Horace. The best society—whether in respect of rank or literary distinction—was always to be found in St John's Street, Canongate. The conversation of the excellent old man, his high gentleman-like, chivalrous spirit, the learning and wit with which he defended his fanciful paradoxes, the kind and liberal spirit of his hospitality, must render these noctes cana-que dear to all who, like the author (though then young), had the honour of sitting at his board." The passage in Guy Mannering, to which the above is a note, is as follows:-" I am of counsel with my old friend Burnet. I love the cana, the supper of the Ancients, the pleasant meal and social

glass that wash out of one's mind the cobwebs that business or gloom have been spinning in our brains all day."

Monboddo's house in Kincardineshire was a place of call to many distinguished strangers, who visited Scotland in the eighteenth century, very much as Linlathen in Forfarshire was a resort to like-minded men in the latter half of the nineteenth; and the memory of visits paid to it were numerous and bright. Although — as was most natural—the Judge latterly preferred the retired life of a country laird to active work in Edinburgh or London, he always spent part of the year in the northern metropolis; and the old fellowships of the "Select Society" continued to the close of his life. In the Memoirs of the Life, Writings, and Correspondence of William Smellie - who was an Edinburgh printer, and afterwards Secretary and Superintendent of Natural History to the Society of Scottish Antiquaries—there is an interesting account of Monboddo. Smellie was a frequent guest at the classical suppers of the Judge, which occurred once a fortnight while the Court was sitting; and which usually included such distinguished men as Drs Black, Hutton, and Hope. He was also frequently invited when Monboddo was writing on anything which involved reference to Natural History. Smellie was a competent naturalist; and he used to read some of his Essays to the Judge (such as that on his theory of Sleep and of Dreaming), who enjoyed them. He offended his friend, however, by a disparaging criticism of his book on the Origin and Progress of Language, in the Edinburgh Magazine and Review, which Monboddo felt acutely. This criticism, along with another by the editor (Dr Gilbert Stewart) led to the collapse of the Review, owing to the wide-spread offence it gave. The controversy with Smellie caused no real breach, however, in their friendship; and the naturalist intended at one

time to write an account of the "Life and Writings" of the Judge, (along with that of many of his contemporaries), which he did not live to accomplish.

Little more need be said of Monboddo's career. He died at Edinburgh, of an attack of paralysis, on the 26th of May 1799, in his eighty-fifth year, having been thirty-two years on the Bench.\* Shortly before his death he said to his physician-friend, Dr Gregory: "I know it is not in the power of Art to cure me: all I wish is euthanasia—a happy death." The following is part of an "Epitaph" upon him, which was written for a London newspaper by Dr H. W. Tytler.†

If wisdom, learning, worth, demand a tear Weep o'er the dust of great Monboddo here; A Judge upright, to mercy still inclined; A generous friend, a father fond and kind; His country's pride, for skill in Grecian lore, And all Antiquity's invalued store.

As the epitaph goes on to anticipate a lasting immortality for Monboddo's works, it need not be further quoted. It can be found in full in *The Gentleman's Magazine* for June 1799. One of the best of the posthumous tributes to him is that by a late Senator of the same Court of Session which he adorned, viz. Lord Neaves, who wrote as follows:

## To the Memory of Monboddo.

'Tis strange how men and things revive Though laid beneath the sod, O! I sometimes think I see alive Our good old friend Monboddo!

<sup>\*</sup> It is perhaps worthy of note that only three judges sat in Monboddo's seat in the same line of succession from the Revolution. Lord Fontainhall, appointed in 1689, was succeeded by Lord Milton in 1724, who was followed by Monboddo in 1767; three judges for the long period of one hundred and ten years.

<sup>†</sup> A poetical M.D., author of *Pedotrofhia*, and *Poems relating to the Cape*, etc., a scholarly friend of Monboddo's.

His views, when forth at first they came, Appeared a little odd, O! But now we've notions much the same; We're back to old Monboddo.

Alas! the good lord little knew,
As this strange ground he trod, O!
That others would his path pursue,
And never name Monboddo!
Such folk should have their tails restored,
And thereon feel the rod, O!
For having thus the fame ignored
That's due to old Monboddo.

Though Darwin now proclaims the law,
And spreads it far abroad, O!
The man that first the secret saw
Was honest old Monboddo.
The architect precedence takes
Of him that bears the hod, O!
So up and at them, Land o' Cakes,
We'll vindicate Monboddo.

There is no doubt that some of Monboddo's personal and literary animosities were unfounded. He had a quarrel with David Hume, another with Lord Kames, another with Samuel Johnson. Perhaps his bias towards paradox, and even whim, prevented him from being the most sympathetic of men amongst his contemporaries. They all felt him to be a man of power; and his personal ascendency, with the charm which he invariably displayed (when out of the arena of controversy) made him an honoured member of the illustrious brotherhood of eighteenth-century Scotsmen.

As to those works in which he unfolded his opinions, and on which his fame rests, the primary idea—instilled into him doubtless by his tutor Skene, and by Principal Blackwell—was that, for all philosophic truth, we must go back to Plato and to Aristotle. He despised every one who presumed to think that he was a philosopher, if

he was a mere *modern*, and ignorant of these ancient masters.

This return to Antiquity was, to a large extent, a return to Authority, from the manifold individualistic theories of modern philosophers, Bacon and Descartes included: but Monboddo's regard for the Ancients was not a blind reverence for them, as the ultimate arbiters of belief, far less an abject deference to them as intellectual autocrats. It was a healthy appreciation of the mature thoughts of the philosophical magnates of the past, as a counter-active to the vagaries and the crotchets of those moderns who had broken with antiquity in an insurgent manner, without any valid substitute. Many of his opinions were those of Plato and Aristotle in an eighteenth-century dress. The intellectual ancestry of others may be traced to Lucretius, and to Horace. Let any one look up the fifth book of the De Natura Rerum, or the third, in the first book of the Satires of Horace, and he will at once see the extent of Monboddo's debt, and its special character.

The seven lines-

Cum prorepserunt primis animalia terris,
Mutum et turpe pecus, glandem atque cubilia propter
Unguibus et pugnis, dein fustibus, atque ita porro
Pugnabant armis, quae post fabricaverat usus,
Donec verba quibus voces sensusque notarent
Nominaque invenere; dehinc absistere bello,
Oppida coeperunt munire, et ponere leges \*

—were taken by Monboddo, as the motto of his book on the *Origin and Progress of Language*. His adaptation of Virgil's line

Tantae molis erat humanam condere gentem

"might," (as some one has said,) "be adopted as a motto

<sup>\*</sup> Horace, Sat. I., 3, ll. 99-105.

by the evolutionists." But he altogether idealised the world of Antiquity, the Greek world especially. He held that the youth of the world was its age in wisdom, that the ancients were our superiors not only in Philosophy, in Science, and in all the Arts-Poetry, Music, Painting, Architecture, Sculpture—but also in the physical characteristics of strength, stature, and longevity. His work on the Origin and Progress of Language was first published anonymously in six volumes (1773-1792). It was translated in part into German by E. A. Schmidt (Riga, 1784-6), and greatly praised by Herder, in a preliminary dissertation to Schmidt's version. It was welcomed in France. may be mentioned that John Hunter-who was afterwards Professor of Humanity in the University of St Andrews -- acted as Monboddo's Secretary for some years, and assisted him in the preparation of this work. Some even say that Hunter wrote the first (which was the best) volume. In this volume we first have an account of the origin of Ideas (according to Plato and Aristotle), next of the origin of Human Society, and next of Language. Monboddo held that Language is a human invention; that Man was originally an animal, without speech, or reason, or affection; that the orang-outangs were not specially distinct from men, and that men with tails did still exist; that the beaver was essentially a social creature; and that all the higher attainments of the human race, in reason affection civilisation and speech, were the mere results of long experience, continuous struggle, and artifice.

It is curious that with this scientific experientialism as the keynote of his earlier work, Monboddo should—in his later one—be so idealistic. In his Ancient Metaphysics, published anonymously in six volumes (1772-1799), we have a glorification of Greek idealism,

as opposed to the empiricism of the phenomenalists and of David Hume.

An interesting reference to him is to be found in *The Life of Percy Bysshe Shelley*, by Thomas Jefferson Hogg, 1851, vol. I., p. 454, as follows:—

"The bright lights of Scottish Jurisprudence are not lightly to be contemned. There have been some truly great men in their College of Justice. We cannot boast such names in England among our Judges; by no means. Lord Monboddo—some whimsical fancies, such as spring up in inventive minds, like weeds in a rich soil, alone excepted—was a star of the first magnitude. So profound a scholar as James Burnet—a genius so original, so splendid: a man so learned, so liberal-minded—our English Bench could never show."

The next chapter contains an outline of Monboddo's works, and an estimate of his philosophical position. It need only be added that, while he was prejudiced against modern science, and quite unjust to Newton, the education of the Scottish youth in his day was almost wholly a classical one. Relatively speaking, even Mathematics were disesteemed; while experimental Physics and Chemistry were rarely taught, and scarcely known.

## CHAPTER SECOND.

LORD MONBODDO'S WORK, AND HIS PHILOSOPHICAL POSITION.

## (a) General Estimate.

THE publication of Lord Monboddo's Letters, and those of his contemporaries which are included in this volume, is warranted not only on the ground of their intrinsic merits, and because of the light which they cast on the controversies in which he was engaged, but also because they anticipate some of the outstanding problems of modern times. They also disclose a good deal as to his correspondents' point of view, notably that of James Harris, Samuel Horsley, and Dugald Stewart. Some of his friends wrote a better and terser English style than he did. He was occasionally prolix, repetitive, and wordy; but invariably courteous in argument, and a formidable intellectual foeman. In his observations on Sir John Pringle's third letter to himself on The Origin of Language (21st June 1776), he defended the long rolling periods of Milton and Clarendon amongst the moderns, and of Demosthenes Thucydides and Cicero amongst the ancients, over the brevity and sententious style of such writers as Voltaire. The latter he called "memoranda, or shorthand writing."

The candour and graciousness, on both sides of the philosophical correspondence with Dr Price, is note-

worthy. It is an excellent example of fair-minded controversy, while the men differed on many fundamental points: but these letters disclose Monboddo's weakness, as well as his strength, as a controversialist. We see him entrenched behind the Torres Vedras lines of Aristotle's psychology, and metaphysics; and we note, with inevitable regret, his reluctance to open his eves to the advance made by modern philosophy. He fought like the South African Boers, behind intellectual kopies: only he did not conceal himself, as they do! In all his argumentation we perceive, it is true, his clear grasp of the essentials of each problem discussed; but Aristotle was all in all to him for a time. Later on, he harked back to Plato; and his Platoism was, perhaps, his most distinctive characteristic. He was slavish in his deference to him. It amounted almost to worship. He even thought that the Protagoras might be brought upon the stage, and so dramatised as to be delightful to philosophically - minded spectators! Not only was his intellectual discipleship to ancient theory complete, but his slavery to the Greek and Latin canons of criticism was also absolute. This led him to prefer Home's tragedy of Douglas to any of Shakespeare's dramas! The letter which he wrote to James Harris (28th September 1769) on this subject — in which he gives reasons for his preference—is specially interesting, although it contains an almost ludicrous misjudgment of Shakespeare. He wrote it mainly to vindicate Aristotle's theory of Poetry, in the light of the tragedy of Douglas; or rather to find in Douglas a confirmation of the truth of the radical principle of Aristotle's theory. He said that Shakespeare's plays want that element of "discovery." or "surprise" in action, which is seen in Douglas. This contrast he tries to draw out in detail; but it is poor criticism, from first to last.

Monboddo was full of prejudice in favour of certain authors, subjects, literatures, and against others. His enthusiasm for Greek was balanced by a somewhat irrational contempt for Latin. His anticipation of the affinity of Greek with Sanskrit, (see his letter to Sir William Innes, 20th June 1789), was as remarkable as his ignoring of the merit of solid construction which characterises the language of ancient Rome. Dr Beattie tells us that he said: "If we'except the Roman Law there is nothing in Latin literature worthy of preservation; and that no one ignorant of Greek could write a page of good English." His polemic against his predecessor, Locke, was at times as one-sided and inaccurate, as his attack on Sir Isaac Newton's laws of motion: and he was prejudiced against Dr Johnson, because of his indifference to Milton. But in the course of his letters to his correspondents, and of theirs to him, we get many interesting side-glimpses of the character and habits of his friends; e.g. Samuel Horsley writes that he read his Plato usually at breakfast, and, therefore, required an edition which he could conveniently hold in his hand at that time. His correspondence with Horsley-when they interchanged, not letters but long essays, or rather short booklets in MS.—turned on the intricate problem of the nature of Force and of Motion, and the relation of these to Mind, with special reference to Sir Isaac Newton's teaching; questions in which physical and metaphysical science meet, and cross each other. Monboddo's attack on the teaching of the Principia is easily explained. In his youth, at school and college (as already noted) he had never learned anything about the subject, and he had not studied it in his manhood; yet his controversy with the distinguished mathematician just named is more than interesting. Monboddo was by far the abler of the two disputants, but he did not know the drift, scarcely even the elements, of Sir Isaac's teaching. Horsley was inferior in grasp, but he had studied the subject, and was familiar with the mathematical physics of the *Principia*. The result was that, neglecting induction, and trusting to his own reasoning power, Monboddo tilted (in vain) against some of the established laws of science. If his discussion with the mathematical prelate has no special value to the student of Modern Science—as Newton's laws are now established data in the realm of physics—it has much interest to those who care to watch the progress of ideas, and to note the way in which when first promulgated they appealed to acute and powerful minds, and were by slow degrees recognised and adopted.

As a man of learning Monboddo has had no rival amongst the philosophers of Scotland except Sir William Hamilton: but in his early days, when an advocate, he was noted quite as much for his love of hunting, of the theatre, and of dancing, as for his poor opinion of contemporary authors, and his excessive admiration for the writers of antiquity. He thought that the human race had sadly degenerated. He was taunted with being a "master of ceremonies to the playhouse," and that may have lost him some legal practice: but he was really diverted from his profession by his love of learning, and his passion for writing books. His bias against the moderns has been noted, but he did not quarrel with his contemporaries. He differed widely from them, and expressed his differences with characteristic force. He had some friction with David Hume and Lord Kames, as well as with Dr Johnson. He detested the philosophy of Hume, while neither Bacon, nor Locke, nor Berkeley satisfied him; but he was not a bitter opponent. He had a dislike, approaching to contempt, for those who, whenever pressed by difficulty, resorted to "first principles,"-that harbour

of refuge for distressed metaphysicians—and preferred a further rational analysis and critical investigation of every problem. In his excessive eulogy of the ancients he once said to the Duchess at Gordon Castle that few of the moderns who had won distinction could write with elegance. It was suggested to him that Lord Kames (who was present) did so. He replied that he did not think his brother on the bench any exception to the rule—a remark which not unnaturally offended the latter. Their hostess, not relishing the prospect of a literary duel in her drawingroom, proposed that the two authors should dance a reel with her, which they did! When Kames's Elements of Criticism appeared, he met Monboddo (then Mr Burnet) in the street, and asked him, "Have you read my book?" "No, my lord!" was the reply, "you write much quicker than I can read."

It must be admitted that there was just a touch of vanity in his occasional references to himself; as in the sentence, in a letter to Sir George Baker, that if his projected work on the History and Philosophy of Man was well executed, it would be "the greatest work of History, Philosophy, and Learning, that has been published in this country": and the slightly garrulous egotism of old age came out in one of his latest sayings, "I have forgot a great deal more than most other men knew!" There was also a good deal of one-sided pessimism in the saying that "nothing could save us, and all Europe, from absolute destruction and annihilation, but the study of ancient men and ancient manners."

It was noble and much-needed service that he rendered in directing the attention of his time to the ancient Masters of Wisdom, urging his contemporaries to become familiar with Plato and Aristotle; but to despise all philosophy not based on their teaching was utterly unhistorical. The spirit, the tendency, and the results

of modern philosophy had proved that the European mind was at last disenthralled; that if the dead-weight of mediæval tradition was not removed, the fetters of antiquity had at least been broken. Monboddo virtually said, "No; return to the Ancients. They are our Masters still."

This contention of his had two sides; one of them being extremely foolish, the other essentially wise. To ignore the progress and "increasing purpose" of the ages is to be untrue to historical fact; but in that progress, and as a consequence of it, the insight of the ancients is sometimes forgotten, and the wisdom of the fathers occasionally overlooked. Monboddo's assertion that the race had degenerated-mentally, morally, and physically—was however curiously illogical, when taken in connection with his admission of the animal ancestry of man. The ascent, and not the descent, of man was the natural corollary of the conclusion he had reached in his anthropological studies. If our race has emerged from lower forms its continued progress, after the human stage was reached—and not its subsequent degeneracy—was the logical sequel to which his position led up. But we must not expect to find perfect symmetry, or consistency, in Monboddo's philosophical theories.

## (b) His Philosophical Position.

Perhaps the special interest to posterity in Monboddo's philosophical attitude and work is this, that in an experiential era, when inductive science ruled his contemporaries, he was an acute appraiser, and a valiant defender, of à priori idealism: and that, to help the progress of Philosophy, he looked to Plato and Aristotle as our best guides. It is true that he misjudged Descartes, Bacon, Hobbes, Locke, Hume, Berkeley, and Reid; but it was in the interest, as he judged, of a nobler system of thought,

promulgated by the ancient Greeks, and championed in modern times best of all (in his opinion) by Cudworth, Baxter, and his friend James Harris. We may set aside his erroneous judgments on the leaders of modern philosophy. That he considered the writer of the ponderous, and ill-arranged, as well as inaccurate miscellany, entitled The True Intellectual System of the Universe, as "more learned in the whole ancient philosophy, the older as well as the later, than any modern author"; that he characterised Locke's Essay as "no other than a hasty collection of crude undigested thoughts, by a man who thought and reasoned by himself upon subjects of the greatest difficulty and deepest speculation, without assistance of learning"; that he described Bishop Berkeley's theory, as "as poor a piece of sophistry as ever I saw composed by a man who seems to be in earnest"; that he eulogised the author of Hermes as almost on the same intellectual level as Aristotle -all this was of little consequence, as compared with his misconception of the drift and tendency of modern Science.

Some account must now be given of the two books on which his fame reposes. These were *The Origin and Progress of Language*, in six volumes, (1773-92), and *Ancient Metaphysics*, or *The Science of Universals*, in six volumes, (1779-99).

## (c) The Origin and Progress of Language.

In this book, now seldom read, Monboddo tries to prove "that Language is not natural to man"; first, "from the origin and nature of the Ideas expressed by it," and secondly, "from the nature of Articulation." His motto was the Horatian one,

Mutum ac turpe pecus Donec verba, quibus voces sensusque notarent, Nominaque invenere;

To lay an adequate basis for his doctrine as to the origin of Language he begins with a discussion of the origin of Ideas, and brings forward the metaphysical solution which he had learned from Plato and Aristotle. None of our ideas—whether formed from sense perception, or from the operations of our own minds-are derived from Nature. They are due to acquired habit, not to instinct. And if ideas, which constitute the form of Language, are not natural to man, sounds (articulation), which are the matter of it, cannot be natural but acquired. He tries to show that not only individuals, "solitary savages, but whole nations have been found without the use of speech"; and "although they have organs of pronunciation as perfect as we," they have never been taught to speak. The mechanism of speech also proves it to be an acquired art, and one that it is difficult to learn. It therefore follows that Language is altogether the fruit of art, or human industry. If not, it has been revealed from Heaven. In support of the former alternative, he enters on a discussion of "the Political State as necessary for the invention of Language," and maintains that "such state is not natural to man any more than Language, to which it gave birth." He discusses the origin of Society, which preceded the origin of Language, and existed for ages before it.

He divides animals into the solitary and the gregarious, the political and the non-political, and places man between the two classes. He cites examples of men living without the arts of civilisation, and in tracing the causes which led to the rise of civil society, endeavours to show that it was "not from Nature." Time was when animals disputed with man the empire of the earth; and it was experience, and not instinct, that taught men the use of arms, and of acting together in concert against

common enemies; these enemies being those of their own race, and foreign invaders, as well as the lower animals. He then proceeds to answer the objections, (I) that instinct was sufficient to provide all the necessaries of life, and all its safeguards, (2) that there could be no Society without Language, and (3) that the law of Nature presupposes man to have been rational and political from the first.

His next discussion is as to the origin of Language. He treats of the modes of communication between men prior to the invention of Language, viz. by inarticulate cries, looks and gestures, imitative or mimic sounds, and painting or delineation; (the two former being common to man and the brutes); the first and third only having any relation to Language. He then discusses the theory of his friend, Dr Blacklock, that, before ideas were expressed by articulate sounds, they found expression through a musical language. He does not agree with this; and says that, even if it were so, such a language would be altogether inadequate even for savage life. Monboddo concludes that "Language arose from natural inarticulate cries," and the first were probably those by which animals call on one another. Articulation would begin by the voice being broken, and distinguished by the difference of a few vowels and consonants. first languages were spoken mostly from the throat, and the consonants were guttural. Many of our present words are merely modifications of primitive cries. "The breath which comes from the lungs, and passes through the windpipe, is the subject-matter of speaking." "After the breath has passed the larynx, it receives a farther modification by the positions and actions of the several organs of the mouth, such as the tongue, the teeth, the palate, and the lips; to which also we may add the throat and the nose, which have a great share in the

pronunciation of some languages." "The vowels make a sound by themselves." "They are nothing else than the blowing of the breath through the organs of the mouth." "The consonants are vocal sounds, or words modified by the action of different organs."

In the earlier Languages the words were long, and full of vowels. "The first articulate sounds that were formed denoted whole sentences." There was not one primitive Language, but many; nevertheless, not every nation invented its own Language, but some derived their speech from others. Languages have been propagated at very different rates of speed, and all are liable to change.

The second part of Monboddo's book—devoted to the art of Language—is less interesting than the first. In analysing the formal part of Language, it deals with the division of words into nouns and verbs, and their several sub-divisions, of the various "parts of speech," of genders and cases, moods and tenses. In analysing the material part he discusses accent, quantity, and rhythm. He then deals with "the composition of language," with syntax, and treats of peculiarities in the Latin, Greek, and Chinese tongues. Appended are dissertations on the formation and sound of the Greek language. He next discusses the subject of style, tropes, and metaphors, ellipses, parenthesis, hyperbole, antithesis, simile, and allegory. He treats of the simple, and the ornamental style; dividing the second into the austere, and the florid.

Thucydides, Sallust, and Tacitus are examples of the former; and of the latter, the Sophists, with Lucian among the ancients, and Lord Shaftesbury among the moderns. Wit and humour in style is next discussed; and the conversational, the epistolary, the didactic, the historical style. In this book he reverts to his old theme, viz. the superiority

of ancient, and especially of Greek, learning; and gives an interesting account of it, maintaining that all the learning of Europe came originally from Egypt. The first blow to European learning was the destruction of the Colleges belonging to the priests of Egypt; the second, the destruction of the Pythagorean Colleges in Italy; the third, the loss of liberty in Greece, and the extinction of learning there; the fourth, a similar loss and extinction at Rome; the fifth, the Saracenic conquests, and Turkish invasions.

He proceeds to consider "the different excellencies and defects in different languages." At great length he discusses and compares the Greek, Latin, and English languages, the French, and the Italian. An entire book is devoted to the different kinds of style in conversation, letter-writing, dialogue, history, and biography. He discusses the historical style of Livy, Julius Caesar, Halicarnassus, and Polybius; and of George Buchanan, amongst the moderns. In a book devoted to "the didactic style," he goes back to Plato and Aristotle. His last volume deals with "the matter and subject of rhetoric," of composition, of writing, and the great orators.

These subjects have been discussed to much greater purpose since Monboddo's time, by numerous scholars in this country, and in Germany; and his volumes are now nearly forgotten. The chief interest in all he has said, and dealt with, is perhaps his contention that the human race was for ages in a worse state than animals are now; with no reason or affection, or sense of duty, or power of speech, being endowed merely with sensation and memory. His à priori assertion that the orangoutang monkey is of the human species was a curious guess; but it was not supported by any evidence, and it was discredited by his amazing credulity in reference to travellers' tales!

## (d) Ancient Metaphysics.

This work was written mainly to meet, and expose, the teaching of Locke and Hume; but it was prepared without any consideration of its effect on his contemporaries. He wrote for the future. It extends to 2400 quarto pages, and is devoted to what he called "The Science of Universals," with "an Examination of the principles of Sir Isaac Newton's Philosophy." His familiarity with the Ancients took him into a lofty ontological sphere, or rather into an inner realm, which none of his contemporaries had traversed, content as they were to linger in the outer court of phenomena and psychological analysis.

What he gathered in that à priori realm made him entirely opposed to a mechanical explanation of the Universe. He affirmed that Mind was at the root of all things, and that it was in incessant active energy in matter; that is to say, one Supreme Mind, and under it an indefinite number of finite minds. The movement of the material cosmos might rouse the latter to action; but the ideas which come to conscious light within are not derived from sense but from Mind, and from the action of the Supreme Mind.

He tells us that what he proposed in his work was "to revive ancient Theism"—which was almost "entirely lost"—because modern philosophers "physiologise without Mind: and although they allow that Mind was necessary at first to produce this Universe, and set it a-going, they think it may now go on without Mind, by the operation of matter and mechanism merely; whereas the ancients thought that the operations of Nature could no more go on without the constant and unremitting agency of Mind, than a Universe could have been at first produced without Mind."

The following is a rough inventory of the contents of the first three volumes of Ancient Metaphysics.

In the first volume he discusses the nature of Metaphysics: the principles constituting the Universe; the Categories, or universal forms; the adjuncts of Nature, viz. time, space, and plan: the principles of Science, and of truth and certainty. An appendix is devoted to a dissertation on the principles of the Newtonian Philosophy. In the second volume he deals with the distinction between Mind and Body, and the properties of each: the several kinds of Mind; the several Minds in man, considered as distinct substances; the origin of our ideas, and the several properties of Mind; and again of the principles of Sir Isaac Newton's Astronomy. In the third volume his theme is the several substances of which man is composed; and in an appendix he returns to Sir Isaac Newton's Astronomy, to the principle of motion in unorganised bodies, and the differences between man and brute.

It must be admitted that there is a great deal of repetition in these volumes. Monboddo did not finish a subject, and leave it alone. He was truly a circum-ambulating metaphysician; but his reiterations were due to the intense earnestness of his convictions, and to the belief that his was "the voice of one crying in the wilderness, 'Prepare ye the way.'"

It is impossible to give a summary, or an analysis of the whole of the work attempted by Monboddo in his Metaphysics. A sample will suffice. He begins by a strong assertion of dualism. All things in Nature are either Body, or Mind; in Physics we study Body and Mind; in Metaphysics, Mind alone. In defining Body he at once comes into collision with Locke, and other modern philosophers, and goes back to the teaching of Plato and Aristotle. He gives Aristotle's distinction between  $\delta v' \nu a \mu \nu s$  and  $\partial v' \nu a \nu s$  a

energy. There are two kinds of motion—one derived from that to which it tends, the other from the capacity whence it begins. Modern philosophers have not defined motion except as change of place, but that is only the effect of motion. The great, the universal mover in the Universe is Mind. Of the two great principles in Nature one is always passive, the other active. The subject matter of Metaphysics is the nature of universal being. It is the science of the first causes and principles of things, and it therefore includes Theology within it. Notwithstanding the fundamental dualism of spirit and matter, or the radical separateness of mind and body, the two are correlated of necessity. Since Mind is the universal moving cause, and matter is in motion, it is Mind that moves it. Matter cannot be the cause of motion, simply because it is material. It is the immaterial that moves it. We reach this conclusion by analogy, starting from self-consciousness. We know that mind in us can move body external to it; and we are warranted in extending the inference, by analogy, to all the masses of body which exist around us. We infer that they are all moved in like manner by mind; and we thus conclude that the lower realms of the inorganic and the organic, of the vegetable and animal are-equally with the higher realm of intelligence -moved and ruled by mind.

The differentia in man, which marks him off from other existences, led Monboddo to deal with the characteristics of the human intellect, and the nature of man as a knower. Through sense man knows only the shadows of things (idola), but mind can transcend matter, and rise to the apprehension of truths and ideas underived from sense, e.g. the categories of thought; and, being able to carry on its operations apart from the realm of sense, mind is detachable from matter, and is immortal.

This power of elevation above sense, and detachment from it, proves that man has free will; and although his will is always determined to act by motives, the determination may be from within. Monboddo broke with the Lockian theory of the origin of knowledge as thoroughly as Leibnitz did, and on grounds similar to his. The human intellect contains within it latent ideas. underived from matter, such as those of substance and causality. But then ideas are not the product of the human mind, any more than they are the creatures of sense. They are planted in us by another, and a kindred mind, the supreme Mind. The distinctiondrawn out in so many ways, and repeated by Monboddo again and again—between mind that moves and body that is moved, and the discernment or discovery in Nature of a definite system of ends, was to him the hasis of Theism.

But perhaps the root-principle of his teaching was the ascent and progress that is to be seen in Nature, from the inorganic, through the organic, up to man; a progress which has gone on historically in the human species. The analogy of the growth of the individual, from the embryo up to the fully-formed product, suggests that the race was once embryonic, a state in which man was an animal, sans house, sans fire, sans clothes, sans speech, etc., etc. He tried to adduce testimony that there are still survivals of these early stages, e.g. men with tails, with eyes in their forehead, etc. In all this it must be confessed that he was the victim of illusion; and it is curious that, while believing in the ascent of man, he illogically connected with it a subsequent descent in the modern world—a falling-away, not only from the wisdom of the ancients, but from their physical stature and development. It is still more curious that, with an intellect so keen and arrowy, and a power

of sifting evidence that was possessed by few, he should have been so strangely imposed upon by the reports of travellers, and so credulous of their unversified assertions.

We honour the root-principle of his philosophy that the movement of all bodies must proceed from Mind, and his consequent denial of physical or mechanical energy as sufficient to explain the ongoings of the cosmos. Even although he brought Mind into Nature as a sort of Deus ex machina, the grounds of his reiterated protest against the materialistic hypothesis are unassailable. Amid the phenomena of the finite world, when an agent wills anything he thought that a "virtue went forth" from the realm of mind, which directly affected matter. This he did not make clear, or logically coherent: but his hypothesis of Intelligence, lodged originally and perpetually within the elements of Nature, and everlastingly diffused throughout the cosmos, was much more satisfactory. Inherent energy was the source of motion, and of power, in every atom or particle of matter.

In his defence of the à priori principle in Metaphysics and in Ethics Monboddo occupied an impregnable position, from which to repel the assaults of empiricism: and he clung to the three great postulates of God, Freedom, and Immortality—elaborated in a different way in the Kantian system—quite as firmly as the great philosopher of Königsberg did.

# CHAPTER THIRD.

SOME NOTES ON MONBODDO'S FRIENDS, AND CORRESPONDENTS.

JAMES HARRIS of Salisbury (1709-80) was a learned man in various directions, especially in that of the Greek and Roman classics, (Aristotle in particular). He wrote essays on Art, Music, Painting, Poetry, and on Happiness, which were published in 1744. In 1750 appeared his more famous work, Hermes: or, A Philosophical Inquiry concerning Universal Grammar. In the first chapter of his Origin and Progress of Language Monboddo refers to his "worthy and learned friend, Mr Harris;" and adds, in a footnote: "The author of Hermes, a work that will be read and admired so long as there is any taste for Philosophy and fine writing in Britain." In 1775 he gave to the world his Philosophical Arrangements (on the Categories or Predicaments); and in 1780 his Philological Inquiries. He entered Parliament in 1761, and was successively a Lord of the Admiralty and Lord of the Treasury. In 1774 he became Secretary and Comptroller to Queen Charlotte, which office he retained till his death in 1780.

His son James (1746-1820) became the first Earl of Malmesbury, and published a complete edition of his father's works in 1801. He was a successful foreign diplomatist, was Secretary to the Embassy at Madrid,



BURNS AND HIS CORRESPONDENTS AT LORD MONBODIO'S HOUSE. From a picture fainted by James Edgar.





Minister-plenipotentiary at Berlin, St Petersburg, and the Hague, was made Knight of the Bath in 1778, a baron in 1788, and Earl of Malmesbury in 1800.

The elder Harris was a good Greek scholar; and his general learning enabled him to produce, in his *Hermes*, a pioneer work on the philosophy of grammar, although it has been superseded by subsequent research. Many foreign dialects—not to mention languages—were then quite unknown to English scholars, and from his ignorance of facts some of his deductions were erroneous, and his definitions inaccurate. But the same may be said of the philological work of the lexicographer, Dr Johnson.

SIR WILLIAM JONES (1746-94) was born in London, and educated at Harrow and Oxford. He knew French, Italian, Hebrew, and Arabic before going to Oxford. For five years he acted as tutor to Lord Althorp, afterwards Earl Spencer. He rapidly acquired a knowledge of Persian, Chinese, German, Spanish, and Portuguese; going on to the study and mastery of twenty-eight languages, chiefly Oriental. He was called to the Bar, and entered the Middle Temple in 1774.

He wrote Commentaries on Asiatic Poetry, translated from Persian into French, compiled several dissertations on Oriental Literature, and also wrote on Land Tenure. In 1783 he was appointed a Judge in the High Court of Calcutta, and left England for good; but along with his judicial functions he carried on his Asiatic studies in India, and translated from Greek, from Indian, from Persian, from Chinese, and Turkish sources. He knew the Vedas, and translated the Ordinances of Manu; being, perhaps, the first Englishman who mastered Sanskrit. Extremely versatile, he was a poet, a historian, and a jurist; and in the latter capacity he was called "the Justinian of India." He

had the honour of laying the basis of the Bengal Asiatic Society. He died in 1794.

SIR JOHN PRINGLE, M.D., (1707-82), was educated at St Andrews and Edinburgh, went to Amsterdam and Leyden, returned to Edinburgh, and started as physician there. In 1743 he was elected Professor of Pneumatics, (the philosophy of mind), and Ethics. Being a keen Baconian, he kept up his studies in scientific medicine; became President of the Royal Society, and had considerable fame as a medical and scientific discoverer in various directions. A reformer in military medicine and sanitation, his Observations on the Diseases of the Army became a classic. He was the first to urge that military hospitals should be recognised by belligerents as neutral ground on both sides; and, having been allowed to introduce a deputy to his Chair, he was himself appointed physician to the British forces on the Continent, and was present at the battle of Dettingen. Being afterwards made Physician-General to the forces, he resigned his Chair, and accompanying the Duke of Cumberland to Scotland, was present at Culloden. He ultimately settled down as a physician in London, where he became intimate with many of the eminent men of his day.

Welbore Ellis, the first Baron Mendip, (1713-1802), was educated at Westminster and Oxford, was elected Member of Parliament several times for different constituencies, from 1741 till 1790, and made a peer in 1794. He held office as a Lord of the Admiralty in 1747, was Vice-Treasurer for Ireland in 1755, Secretary of War in 1762, and Secretary for America in 1782, the latter being a post for which he was quite unfitted. He had several literary enemies, amongst whom were Junius and Horace Walpole. Through his wife he acquired Pope's

villa at Twickenham, in 1744. He was an F.R.S., and a D.C.L. of Oxford, (1773), a trustee of the British Museum, (1780), and was buried in Westminster Abbey.

DUGALD STEWART, (1753-1828), son of the Professor of Mathematics in the University of Edinburgh, was educated at the High School of that city, afterwards at its University, and subsequently at Glasgow under Dr Thomas Reid, whose philosophy he imbibed and assimilated. He became an assistant to his father at Edinburgh, and afterwards full Professor of Mathematics in the University. During the absence of Adam Ferguson, the Professor of Moral Philosophy, in America, he lectured on Morality, in addition to the heavy duties of the Mathematical Chair; and, on Ferguson's retirement, he became Professor of Moral Philosophy in the University. His fame rests on his personal influence, and his rarely attractive force of character, much more than on his originality as a philosopher. In his philosophical teaching he followed the views of Thomas Reid of Aberdeen and Glasgow, and presented them in a somewhat diluted, although perhaps in a more acceptable, form. He was an academic orator of a type rare in Scotland. Lord Cockburn spoke of his lectures as to him "like the opening of the heavens."

He took an active part in a once famous academical conflict, when John Leslie—his successor in the Chair of Mathematics in the University—was accused of heresy and the usual etceteras, because he had adopted Hume's theory of causation. Stewart wrote in defence of his friend, and even went to the General Assembly of the Church, to speak in his behalf. He was an excellent mathematician, and both studied and lectured upon Politics and Political Economy, following mainly Adam Smith. Amongst his students in Political Economy he had such men as Sydney Smith, Francis Horner, Lords

Jeffrey and Brougham, Sir Archibald Alison, Lords Palmerston and Dudley (who lived with him), Lord John Russell, etc., etc. He spent two summers in France, and there he came to know many French men-of-letters, and political economists, with some of whom he afterwards corresponded. His relation to Monboddo, was one of genial friendship. His training and skill as a mathematician came out in the letter he sent to Monboddo in his twenty-fifth year. That letter affords as interesting evidence of the mathematical basis on which Stewart's philosophy was raised, as anything in the writings of Descartes, Spinoza, or Leibnitz.

SIR GEORGE BAKER, Bart., (1722-1809), was educated at Eton and Cambridge, graduated as M.D. in 1756, and was physician, first at Stamford, and afterwards in London. He was nine times elected President of the College of Physicians, and was a literary man as well as a physician. His medical works were numerous, and he was specially skilled in the effects of lead-poisoning.

JOHN HOPE, (1725-1786), Professor of Botany and Materia Medica in the University of Edinburgh, was King's Botanist for Scotland, and Superintendent of the Royal Botanic Gardens. During his administration the garden was removed from its old site, where the North British Waverley Station now is, to its present one at Inverleith Row. He was a devoted follower of Linnæus, whose *Genera Animalium* he edited, and who named the genus "Hopea" after him.

SAMUEL HORSLEY, (1733-1806), a distinguished mathematician and astronomer, sometime Secretary to the Royal Society, became Bishop of St David's, and afterwards of Rochester, edited Sir Isaac Newton's works,

and wrote many scientific essays. He engaged in theological controversy with Dr Priestley, and Robert Hall, as a defender of high-church orthodoxy.

RICHARD PRICE, (1723-91), a philosophical non-conformist divine, wrote A Review of the Principal Questions and Difficulties in Morals, which was published in 1758. He also wrote several politico-economic pamphlets, and essays; especially on the subjects of population, public debts, and annuities.

JOHN YOUNG, (1730-1820), was Professor of Greek in the University of Glasgow for forty-six years. He wrote "A criticism on the Elegy written in a Country Churchyard, being a continuation of Dr Johnson's criticism on the poems of Gray," which was published at Glasgow in 1783.

There were other and earlier friends of Monboddo, his correspondence with whom, however, has not survived.

They were, James Thomson, author of *The Seasons*, a "son of the manse," born at Ednam, Roxburghshire, in 1700, who lived chiefly at Richmond, where he died in 1748; David Mallet, born at Crieff in 1698, died in London, 1765; and who—along with Thomson—wrote *Rule Britannia*, a writer of many tragedies, editor of Bolingbroke's works, and the author of a poem, *The Excursion*; John Armstrong, another "son of the manse," born at Castleton, Roxburghshire, in 1709, an Edinburgh graduate of medicine, settled in London as physician, mainly known as the author of a poem on "The art of preserving health;" although he wrote many poems, essays and miscellanies, and numerous medical works.

Lord Monboddo saw sixty-one judges on the Bench of the Supreme Court in Scotland—twenty-seven while

he was at the Bar, fourteen at his own elevation to the Bench, and twenty raised to it after him. It may not be uninteresting to mention the more important of them.

Archibald (third Duke of Argyll).

Lord Royston (Sir James Mackenzie).

Lord Dun (David Erskine).

John Hay (fourth Marquis of Tweeddale).

Lord Milton (Andrew Fletcher), whom Monboddo succeeded.

Lord Elchies (Patrick Grant).

Lord Kilkerran (Sir James Fergusson).

Lord President Dundas (the first).

Duncan Forbes of Culloden.

Lord Tinwald (Charles Erskine).

Lord Glendoick (Robert Craigie), Lord President.

Lord Bankton (Andrew Macdowal).

Lord Strichen (Alexander Fraser).

Lord Kames (Henry Home).

Lord Auchinleck (Alexander Boswell).

Lord Coalston (George Brown).

Lord President Dundas (the second).

Lord Elliock (James Veitch).

Lord Gardenstoune (Francis Garden).

Lord Hailes (Sir David Dalrymple).

Sir Thomas Miller of Glenlee (afterwards Lord President).

Lord Covington (Alexander Lockhart).

Lord Braxfield (Robert M'Queen).

Sir David Rae (Lord Justice Clerk).

Lord Swinton (John Swinton).

Sir Islay Campbell of Succoth (Lord President).

Lord Craig (Sir Francis Grant).

Lord Meadowbank the first (Allan Maconachie).

Lord Cullen (William Cullen).

Lord Polkemmet (William Baillie).

## CHAPTER FOURTH.

LETTERS.

T.

### LORD MONBODDO TO PROFESSOR DALZEL.\*

MONBODDO, March 23rd, 1776.

SIR,—I had the favour of your letter, and am glad to find that my present was agreeable to you. The Design of this part of my work is I think good to preserve, or to restore when it is lost-classical learning, to which your zeal and abilities in your profession will contribute not a little. I hope you think that while I have done all justice to the Greek learning, I have shown no unjust partiality to the Latin, though I have exposed pretty severely some authors in that language, but I hope fairly, praising their beauties at the same time that I note their faults. And indeed if I can preserve the Latin language in this country, it will be δεύτερος πλοῦς, and I think not a bad voyage.

I am much pleased with your quotation from Æneas Sylvius, and Laurus Quirenus, in praise of the Greek learning. The first we have some connection with, for he was here as Pope's legate, and has left us a very curious account of the country; but as to the other I know nothing, what they say shows there was some knowledge of the Greek Literature in the western part of Europe, even before the

<sup>\*</sup> This letter is printed in the Memoir of Dalzel, prefixed to the History of the University of Edinburgh by Cosmo Innes. I have not seen the original.—ED.

taking of Constantinople. Of this there are other proofs; and, if I am not mistaken, there was a learned man who called himself Philalethes, that went from Italy to Greece in the beginning of the fifteenth century, and married an Athenian woman, in order to learn the true Attic; and there was a famous library of Greek Books at Otranto in Italy.

I hope you will do me the favour to note any mistakes you discover in this volume, and set them down in order to show me that if I do not instruct by my publications I may at least be instructed, which is hitherto the chief fruit I have reaped from them.

I am, very sincerely Sir, your most obedient humble servant,

JAMES BURNET.

#### H.

## LORD MONBODDO TO JAMES HARRIS.

Edinburgh,
Wednesday, 26 March 1766.

... As your works first introduced me to the Greek Philosophy, so this present you have now made me has revived my task for that study; which, though never quite extinguished, has been lost for some time amid the hurry of law business. I fell on greedily, as soon as the book was sent me, and began with the most philosophical part of your Hermes, viz. the chapter upon General Ideas, which you have explained most truly and philosophically, according to the dictates of that school to which I confess I have entirely addicted myself, I mean the school of Aristotle; for, as to Plato, he speaks of them in such mysterious and enigmatical terms, as if they had been a secret known only to himself; and I remember he makes Hippias the Sophist, when he was asked what the  $\tau \delta$ 

was, answer, "it was a fine virgin!" If Philosophy was in such a state in the days of Plato, as not to understand perfectly what is the foundation of all Science and Knowledge among men, how much is it indebted to that wonderful man, Aristotle, who, besides his discoveries in every branch of philosophy, has cleared the principles of it from that obscurity which the enthusiasm and mystic genius of Plato had thrown upon them?

I think I may, without the least suspicion of flattery, give to you the praise which Cicero takes to himself, of teaching Philosophy to speak a new language; for as he taught it to speak Latin, so you have taught it to speak English. The language which Mr Locke has put into her mouth is mere stammering, and is, in my opinion, as contemptible as the matter which he has made her utter. Mr Hobbes I am not so well acquainted with; but as he is of the same heresy, that is, one of those who pretend to philosophize, without the assistance of the ancients, I suppose he has succeeded as ill. As for myself, I am meditating great things in the literary way, but I am not sure that I will ever execute any thing. I have one work in view, which I think would not make a bad second part, if it were executed, to your Hermes,-I mean a work showing the origin and progress of this most wonderful of all the arts of man, the art of speech. What set me upon this train of thinking was the study of some most barbarous and imperfect languages, spoken in America, from grammars and dictionaries which I had out of the King's Library, when I was last at Paris. Besides the curiosity of seeing the process of so wonderful an art, in tracing the progress of language, you at the same time trace the progress of the human understanding; and I think I have already collected materials from which a very good history of the human mind might be formed,—better, at least, than that which Mr Locke has given us. This, if I had leisure,

I would make part of a much greater work which I project, viz. a History of Man; in which I would propose to trace him through the several stages of his existence; for there is a progression of our species from a state little better than mere brutality to that most perfect state you describe in ancient Greece, which is really amazing, and peculiar to our species. But the business of a laborious profession will, I am afraid, prevent me from executing this, and several other projects which I have had in my head. But with respect to you, being now eased of the care of public affairs, the world will certainly exact from you an account of your leisure; especially as you have given them such pledges of your capacity to instruct and entertain them. You have done enough upon Grammar. But I would have you do something upon Logic, to show an ignorant age that the greatest discovery in science ever made by any one man is the discovery of the syllogism by Aristotle. . . .

#### Ш.

## LORD MONBODDO TO JAMES HARRIS.

EDINBURGH, June 18, 1769.

DEAR SIR,—In the midst of business here, and when the voice of the crier is yet ringing in my ears, I cannot let pass one day of leisure without inquiring about you and your family, in which I passed so much of my time so agreeably while at London. I take it for granted that you are now all gone to the country, and accordingly I have directed my letter to Salisbury; where I hope it will find you all in good health; all employed in your several occupations, and you particularly carrying on those sublime speculations, with which you entertained and instructed me so much, and which I hope you

are preparing for the public with all convenient speed, in order to give your countrymen some notion what kind of science the highest Philosophy is. For though the word Metaphysics is a word we hear almost every day, yet I do not know one writer in English who appears to have a distinct idea of it, nor indeed is it well possible to have such without studying more diligently than any body now does, except yourself and perhaps one or two more, the works of Aristotle, who, among other great services that he has done to Philosophy, has fixed better than any other the boundaries of the several Sciences. More particularly he has very accurately distinguished the First Philosophy from every subaltern Science, and from Dialectic among others, with which it appears to me that his master Plato has confounded it. For the Dialectic of Plato, so far as I can understand his meaning, is neither the Logic nor Dialectic of Aristotle, nor is it his Metaphysics; nay I do not think that it has any determined subject. But it is a method of investigating accurately and philosophically any subject whatsoever; and accordingly Plato practises it upon some of the lowest Subjects, as (in the Sophist) if you remember, upon the fishing Art.

My morning conversations with you turn my mind so much towards metaphysical speculations that I inquired about a book that I had heard much of, but never read; I mean Berkeley, Bishop of Cloyne's book against the existence of Matter. I found it in London, and have read it, and I cannot help saying that it is as poor a piece of sophistry as ever I saw composed by a man who seems to be in earnest; though I remember to have heard David Hume say that his arguments are absolutely unanswerable. I am persuaded that if he had studied Sextus Empiricus well, he would have found there much stronger arguments in support of

his hypothesis than any he has given. In one thing particularly he seems to me to have defended his cause very injudiciously, in denying that there is such a thing as General Ideas. For he ought on the contrary to have joined in common opinion, and admitted Universals; and as these have no existence but in the mind, he might from thence have argued, with some plausibility, that particular things likewise had no other existence. But the good Bishop, though he pretends to have soared so high in Philosophy as to have freed himself entirely from the entanglement of matter, yet in my opinion is as much a materialist as any that ever pretended to philosophize. For it is plain that he cannot distinguish betwixt Sense and Intellect, and the different objects of those different faculties. Matters of Science, that is, Universals are the object of the intellect, and neither are nor can be apprehended by the Sense; while material or individual things are the objects of Sense, and of Sense only.

For, let Mr Locke say what he will, I deny that there is such a thing as an Idea of an individual thing, if by Idea he means, what he ought to mean,—the notion the mind forms of the thing, not the perception of the Sense in which the mind is merely passive. For the perception of Sense is no more than what the mind perceives by the intervention of the Senses. It is the impression which external objects make upon the organs of Sense, and which by some way inconceivable to us is propagated to the mental part. For I agree with Heraclitus, and other ancient Philosophers, that it is the mind which sees, hears etc. But what does it see? e.g. Only a body of a certain colour, shape, or dimensions. Thus far only the perception of sense goes. And here, as I said, the mind is only passive, receiving as it were like wax the impression of the

object. And this I call sensation, and the object so perceived the object of Sense: but if the mind goes farther, and pronounces that the object perceived by the Sense is a man, or a horse, or a new species never seen before, then, and no sooner, it becomes an Idea and an object of the Intellect.

So that we cannot be said strictly and philosophically speaking to perceive by our Senses-even the individuals of any species, since it is impossible that by our Senses we can apprehend the species or any other general Idea. And even the marks or characteristics by which we distinguish one individual of a species from another are general Ideas of colour, figure, motion and the like. And the only difference betwixt the general Idea of a species, and the particular Idea of the individual, is that in forming the last we connect the general idea of the species with the mass of matter presented to us by the sense, in the perception of which as I have said the mind is merely passive; whereas in the formation of the Idea even of the individual it is active, and truly makes a judgment or proposition, though it follows so close upon the perception of sense that we do not readily make the distinction.

The like happens in other instances. When I see a small object near, it makes a greater picture upon the retina of my eye than a greater object at a considerable distance, yet I readily pronounce that the more distant object is the greater, though that is not only not perceived by the sense, but is contrary to the perception; but the judgment of the mind follows so instantaneously the perception of the sense that every body says, and most people believe, that they truly see the object greater. This distinction betwixt the judgment of the mind and the perception of the sense Mr Locke has not made, which has been the occasion of his speaking

so unphilosophically of ideas of sensation plainly confounding the Sensation or perception of Sense, with the Idea which the mind thence forms, and making no distinction in that matter, betwixt us and the brutes, who as well as we have the sensation, but not the idea from thence arising. Let me know whether I am right in this distinction.

But to return to the Bishop. He seems also not to have known that the imagination of anything is no more than the perception of Sense retained in the mind, and that therefore matters of Science are no more the object of Imagination than of Sense. If he had known this, he would not have talked so absurdly as he has done of the infinite divisibility of matter; for he says he can conceive a yard divided into a hundred parts, but not into ten thousand; which is no more than saying that he can imagine or figure to himself a yard divided by the operation of the hand into a hundred parts, but that when he comes the length of ten thousand his imagination is bewildered; and he says, as some barbarous nations do, after they have numbered as far as their fingers and toes can go, where am I now?

It is the want of true Metaphysics, or the knowledge of the first Philosophy, that leads men into such ridiculous errors. For it is that Philosophy only which explains and ascertains the principles of human Knowledge, and particularly shews us that it is the form only which is the object of intellect and of science; teaching us to make that distinction betwixt the intellectual and material world, without which we cannot truly know what science or demonstration is. A man does not know that, who thinks that anything can be demonstrated of any material or individual thing. For, besides that all such things are in a constant flux, as Heraclitus said—so that the thing is changed before your demonstration

is ended—the intellectual forms when incorporated with matter lose something of the perfection and integrity of their nature, by the coarseness of the stuff, to which they are joined: and hence it is that there is no such thing in nature as perfect spheres, cylinders, or the like. So that, unless we can abstract ourselves entirely from Sense and matter, there is no certainty in mathematical knowledge, any more than in metaphysical. For if we know nothing beyond the perception of Sense, we cannot understand even the definitions in Mathematics; because it is certainly not by sense nor imagination that we conceive what a *point*, a *line*, or a *monad* is.

In the arts of men, the faults and imperfections of matter very often obstruct their operations, and I don't know whether it would be impious to say-at least I think I may venture to say it ἀφοσιούμενος as Plato speaks—that the operations of Divine wisdom in the formation and administration of the Universe are obstructed in the same way; and from thence, possibly, we may account for many not only seeming but real irregularities in Nature. For it is not held to be impious to say that God cannot reconcile contradictions, or do impossibilities. Now I think it is impossible that any matter should be capable of receiving perfectly, and representing exactly, those fair Ideas which we suppose to exist in the highest perfection in the mind of a sovereign Architect, but nowhere else. This is a notion that I think I have found in Plato, or some of his commentators, for I am sure it is not my own. Pray tell me where it is to be found, and what you think of it. But, to return to your Categories.

I think there is none of them of greater importance, or that deserves to be more accurately treated of, than the category of Relation, and this for two reasons.

1st, That it arises from comparison, the common source

of all our general Ideas, and the first operation of intellect, and of the discursive faculty of the mind; and the only difference betwixt the Ideas of Relation and other general Ideas is that the first necessarily imply the comparison, so as not to be conceived without having in view the corresponding term of the comparison; whereas other general Ideas though they arise from this exercise of the mental faculty, vet do not imply or express it, and are understood by themselves without reference to anything else. Under this head of relation therefore I should think it not improper to treat of this prime faculty of the human mind, the foundation of all our knowledge. For discursus mentis begins first, as is natural, with individuals, then it proceeds to general ideas, next to propositions, and last of all to syllogisms, with which is concluded the discursive operation of the mind. And it might be observed that the nature of human Knowledge is such that we know nothing absolutely, or as it is in itself, but only by relation to other things. For as I said before there is no knowledge, or science of individuals. We only know things through the Species and Genera. And these ideas are formed by comparing things together, and observing their likenesses and differences. This comparative faculty is, if I mistake not, what made the ancients denominate man a logical animal. For you know they defined him to be ζωον λογικον, νοῦ καὶ ἐπιστήμης δεκτικόν.

I cannot suppose that in the definition they would use two terms expressing the same. I mean λογικόν, and νοῦ καὶ ἐπιστήμης δεκτικόν; and therefore, by the first, I understand the faculty of Comparison, which is the source of general ideas, opinions, and that sort of wisdom or skill in anything which is acquired by experience. In short, it is the possession of this faculty which intitles us to the common appellation of a rational creature, but who is a

being very different from a man of Science, that is, a man who is possessed of νοῦς καὶ ἐπιστήμη. And, as the actual possession of these is not an essential property of humanity,—(for otherways there would be very few men in the world)—you will observe that only the capacity of acquiring these is made part of the definition. Pray, tell me also whether you think me right in this notion, and whether it can be supported by any ancient authority.

My other reason for thinking this category of such importance is that, if it be rightly understood, it destroys entirely the doctrine of Materialism, by exhibiting to us a class of beings, which cannot exist in matter, but only in mind. Other general Ideas,-such as those of Substances and Qualities,-may be said to exist in matter; and by so inaccurate and unphilosophical a writer as Mr Locke may be said to be perceived by the sense, whence they are most improperly called by him ideas of Sensation. I think it is impossible, that Mr Locke, or any body, can accurately maintain that the ideas of Equal, Greater, Less, Double, Triple, and the like, can exist in matter, or be excited by it. They are the genuine production of that divinest part of the mind, by which it moves itself and energizes, without suffering an impulse from material external objects. This selfmoving power is, by the Peripatetic schools, made to constitute the very essence of mind: whereas, according to Mr Locke's system, our mind consists of nothing else but a passive capacity of receiving impressions from sense, and a consciousness by which we know what we are doing, and can recognize the operations of our own mind. Hence it is that, according to him, all ideas are either ideas of Sensation or Reflection.

These thoughts I have thrown out with little accuracy, but I hope you will understand them, so far at least as to be able to correct me where I am wrong, and they

may possibly furnish matter of reflection to you, which will be both entertaining and instructive to the public.

I offer my best compliments to Mrs Harris, and the two young ladies. I will, in my next, give you something upon a subject which they will be better able to judge of. For you must know that since I saw you, I have studied pretty diligently that most valuable fragment of Aristotle's upon Poetry. I want to try how his rules will apply to some of our English plays. Give my service also to your neighbour Mr Cambridge,\* and thank him in my name for the present of his Poem, which he sent me just as I was leaving London, from which and from his preface I see that he is both a good performer and a critic. I shall therefore beg his opinion of what I am to write you on Poetry.

I ever am, with the sincerest regard and esteem.—Dear Sir, your most obedient humble servant. . . .

### IV.

## LORD MONBODDO TO JAMES HARRIS.

Monboddo, 28th September, 1769.

DEAR SIR,—I am really angry with you that a man who owes so much a better account of his leisure to the public as well as to himself should spend it, like a vulgar man, in vulgar amusements. Be instructed by the example of your friend Mr Glover,† who in the midst of a great trading city.‡

Inter scabiem tantam et contagia lucri

<sup>\*</sup> Richard Owen Cambridge, (1717-1802), author of the Scribleriad (1751), the Intruder (1754), the Fakir (1756).—Ed.

<sup>†</sup> Richard Glover, (1712-1785), the poet who wrote Leonidas, and the much better known Ballad of Anniral Hosier's Ghost.—ED.

<sup>#</sup> London. - ED.

devotes himself to the muse, though his muse be of a kind much inferior to yours. For yours is the true Urania,

> That with eternal wisdom did converse, Wisdom her sister.

But I am growing poetical before my time. For I must first say something to you upon the subject of my last letter, concerning which I really desire your opinion, particularly as to that part of it relating to Mr Locke. 'Tis a proposition that I am sure will startle all his admirers very much, that we have not from our Senses the Idea even of any particular thing, such as a man or horse: and it is no wonder. For what then will become of his famous division of Ideas into Ideas of Sensation and Reflection, which is the foundation of his whole system. For, if the idea of an individual thing is not an idea of Sensation, I would ask Mr Locke what is. Now that it is not, I think is most evident, unless Mr Locke will abuse words so much as to call a mere sensation or perception of Sense an Idea. For, when I see a man or horse, what is it that the sense furnishes? Nothing but the picture of the object upon the retina of the eye, which presents to the mind indeed the colour and figure of the object but does not inform it even of its distance, which we learn to judge of only by experience; and by consequence does not let us know the real magnitude, which is only an inference of the mind from the distance.

How then does this perception of the sense become an idea of a man or a horse? I answer by no less than two distinct operations of the intellect, one of them already performed, the other then performed. The first is the abstract idea of a man or a horse, which the mind has already formed from many former perceptions of the same kind. The second is a judgment of the mind, or a proposition which I form within myself, that

the object which my eye presents to me is an individual of the general idea of the species which I have formed. That this is truly a judgment of the mind, though generally made so quickly, and I may say so instantaneously, that we overlook it, is evident from the case of obscure vision, when we see the object either at a great distance or with a bad light. For then men differ not only from one another in that judgment, one saying that the object is a horse; another that it is a cow; but often from themselves, when they come nearer to the object and see it more distinctly.

If this reasoning be just, I am sure you will be pleased with this degradation of Sense, and the consequent exaltation of Intellect, to which it seems we owe all our particular, as well as general ideas; Sense only furnishing the materials, and being only such a minister to Intellect as the digger in the quarry is to the statuary. For I think that for the same reason that intellect forms the idea of every particular substance, it must also form the idea of every quality belonging to that substance. For is it not the intellect that tells me that the figure is round or square, the colour white or black?

I must further say of Mr Locke that I think he is not only mistaken in most of his notions, but that he has not treated his subject with distinctness and perspicuity, in so much that I do not well know what he means by ideas of Sensation, and I find others have the same doubt. For, in the first place, he has not distinguished betwixt the mere sensation, and the object presented by it to the mind. This distinction is the more necessary that there are some sensations which have no external object belonging to them; such as the sensation of pain, which is often very violent, when even our reason cannot inform us from whence it comes. Secondly, when the sensation presents to us an external object Mr Locke

has not told us whether it is the impulse which the object makes upon the organ of sense, and which is communicated to the mind, that he calls an idea of sensation, or the object distinct from the sensation, or that particular object preserved in the memory, or the abstract idea of the object formed by the intellect, or lastly the abstract idea of the Sensation itself. These things are all very different in their natures, and if Mr Locke, by his term of "ideas of sensation," meant to express only one of them, he should have told us which; or if by one word he intended to denote so many different things, he should certainly have taken notice of the homonymie,\* and distinguished the different significations. So much for Locke, and Philosophy.

I come now to the poetical part of my letter, which I promised you in my last, first thanking you for making me acquainted with a sophist that I never heard of before; you don't tell me whether he be a Greek or a Latin writer; but from his name I guess him to be a Greek, and besides I know that in those later times almost all learning was Greek. And I think there is but one Latin sophist in those times whose name I have forgot; but I remember he writes a bad panegyrick upon a bad subject, namely, Constantine the Emperor.

But now for Poetry. In the first place, I send you a specimen of a work that is just now going on, which I hope will merit your approbation, and will entertain your ladies, for whom I chiefly intend it. The author is a great favourite of mine, as I am sure he would be of yours if you knew him, which perhaps makes me a little partial in favour of his work. His name is Beattie, a Professor in the Marishal College Aberdeen, and already known to the world by some Poetical Works which he

<sup>\*</sup> Ambiguity. -ED,

has published. It is, in my judgment, the best thing in that sort of verse that has been written since Thomson's Castle of Indolence, and the kind of verse I like better than any other rhyming verse in English. The subject too I think is good, without which both you and I agree that neither poem nor picture can have any real merit: and I like it so much better than Mr Thomson's subject in that it is altogether historical, and not allegorical.

In the next place, you must know that since I saw you, I have read over again Aristotle's *Art of Poetry*, and have made many more corrections than those which I believe I mentioned to you. For it has been most miserably deformed and mutilated in the transcribing; but, such as it is, I think it a most valuable fragment.

It is, with respect to Poetry, what a mutilated ancient statue in Rome (I think they call it a torso) is with respect to Statuary, upon which I am told all the young artists of that kind exercise themselves most diligently, as I think all our young poets ought to do upon Aristotle's Poetics. For it is from thence that they are to learn what Poetry truly is, and particularly what tragic Poetry is, a thing which our famous Shakespeare, whose nativity I suppose you have been celebrating, did not in my opinion know. For his tragedies do, for the greater part, indeed I may say all of them, want a fable, and therefore I think are not proper tragedies, but belong to that species of writing known to the ancients under the name of ήθοποιία. Of this kind, if I mistake not, were their pieces they called mimes, such as those of Sophron and Xenarchus mentioned by Aristotle, and those of Laberius mentioned by Horace.

In such pieces characters and manners were indeed imitated, and personages were introduced speaking in character upon certain occasions; but there was no fable,

no chain of a story, or series of events, tending all to one catastrophe. Now I hold Shakespeare to be a writer of that kind, with this difference only that he attempts a fable but does not succeed, and indeed he knew so little of the nature of poetry that he thought a plain historical fact would make a poetic fable. And accordingly not only those plays of his that are professedly historical, but all his tragedies I believe without exception are pieces of history. All the merit therefore I can allow him as a poet is that he is the best mimographer that ever wrote; and perhaps I should not have allowed him even that praise, if any of the ancient mimic pieces had come down to us. And I must think it very unfortunate for the English taste of Poetry that Shakespeare has been set up as a standard; as I think it is unfortunate for their Philosophy that Mr Locke has been considered as a model in that way, and reverenced in England as Socrates and Plato were in Greece. If Shakespeare had formed himself, as I have said all young Poets ought to do, upon the study of Aristotle's rules, and had joined the practice of the great ancient masters from which those rules were drawn, we should have seen him at least aim at what is most perfect in tragedy, namely a discovery. And it is an ill sign of our taste in dramatic writing that so few discoveries are to be found in our English plays. There is however one in a late play, I mean the tragedy of Douglas,\* which I think is most happily executed, and exceeds anything of the kind I know, either ancient or modern, without excepting even the famous discovery in the Oedipus Tyrannus mentioned by Aristotle as a model of the kind.

Cur ita crediderim, nisi quid te detinet, audi.

I do not know whether you have read the play, but

<sup>\*</sup> By John Home, published in 1757.—ED.

if you have not, I desire you would. In the meantime I will shortly tell you the subject of it, that you may be the better able to judge of the justice of my criticism. Lady Randolph, the heroine of the piece, was the daughter of a Baron, who was a declared enemy of the house of Douglas. A son of that family fell in love with her, and married her privately. The father, having had some information of it, questioned her about it. She, to avoid her father's anger, which threatened her with instant death, denied it, and took an equivocal oath that she would never marry one of the name of Douglas. After that her husband was killed in battle, leaving her with child. She was privately brought to bed of a son, whom she sent away with her nurse in great secrecy, in order to be brought up in the nurse's sister's house.

It happened to be a rainy night when the nurse was sent away, and as she had a river to pass, and neither she nor the child had been heard of for many years, Lady Randolph concluded that they had both perished in the river. The play opens upon the anniversary of the death of her husband, when she is introduced lamenting in a very pathetic soliloguy the loss both of her husband and her child, which last she charges to her own account, as being occasioned by the lie she had told her father. We are likeways informed, in this first scene, that she was then married to a second husband; and the occasion of it was that Glenalvon, the villain of the play, being in love with Lady Randolph, and not being able to obtain her of consent from her father, wanted to carry her away by force; but was prevented by Randolph, whom at her father's earnest desire to prevent such attempts for the future, she married. At the time the play begins, the Danes had landed in Scotland, and the country was all in arms to oppose them, This is one episode; and there is another which

the poet has very properly introduced, as it very naturally leads to the discovery which I praise so much.

Glenalvon, still continuing his passion for Lady Randolph, takes advantage of the disorderly state of the country to employ assassins to murder Lord Randolph; who accordingly fall upon him, and would have murdered him, if they had not been prevented by a young stranger who came most unexpectedly to his deliverance. This, and the war with the Danes, I call episodes; because the principal story of the piece is Lady Randolph's recovering her son, and then losing him again; beside which everything is episode. According to this notion Aristotle recommends to Poets first to lay out the general plan, or principal story, ἐκτίθεσθαι καθόλου, εἶθ' οὕτως έπεισοδιοῦν καὶ παρατείνειν. But the episodes must be proper, and natural, ὅπως δὲ ἔσται οἰκεῖα τὰ ἐπεισόδια δεὶ σκοπείν οἷον έν τῷ 'Ορέστη ἡ μανία δι' ἡς ἐλήφθη καὶ ἡ σωτηρία διὰ τῆς καθάρσεως; and the fables which were faulty in this respect, by having too many or too long episodes, or not to the purpose of the play, he calls μῦθοι ἐπεισόδιώδεις.

But to return to the story of the play of Douglas. Lord Randolph as it was natural brought this stranger to his house, and presented him to his wife as his deliverer. They ask him who he is; and he relates that he is the son of a shepherd, that some robbers had carried away his father's flocks, and that he was sent in search of them, which happened to be the occasion of his rescuing Lord Randolph. He tells this story with so much modesty and grace, that both Lord and Lady Randolph grow exceedingly fond of him, and particularly Lady Randolph; who, at the same time that she admired him so much, thought that if her son had been alive he might have been such a youth as that gallant stranger. But this thought redoubled her affliction, which she expresses in a strain so sweetly simple and

passionate that I cannot help transcribing for you the lines,

Wretch that I am! Alas! Why am I so? At every happy parent I repine! How blest the mother of yon gallant Norval! She for a living husband bore her pains, And heard him bless her when a man was born: She nursed her smiling infant on her breast; Tended the child, and reared the pleasing boy: She, with affection's triumph, saw the youth In grace and comeliness surpass his peers; Whilst I to a dead husband bore a son, And to the roaring waters gave my child.

I have quoted this passage the rather that I think it shows very much the poet's art who has raised Lady Randolph's grief so high in this scene that he might make the περιπέτεια, or change of fortune, in the next the more striking. This next scene is the one that I admire so much, and for the sake of which I have given you the trouble of all that preceds. It is indeed the most interesting and affecting scene that I ever read, and it is much more so in the acting—if it be well acted—which it never was in England. If it had no other merit but that of touching the natural feelings so much as it does, it would have the greatest merit—in my opinion—that any theatrical piece can have. Furthermore, it is exactly according to rules, and must please the judgment as much as it affects the heart, and it convinces me still more and more of what I have always believed, that Aristotle's rules were all formed from what he observed. He was pleased and moved most in the pieces that he saw performed. For it is but a foolish thought to imagine that Aristotle formed the art. The art was formed to his hand, and brought to a degree of perfection which it never afterwards exceeded; and all he did was from particular pieces that succeeded best to form general rules, and to explain as a philosopher how the practice of those rules answered the end of tragedy.

This scene opens with great tranquillity, for Lady Randolph is asleep; and her attendant uses that opportunity to walk out, and take the air. But the scene is changed immediately (and you know Poetry delights in those sudden changes) from great tranquillity to the highest agitation of passion that can well be. For a servant comes in who informs the attendant that one of the assassins was found, and in his custody some jewels which he shows. These the attendant carries to her mistress, who knew them immediately to be the jewels that she had put into the basket with her son, and she comes forth with the desperate resolution to hear all the particulars of the loss of her child. The prisoner is brought in, and examined, and tells a story most wonderful indeed, at the same time probable enough; and the most moving, both for the matter of it, and the manner in which it is told, that I ever read.

During the whole narrative the agitation of Lady Randolph is extreme. From what the old man says in the beginning she is more and more convinced that he had robbed and murdered her child, till after passing through a surprising vicissitude of hopes and fears—which the poet has managed with wonderful art—the shepherd at last coming to that part of the story which the young man had already told, Lady Randolph interrupts him, and asks him what his name was. Upon his answering that it was Norval, the same with the young man's name, the whole secret is out, and from the greatest despair she is raised to the highest exultation of joy. In this manner is the discovery conducted, and it is according to Aristotle's rules the most perfect of the kind; because it arises from the plot, and is, as he expresses it, έξ αὐτῶν τῶν πραγμάτων. For, as there is nothing so perfect in drama as a good discovery, Aristotle has explained it more fully than anything else belonging to the drama. And, according to his method, he divides it into several kinds.

Some, says he, are made by marks upon the body, as when Ulysses was discovered by cicatrice of his wound, others by marks external, as by necklaces or bracelets, like the story of Indiana in the Conscious Lovers. But that above mentioned which grows out of the plot and is produced by the events themselves he prefers to all others, even to that ἐκ συλλογισμοῦ which he ranks only in the second place. Now, of this best kind, he says is the discovery in the Oedipus; and of the same kind is the discovery in Douglas. For, though the jewels are there used, they are so far from making the discovery, that they lead Lady Randolph, as I have already observed, to be the more fully convinced of the loss of her son. They let her know that the man, in whose possession they were found, must know something about her lord; and as he had what belonged to her son, she very naturally concluded he was dead.

Now the thing to be discovered is that he was alive, and that he was that very Norval whom she admired so much. And this discovery arises from the facts themselves. First the attempt of Glenalvon to assassinate Randolph prevented by the young man; then the old shepherd going in quest of his supposed son with the jewels in his pocket, in order to prove his birth to be above the rank in which he was educated; and lastly his being apprehended as one of the assassins, and examined by Lady Randolph; upon which examination, by the coincidence of the story and name with what young Norval had told, the discovery is brought out. So the only use made of the jewels is to excite the curiosity and impatience of Lady Randolph, and make her examine the old shepherd with more closeness and attention; and in this way the poet has indeed made a fine use of them. Another beauty, which Aristotle praises in the discovery of the Oedipus, is the surprise and sudden change. For, says he, the messenger from Corinth, who came to deliver Oedipus

from all his fears and doubts, did on the contrary make him certain of his misfortune. In like manner Lady Randolph, in the utmost distress, and coming as she supposes to hear the particulars of the loss of her son, is assured that he still lives, and is that gallant youth whom she had so much admired.

But so far you will say "This discovery is only equal to the discovery in the *Oedipus*, why do you prefer it?" I will give you two reasons, either of which I think is good.

The first is that the story told by the Shepherd is in itself both most wonderful, and most affecting; whereas the story told by the Messenger from Corinth has nothing in it that affects you, except in so far as it leads to the discovery. The second is, the messenger in Sophocles has no character at all, whereas the Shepherd in *Douglas* has a character for goodness and honesty that touches the heart, as much as any I have met with; and I will give you a specimen of it at the end of this scene, which I think is wonderfully fine. The shepherd, after he had discovered that Lady Randolph was Sir Malcolm's daughter and the mother of the child, says:—

Blest be the hour that made me a poor man! My poverty hath saved my Master's House!

#### LADY RANDOLPH.

Thy words surprise me: sure thou dost not feign: The tear stands in thine eye: Such love from thee Sir Malcolm's house deserved not; if aright Thou told'st the story of thine own distress.

#### PRISONER.

Sir Malcolm of our Barons was the flower,
The fastest friend, the best and kindest master;
But ah! he knew not of my sad estate.
After that battle, where his gallant son,
Your own brave brother, fell, the good old Lord
Grew desperate, and reckless of the world;
And never, as he erst was wont, went forth
To overlook the conduct of his servants.
By them I was thrust out, and them I blame:
May heaven so judge me as I judged my Master!
And God so love me as I love his race!—

Can anything be more sweetly simple, or more moving than these two last lines?

And thus I think I have made out my position that the discovery in Douglas is better than the discovery in Oedipus, but do not from this imagine that I think Douglas a better play than Oedipus. If indeed it could have been contrived so as to have concluded with this discovery, I should perhaps have thought so. For the discovery in Oedipus is the denoument of the piece, as Aristotle has observed, and concludes the fable as it certainly ought to do. Whereas in Douglas the plot goes on after this discovery, and we have a new catastrophe by Lady Randolph again losing her son, which entirely destroys the unity of the piece; and makes it in effect two tragedies, the one ending happily, and the other miserably. When I further consider how very much inferior in every respect his other pieces are to Douglas, the last of which \* has hardly any change of fortune at all, I think I need not raise the question which Aristotle raises with respect to Homer, viz. whether it was by Nature, or by Art, that he had succeeded so well; but I may aver without hesitation that it was altogether by Nature and Genius, or rather by a kind of Inspiration, that the author of Douglas has succeeded so wonderfully in that play, while in his others he has blundered so very much.

And so I have done both with my Philosophy and Poetry, and I have nothing to add but my best compliments to the ladies, who perhaps may find some entertainment in this letter, but much more in the play of *Douglas*, if they will read it with attention, and provided they are of that sort—as I believe they are—who are more pleased with crying at virtuous distress, than laughing at drollery and absurdity. I hope sometime in my life to be able to accept of Mrs Harris's invitation to come, and pass

<sup>\*</sup> The Fatal Discovery, a Tragedy, was published in 1769.—ED.

some days with you and her in the country. It is a long journey, but that would not frighten me, if I could find the time. . . .

#### V.

### LORD MONBODDO TO JAMES HARRIS.

MONBODDO, 31st December 1772.

. . . I BELIEVE I am as long of answering your letter as you were of answering mine, though I have not so good an excuse. For I do not wonder that you were much taken up with the joy of seeing a son, who had conducted a most important negotiation with so much honour to himself, and so great advantage to his country.\* It is to him, so far as I can learn, that we in a great measure owe the blessing of peace which we now enjoy - the greatest of all blessings, if it be procured, as this was, upon honourable terms-and never at any time more necessary to Great Britain, if I judge rightly of the present state of the nations. He is gone to Berlin, to succeed a very worthy man, a friend of mine; and I think I wish nothing bad to him, when I wish that he may discharge his duty there as well. At the same time if he does better, I shall heartily rejoice. As for myself, I can only say by way of excuse, that my office-which is a very laborious one-imploys me about one half of the year. The other half I spend in the country, and there my occupation is first your favourite occupation, Philosophy; and then, Farming, which comes next to Philosophy in the judgment of old Cato, when he began to apply to the Greek Learning. But I have another excuse, which I am glad of this opportunity of letting you know. I am

<sup>\*</sup> Harris's son and heir, afterwards first Earl of Malmesbury. The "important negotiation" refers to Harris's conduct of the Embassy at Madrid in 1770, of which Lord Mahon pointed out the importance.—ED.

going to publish something, upon a subject which I believe I mentioned to you, in the beginning of our correspondence, I mean *The History of Man*.

I have not taken in the whole of that plan, which I found too extensive both for my abilities and the time I had to bestow upon it; but only a part of it, though a considerable part, viz. The History of Language, upon which my thoughts have been turned for a good many years. I had collected a great deal of material on the subject, but without any design of publication, until they grew very bulky; and being written, like the Sibyl's prophesies, upon loose leaves, which my children sometimes stole, I thought the best way of preserving them, and making a fair copy of them, was to employ a printer for an amanuensis.

The book will be entitled Of the Origin and Progress of Language, and you will have a copy of the first volume of it pretty early in the Spring. As I thought I could not give a philosophical account of the origin of Language without accounting for the origin of our Ideas, this has led me deeper into Philosophy than I ever proposed to have gone in any work I was to give to the public. For I had resolved, like Varro the Roman, never to publish anything upon the subject of Philosophy; and for the same reason, viz. that the learned would not read me, and the unlearned would not understand me!

As to the first, I hope I shall be so far mistaken that you will read it; and, if it have your approbation, I shall care very little for the censure of the many. I have taken occasion to mention you, more than once, in such terms as I hope will not appear flattering even to you (I am sure they will not to any other) and under an appellation, which I flatter myself you will permit me to use, namely that of *friend*. As the origin of Language has

naturally led me to inquire into the state of our nature before we had the use of language, I have spent a great part of the book upon that subject, which I thought a very curious as well as a new subject of inquiry; and in that state I believe I shall be thought by many to have sunk our nature too low. For though nobody has a higher idea than I of Human Nature, when it is improved by the arts of Life and exalted by Science and Philosophy, I cannot conceive it—before the invention of Language—to have been in a state much superior to that of the brute.

In short the mutum ac turpe pecus of Horace is my notion of man in his natural and original state; and, in support of my Philosophy, I have appealed to History - both ancient and modern - for proof of the brutal condition in which many nations have been found, and are still to be found, even though they have some use of speech. From which I think we may justly infer how much more abject and brutish their condition must have been, before they had the use of speech at all. What therefore according to my system chiefly distinguishes Human Nature from that of the brute is not the actual possession of higher faculties, but the greater capacity of acquiring them. But, if you do not like my system of Man, I am sure you will be pleased with what I say of superior Natures; for I have brought in a good deal of the First Philosophy; and, in general, you will find a variety of matters in the work, which I believe will a little surprise you (how properly introduced you will judge). That part of it which treats of barbarous nations will be for popular use, and will tempt even the vulgar to look into it, though it is not for them that I write; and there is an account given of barbarous languages, such as never before was published, and which I think must excite the attention of every man of curiosity. The book will be much about the size and of the form of your *Hermes*, with notes and quotations at the bottom of the page. I am sensible that I come much short of the elegance of your style; but I have endeavoured to imitate the philosophical accuracy of it.

Now, let me know what you are doing. When will your book upon the Categories appear, which I have taken occasion to announce to the World, as the best book of Metaphysics that ever has been written in English?

I have some literary inquiries on foot, which I communicated to Dr Tolanden when he was in Edinburgh, and about which he will inform you, if you think it worth your while to inquire. As to Livy, whom you mention in your letter, even if the Books that are left of him were to be recovered, it would not give me much pleasure, as I think we know enough already of that People. But there is a great deal of Greek Philosophy in the Escurial Library, which I should be very glad to see published.

I offer my best respects to Mrs Harris, and the young ladies; and wishing you, and them, the usual compliments of the season, with more than usual sincerity, I ever am, with the greatest regard and esteem, your most obedient humble servant, and faithful friend.

P.S.—Though I have let some of my particular friends know that I am to be an author, I will not set my name to the book, nor would I wish that it should be publicly known. I hope you will favour me with an answer when I return to Edinburgh, which will be by the 12th of the New Year.

VI.

## JAMES HARRIS TO LORD MONBODDO.

ST JAMES'S STREET, Feb. 22, 1773.

My LORD,- . . . But to approach a little nearer to Philosophy. I was on Thursday last at Mr John Hunter's, celebrated for his invaluable collection of anatomical subjects. These subjects are not confined to the human Species, but are collected from the whole animal genus, Beasts, Birds, Fishes etc. On these he founds a system of Comparative Anatomy, and in shewing these he gave us a lecture, with so much precision perspicuity and information, that I could not but hear him with the highest satisfaction. Instead of many strange tales about many strange things (the usual process of modern philosophy) we had the sure antique method, that of looking to the Whole; of tracing out identities, in comparing things heterogeneous and dissimilar; of tracing out diversities, in comparing the similar and homogeneous, of going from Means to Ends, and from Ends back again to Means; of investigating, by this process, general Theorems; and of employing those we discover, to help us to the discovery of new ends. . . .

I readily join in your Lordship's wish, in preferring the discovery of some new pieces of Greek Philosophy to that of some new Books of Livy. But, like one who has a keen appetite, I wish for both. I believe 'tis since I had the honour of writing to your Lordship that I hear that a fragment of Livy has been found in the Vatican Library, relative to the history of *Sertorius*, a fragment found by chance, as they were looking after Hebrew, on account of our countryman Dr Kennicott.

An Irish gentleman, versed in the old language of his own country, has, I am informed, by the help of that language, explained these dark passages in Plautus, where one of his characters speaks Carthaginian. The critic's idea is, that the two languages were the same originally.

Your Lordship inquires after my Hermes-that part, I mean, which respects the Predicaments—they will make their appearance next year. I expect so at least, for I am now inquiring for an amanuensis to transcribe them for the press, being unwilling to trust the whole to a single copy. Were mankind as candid, and as knowing, as yourself, I should be in no pain at appearing a third time in public; \* and that on a subject so uncommon and abstract, as my Predicaments. But all readers are not like yourself. Some are indolent; others, fastidious; some soon tire, as they travel on; others will travel no road, but what they have been accustomed to. I have however endeavoured to make my work as palatable as possible—by as much ethics, imagery, and as many quotations from the Poets, as I could with any propriety collect together-taking care at the same time to have a proper regard to lucid order. . . .

Your Lordship's much obliged and most faithful humble servant,

JAMES HARRIS.

<sup>\*</sup> His previous works were Concerning Art, a dialogue (1744); A Discourse on Music, Painting, and Poetry (1744); Concerning Happiness, a dialogue (1744); Hermes: or a philosophical enquiry concerning Language and Universal Grammar (1750).—ED.

### VII.

### GEORGE L. SCOTT \* TO LORD MONBODDO.

EXCISE OFFICE, 3 April 1773.

MY DEAR LORD,—I have this moment received yours; at the time I was taking an opportunity of thanking you for your Book. I received it a few days ago; and had prepared myself for the pleasure it has, and will give me, by a line from Sir James Steuart recommending it strongly to me. Your name was sufficient. I have not had time to read far. So far as I have gone, I think we shall agree in things; though we may, perhaps, differ in expression. You have remarked, most justly, the strange confusion introduced by Locke (in which he copied Des Cartes and Malebranche) by his indiscriminate use of the word Idea. Faculties, their acts, and their objects, are thereby classed under the same head. The power of walking, the act of walking, and the road I walk on, are of the same genus! Locke was an acute man in finding fault with others; but as to his work on "The Human Understanding," I think, with a German author, ubique passus est desideri acumen suum.

Notwithstanding his repute in England, authors of this nation have borne testimony to the truth, and done justice to the superior accuracy, of Aristotle. In the present age, all these things are despised alike, not being de pane lucrando. Locke had admitted matter, spirit, and ideas. By many passages, one would be apt to think that he saw no absurdity in material Spirit, or in spiritual Matter. Berkeley comes, sees the difficulty, and strikes

<sup>\*</sup>George Lewis Scott, F.R.S. and A.S.S., born at Hanover, died 1780, —En.

out matter. Then comes a Parisian Egoist, who strikes out all spirit, but his own. And, lastly, our friend Hume, strikes out even his own spirit, and leaves nothing but Ideas!

This, in Mr Hume, I looked upon as a mere philosophical amusement, and not ill adapted to turn all those doctrines into ridicule; and I cannot but say I was hurt by the rude way in which Mr Beattie treats him. The words of Grotius, turpi factu impotentis animi, may be applied to this antagonist of Hume. How trifling are all his Argumenta theologica ab invidia ducta! Die, say I, Postume de tribus Capellis. If he had been as well read in Aristotle as you are, he would have recollected, that, Quaestio an sit non concluditur syllogismo. And he might have satisfied himself that the world, and Mr Hume will go on, just as they would have done, had the Treatise of Human Nature never been thought of!

I observe, that you use the word *Idea*, not for the recollection, memory, or imagination of absent sensible objects, but for the perception of *genera* and *species*, which is an act of the understanding, as you observe, and not an act of sense. In this use of the word *Idea*, I do not think you are well warranted by the genuine use of the English language. In this, *Ideas* represent individuals: and *Notions* represent *genera* and *species*, or Universals, as also relations, and all acts of consciousness. Berkeley saw this distinctly. And some late French writers have departed from Descartes and Malebranche, and have not scrupled to use the word *Notion*. Locke had confounded those terms, and we too often adhere to him, and confound ourselves. However, as you have explained yourself, the mischief is not great.

This is the most idle Saturday I ever remember at this office. I am here alone, and have thereby an opportunity of assuring you of the truth with which I have the honor to be.

My dear Lord, your most obedient and most humble servant,

GEO: L. SCOTT.

I long to see Mr Harris on the Categories, not having as yet met with a good explanation of them.

### VIII.

# JAMES HARRIS TO LORD MONBODDO.

ST JAMES STREET, May 14, 1773.

My LORD,—My sincerest thanks are due to your Lordship for the honour of your letter of the 29th of April last.

Though your Lordship's book came late to my hands, and though Parliamentary time\* is not the most favourable to Philosophy, I have not been negligent in the perusal of so curious a performance. I have great satisfaction in seeing so masterly an attempt to revive and explain the noble tenets of the Pythagorean School, as they were adopted by Plato, and his disciple Aristotle. I freely subscribe to your ideas of Mr Locke. Ignorant of all Ancient Literature, he had an inclination to spin out everything from his own brain, as if so stupendous a work as an Analysis of the Human Understanding could be raised by the effort of one unassisted man. Euclid and Archimedes among the ancients, Copernicus Kepler and Galileo among the moderns, preceded our illustrious Newton. 'Twas thus that Homer and Tasso pointed out the road to Milton. Life is too short, and the labour too immense, for a single man to carry anything to perfection.

Mind and Soul are terms acknowledged by our language,

<sup>\*</sup> Mr Harris was M.P. for the borough of Christchurch, from 1761 to 1780.— $\mathrm{E_{D}}$ .

and most other modern languages have terms analogous. But alas! though they pass very well in common conversation, our philosophers are well satisfied with Body, and its attributes. These last are abundantly sufficient for *their* purposes, and solve every part of their systems to their entire content. If anything be wanted further (which rarely indeed happens) if the fluids grow too thick, or the solids too thin, then perhaps, to help matters out, we have  $\Theta\epsilon \delta s \ \delta \pi \delta \ \mu \eta \chi \alpha \nu \eta s$ .

I think myself happy, as I am about to publish my *Predicaments*, that I have so learned, and so able, an introducer as yourself. Readers will be a little prepared for that sublime Philosophy, to which their ears have been so little accustomed, and which—in spite of all my endeavours—will I fear be thought somewhat strange. But your Lordship has been so good to give them a sample, and to rescue me from the danger.

I do not wonder your Lordship, or any writer under the Heavens, should give offence to Bigots, if you do not adopt their tenets, and live in their gang. Not to give offence, is not enough for them, and yet this perhaps is as far as any liberal and disinterested man was ever able to go. 'Tis not enough, not to offend: their bed, like that of Procrustes, must do for all, and if the lodgers do not fit, they must be lopped, or stretched, till they come to the standard.

Your Lordship's interpretation of λόγοs in St John seems perfectly clear and rational; but, being no theologian, I can't tell but it may be heretical.

I have a second time carefully read over your Lordship's two passages on the Categories, the formation of Species and Genus, etc. I have no objection, but to your too candid, your too partial mention of one who honours your friendship, and thinks himself happy in being a labourer with you in the same vineyard.

I must beg your Lordship's permission for a longer time, and a further perusal, before I decide on the new doctrines founded on new authorities, making a part of your Lordship's book. I don't come to them with the same reverential partiality, that I approach my old Guides and Masters. A candid and good man like your Lordship will allow much to an early acquaintance.

If I may be permitted to make a short remark or two, the first should be, p. 73, line 3. I cannot think brutes have mind, Noôs; and therefore I would rather read Soul, or Internal Part, or any phrase to that effect. P. 310 in the note, Horace is quoted as being serious in these lines, "Venimus ad summum fortunae etc." I have always thought them ironical. Perhaps I may be wrong.

I enclose your Lordship by this Post the copy of two curious fragments of Plutarch, that were never yet published, and are now brought to light out of the British Museum, by a learned and ingenious gentleman, Mr Tyrwhilt, late clerk to the House of Commons.\* As yours is an enlightened Country where Literature is still cultivated, they may perhaps furnish out some amusement to men of Science, and to yourself in particular. They are books presented, not to be bought—or I should not have sent your Lordship so torn a copy, as that which you now receive. . . .

I have the honour, with great regard and esteem, to subscribe myself, my Lord, your Lordship's most obedient, and most faithful humble servant,

JAMES HARRIS.

I leave London for Salisbury in a few days.

<sup>\*</sup> Fragments from Plutarch (1773) by Thomas Tyrwhilt (1730-1786).—ED.

#### IX.

### LORD MONBODDO TO SIR JOHN PRINGLE.

16 June 1773.

. . . I WILL begin with the matter of my Book, which may be reduced to three heads — first, that Language is not natural to Man—second, that it is possible (for I say no more) that it may have been invented—and, lastly—upon that supposition—to shew how it was invented. As to the first proposition, I must own I think I have proved it very clearly; and, whatever doubt you may have of the ideas which are expressed by Language not being natural to man, I think you can hardly doubt that the expression of them, by articulation, is artificial, and not to be acquired otherwise than by much practice.

The author of the Critical Review says that it is a proposition self-evident, and thinks that I have bestowed a great deal too much pains in proving it. But he does not consider that my proposition goes a great deal farther. For I say not only that Language is not natural to man, even when he has arrived at the age of maturity; but that he must have lived a great while in Society, and invented other arts, before he could have invented Language. This I doubt is not so very clear a proposition, and must require a great deal more knowledge of the Philosophy of Ideas, and of the nature of articulation than this reviewer seems to be possessed of, in order to be convinced of it.

My second proposition—viz. that the invention of Language does not exceed the faculties of man—I really want to have your opinion of; because, if I am mistaken in that point, my whole hypothesis is a mere chimera, my system being founded upon an impossible

supposition, and it becomes then a philosophical truth that Language was revealed. For of necessity one of three things is true—that Language is natural to man, that it was invented by him, or that it was revealed. If it is admitted that Language might have been invented by man, I doubt Philosophy will direct us to believe that it was so invented. For Philosophy will not introduce a God without necessity, nor suppose that Language more than any other Art was revealed from Heaven, when it might have been invented by our own natural sagacity and industry.

Upon the supposition therefore of the possibility of the invention of Language, the belief of its being revealed from Heaven, or of man's being created with the faculty of speech, is a matter of faith, which has nothing to do with a philosophical enquiry. And suppose my reader should hold it to be clearly revealed that it was originally bestowed by God upon our first parents,—the contrary of which I am far from asserting-and, if he will not agree with me in the supposition that this gift of God, like many other of his gifts, may have been lost in consequence of the Fall-at least that it may have so happened in some one country of the Earth,—he may however allow that it is a curious speculation, and I think not attended with any bad consequences to Religion or Morality, to enquire how Language-supposed to have been possibly invented-might actually have been invented, if the Revelation from Heaven had not made it unnecessary.

As to the fact whether Moses has actually said that man was endowed by God Almighty with the faculty of speech, I am really not a competent Judge, as I do not understand the original. But, so far as I can judge from the Greek or English translation, it is certainly not said expressly. Nor are there any circumstances in

the Narrative, from which I think it can be necessarily inferred. And I should think it more natural to believe that the first man, as he was endowed with superior faculties, did invent this art, as well as the art of tilling the ground, which was his occupation in his state of bliss.

But, though I pretend no learning in Divinity, I am much inclined to the opinion of the ancient Fathers of the Church, and of the Jewish Doctors, that many of the circumstances of that narrative are to be understood allegorically; and particularly that the conversations which are there related betwixt God and Man, and betwixt the Woman and the Devil, from which—as I imagine—the belief of Language being revealed has chiefly arisen, are not to be understood literally; any more than the conversations in the beginning of the Book of Job, which by some divines are believed to be the work of the same author.

One thing I think at least is certain that this divine original of Language is not so clear from Moses' account of the Origin of our Species, as that the world was created—not only this Earth, but the Sun, Moon, and Stars,—so many generations before Abraham. In this part of the narrative you seem to think that Moses was not divinely inspired, but only adopted the popular tradition among the Jews, by which—as it has happened in other nations—the origin of all things was made coeval with the progenitors of their nation. If this be so, we may also suppose that he has followed the national traditions with respect to Language, and made the Hebrew Language, as well as the founder of their Nation, come directly from Heaven.

As to the humanity of the Orang-Outangs, and the story of the men with tails, I think neither the one nor the other is necessarily connected with my system; and if I am in an error, I have only followed Linnæus,

and I think I have given a better reason than he has done for the Orang-Outang belonging to us, I mean, his use of a stick. From which, and many other circumstances, it appears to me evident that he is much above the Simian race, to which I think you very rightly disclaim the relation of brother, though I think that race is of kin to us, though not so nearly related.

For the large monkeys, or baboons, appear to me to stand in the same relation to us, that the ass does to the horse, or our gold-finch to the canary-bird. For it is certain, as you observe, that the baboon has a desire for our females, and—if we can believe the Swedish traveller, Roeping—they copulate together. For Roeping says he saw an animal produced of that copulation, which, as soon as it was born, fell to climbing upon the chairs and tables, and at last got up to the top of the house, from which it fell, and broke its neck.

If ever my book comes to a second edition, which you seem to think it deserves, I shall certainly correct that too strong expression about the exact conformity of the anatomy of the Orang-Outang with that of a man. I had my information upon that point from M. Jussieu at Paris, who either did not know, or did not think it worth his while to inform me, of those differences, which Dr Tisson has observed betwixt the anatomy of the Orang-Outang, and ours.

You have taken occasion to explain most ingeniously a passage of a very favourite author of mine, which I never understood. I mean that passage of Horace concerning the *Nigri Barri*, of which your interpretation makes excellent sense; whereas, in the way that it is commonly understood, it is I think absolute nonsense. For, besides what you have observed of the chastity of the elephant, the epithet of *nigri* does not agree with the elephant—at least with any I ever saw—and

so chaste and correct a writer as Horace never could think of coupling even the lewdest woman with an elephant.

I am obliged to you for correcting me with respect to the name of the French author, who writes the history of the Carribee Islands. It is—as you say—Le Bat.

I believe I am right as to the time when Cardinal Polignac\* flourished, that is was in his prime, because I took it from the preface of the edition of his *Anti-Lucretius*, though it be very possible that you may have seen him at Paris; for he lived to be very old, and continued to employ himself in correcting his work to the last hour of his life.

With respect to the Basque language, I do not well know what to believe. What you say is to be sure very strong. But I have it, from authority that I can depend upon, that one Williams, a Welshman, was in the country; and he avers that, though at first he did not understand the natives nor they him, yet in a very short time they came pretty well to understand one another; and he discovered that the two languages—I mean the Welsh and Basque—though differing a good deal in many words, and particularly in the pronunciation, were originally from the same stock. But however the fact be, it is not material to my system, though it belongs no doubt to the history of Language.

I come now to the observations you make upon the language of my book. And first as to what you say of the use of the word *length* in the expression *length of forming*, I am persuaded it is—as you say—not agreeable to the English use. And further I think it is not according to grammatical propriety. For the length of a thing, as you observe, is the extent of the thing in

<sup>\*</sup> Cardinal Melchior de Polignac (1661-1741). His Anti-Lucretius was published in 1747.—ED.

that dimension; so that to go the length of the thing is not to go to that thing, but to go so far as that thing is extended; and therefore when I say the length of a foot, or the length of a mile, I express no more but a foot or a mile of measure.

As to interference, I doubt not that you are right as to the use of the language; but I have no scruple about making words in English, when it is done according to the analogy of the Language, and in such a way that there can be no doubt or mistake as to the meaning of it. And this I believe is a freedom that I have used in other passages. Now interference is a substantive formed from interfere, in the same way that adherence is formed from adhere, and perseverance from persevere, and the word you mention, reference from refer. I make a difference betwixt creating words in this way, and using known words in a signification different from the common use of them, though that signification be more according to grammatical propriety. The first, if it be not affectedly and intemperately used, may I think be allowed; but the other I think ought not-because it is apt to puzzle the reader, and lead him into a mistake of the meaning.

I will give you an instance that will explain what I mean. The word precision, which is now so commonly used in England, came I believe originally from this country, and was used by an author not very learned in language, for all the reputation he has acquired as a writer, I mean David Hume. This word according to its etymological signification denotes the act of making precise, not the state of the thing when it is so made; in the same manner as circumcision denotes the act of circumcising—not the state of the person circumcised. The word signifying the state of the thing made precise ought to be, according to the rule of forming such words, preciseness. But, as this word is appropriated by use

to signify a blameable affectation of that quality, I should think an author censurable who would use *preciseness* to express what is well understood by the word *precision*, though not a proper word to express that idea. Tell me if I am right in this distinction.

As to your observation upon the expression that the instance—which you say ought to be as the instance—I am persuaded you are right as to the use of the language; and therefore it shall be corrected, though I confess I do not see the reason for it, and I know the Greek and Latin idiom is as I have it.

I shall remember also your observation upon one *Samuel Squire*, which is certainly not a proper way of speaking of a man that came to the dignity of a Bishop!

## Χ.

# JAMES HARRIS TO LORD MONBODDO.

PICCADILLY, 23 March 1774.

My LORD,— I am truly sensible of your Lordship's kind remembrance of an old friend, who so much respects you for your learning, and your love of Ancient Literature. I am likewise to thank your Lordship for your kind intention to present me with your second volume; but, from what mistake I know not, no such volume is as yet come to my hands. I shall have pleasure to see how far your speculations have carried you, on so curious and singular a subject.

My Categories are going on, and many sheets are printed off. As the Names, Categories and Predicaments are rather scholastic, though I have not rejected them, yet I have chosen to make the running title of my book

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Philosophical Arrangements; a name more intelligible, and yet I think by no means improper, as the scope of the work is to class our Ideas, and arrange them after the most clear and comprehensive method.

Your Lordship has many excellent scholars, and men of speculation in North Britain. 'Tis on such as these, that I must depend for support. 'Tis among these I must find patrons, when modern Philosophers (not knowing that I offer nothing inconstant with their own systems) may possibly be severe enough to condemn me, merely for keeping company with those, of whom they have little or no acquaintance. Your Lordship knows my company better than I do, so I am not likely to fail in your protection.

I have little literary news for your Lordship. The decision about the Property of Books has alarmed the great booksellers, and they are applying for an Act. Some relief they seem to merit under certain restrictions.

There is too, in the House, the report of a Committee relative to the British Museum. The complaint has been, the difficulty of seeing that noble Collection, from the immense crowd of low and ignorant spectators, who are sure to be found everywhere, where the sight is to be had gratis. 'Tis proposed to take money for admission, and leave not above one gratuitous day for the mob, in the course of a week.

Your Lordship tells me you have differed from me on some grammatical points. I shall attentively examine what I read, and I hope I may venture to affirm I shall read with candour.

As to what your Lordship says about rhythms and accents, I shall be happy to peruse it, because I know the subject to be curious, and not much thought upon, with reference to the English Language. I have slightly touched the subject in a little treatise upon the rise and progress

of Criticism, which I shall join to my larger piece in the same volume.

I must not conclude my letter, without begging your Lordship to accept my truest and sincerest thanks for your most kind congratulations. I am happy to say my office is an honourable one, and that I *verily* believe my Royal Mistress to be one of the best Women in Europe.

My wife and daughters beg your Lordship to accept their compliments, and are highly pleased that your Lordship has been so good as to remember them. I expect my son every day from Berlin, as his Majesty has given him leave to quit his mission for a few months.

With the greatest truth, I beg to subscribe myself, my Lord, Your Lordship's most sincere friend, and obedient humble servant,

JAMES HARRIS.

#### XI.

# JAMES HARRIS TO LORD MONBODDO.

# PICCADILLY, near Air Street, 11 Feb. 1775.

My LORD,—I have been in expectation, for some weeks, of seeing my *Philosophical Arrangements* printed off, and of accompanying a copy of them, intended for your Lordship, with a letter. Your very kind letter makes me write somewhat sooner, though there is nothing that now delays the publication, but the engraver, who promises me to finish in a fortnight. Stuart,—who for his fine taste, and his knowledge of the country, his friends call the *Athenian*—has given me an elegant frontispiece, which is now in the engraver's hands.

Greek and Latin, having little connection with the Philosophy in fashion here, are I am afraid not much

cultivated. This is rather against one, who has filled his pages with a great deal of that unfashionable lore. I hope however to find a few, scattered up and down in corners out of sight, who may think my endeavours laudable, and worthy of their attention. I have great hopes from the scholars of North Britain. They have not yet transferred the whole of Philosophy from the head to the hands; that is to say, from Syllogism and Theory, to Air-pumps and the Electric Apparatus. I have great hopes to find advocates in them; advocates, to keep me from sinking, till I am understood; advocates, to support the cause of Metaphysics, and the First Philosophy, which-because they have nothing to do with experiment—are therefore boldly called "nonsense." I can only add, that, if this be true, then is Euclid "nonsense" also, for I never heard that his theorems depended upon experiment.

I forbear at present to say anything on your Lordship's own speculations. I have said already I had my doubts as to your theory of Human Nature. You have, I think, deduced it from an origin too humiliating: but I should be happy rather to converse with you, than to write on this curious subject, should any fortunate event bring you hither, and give me the pleasure of your company.

I cannot enough admire your noble attempt to bring the Greek Philosophy again in fashion. To speak my mind freely, I think, though there was a time, when Plato and Aristotle were much more in fashion than they are now, they were never cultivated or understood in Western or Latin Europe as they ought; and as I believe many of the learned Greeks cultivated them, even down to the taking of Constantinople.

I am pleased with what your Lordship says about your having suggested nothing against the Religion of your Country. I am pleased with it, because it has

been exactly conformable to my own practice, and because I think it a Duty, which—were it but for the sake of decency—every writer owes the public. At the same time, having lately looked into the lives of Philip of Spain (son to Charles the Fifth) and his wretched wife, (our Mary of England), I think these two detestable bigots were greater scourges to mankind than all the Atheists taken together, from the time of Diagoras.

Your speculations upon Speech, in a view to its harmony and elegance, existing even in Prose, I totally approve and admire, and think your Lordship's own style manifestly proves the truth of your theory. . . .

Your Lordship's most obedient, and most humble servant,

JAMES HARRIS.

#### XII.

# [In Lord Monboddo's handwriting.]

OBSERVATIONS ON SIR JOHN PRINGLE'S LETTER RESPECTING VOLUME THIRD OF "ORIGIN OF LANGUAGE," SENT TO SIR JOHN, 21 June 1776.

... THERE is one remarkable difference betwixt the ancient and modern Philosophy, namely that the ancient Philosophy in every branch rises more to Generals, whereas the modern Philosophy, particularly our Philosophy of Nature, is chiefly conversant with particular facts, and seldom rises above the air-pump or alambic. The Ancients had a science of Universals, which they believed to be as certain as Geometry and of much greater dignity and elevation, for they placed it at the head of all Science and all Philosophy; and believed that in it, and it only, were to be found the principles of all other Sciences. . . . For the Ancients attempted

at least to comprehend the whole System of Nature, and this they called Philosophy, not the knowledge of any particular part of it, such as the History of Insects treated of by Mons. Bonnet. Even Astronomy, or the knowledge of the motion of the Celestial Bodies, they did not reckon Philosophy, far less did they bestow the name of Philosopher upon a mere Geometer, whom they considered as only a better kind of mechanic, compared with the Philosopher. There is another capital difference betwixt the ancient and modern Physics, viz. that the Ancients not only held Mind to be the first cause of all things, but the immediate cause of the chief operations in Nature. I used the word Mind in a large sense, so as to comprehend not only Intelligence, but Vitality, and whatever other principle there is in Nature that produces Motion; for such principle they held to be immaterial, and of a nature altogether different from Matter. From this principle they accounted not only for the motion of the animal and vegetable, but for the motion of the Celestial Bodies, and in general every motion which they could not account for by mechanical principles. . . .

You seem to think that I have been too severe upon the French authors; but I am pretty sure that the learned in France, with whom I have conversed, will not be offended with what I have said upon that subject. For the distinction that I have made betwixt the Beaux Esprits, and Savans is perfectly well known; and indeed I thought I had guarded so well what I said of the French, that I fancied it could not be mistaken. As to those of them who pretend to philosophise, I have said enough already. And as to such of them as pretend to be men of taste, and critics in Classical Learning, I have lost so much time in reading their works—without excepting even the Dissertations published by the

Academy of Belles-Lettres—that I have almost foresworn reading any more of them. As to that work of Voltaire's you mention, I never saw it. I suppose, from what you say of it, it is better than the rest of his works; but I shall think it very extraordinary if it will bear a comparison with that mutilated fragment which Aristotle has left us upon Poetry. Of all the works of his that I have seen I approve neither the matter, nor the style: and I place him at the very head of these petits-maitres writers, who have corrupted both the taste and morals of the greater part of Europe.

As to those English writers you mention-such as Milton—if it be true that, as I suppose, there is an art of writing, and that the Ancients are our masters in that art, as well as in Statuary and Painting, it is impossible in the nature of things that the writers of that age, when the ancient authors were so much more read and admired, should not be better writers than those of this age; as impossible as that a painter or statuary, who had learned the art here at home, should be as excellent an artist as a man who had formed his taste and his hand by the imitation of the best models of Greek Art to be seen in Italy. I am sorry that my style is not more like that of those old authors; and if I were not too late in life to begin to learn a new set of words and phrases, I would certainly study their writings more with the view of improving my style. But, though I use the common words and phrases of the age, as I have studied in the same school, and learned the art of composition from the same masters, I think there must be a resemblance in the general colour of our style. Those who think the periods of Milton and Lord Clarendon long and involved will no doubt think the same of those of Demosthenes, Thucydides, Cicero &c.; and will of course admire the brevity and perspicuity of such authors as Voltaire, Montesquieu, Macpherson, Sir John Dalrymple, etc. But a style of that kind I call *Memorandum*, or *Shorthand-writing*; and, as it would be intolerable even to the merest vulgar in public speaking, I think it is impossible it can have any real beauty in writing.

As to Scoticisms in my style, I have avoided them as much as I was able, but some have escaped me. There is particularly a very gross one which My Lord Mansfield, who has done my work the honour of a second perusal, observed to me; "presently" instead of "at present," which I wonder has escaped both you and the English gentleman you mention: but I have not scrupled to use words, whether used in Scotland or not, that I thought were agreeable to the genius of the Language, though they were not used in England. . . .

## XIII.

# LORD MONBODDO TO DUGALD STEWART.

Monboddo, 2 April, 1778.

DEAR SIR,—. . . Sir Isaac's system, if I rightly understand it, is not that Gravitation is essential to matter (for that would be downright *Materialism*, which he disclaims) but that it is a motion impressed by the Deity upon the Planets, as well as upon heavy bodies here on Earth, by which they tend, each to its respective centre: and this makes another impressed force absolutely necessary in order to give them the circular motion; I mean the *projectile* force. Now it is true, as you observe, that Dr Clarke says nothing concerning the motion of the Planets, whether it be simple or combined; so that you may suppose that he believed it to be combined. But he

rejects, in most express words, all original impressed force, and avers most positively that the Planets are moved by the constant agency of Mind. It is evident therefore that Dr Clarke's system of Astronomy\* differs essentially from Sir Isaac's, as to the motive principle of the Planets, though I suppose he agreed perfectly with him in the mechanical principles he applied to the calculations of their motions. . . .

The doctrine therefore of Gravitation, and Projection among the Celestial Bodies, must be rejected by all those who are really Philosophers, and not mere Mechanics or Geometricians. . . . †

### XIV.

### DUGALD STEWART TO LORD MONBODDO.

1778.

My Lord,—For some weeks after I received your Lordship's letter I was prevented from turning my thoughts to the subject of it by some private business which required the whole of my attention. During the time of the summer session I imagined it would be impertinent to intrude on your business with philosophical speculations. As I suppose you are now settled in the Country, I take the freedom to trouble you with a few observations on the Newtonian doctrine with respect to the planetary motions.

<sup>\*</sup> This probably refers to Dr Samuel Clarke's "Letter to Mr Benjamin Hoadly, F.R.S., occasioned by the present controversy among Mathematicians, concerning the proportion of Velocity and Force of Bodies in Motion." (1729).—ED.

<sup>†</sup> This, like so many of Monboddo's letters, is a mere fragment, most of the MS. being lost. The reply to it which follows, written by Dugald Stewart, contains passages not now to be found in what survives of his correspondent's original letter.—ED.

1778.]

After considering the subject in dispute I am of opinion, that Newton's theory of the planetary motions is not only consistent with the phenomena, but is deducible from them: in other words I think it not only accounts for the phenomena, but is the only theory by which they can be explained. As the reasoning which I have to offer on this question is entirely founded on the first "law of motion" laid down by Sir Isaac, I shall state it in his own words, and make a few remarks on it. "Corpus omne perseverat in statu suo quiescendi vel movendi uniformiter in directum nisi quatenus a viribus impressis cogitur statum illum mutare."

I know your Lordship will not dispute the first part of this position, which relates to the continuance of a body at rest: but I suspect you differ in opinion from Newton with respect to the second part of it, in which he asserts "That a body in motion, if left to itself, would continue to move for ever in a straight line with uniform velocity." On this point all Newtonians are agreed; but they differ in one circumstance, some affirming that the truth of the law is demonstrable à priori, others that it can be proved in no other way than by appealing to experience.

I am inclined to think that neither of these modes of proof is sufficient by itself to evince the proposition in question, and that it is necessary to unite them in order to obtain a satisfactory demonstration. If we have recourse to reasoning à priori, we are immediately involved in metaphysical perplexities. Lord Kames tells us, that "Motion even in a straight line is a continual action, which must infer some power continually acting"; or in other words that an instantaneous impulse cannot produce an effect which is to continue after the impulse is over. Sublata causa, tollitur effectus.

(See his Discourse on the laws of motion, printed

among the "Essays Philosophical and Literary" published by a society in Edinburgh.)

It is impossible to refute this reasoning of Lord Kames by any arguments à priori. We could never without experience have formed the idea of motion; and, unless we are allowed to appeal to experience, we can never establish anything with respect to its laws.

On the other hand, it seems to be obvious that experience alone cannot furnish a proof of the law in its full extent, for in no case do we see the law exemplified. All the motions which we are able to produce on earth soon languish and cease.

I am inclined however to think that, by uniting a very simple argument  $\grave{a}$  priori with the facts which we observe, the truth of the law may be evinced in the most satisfactory manner.

Lord Kames' argument, if it proves anything, proves that the effects of impulse do not continue a single instant after the impulse is made. But this is directly contrary to experience; for we find, that although we cannot produce a motion in any body which will continue for ever, the slightest impulse produces a motion which continues for a certain time after the impulse is over. We learn therefore from experience that an instantaneous impulse produces a motion, which continues of itself after the cause has ceased to act. From this principle once established, we may infer by reasoning some important consequences.

Since the effects of impulse are not confined to the instant when it is exerted, it follows that a body may be in motion without any force acting on it at the time. Suppose a body in this state: Its motion cannot be diminished or stopped, nor can its direction be altered, without the action of some cause. But this cause cannot be found in the body itself, for the body is perfectly

inactive. If any alteration therefore be made in its state, it must be acted on by some foreign cause. Hence it appears that when a body is once put in motion, if it were left to itself, it would move for ever in a straight line with uniform velocity.

Although we cannot appeal to experience in support of this conclusion, our experience is by no means *inconsistent* with it; for the cessations of the motions which we see produced on Earth may be accounted for from various causes—such as the resistance of the air, friction, and the like. We see that in proportion as these circumstances are removed, the duration of motion is prolonged.

From what has been said it follows, that whenever we see a moving body change its velocity, or the direction of its motion, we must infer the action of some new force on it. If the body move in a rectilinear polygon, a new force must act on it at every angle. If it move in a curve, a force must act on it incessantly to deflect it from the straight line in which it has a constant tendency to move.

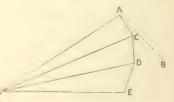
There is therefore one important difference between motion in a straight line, and motion in any curve, how simple so-ever, viz. this, that a single impulse is sufficient to make a body move for ever in a straight line, whereas a constant force is necessary to retain a body *even* in a circular orbit, which your Lordship observes is the simplest of all figures.

Your Lordship is pleased to censure the manner in which Newton has delivered this part of this theory. You observe that "on the supposition that the circular motion is by its nature combined of a centripetal and centrifugal tendency, Newton had nothing to do with the hypothesis of either Gravitation or projection, but should have argued from the nature of the motion which was necessarily accompanyed with a tendency both ways."

The fact is, it is in this very way your Lordship points out that Newton has proceeded. This will appear from the following general view of his reasoning.

In the first proposition of the second section of his *Principia* he proves, that if a body be constantly impelled by a force tending to a particular point, and receive a single impulse in any transverse direction, this body will move in a curve line wholly concave to that point, and will move with a velocity so adjusted as always to describe areas round the point proportional to the times of description. Suppose, for instance, that a body is continually urged by a force tending to the

fixed point S. Let this body at the point A, receive a *single* impulse in a straight line AB inclined to AS in any Angle. This body will move in



a curve A.C.D.E, and will describe equal areas in equal times round the point S; that is, if the arches AC, DE be described in equal times the areas ASC, DSE will be equal; or in general, the area ASC will be to the area DSE as the time in which AC is described to the time in which DE is described. Sir Isaac has proved, on the other hand, that if a body move in a curvilinear orbit ACDE in such a manner as always to describe areas proportional to the times round a fixed point S, this body is continually acted on by a force tending to that point. He does not shew merely that its motion may be accounted for in this way; but "arguing from the nature of the motion" he proves that it arises from the action of this centripetal force which constantly deflects it from the rectilinear direction in which it has in every point of the curve a tendency to move.

Kepler was the first person who discovered that the

planets move round the sun in ellipses having the sun placed in one of the foci; and that they move with velocities so adjusted as always to describe round him areas proportional to the times. This discovery he made by a long series of observations, without suspecting to what circumstances this law of the planetary motions was owing. It was on Kepler's observations that Newton's theory was founded; for the general propositions formerly mentioned joined to Kepler's discovery afforded a demonstration that the planets are retained in their orbits by forces tending to the sun.

I have no objection to your Lordship's doctrine "that every planet is under the guidance of a particular Mind"; provided you will allow that all the exertions of this Mind are in straight lines directed to the sun. Upon this supposition, the only difference between your Lordship and Newton will be with respect to the cause of Gravity, and there are many Newtonians who will subscribe to your opinion. Some of these have ascribed Gravity to the constant agency of the Deity, which supposition is not very different from your Lordship's doctrine of subordinate minds. This was the opinion of Mr Baxter, author of philosophical Dialogues entitled Matho; sive Cosmotheoria Puerilis Dialogus.\* It appears also, from the passages which your Lordship has quoted from Dr Clarke, that he thought the planetary motions were supported by the constant agency of mind, and that he rejected Sir Isaac's theory of a subtile aether as the cause of Gravity. I shall produce evidence, before I conclude my letter, that Dr Clarke in the passages referred to must have admitted Newton's doctrine of the combination of a projectile force with a centripetal one in producing the planetary motions; and that he intended

<sup>\*</sup> Andrew Baxter, (1686-1756), an Aberdonian, author of An Inquiry into the Nature of the Human Soul, &c.—ED.

to substitute the agency of mind only in place of the latter.

Nor is this scheme an attempt (as your Lordship seems to suppose) to combine a mechanical cause with an intelligent one. If the planetary motions had no beginning, then the centripetal force is the only one which ever existed. The centrifugal force is not to be conceived as a separate force acting on the planet: it is only the result of the tendency which the planet has every instant to leave the curve, and move in the tangent. On the other hand, if the planetary motions did commence at any time, the governing Mind might easily produce all these revolutions, by first giving the planet a projectile impulse in a straight line, and ever after urging it towards the sun. Your Lordship seems to differ from me with respect to the mode in which these governing Minds exert themselves. You observe that "when a person walks round a circle, it is not necessary for him to begin with moving in a straight Line." But it is not fair in the present controversy to appeal to the case of terrestrial motions; for in these a variety of circumstances interfere to affect our conclusions, particularly the resistance of the air and the gravitation of our bodies to the earth. It may be observed, however, even with respect to animal motions that when they become very rapid, they furnish an illustration of the doctrine already delivered, for if a person run very fast in a circular orbit, he will find it necessary for him to incline his body inwards, in order to counteract the centrifugal force arising from his tendency to move forwards in a straight line.

In the letter which I formerly sent your Lordship, I supposed the governing-mind of some planet to be annihilated, or to suspend its operation; and I affirmed that on this supposition the planet would immediately

leave its orbit, and would move for ever in the tangent to the orbit at that point. This your Lordship will not admit. You think "one of two things must happen. Either the planet must stand still, or must continue to move in its former orbit." But it seems to be obvious that it would not stand still; for, from every instance of motion which we have an opportunity of observing, it appears that when a motion is once begun it continues of itself. Neither can it be supposed that it would continue to move in a circular orbit; for if this were possible, what was the use of its governing mind? This supposition would have a tendency to banish mind entirely out of our philosophical system.

I think we must therefore conclude that the planet would leave its circular orbit, and would move in the tangent. Your Lordship's objection to this supposition is, that the planet never moved in the tangent before; and you think it difficult to conceive how it should abandon its old path, and strike into a new one. But it must be observed that, although the planet never before actually moved in a straight line, it had always a tendency to move in that direction; and it is not surprising that when the cause is removed, which formerly deflected it from the rectilinear course, it should leave the curve, and move in consequence of its former tendency.

I lately met with a passage, in one of Dr Clarke's performances, which convinces me his opinion on the subject was not different from mine. The passage is to be found in a note on Rohault's l'hysics,\* of which the Dr published an edition. If your Lordship has any curiosity to see the book, I shall send it by our carrier in a fortnight to your lodgings in Edinburgh. In the meantime I transcribe part of the passage I refer to.

<sup>\*</sup> The earliest work of Samuel Clarke was a translation of Rohault's Physics, which was published in 1697, when Clarke was twenty-two years of age. - ED.

"Mr Rohault,\* in his Traité de Physique, (tom I. p. 80,) contends that motion in a circle is as natural as in a straight line; for terrestrial bodies turned round endeavour to go off from the centre of their motion because they are heavy; but if a body that had no weight at all were turned round, it would revolve about its centre freely without any impulse, and would not endeavour to go off from it. Thus, if a ball of wax be made so hollow as to equal in weight an equal bulk of water, it will so comply with the motion of the water turned round in a vessel full of water, that it will always describe the same circle and never attempt to go off from the centre of its motion. But" (says Dr Clarke) "this assertion is contrary to all reason; and this very experiment proves nothing less than what this eminent person imagined, etc." I shall not transcribe the Doctor's reasoning in opposition to Mr Rohault, but shall refer your Lordship to the book itself.

I am too well acquainted with your Lordship's candour to offer any apology for the freedom I have used in this letter. I shall ever remember with gratitude the attention you have shewn me, and the instruction I have so often received from your conversation.

With much respect, I am, my Lord, your Lordship's most obedient and very humble servant,

DUGALD STEWART.

P.S.—If your Lordship shall honour me with your remarks on the foregoing observations, please direct your letter to me at Catrine, by Kilmarnock.

<sup>\*</sup>James Rohault, (1620-1675,) published Trailé de Physique at Paris in 1671. It was translated into Latin and published in London 1682: and afterwards, with Dr Samuel Clarke's notes upon it, in 1710 and 1718.—ED.

## XV.

# LORD MONBODDO TO JOHN HOPE.\*

Monboddo, 29 April 1779.

DEAR SIR,—I thought to have written to you as I promised, long before now; but one thing or other has hindered me. But I am now to propose to you enquiries, concerning which I am persuaded it will be easy for you to satisfy me.

In the most ancient Books, sacred as well as profane, the memory is preserved of a certain time when men lived upon the natural fruits of the Earth, not prepared by fire; and these writers agree that it was a life infinitely happier than the life we now lead, subsisting upon the fruits of the Earth, raised by much art and labour, and prepared often with no less art, and strangely mixed and compounded before they are thought proper to be food for us. According to Hesiod, we were deprived of the happiness of this life, in punishment of Prometheus' theft of the fire from Heaven. But, according to Moses, we forfeited it by eating of the tree of Knowledge. If we are to understand both these accounts as allegorical, I think Moses' allegory is by far the best; for it is undoubtedly the improvement that men have made in Knowledge, by the invention of Arts, that has been the cause of all their misery. But of this we shall talk more, on meeting.

In the meantime I am to inform you that there are two plants, one of them mentioned by Homer, and both by Hesiod, upon which they supposed that men chiefly subsisted in that golden age. The plants are called in Greek Asphodelos and Malaché; and Hesiod, in the beginning

<sup>\*</sup>John Hope, M.D., F.R.S., Professor of Botany in the University of Edinburgh (1725-1786).—Ed.

of his Opera et Dies, v. 41, speaks of them as the best food of men; and Homer in his Odyssey describes the Heroes in Elysium, as living in a meadow covered with Asphodel.

This plant, saith the Greek Scholiast upon 1. 538 of the 11th Odyssey, is like to a plant he calls Scilla, which has the same name in Latin, and is translated into French by the name Oignon Marin, or Sea-Onion. To this plant the asphodel is said to resemble; but according to the account given of it, in the Dictionary of Arts and Sciences by the French Academy, it is a much more bulbous plant than any onion; for it has sometimes four-score bulbous roots. The authors of this Dictionary speak of it as used only in Medicine; both Galen and Dioscorides mention it, as also Pliny: but as I have not their works here I cannot tell what they say of it.

This is all I know of the Asphodel. As for the Malaché, it bears the same name in Latin, only with the change which the Latins usually make upon the Greek words;—for it is called Malva; what the English name of it is I do not know:\* but in French it is called Mauve; and in the French Dictionary above mentioned, it is said to be a shrub bearing a number of large flowers, and with a long root, supple and tender. Horace makes mention of this plant in the first book of his Odes, 31. ver. 15, when, describing his own diet as very simple, he says,

Me pascunt olivae Me cichorea, levesque malvae,

from which it is clear that as late as the days of Horace the *Malva* was used by way of diet. As to the Cichorea, which he mentions at the same time, the French call it *Chicorée*, and they say it is an excellent pot-herb cultivated in our gardens, and called by some *endivia hortensis*, and for any thing I know is what we call *endive*.

<sup>\*</sup> It is the ordinary Mallow. -ED,

I find from an ancient epigram that they used to sow upon their tumuli, or mounds of earth, which they raised upon the dead, both the Malva and the Asphodelus; and in this epigram the Asphodelus has the epithet of many roots, answering to the description given of it by the French Academician. This custom was no doubt derived from the tradition of the dead living upon the Asphodelus and the Malva.

There are many I know who look upon these ancient traditions as no better than poetical fictions. But what shall we say to the authority of an historian of later times—Dion Cassius—who attests that the inhabitants of this very country where we live, subsisted in his time, without agriculture pasturage or fishing, upon the natural produce of the earth, the barks of trees, and hunting: and the Orang Outang (one which I read in the Newspapers of seven feet high taken aboard a French East India ship) subsists entirely upon the natural fruits of the earth, without either hunting or fishing, and yet is an animal of amazing strength.

Our friend Dr Hutton, who has no historical faith at all, does not believe a word of this; and his Philosophy is that the artificial life—as I call it—which we lead at present, is the natural life of man, and therefore the best life. When we see the Doctor, we shall dispute this point; but in the meantime I should be glad you would instruct me about the Asphodel and Malva, and let me know whether they are plants such as you think men could subsist comfortably upon. . . .

#### XVI.

# LORD MONBODDO TO JAMES HARRIS.

MONBODDO, 23 May, 1779.

DEAR SIR,—I had the favour of your very obliging letter; and I am very glad that my Metaphysics meet with so kind a reception from you, whom I esteem the best judge of such a work now living. I imagine they will be very differently received by the Philomaths and the Empyrics, as you very properly call them, but soi disant (as the French say) Philosophers. These last mentioned gentlemen will no doubt be very much affronted by my telling them that, instead of being "Natural Philosophers," they do not so much as know what Nature is.

The Newtonians too, I am afraid, will be very angry with me, though I think they have much reason to be pleased with me; as I have put the philosophy of their Master upon much sounder principles than it stood before, and have carried that best principle of his philosophy, as I think, its full length. I refer to the passivity of matter, which he appears to me to give up, when he speaks of a vis insita in matter by which it continues in motion, or indeed of any vis of any kind in a thing whose essence is perfect inactivity. And as to his Astronomy, I think I have delivered it from the imputation both of materialism, with which I think his friend Dr Clarke directly charges him, and of occult causes, when I maintain that the celestial bodies are moved by the immediate agency of Mind, without the hypothesis of the ancient atheists mentioned by Plato of ethers and subtile fluids. These I think are doubly an occult cause, first because there is no evidence that they exist, and secondly because it is impossible to show how they

should produce such extraordinary effects, if they did exist; and that without either projection or gravitation, but with an analogy to projection and gravitation here on earth.

Now, since everything in the Universe is either body or mind, and as I acknowledge no principle of motion but Mind, I have called this kind of life in inanimate things by the general name of Mind, but have distinguished it, I think sufficiently from the rational mind, by the want of intelligence and consciousness. Do me the favour to let me know whether you approve of this way of thinking and speaking. . . .

#### XVII.

### LORD MONBODDO TO RICHARD PRICE.

EDINBURGH, 11 July, 1780.

SIR,—When I had the pleasure of seeing you, I thought you were only a political arithmetician. But since I have returned to Edinburgh, there has fallen into my hands a book, containing a correspondence betwixt you and Dr

Priestley,\* which shows me that you are a philosopher, and a philosopher of the highest kind—a metaphysician. You have combated very well Dr Priestley's strange system of Philosophy, and stranger still of Christianity. But you have made some concessions to him which, though supported by an authority which I very much respect—the authority of Dr Clarke—are, I think, dangerous to Theism.

You admit that Mind, though immaterial, is extended; even the supreme Mind, you say, has this property. only difference in this respect betwixt the two is that our mind, being finite, the extension of it is only finite, whereas the supreme Mind being infinite is infinitely extended. The consequence of this I think necessarily is that our mind must be both figured, and divisible into aliquot parts, such as a half, third, or fourth. parts must, at least in idea, be separable or discerptable; and the Divine Mind, though it cannot be figured, must be conceived as having aliquant parts, if not aliquote, though they may not be separable from one another. I cannot conceive what is extended, not to have parts; and I think figure is nothing else but extension, limited and circumscribed. Accordingly, I observe that Dr Priestley has laid hold of these concessions of yours, to draw the above inferences; and he draws this further one, viz. that if the Deity be extended, and our minds also extended—and if, at the same time, they be not solid and impenetrable—then they must necessarily penetrate one another, as they exist in the same space.

This will be a strange confusion of Divine and human Natures; whereas, if we hold that nothing is extended except Body—for to be extended is to occupy space—the thing extended is certainly different. Now I can conceive nothing different from space, yet occupying space

A Free Discussion of the Doctrines of Materialism and Philosophical Necessity, in a Correspondence between Dr Price and Dr Pricstley, (1778).—ED.

and extending over it, except what is material. Mind therefore being immaterial, cannot occupy space, or be extended; any more than it can be solid, impenetrable, or divisible.

What makes the difficulty in the case is that mind must be somewhere, and the Supreme Mind it is said is everywhere; and whatever is anywhere must have a local position, and therefore must be extended. But to this I answer that Mind no doubt acts or energises in some part of Space; and the Supreme Mind in every part. And I allow that nothing can act except where it is. Mind therefore exists in space. But, as it is a substance of a nature quite different from Body, it is impossible that it can exist in the same manner, that is, extended and filling up space as Body does, so that there is no vacuum where it is. In short as Mind is immaterial, i.e. not matter, I hold all its qualities to be a negation of the qualities of matter. Therefore it does not occupy space, is unextended, indivisible, not solid, not resisting; for, as we do not know the substance of either, we cannot distinguish them but by denying the qualities of the one to the other.

I am not satisfied with Dr Clarke's notion that infinite space and duration are properties of the Supreme Being; and much less am I pleased with what Sir Isaac Newton has said that Space is a kind of organum for the Deity. I hold that neither Space nor duration is the property of any thing: for Space considered by itself is a mere nonentity, and has no existence except in relation to Body. So that if there was no Body there could be no Space: therefore, it is very improperly applied to mind; for, though it may be said that mind acts in Space, in that expression Space is only considered as the interval betwixt bodies, the boundary of bodies, or the capacity of receiving them. Even of Body it is no property, but only related to it in the three respects I have mentioned; far less is it a property of

mind. To be convinced that it is only a relation, you may suppose that nothing existed, neither Body nor Mind. What then would Space be? or would it be any thing? for I deny that Space is extended, extension being only a property of what is *in* Space. It is true that Space may be measured, but that is only when it is the interval betwixt Bodies, or the boundary of them, and when Body is applied to it; so that without Body it is truly nothing.

As to Duration—whether it be infinite duration, or that which is limited and known by the name of Time—it is no property of anything, and is only a kind of adjunct to Being: so that if we suppose nothing to exist, neither Mind nor Body, we could not conceive any such thing as Duration, which is nothing but the continuation of the existence of some one thing or other. If a Being is without change—either in substances, qualities, or energies—such as we conceive the Supreme Being to be, then duration only is applicable to it, without limit or measure; and such a Being is properly said not to exist in time. But if the Being be liable to change, then limited duration is applicable to it—to measure the interval betwixt its changes—and such a Being is said to exist in Time.

These things I have explained in my Metaphysics, in two chapters, one upon the subject of *Space*, and the other upon the subject of *Time*, to which I refer you; and, if you have not a copy of the book, I hope you will accept of it as a present from me; and I will desire Mr Caddel to give it you, if you think it worth your while to call for it.

As to Free Will and Necessity I have likewise a chapter upon that subject, which Dr Horsley has read, and entirely approves of. As Dr Priestley makes Man a machine, such as a clock, the necessity of our determina-

tions and actions (which he maintains) is a material necessity. This I have distinguished from the necessity of intelligence, the being determined by the most powerful motive.

Upon these subjects, which are of the greatest consequence in Philosophy, I should be very glad to have your thoughts, and as you seem to be very well acquainted with Dr Priestley, I should be glad you would ask him concerning the following particulars:

Ist. Whether Man, being a machine, the parts of which that machine are composed, were put together by divine wisdom, or whether they came together by material necessity, and by the operations of the particles of matter upon one another.

2d. After he has informed you how the machine was made, I should be glad if he would tell you how the motions of it are carried on; whether the several parts of it are moved by themselves, whether there be any external cause of their motion, or whether they be not moved by divine power; and if, by divine power, whether they be moved by a force originally impressed upon them—as Sir Isaac Newton supposes the planets are moved—or by the constant and unceasing operation of Deity.

3d. I should be glad to know what Dr Priestley means when he says (p. 256), that though a Body be perfectly organized, yet it will not have thought or sensation without life; But, as soon as life is added to it, then it has immediately both sensation and thought. He says that this life is the cause of respiration, and the circulation of the blood. Now I desire to know what it is that produces these effects. He plainly considers it as distinct from the organised body. But I should wish that he were more explicit, and told us whether it was Substance or Mode, material or immaterial.

These questions I think ought to be answered, by a man who says we have no soul!

If you will favour me with an answer, a letter addressed to Lord Monboddo in Edinburgh will find me; and I have sent you two franks, in case you should not have a Member of Parliament at hand. . . .

### XVIII.

# LORD MONBODDO TO SAMUEL HORSLEY.

EDINBURGH, July 24, 1780.

DEAR SIR,—I hope this will find you in the country, enjoying your leisure agreeably and usefully, which a Man of Letters only can do. Since parting with you I have very often thought of what we conversed about, and what you gave me in writing. I have shown your paper to some of my learned friends here who, if they are not convinced by what you say, admire very much the candour and ingenuity with which so great a mathematician as you—so learned in the philosophy of Newton—have received an explication of the principles of that Philosophy, from a man who knows only the elements of Mathematics, and has never made a professed study of the Newtonian philosophy.

I send you, enclosed, a paper from one of them, in which I believe he states very accurately the common opinion of the Newtonians; and, if you will grant him this postulation that the planets do actually gravitate towards the Sun, or towards one another, I think what he says is unanswerable.

But that is begging the question. You will observe that he lays hold of an expression of yours that they gravitate

potentially, and you may remember that I took notice of it, and gave you an explanation of that word as used by Aristotle, which if you have forgot I will put you in mind. The ancients, as they had great and comprehensive views of things, not only considered what a thing is at present, but what by Nature it is destined to be. Thus the embryo of an animal, the seed of a plant, they considered not only in its present state, but in that future state for which it was destined by Nature; with respect to which they said that it was potentially an animal, or a plant; whereas actually or ἐνεργεία, it was only an embryo, or a seed. Even a child, after he was born, they said, was only potentially an animal of intellect and science: And they would have said of you, when you were ten years old, that you were only potentially, or in capacity, a geometer, and a philosopher! Now, as Body has by its nature only mobility, or the capacity of being moved in any direction, it has not by its nature even potentially a motion or tendency to move one way more than another.

You know Mr Stewart here, our Professor of Mathematics. He is a young man of excellent genius, and very happy in a clear distinct elocution, which makes him the best lecturer of our University.\* He is, I think, far advanced in mathematical knowledge; and, if he would study the Greek Philosophy, I tell him he would be the Dr Horsley of this country. In the meantime, for want of understanding the Philosophy of Mind—which you know is only to be learned in the Ancient Books—he does not conceive rightly the only way in which Mind can move Body; and therefore has still a doubt, whether the Celestial Bodies be not actually moved by Projection and Gravitation. They certainly would be so, if they were moved by bodily impulse. But I think it is equally certain that

<sup>\*</sup> Matthew Stewart, father of Dugald Stewart, professor of Mathematics in the University of Edinburgh, 1747 to 1785.—ED.

they cannot be so moved, if they are moved by Mind.

But there is nothing more natural than that their motion should be analysed, and resolved into two motions which actually exist here on Earth; and which—if the projectile impulse was of force sufficient—would carry a body round the Earth.

You may remember I had some conversation with you about the second part of my work, which you were so good as to say you desired to see. I told you then that my plan was to make Man the subject of my second volume, and from man to proceed to God and Nature in my third volume. This you seemed not to approve of; and, upon second thoughts, I believe you are in the right.

Accordingly I am to begin the remaining part of my work with God and Nature, and to conclude with Man; and of the two I think it is best to begin with God, because if I establish the doctrines of Theology on good principles, I shall be able to demonstrate many things concerning Nature à priori: and, if the doctrine both of God and Nature be well laid down, I think I shall be able from thence to give an account of Man, such as has not hitherto been given, at least I am sure in no modern book.

God will be the subject of one book of this second volume, Nature the subject of another. But before these I will have a book, by way of introduction; recapitulating, and explaining at more length what I have said in the first volume concerning that division of things in the Universe into Body and Mind. And I will be particularly full upon the subject of Mind, the knowledge of which I hold to be absolutely necessary for knowing what is to be the subject of the next book, viz. God; for it is only by knowing ourselves that we can know God, and I am persuaded the oracle had that in view, when it directed those to the temple, to study themselves.

In this way I planned the work upon my journey,\* during which I studied four or five hours every day, with as much pleasure, and as I thought profit, as ever I did in my life. I even executed some part of the work; so that I think I shall be prepared to send some sheets to the press, in the beginning of winter.

Since I returned to Edinburgh I got put into my hands the controversy betwixt Dr Priestley and Dr Price, upon the subjects on which I am writing. In this controversy your name is frequently mentioned, and there is a letter addressed to you. Dr Priestley is the most professed materialist, I think of this age; and the only materialist Christian, for so he professes himself, that I ever heard of.

His system of matter is as extraordinary as that of mind; and his Philosophy altogether surprises me more than anything that I have seen for a great while. I am more in love with my own Philosophy than ever I was, since I read his. He says that there is a great deal of metaphysical knowledge among the dissenters in England: I hope it is of a better kind than his. If it is not, I think your Church should endeavour to introduce a better system. In every country where there is learning, and consequently learned and curious men, there will be metaphysics of one kind or another, for there will be enquiries concerning the causes and principles of things; but it is of great importance to the country in general, and particularly to the religion of the country, that the metaphysics should be of a good kind. Your Church, as I said to the Archbishop of York, has nothing to fear from the religion of the dissenters.

But every Religion has a great deal to fear from a general spirit of irreligion, to which the principles of Dr Priestley's philosophy directly lead; and particularly a Church such as that of England, which has such

<sup>\*</sup> One of his journeys from Scotland to England on horseback.-ED.

large possessions, at a time too when the distress—both public and private—for want of money is so great.

There is therefore no study which the Church of England should cherish so much, as the study of the pious Philosophy of the Ancients, and particularly the Philosophy of Plato, which has ever been acknowledged to be more agreeable to the doctrines of Christianity than any other. I believe I told you that I am becoming a convert more and more every day to his Philosophy. I have already written a chapter in which I have proved, entirely to my own satisfaction, that our ideas are not from matter—as Mr Locke has informed us—but from our own minds, where they have always been, though in a dormant state, till they are roused as it were, and excited by the impressions of external objects upon our organs of sense.

The great obstruction to this Philosophy, and to all Ancient Philosophy, in this country, is first the want of the knowledge of the language of it; and secondly the hold which the wretched philosophy of David Hume, has got of the minds of men here.

There is neither of these obstructions in England, so that I hope the Ancient Philosophy will thrive among you, by your influence, and by the influence of Mr Jackson, whom you recommended to me. I know the Archbishop of York, Lord Mansfield, and Lord Stormont are disposed to patronise it. . . .

## XIX.

## RICHARD PRICE TO LORD MONBODDO.

August 2d, 1780.

My Lord,—I think myself much honoured by your Lordship's letter. When I received it I was going a journey into the country. Being now returned—and this being the time of year when I throw off study, and employ myself in excursions to visit distant friends—I am setting out again, and shall not probably be at home till near the middle of next month. But I cannot omit for so long a time taking notice of your Lordship's favour.

I have been lately so much talked of as a politician, that I do not wonder you should have taken me for nothing else. But the truth is, that the study of Politics has been a late deviation, into which I have been drawn by the circumstances of the times, and the critical situation of our public affairs. Of this study I am now almost sick; and I am continually resolving to confine my attention for the future to moral, metaphysical, mathematical, and theological subjects. With these I began, and they have always been my favourite, and most delightful, studies. I am glad to find that your ideas and mine on metaphysical subjects are so much alike. I was always a warm admirer of Plato among the ancients, and of Cudworth and Clarke among the moderns. This you may learn from my Review of the principal Questions and Difficulties in morals, which -though my first work, and that which has been least read, -is not in my own opinion my worst. This book I have desired Mr Cadell to convey to you, when he has an opportunity of sending to Edinburgh; and I hope you

will accept it as a small return for your book on Ancient Metaphysics which, in consequence of the encouragement given me in your letter, I have called for, and received, from Mr Cadell.

I am ashamed that I had not long before this time read this book. The journey which I have in view will not allow me at present to read the whole of it. I have however read with much attention a good deal of it, and particularly what you say on the subjects of Liberty, and Space, and Time. I agree so entirely with Dr Clarke in my notions of Liberty that, where you differ from him, I find myself obliged to differ from you. But perhaps, as your Lordship observes on page 307, there may be no other difference than arises from a different use of words.

I think you extremely right in asserting that will implies liberty in the idea of it, and in laying a stress on the distinction between sensations and ideas, and between moral and natural necessity. These are distinctions of great importance; but I think that it is also highly proper to distinguish between the active and passive faculties of the soul. Did we act by the same necessity by which we believe the truth of a proposition upon attending to its evidence, or judge two and two to be equal to four, we could not (I think) be said to be free. There seems to be the same difference between these that there is between seeing the way upon directing our eyes to it, and walking along it. In the one case, we only receive an impression. In the other, we exert a power.

I am much obliged to you for the remarks you have made on my concession to Dr Priestley, that the soul is extended. But I have not explicitly made this concession. The truth is, that I am much at a loss how to frame my ideas on this subject. All I am satisfied about

is that the soul, as well as everything else, does exist in place, as well as time; but how I know not. extended—that is if it exists in space, as matter does it must, one would think, be (as you say) figured also; but Dr Clarke has observed that it will not follow that it must be divisible, for Space (as he says) is extended, and cannot be conceived to be divided without a contradiction; and the same is true of Time. The present moment is omnipotent; but it is the same everywhere, and cannot be divided, nor indeed—though it co-exists with every point of immensity—does it consist of parts, some of which exist in one place and some in another, but the whole of it exists in every place. There are, therefore, ways of occupying place which do not imply divisibility, or even a diffusion of parts through space. But, perhaps, I may be now talking very incorrectly; and probably there is some great impropriety in our modes of thinking and speaking on this subject.

I am sorry I cannot assent to your account of Space and Time. The former you call a relation of bodies to one another, and an adjunct of bodies; and without body, you say in your letter, it is truly nothing; so that where body is not, there is no space. Are not these last words the same as to say that there is no space in that part of space where body is not? and does not this sound like a contradiction? But not to insist on this, body, you acknowledge, exists in space. But does not this imply that space is independent of body? How can anything exist in its adjunct? The visible world, supposing it bounded, might be moved directly forwards with any velocity. But if there is no space where body is not, it would always remain in the same place. Was there no such thing as space before body? If so, there was no place for body, and it could not exist. Similar observations are applicable to duration. The world, if it began to

exist, might have been created sooner or later: but this implies a contradiction, if before the world there was no duration. Time I consider as the same with duration. They may however be distinguished, by considering time as that part of infinite duration which is commensurate with the existence of the world. But though this may be a proper distinction, it is not easy to speak always agreeably to it. In short, space and duration offer themselves to me as necessarily existing, and boundless, and the foundation of the possibility of all other existence. I think them therefore to be nothing but the Divine Immensity and Eternity.

In like manner. That infinity of possibles, which I find I cannot in idea destroy, I think to be the Divine Omnipotence. That infinity of abstract truth and of knowables, which I see to be necessary and eternal, I think to be the Divine Eternal Mind, And that Nature to which atheists ascribe all things, and which they say contains in itself a principle of order, I consider as only the Divine Agency and Wisdom preserving, conducting, and governing all things according to certain fixed rules or laws. I have touched these subjects in a chapter in my Review of Morals,\* but I cannot properly explain them, and I know that your sentiments are very different. I am happy however in thinking that with respect to the most important parts of this speculation I have on my side Plato, Newton, Clarke, and Cudworth. I differ from Cudworth only in his notion of Plastic Natures; and I have given my reasons, in a note to my Dissertation on Providence; and this is another instance in which I have the mortification of finding that I differ greatly from your Lordship.

Dr Priestley lives in Wiltshire, at a great distance from

<sup>\*</sup> See the second section of the first chapter, "On the origin of our ideas in general."—ED.

me, and he is in much trouble being himself very ill, and likewise his wife ill. I cannot therefore at present put to him the questions you propose at the end of your letter, but I know so well his sentiments that I have no doubt but he would say, in answer to the first of them, that the parts of the machine which he calls man were put together by Divine Wisdom; and, in answer to the second, that the motions of this machine are produced not by the matter itself that composes the machine, but by the constant operation of the Deity, whom he makes the only agent in nature. As your Lordship has honoured the correspondence between him and me with your perusal, you must be sensible that I differ extremely from him. Indeed no two persons can differ much more on most theological and metaphysical subjects; and yet we respect and love one another.

I have enclosed a note for Dr Webster. May I give your Lordship the trouble of getting it conveyed to him? I am acquainted with Dr Robertson, Dr Smith, and Mr Stewart the mathematical Professor, and I have also corresponded with Dr Erskine. Should any of them happen to come your way at Edinburgh deliver my respectful enquiries to them.

With great regard, and the best wishes, I am, my Lord, your Lordship's most obedient and humble servant,

RICHARD PRICE.

I have been interrupted in writing this letter by the sudden death in my house of a most amiable and excellent friend. This has thrown me, and my wife, into a state of bitter grief; and obliged me to postpone my journey. But being now recovered a little, I intend to set out in a few days.

NEWINGTON GREEN, Aug. 12th, 1780.

### XX.

# LORD MONBODDO TO RICHARD PRICE.

15th Sept. 1780.

SIR,—I had the favour of your letter, and am very desirous of the continuance of the correspondence; for, from what I have seen of your communications with Dr Priestley, I think you are both well-bred men, and of good temper and disposition. I have never seen a controversy managed with more temper, and good breeding. Although I differ from Dr Priestley almost in every thing, and from you in some things, yet I hold you both to be men of genius, who-not contented with experiments, facts of Natural History and Mathematics-have aspired to the knowledge of the Causes and Principles of things, Though I hold Physics to be the groundwork of good Metaphysics, and Mathematics an excellent handmaid to Philosophy of every kind, I have always thought him a man of low genius, and little elevation of mind above the vulgar, who rested satisfied with the inferior sciencesamong which I reckon even Geometry and Astronomyand could not raise his mind to the First Philosophy, which explains the principles of them all; and enquires concerning the Universe, and the first Cause of all things. But as this Philosophy is the highest of all, so I hold it to be the most difficult, and it has been the labour of many ages to bring it to any degree of perfection. Whoever therefore thinks he can excel in this Philosophy, without being taught by the very best masters, deceives himself most egregiously; and will be apt to fall into the most dangerous errors, of which we have seen of late several examples.

You say the masters from whom you have learned your Metaphysics are Cudworth and Clarke among the Moderns,

and Plato among the Ancients. Cudworth I think is the best of the Moderns you could have applied to; for he was thoroughly learned in the Ancient Philosophy. As to Dr Clarke, he was an excellent Greek and Latin scholar, but not at all learned in the Ancient Philosophy, as I think I have shown very clearly, p. 213, and indeed is evident to any man learned in Ancient Philosophy who reads his works. As to Plato, he was certainly a great genius, and a Philosopher truly Divine. But he was not so learned in Metaphysics, as his scholar Aristotle; nor does it appear to me that Metaphysics, any more than Logic, was formed into a science in Greece in his time. It was reserved for his scholar Aristotle to make a science of both, but you are not to suppose that he invented either; for that exceeded the abilities of any one mortal man. But, he was so happy as to get hold of some writings of the Pythagoreans of which he made excellent use; and from what is yet preserved of these books, I think I do him no injustice when I say that he took his whole Philosophy of Logic and Metaphysics from them.

If it be asked whence the Pythagoreans got them, the answer is obvious, that their master brought them with him from Egypt, where all sciences had been cultivated for thousands of years, by a long succession of philosophers from father to son, in the several Colleges of Priests. It is therefore to Aristotle that I have chiefly applied myself, as my master in Metaphysics, as well as in Logic; for Aristotle decides, what Plato only disputes about; nor is there anything more true than the common saying that Disputat Plato, docet Aristoteles. And he made a complete science of it by inventing terms of Art, which he defined; and, by using them, he saved a great many circumlocutions, with which Plato abounds. With Aristotle I have joined the study of his commentators of the Alexandrian School; without whose assistance, his acroa-

matic works, or works of abstruse Philosophy, are not to be understood. If therefore I am mistaken in my metaphysical notions, you are to lay the blame upon Aristotle, if you suppose that I rightly understand him.

As to Dr Priestley, he does not appear to me to be much conversant with ancient authors; and the only man from whom he professes to have learned his Metaphysics, is one Dr Hartley, of whom I never heard so much as the name till I was last in London.\* But I ask from whom did he learn his Metaphysics?

As to the first question you mention, concerning Free Will and Necessity, I have had no assistance at all from the Ancients that I have studied, who appear to me not to have had the least doubt but that the will was necessarily determined by what appeared the strongest motive, or reason; and indeed whoever has been taught the Ancient Philosophy, and has learned to distinguish betwixt sensations and ideas, and to know the nature of intellect and will, cannot in my apprehension have any doubt in the matter. The whole controversy appears to me to have arisen from modern ignorance, and the neglect of ancient Philosophy. There is one most obvious distinction in this matter, which however Dr Clarke does not seem to have made; and that is betwixt the determination of the mind to act, and the action itself. The action is certainly not necessary, for we may not have it in our power to perform it; or we may alter our mind, as we frequently do, and come to a contrary determination; But the determination both first and last is of absolute necessity, being the necessary consequence of a proposition to which we have given our assent, that the thing is fit to be done, that it is good,

<sup>\*</sup> David Hartley, M.D., (1705-1757) a distinguished psychologist, author of Observations on Man, &c. (1749). It is a somewhat remarkable admission by Monboddo that he did not know his name.—ED,

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profitable, useful, etc. This is a proposition as much as any in Euclid, and I can make no distinction betwixt the assent I give to such a practical proposition, and the assent I give to a speculative one. They are both equally necessary; but it is necessity perfectly different from material necessity.

Nor ought we to call it Necessity, if we would speak with the accuracy of ancient philosophers; for, in that most valuable piece of Pythagorean Philosophy which Proclus has preserved to us-I mean Timaeus De Anima Mundi,\* to be found in all the editions of Plato-the definition is expressly made in the very beginning of it, betwixt intellect and necessity, which as he explains the word is only material or bodily necessity. If we call the determination of the will necessary, it is that necessity by which every thing is what it is, and has essential properties belonging to its nature; the same necessity by which the three angles of a triangle are equal to two right ones. There is no doubt, as you say, a difference betwixt seeing the way, and walking in it; but, suppose I have determined to walk in it, for reasons which appear to me convincing, is not that determination necessary, and will not the action necessarily follow, if I do not change my mind, and nothing happen to hinder me.

As to Mind being extended, and having the three dimensions, if you have not made that concession entirely, I hope you will now entirely deny it, as a most absurd

<sup>\*</sup> There is a treatise, in Doric Greek, ascribed to Timaeus the Locrian, entitled  $\pi\epsilon\rho l$   $\psi\nu\chi\hat{\alpha}s$   $\kappa\acute{o}\sigma\mu o\nu$   $\kappa\alpha l$   $\phi\acute{v}\sigma\iota os$ . "Its genuineness is very doubtful, and it is in all probability nothing more than an abridgement of Plato's dialogue of Timaeus," (see Smith's "Dictionary of Greek and Roman Biography"). There is an extensive literature as to its origin, mostly by German scholars (of which there is a list in Englemann's Bibliotheea Script. class. s.v. Timaeus). Whether Lord Monboddo had authority for saying that we owe its preservation to Proclus is quite uncertain. It is printed in a Zurich edition of Plato, in which it fills five pages of double columns, immediately following Plato's Timaeus,—ED.

position. Indeed till I read your controversy with Dr Priestley, I did not imagine that Dr Clarke had been so entirely ignorant of Ancient Philosophy, and indeed of the Nature of Things, as to have maintained that an immaterial substance could have that essential property of Matter, or to speak more popularly, of Body, and which makes it what it is. I mean the property of being extended. And when this notion is carried to the Deity, as it must necessarily be, and he is said to be infinitely extended, it is a most impious, as well as a most absurd notion. With respect to our minds you allow that, if they are extended, as the extension is not infinite, they must be figured; but you say Dr Clarke will not allow that they are divisible and discerptible. But I say they must be both, though space be neither; for they certainly must be something different from space; because they are something that is in space; and if they likewise be extended, they must also be divisible and discerptible, like everything else that is extended.

Now what a strange kind of mind is this that has length, breadth, and depth, and may be cut and carved like a piece of meat. It is however true that our minds must exist somewhere, as the Divine Mind exists everywhere; but it does not follow from thence that they must exist in the same manner that Body does, that is with the three dimensions; but, on the contrary, as Mind is a substance of a nature quite different from Body, it follows of necessary consequence that it must exist in a manner altogether different. This manner indeed we cannot explain; but we ought to be contented to know as much of Mind, as we do of Body, with which we are so much conversant. Now extension is but a property of Body, an essential property indeed, but not Body itself as the Cartesians would make it. There is something therefore which is extended; for extension is not a mere ideal abstraction, such as length from breadth, but Body is really something without its dimensions or bounds, so that we are obliged—whether we will or no—to come back to the ancient notion of a  $\delta \lambda \eta$ , or first matter, which has been so much ridiculed.

Now, if any man will tell me how he can conceive that this first matter can exist without dimensions, I will tell him how I can conceive that Mind exists, and exists in a place without having either length, breadth, or depth. The fact truly is that we know nothing either of Mind or Body, but by their operations, and we know that both Mind and Body operate in place, and therefore exist in place; but as to their manner of existence, we can say nothing with any certainty, because we do not know their Substance or Essence; and therefore all we can say is that we know certainly that their substances are different, and therefore that their manner of existence must be different.

As to Space, what it is, or whether it be anything, is a matter no doubt of difficult and abstruse speculation. One thing is certain that if it be a being at all, it is a being eternal, self-existent, necessarily existent, indivisible and immoveable. This being the case, it is no wonder, that the atheists have set it up as a rival to Divinity, and have rejected all the arguments used to prove that God is the only eternal, self-existent, necessarily existent, independent, indivisible, and immoveable being. On the other hand it is as little to be wondered at that Dr Clarke, and other theists, supposing it likewise to be a being, have contended that it was a quality or property of the Supreme Being, that it is an accident of which the substance of God is the substratum. So Dr Clarke has expressed himself in his answer to the third letter of the Gloucestershire gentleman. And because Space, the accident, is of necessary existence, therefore the Substance, God, must à fortiori be of necessary existence. And Sir Isaac Newton has carried

this notion of Space, or infinite Space—for so it must be with respect to the Deity, being an attribute of Divinity—so far as to assert that it is, as it were, the sensorium of the Deity. So that, according to Sir Isaac, it is a most necessary attribute of God, without which, it would seem, he thought he could have no perception or intelligence; any more than we could have without our sensorium.

The Gloucestershire gentleman observes—I think justly —that if infinite space be a property of the Divinity, finite Space must be a property of inferior minds, such as ours. The Doctor's answer to this, in his third letter to that gentleman, is to me altogether unintelligible; and I find a great deal of that kind in the Doctor's metaphysical writings, being the necessary consequence of a man writing upon the most difficult and abstruse of all sciences without having learned it from good masters; for though I think the Doctor was a man of very good parts, yet I deny that it was possible for him, or for any one mortal man, to have invented such a science. Here, therefore, we have certain portions of Space, that are common property betwixt the Deity and inferior minds. Body must also be a sharer in this property, so far as it occupies Space; for, if Space be a property of Mind, I think it is impossible but that it must be likewise a property of Body, which we are sure it occupies, in a manner we well understand. Mind occupies it, in a manner we cannot so well explain.

These are strange notions; and, if they be well founded, they may be set down among the other great discoveries that we moderns are supposed to have made in Philosophy. The Ancients disputed very much whether such a thing as a vacuum—which we mean by the word Space—existed; and in Aristotle's fourth book of Physics there is a very long and subtle disputation upon the subject. But none of them appear to have had the least notion that Space was either a substance

by itself, or the quality of any other substance. It is therefore, I think, a matter of great curiosity, and also of great importance to the doctrine of Theism, to enquire whether the ancients or the moderns are in the right, in this matter.

The modern philosophers, both theists and atheists, agree in this, that Space is a being; whereas I agree with the ancients, and say that it is no being itself, however necessary it may be for the existence of other beings.

And, in the first place, I say that if it be a being it must be either substance or accident; for no man can conceive a being, that is not either the one or the other. Now it is certainly not substance, for if it were substance it must be either Body or Mind—that is material or immaterial—because betwixt these two it is impossible there can be any third substance. Now nobody will say that it is Body, for it is Space without Body: and no philosopher, that ever I heard of, maintained that it was Mind. The atheists therefore are certainly mistaken, when they make a substance of it.

The only question then is whether it be an accident. Now the accidents are reduced to nine classes, as they are arranged by Aristotle in his book of Categories, which I hold to be the foundation of Metaphysics—or the science of generals—and is I believe as ancient a piece of Philosophy as any in the world, being taken by Aristotle from the school of Pythagoras, and brought by Pythagoras as I believe from Egypt. Now I would desire to know to which of these nine classes Space belongs? Is it quantity? Dr Clarke, as he makes it an attribute of the Deity, will certainly say that it is not. Is it quality? If it be, I desire to know what quality it is, whether colour, figure, hardness, softness, etc. Is it doing, or suffering?

I need not go through them all in this way, and I shall only mention one more, to which it seems to be more akin than to any other; and that is relation, or  $\pi\rho\delta$   $\tau\iota$ , as Aristotle expresses it, and which very well denotes the nature of it; for it is always betwixt two things at least, and it must denote an idea which arises from comparing the two things together. Now I desire to know what two things compared together produces in us the idea of Space?

But there is one argument, which to me is demonstration that it is neither substance nor accident. It is this, that it has no place. Now everything existing—whether substance or accident—must exist in some place, the substance occupying the place primarily, and the accident secondarily, as being in the substance. In short everything existing, must exist somewhere. Now I desire to know where, or in what place, does Space exist? And I say it has no place itself, though it be the place of every thing else; but it is impossible that there can be a place of a place, for that would go on ad infinitum. Whence I conclude that Space, having no place, is no real being; because every being—whether Mind or Body, or the accident of Mind or Body—must be somewhere.

To make this matter still clearer if possible, let us suppose that nothing existed, neither Mind nor Body. I should desire to know what Space would be upon that supposition, or whether it would be any thing; and whether it would not be strictly true,—what every man would say, who has not confounded his head with modern Metaphysics—that nothing existed; for, if any thing has a real existence by itself, it would exist, if nothing else in the Universe existed.

I know it may be said that there would be, in the case I suppose, a capacity of containing Body, and that this may

be considered as something; but I deny that this capacity merely will make Space a Being. There is no being existing, nor indeed can we conceive such a being, which is only capacity, and nothing else; for, though beings have many properties in capacity only,—or δυνάμει, not ἐνεργεία, as Aristotle expresses it—they are always something besides mere capacity; and I deny that we have any conception of a Being that exists only δυνάμει, and not at all ἐνεργεία.

It is, however, true that nothing could have existed without Space; and it was for that reason that Democritus, and after him Epicurus, made Space or a vacuum, one of the Principles of Nature. For the same reason Aristotle has made Privation one of his three principles of natural things; Matter and Form being the other two. But though privation of one form be no doubt necessary before Matter can receive another—as a piece of wax or clay cannot receive the form of a globe before it loses the form of a square, or any other form it might have had before—yet Aristotle never dreamt that the privation of the square was any property of the globe; or that privation was to be reckoned a being. On the contrary, both he and his commentator Simplicius, tell us that it is a nobeing—or a τὸ μὴ ὄν,—and is not the presence of anything, but the absence; though that absence be absolutely necessary for the existence of any particular thing. (See Aristotle's Phys. cap. ult.)

In this way we may, if we please, consider Space, and say it is the privation of fullness, or of Body; which it certainly is with respect to Body, which cannot exist where another body is.

As to Mind, we cannot exactly tell how it exists, only we are sure that it exists in space, and even in the same Space where Body is; for that is the case of Mind animating Body. You will perhaps be surprised when

I tell you that I think Space is not extended;\* for I hold Extension to be a property of Body, and of Body only. A Body therefore in space is extended, but not Space by itself; so that, when we speak of measuring Space—if we rightly understand what we say—we mean only measuring the Body that is in Space; for we cannot otherwise measure Space, but by a Body that is in it, or supposed to be in it. It is however natural enough that, in common Language we should apply to Space that extension and measure which can be properly predicated only of the Body that is in it.

What I have said therefore, in the first part of my *Metaphysics*, I am still of, opinion, upon the strictest review, is true; viz. that Space is no being by itself, but that it only exists in relation to Body, in the threefold view I have mentioned; so that it is absolutely nothing when Body,—or, if you will, Mind—does not exist in it. It may be true (what you observe) that I have used an improper word, when I said it was an adjunct of Body; but from what I here say, and even from what I have there said, I think my meaning is abundantly clear.

If you should think that, in consequence of what I have said of the threefold relation of Space to Body, it falls under the category of relation, and therefore is something, I would have you consider that when two things are said to be related, they are so by quantity or quality, or doing or suffering, or some other of the categories. But two bodies in Space, at whatever distance from one another, cannot be said to have any such relation. It is true we give a name to the distance, and call it an interval; and we likewise measure it. But that is, as I said, by putting Body in it, or supposing it to be put. If, however, you choose to rank Space under

<sup>\*</sup>With this doctrine of the subjective notion of Space compare the Kritic of Kant, passim.—ED.

the category of Relation, I have no objection; provided you agree that it is not Substance, nor any property of Substance, and least of all of the Divine Substance.

As to Duration, I still think it is absolutely impossible to conceive it without something that exists, and continues to exist, *i.e.* to endure. But how it should be a property of the thing existing is to me inconceivable. One thing, I think, is absolutely certain, viz. that if eternal Duration be a property of the Supreme Being, Duration limited must be a property of inferior beings; so that we have here some common property.

I find you agree with Dr Clarke, in considering Time and Duration as the same. But this is an error that Dr Clarke has fallen into, by not being learned in the Ancient Metaphysics; for there he would have learned that time is only the measure of motion. It therefore could not exist, but with the material world; so that, if we could suppose nothing existing but the Supreme Mind, which is immoveable, there would in that case be Duration, or alion,—as the Greek Philosophers call it—but not  $\chi\rho\delta\nu$ os, or Time. And the Doctor should not have rejected the common distinction, made by all Philosophers and Divines before him, betwixt Time and Eternity, without assigning better reasons than he has done.

I have only to add something concerning my queries to Dr Priestley. Your answer to the first query I expected, because I do not reckon him an atheist, although I think his opinions have a very dangerous tendency that way. But I own that your answer to the second surprises me. And I cannot at all reconcile it with the Doctor's words or arguments; for if our machine of Intellect does not go on of itself, when once set a-going like a clock, but is carried on by the immediate agency of God, then I think it is not properly

a machine; or, if you will call it so, it is a machine, such as a pipe upon which a musician plays. But we can be no more answerable for our thoughts and actions, nor indeed are they ours, any more than the tune is the pipe's and not the musician's. The Doctor says somewhere that our reasoning machine is a kind of superstructure upon that part of us by which we breathe, and our blood circulates. Now I should desire to know whether that part of our composition likewise be a kind of pipe, which is played upon by the Supreme Being; and I would ask the same question concerning the sensitive part of our Nature also, if the Doctor had learned to distinguish the three natures of which we are composed, viz. the Intéllectual, the Sensitive, and the Vegetable. If they are all moved immediately by the Deity, and have no principle of motion in themselves, then, God is, literally speaking, all in all, and there isproperly speaking—neither man, nor brute, nor vegetable in this world. These are questions which the Doctor should certainly be ready to answer, before he publishes any more on the subject of Philosophy.

As you say you delight so much in speculations of this kind, I need not make any apology for the length of this letter, which has swelled into a Dissertation. Whether I shall convince you of the truth of my opinions I know not; but I am sure I shall profit by the correspondence, either by being convinced of my errors, or by being confirmed in the truth of my opinions, by finding that even you cannot make an objection to those I think are solid.

This is all the profit I have reaped by my publications, and it is a profit with which I am very well satisfied. I have had a great deal of correspondence upon the subject of the Origin of Language, by which I have been much instructed. But you are only the second correspondent that I have had, upon the subject of my Metaphysics.

Your note to Mr Webster I forwarded to him, and shall make your compliments to the persons you mention when I see them.

I am, with great regard and esteem, your most obedient humble servant. . . .

# XXI.

## LORD MONBODDO TO SAMUEL HORSLEY.

11 December 1780.

. . . As I have delayed sending off this packet for two posts, and have at present some leisure, I will add a P.S. concerning Plato, of whose works I have read a good deal of late, in search of a problem of Geometry, that he somewhere mentions; about which I said to my Lord Stanhope, I was to consult him, and I will also consult you, when I find it. This I have not yet done; but, in search of it, I have read two or three dialogues that have pleased me so much, and led me still farther on in him, that I can hardly get out of him, or read any thing else with pleasure. One of these I have read is the Protagoras, the style and composition of which is wonderfully pleasant. It is one of the finest dramatic pieces that ever was written, of which the subject, or action as you may call it, is perfectly one; and yet a most surprising variety of characters, manners, and incidents, and concluding with a catastrophe or peripateia, that is as wonderful, as it is pleasing and agreeable. I have no doubt that, if it were brought upon the stage, and proper actors procured for it, it would please philosophical spectators, as much in the representation as it does in the reading. As to the matter of it, it is ethical or moral; and Socrates proves against Protagoras, that

all virtue is knowledge. But it is plain that here Plato disputes, but does not teach; for, in his Book De Republica—where he gives up the sceptical and disputative manner, and really dogmatizes concerning virtue—he gives a very different account of it. However, he does not there solve all the difficulties that he starts in the Protagoras; but for that you must go to Aristotle's Nicomacheia—the greatest part of which work appears to me to be intended to solve the difficulties which Plato started in the Protagoras, and other parts of his works concerning Morals—just as his Analytics were written to answer the question so much agitated in the Theaetetus, but not resolved, viz. "What Science is."

It appears to me that almost all Aristotle's works were written with an intention to correct the errors, to supply the defects, and to resolve the puzzles and difficulties, which Plato's way of handling Philosophy—in Dialogue—had occasioned.

For this reason I think that the philosophers of the Alexandrian School did perfectly right in joining the two Philosophies together, the one being imperfect without the other; but Plato I think more imperfect without Aristotle, than Aristotle without Plato. At the same time, I think that there is in the philosophy of Plato something more noble, and truly divine, than is to be found in the philosophy of Aristotle; and particularly in the doctrine of Ideas, in which, as I told you in my last, you have plunged too deep at once, when you have studied them in the Parmenides. And I would have you read attentively what he says of them in his description of a Philosopher, in the fifth book, De Republica, and in the beginning of the sixth book. I will not enter at present into the controversy, whether Ideas are Beings, which have an existence by themselves, not only out of anything corporeal, but out of any intelligent mind. But this I will maintain that there is not only in every species of things, but in every individual thing, *something*, that makes it what it is, and distinguishes it from every other thing.

Now this is what Plato calls the idea of the thing; and he says-and I think most truly-that it is this only, which gives permanency and stability to every thing here below, without which all the material world would - according to the doctrine of Protagoras and Heraclitus-be in a constant flux, like the stream of a river, of which we could apprehend nothing but in passing, by means of our senses: and, for that reason, those philosophers maintained that there was no Science but Sensation, and that therefore every man was a standard of truth and falsehood to himself. And it is most certainly true that the material part of all beings here below is in a constant flux, and vicissitude, of generation and corruption; so that if there be nothing in them besides matter, there can be no science of them, nor anything that intellect can apprehend. Plato therefore, I think, was undoubtedly in the right when he maintained that ideas were the τὰ ὄντα, and the only things that had any real existence when every other thing in his language ὀυκ ἔστιν ἀλλὰ γίνεται; words which you will understand, but which cannot be rendered into English without a great periphrasis.

But what is this *something*, you will say, which constitutes the nature and essence of everything, and makes it what it is? In animals and vegetables it is clearly the  $\psi v \chi \dot{\eta}$ , or mind as I call it, according to the doctrine of Plato and Aristotle. But what is it, in bodies unorganised? I say it is also an immaterial substance. That such a substance must be the principle of motion in them is evident, unless we maintain that matter can move itself, which I hold to be downright atheism. And as it is the principle of movement in them, so it is also of

cohesion. And therefore I say it constitutes their nature and essence, and is the foundation of all their qualities, and in short is no other than the idea of the thing.

This I believe to be the doctrine of Plato, and I am sure it is the doctrine of his successor, in later times, Proclus. It is a thing I am to insist upon much in my second volume, which I have begun to print; and therefore I most earnestly desire your thoughts upon it. It is such an account of the ideas of Plato, as has never been given in modern times; nor, I believe, has been so much as dreamed of, by any modern philosopher. Aristotle everywhere distinguishes the form from the matter, but instead of calling it idea-a word which he does not appear to me to have liked—he expresses it by a periphrase, calling it the τὸ τί ἢν είναι of the thing; but though I do not quarrel with him, or anybody else, for the name of a thing, I do find fault with him for not saying more expressly that the form of the thing-by which it is moved, coheres together, and from which all its qualities are derived—is not mind, but only something like mind. Proclus has found the very same fault with Aristotle's Philosophy, for he says he acknowledges that Mind moves celestial Bodies; but does not acknowledge-at least explicitly-that Mind is the mover of the elements here below.

There is another thing which I blame Aristotle for, viz. that he derives all our ideas from matter—as Mr Locke does—and does not suppose them to be originally in the mind, and only excited by our sensations, as Plato does. This is giving a much nobler origin to our ideas, and one truly worthy of the divine original of our Minds: for if that part of us be after the image of God, we ought to suppose that it resembles him, so far as to have ideas originally in itself, and not derived from matter.

This makes me say that Plato's philosophy is nobler

and more divine than Aristotle's: and he has certainly given it the finest dress that ever Philosophy wore, or I believe will wear. In this he has been imitated by several, but equalled by none; though I think it must be owned, for the honour of the English nation, that my Lord Shaftesbury has come nearer to him than even Cicero; for I think the Rhapsody \* is the best philosophical Drama that has been composed, since the days of Plato. . . .

#### XXII.

### RICHARD PRICE TO LORD MONBODDO.

NEWINGTON GREEN, Dec. 11th, 1780.

My Lord,—I think myself much obliged to your Lordship for the honour you do me by desiring the continuance of the correspondence between us; and I am sorry I have been so long without answering your last letter. This delay has been occasioned by my own slowness, joined to a particular business which has for some time occupied almost my whole attention, and which will continue to employ me during the greatest part of this winter.

I am glad your Lordship approves the manner in which the controversy between Dr Priestley and me has been conducted. I wish indeed all controversies were carried on in the same amicable manner. I differ, as your Lordship says you do, from Dr Priestley in almost everything, and consider his system as most dangerous in its tendency; but at the same time I honour him, as an upright and able man.

<sup>\*</sup> The fifth "treatise" in Shaftesbury's "Characteristics," viz. The Moralists, a Philosophical Rhapsody, being a Recital of certain conversations on Natural and Moral Subjects (1709).—Ed.

I have received pleasure from the account which you give me of your sentiments of Cudworth, Clarke, Plato, and Aristotle. The three first of these writers I have read, studied, and admired; but, in consequence of some early prejudices, I have been but little conversant with Aristotle's writings. This, perhaps, may have been a great disadvantage to me; but it is now too late for me to begin the study of Aristotle, and I must content myself with such opinions as I have formed; preserving however a mind always open to any new arguments, and a desire to be influenced by them, as far as I can see their force.

I am afraid we must be willing to continue to differ about most of the points which are the subjects of your Lordship's letter. I offered what I thought of most weight with respect to them in my last letter, and I have considered carefully your replies. The determinations of the mind, your Lordship says, are of absolute necessity; but yet you acknowledge we may alter our minds, and come to a contrary determination. This last assertion seems evidently true, but scarcely consistent with the former. Determination, you add, is the necessary consequence of our assent to the proposition that a thing is fit to be done. I would ask how then we ever come to do things that we are conscious at the time to be unfit to be done? Every one to his sorrow knows that he often does such things, or that he determines against his convictions and judgment; and if this is never done, there is no such thing as guilt or sin in the world. The assent of the understanding is in my opinion a totally different thing from the determination of the will. You ask, supposing I have determined to walk in a particular way, for reasons that appear to me convincing, will not the action necessarily follow? I answer by no means; because I may change

my mind. If I do not change my mind, the action will indeed follow, if there is no physical impediment; but this is only saying that I will do a thing, if I continue to choose to do it. I would observe farther, that if by determination is meant the same with actual volition, saying that it is necessary is begging the question, or asserting the very thing that is denied. On the contrary, if by determination is meant the intention or resolution to act, saying that it is necessary seems wrong; because we have a controlling power over our intentions, or resolutions. Your Lordship distinguishes between determination and action, and makes the former necessary, and the latter free. But I do not feel the force of this distinction. If our determinations are necessary, the actions that follow them must be equally so. I assent entirely to what you say about material necessity, and think that it is of the last importance that no such necessity, or any other inconsistent with the power of self-determination, should be ascribed to the operations of the mind.

I have the happiness to agree with your Lordship almost entirely about the extension of Spirit. It exists and operates, in place; but, as your Lordship says, it cannot be concluded from hence that it is long, broad, and thick, or that it occupies space in the same manner with body. Time, truth, the first matter, ideas, etc. exist in place, or have a *presence* here and everywhere, but without dimensions. Why, therefore, as you very properly ask, may not mind likewise so exist?

I wish I could agree as much with your Lordship on the subject of Space. What Sir Isaac Newton has said concerning Space, that it is as it were the sensorium of the Deity, has, I think, been much misunderstood. He seems to me to have meant principally to make use of a strong figure or comparison. As we see things by

being present in our *sensoria*, and there perceiving the images of things conveyed thither by the organs of sense, so the Deity sees all things by existing in every part of infinite Space; and there perceiving not the images of things but the things themselves, by being intimately present with them, and their existing in him. Nothing, according to my ideas, can be more just than all that he says on this subject, at the end of his *Principia* and *Optics*.

I do not choose to call Space a being; nor am I able to give any satisfactory answer to the question, whether it is a substance or accident. But I am satisfied in general that it is something. Were it nothing, it would not be what your Lordship says it is, necessary to every thing. It seems a manifest absurdity to assert that what is itself nothing is necessary to anything; or that the sine qua non of all existence has itself no existence. Everything, your Lordship says, "must exist in place or somewhere, but where can place itself exist? If it be anything, must there not be previously a place for it, and a place for that place and so on for ever?" This argument your Lordship reckons a demonstration. How different, in this instance, are our conceptions? This argument seems to me the same as if I was to attempt to prove that there was no room for any more books in a Library by saying that if there was, there must be room for that room, and so on in infinitum; or as if I was to prove, that there was no such thing as time, by saying that time being necessary to the existence of every thing, time itself cannot exist, because if it did it must exist in itself, and there must be time for time, and so on.

To your question. Supposing neither body nor mind to exist, what would exist? I would answer, the possibility of body and mind; that is, time and place



James Burnet Legal & Menkedde ! jom un engraving (; 26 Marie)





would still exist. These are so real that they cannot be even *supposed* not to exist; and this *necessity* of their existence is according to my ideas, the same with the necessity of the first eternal and omnipresent nature.

Your Lordship says (p. 13) that Space is not extended. I know not how to understand this. Supposing it true it will still follow that Space is *something*; for of nothing, nothing can be either affirmed or denied. It will also follow that saying infinite Space, or immensity, is an attribute of the Deity is not the same with saying that he is infinitely extended, which would indeed be a most improper expression.

The difference between us about duration is less than about Space. Your Lordship says that duration cannot be conceived without something that exists, and yet you deny that it is a property of anything that exists. I do not see how anything can justly be said to *endure*, and yet that enduring not be a property of it. Is there not a sense in which whatever can be rightly affirmed of a thing is a property of it?

If infinite duration, you say, is a property of the Deity, limited duration is likewise a property of inferior beings. I find no difficulty in this. Intelligence, power, goodness, etc. are properties of the Deity, and also of inferior beings. But they are properties of the Deity in a peculiar manner. He possesses them necessarily, and independently. Inferior beings possess them by derivation from him. He is that infinite Truth, by which all minds know, and all beings are intelligent. The question whether there is a just distinction between duration and time appears to me to be chiefly a question about words.

I am as much surprised as you can be at some of Dr Priestley's opinions. He does indeed assert that the Deity is the *only Agent* in nature, and that we

have in ourselves no principle of motion or action; the consequence of which is, as your Lordship says (and Dr Priestley in effect acknowledges it) that we are not properly responsible for our actions, that they are not really ours; and that the machine called man is only a kind of pipe (to use your Lordship's comparison), which is played upon by an invisible hand, his actions being no more his own than the tune is the pipe's.

I have been afraid in writing this of repeating too much of what I said in my former letter, and this has made me less particular in my replies than I should otherwise have been. These are subjects which are hardly capable of being elucidated by a multiplicity of words, and long discussions. I think for myself, as well as I can; and if, after employing myself in laying my thoughts before others with the reasons of them, they do not receive them, I endeavour to make myself easy, and to content myself with the improvement (often perhaps imaginary) derived from the attention bestowed in proposing them. It would, indeed, have given me great pleasure to be able to tell your Lordship that your arguments have convinced me on all the points in debate between us. The reason of the difference between us may be my ignorance of that first Philosophy, and those ancient Metaphysics, with which your Lordship is so deeply conversant. I am afraid you discern in me much of this ignorance; but I rely on your candour. My delay in sending this letter I reflect upon with pain.

In hope that it will be excused, and with great respect, I am, my Lord, your Lordship's obliged and most obedient servant,

RICHARD PRICE.

### XXIII.

## LORD MONBODDO TO RICHARD PRICE.

EDINBURGH, 5 February 1781.

DEAR SIR,-I am very much obliged to you for the trouble you have taken to read the sheets I sent to you, and to give me your thoughts upon them. I know the prejudice is so great in favour of the Mechanical Philosophy at present, that I did not expect you were to be convinced by anything I have said against it. At the same time I was very desirous to know what a man, so ingenious as you, could say against the principles of the Ancient Philosophy, which I have endeavoured to defend. It is well, in the present state of Philosophy, if a man will allow that Motion was at first begun by Mind; which even Des-Cartes admitted, but I am afraid many of our present Philosophers do not. But that they should admit that it is not only begun, but carried on by Mind, is not be expected; at least not till the Ancient Philosophy be received, of which I have some hopes in England, where the language of it is understood.

I have so far profited by your remarks as to perceive that there are some things I have not sufficiently explained in the sheets I sent to you; referring too much to the Dissertation at the end of my first volume. There I am persuaded I have obviated the objection you urge against my system, that I make Body stop itself. This indeed would be as contrary to my notions, as to the notions of the Newtonians, and it would be most absurd to maintain that Body can neither begin to move itself, nor continue to move itself, and yet could stop itself. But I no more believe that any Body,

organized or unorganized, can stop itself, than I believe that our Body can stop its own motion. It is Mind—according to my Philosophy—that makes Body both move, and cease to move; at least it is one of the causes of the cessation of motion, for Body by its impenetrability and resistance will also make the motion of another Body cease.

The great difference I observe betwixt the ancient and modern Philosophy, with respect to the doctrine of Motion is this; that we, Moderns, have applied Geometry and Mechanics to it most successfully, and have measured and calculated very exactly; but we have not inquired concerning the cause of it, as the Ancients did, at least concerning the immediate cause of it. For, although Sir Isaac Newton has calculated most accurately the motions of the celestial Bodies, and shown by what laws they are moved, yet he has not said a word in his Principia as to the cause of those motions. He has only told us that their motion is combined of Projection and Gravitation; but what it is that gives the projectile motionwhether Body or Mind-he has not said. And as to gravitation, it is well known that he desired at least to account for it by bodily impulse. What makes me inclined to believe that he supposed that the projectile motion was produced in the same manner is:-

First, that it would make his System more consistent, both motions being produced in the same way.

Secondly, that otherwise his first law of Motion—which he makes the basis of his whole system—would not apply; for it is only Bodies, moved by the impulse of other Bodies, that continue their motion after the impulse ceases.

That Bodies, moved by Mind, do not continue their motion in that way, we know with as great a certainty as we know anything. I mean from consciousness of the motion of our own Body: and this is the more to be

attended to that it is only from thence that we have any idea of Mind moving Body. Now I am sure we are conscious, first that our Mind does not move our Body in the same way that Body moves Body, that is by impulse. And indeed it is impossible, when we consider the nature of Mind and Body, that it should; for Body acts upon Body by its surface; and what we call impulse is the impression that the surface of the one Body makes upon the surface of another; which is the necessary consequence of the resistance and solidity of Matter. But how is it possible that a substance, that has neither surface, resistance, nor solidity, can act in that manner? It is manifest, therefore, that Mind must move Body in a manner quite different. And it is in the way that Dr Clarke says gravitation operates, by acting not upon the surface of the Body only, but upon even the very inmost particle of it; that is, in one word, by animating it.

Thirdly, We learn from consciousness not only negatively that mind does not move Body by impulse, but we know positively that it moves it by constant and incessant energies, in the same way that Dr Clarke says that God Almighty, or some inferior Mind, moves the Celestial Bodies. Now I am very desirous to know, whether you think it is possible that Sir Isaac's first law of motion can be applied to the Celestial Bodies, if we suppose them to be moved immediately by Mind, and not by bodily impulse.

You admire Dr Clarke, as a metaphysician; and so do I. I wonder his Authority has no more influence with you, with respect to the manner in which Mind moves Body, and with respect to the motion of the Celestial Bodies in particular; which, he says most expressly, cannot be accounted for by one original impression or impulse made upon them, nor otherwise except by the constant

agency of Mind. I am also surprised that you are not moved by the authority of Sir Isaac himself, who—in the only part of his work, where I think he has philosophised, that is enquired concerning the cause of Motion — has said, in so many words, that neither the beginning, nor continuance, of Motion can be accounted for otherwise than from an active principle in Matter. Now that active principle is what I call Mind; and Sir Isaac did certainly believe that it was something different from Matter, in which he says it is inherent, for otherwise he must have believed that matter moves itself, which no body can believe, but an atheist. Certainly Sir Isaac was no atheist, though by following too much the mechanical Philosophy of Des Cartes, he has laid down principles which have a tendency that way.

Thus you see I am not destitute of authorities, modern as well as ancient, in support of my system, and among those of modern times I reckon Dr Horsley one of the greatest. He is a mathematician, scholar, and philosopher; such a man may be common with you; but I do not know a single man in Scotland such as Dr Horsley. As to his Philosophy, I can assure you I have learned more in conversation with him, than I have done by reading Dr Clarke's works; and he has fallen into no error so gross as that of Dr Clarke's concerning Extended Spirit.

As to the change in motion, it appears to me impossible to deny that there is one change constantly going on in it, I mean change of Place: and the last change of Place can, I think, no more be without a cause, than the first change. That this was the philosophy of Aristotle is evident from his definition of Motion; and that he was so ignorant as not to know what you call an axiom—that all the several changes of the Place of Body are produced by one single impulse—is also evident from the passage that I have quoted from his

Physics. Dr Clarke, it would appear, was as ignorant, at least with respect to the motion of Celestial Bodies. And even Sir Isaac Newton—whatever he may have thought when he wrote his *Principia*—appears to have changed his mind when he published his *Optics*, in which he has said in so many words, that motion can not be continued any more than begun, without a principle of activity in matter. This, I think, is plainly giving up his first law of Motion.

Motion, to be sure, is not such a change of a Body as the alteration of its figure; but still it is a change. The Sun, when he goes from East to West, is certainly changed with respect to his situation; though he be not changed as to his figure. If there be an increase of the velocity of the motion, as in the case of falling bodies, I think it cannot be denied that there is a change in Motion. And what is this change? It is nothing else but the Body changing its place of tenure, in the same time; so that this change is no more than a mode of change of place.

You say that motion, or passing from one point of space to another, is no more a change of the state of the body than passing from one instant of time to another. But this is comparing two things quite different, viz. the motion of the Body, and its duration measured by time—that is by the motion of other Bodies, such as the Sun or the Moon—for the motion is in the Body, and belonging to it, whereas the motion of other Bodies is extrinsic to it, and is only applied by the mind to measure the duration of a Body or of its motions. Of this no one can have the least doubt who has studied the doctrine of Motion and Time in ancient Books. As to Existence and Motion they are certainly ideas quite different; for though everything in motion must exist, yet a thing certainly may exist that is not in motion.

To conclude, there are but three ways possible, in which the Celestial Bodies can be moved. Either, they must move themselves by a *vis insita*, or Power essential to the Body; or, if they do not move themselves, they must be moved, either by impulse of other Bodies, or, by Mind; καὶ παρὰ ταῦτα οὐδέν as Aristotle says.

Now, as to the first alternative, Sir Isaac has said that one of the two motions by which he makes the Planets to be moved, viz. gravitation, is not essential to matter; and for the same reason I think we cannot doubt, but that he believed the projectile motion likewise not to be of the essence of matter. And, indeed, whoever believes that Body can move itself, and with so much constancy and regularity as the Planets are moved, must be an atheist, whether he knows it or not.

As to the second alternative, I think it is evident that he supposed the projectile motion to be produced immediately, by bodily impulse, otherwise his first law of motion would not apply. It is certain he desired to account for the motion of gravitation, in the same way; and indeed it was necessary, in order to make his system uniform and consistent. But whatever Sir Isaac may have thought, you seem to be clearly of opinion that the last alternative is the true one, viz. that the planets are moved immediately, and directly, by Mind. You do not agree with Dr Clarke, and Dr Horsley, that they are moved by the constant agency of Mind; but you say, they are first projected by Mind, and then go on of themselves in the line of projection, by Sir Isaac's first law of Motion, but are bent by the power of Gravitation into the Curve, which power—if I understand you aright—operates, not as the projectile force does, by one original impulse, but constantly and incessantly; so that here there are two operations of Mind concurring to produce this single motion, and one of these operations is different from the other.

This must appear at first sight a system very complex, and not at all probable; and indeed, I think, impossible to be true, unless it could be demonstrated that it was impossible that mind could move Body in a circle or ellipsis, otherwise than in this round-about way; for I lay it down as a postulation that cannot be refused me, that Mind,—intelligent, or directed by Supreme Intelligence—will move these Bodies in the most simple and direct way possible. If, indeed, they were moved by bodily impulse, it would be impossible that they should be moved otherwise than by a double motion. But there is no such necessity, when Mind is the Mover.

In order to prove that there is such a necessity it must be proved that there can be no motion—not even by Mind—except in a straight line; and it appears to me that Sir Isaac has proceeded upon that hypothesis.

But, if the difference betwixt the manner in which the mind moves Body, and that in which body moves body is attended to, it will be evident that Mind may move Body in a curve, as well as in a straight line; for, as Mind moves Body not by impulses, which carry on the Body in a straight line for some time after the impulse has ceased—but by incessant energies and exertions in every instant, it is plain that the direction may be altered in every instant of the motion, and so the curvilinear motion be produced. This is not a matter of speculation only, but a matter of fact; for the truth of which every man may convince himself by describing a circlewith his hand-upon the table. If Sir Isaac had attended to this difference betwixt the motion of body by Mind, and motion by another body, and had believed—as you seem to think he did-that the motion of the Planets was produced immediately by Mind, I cannot have the least doubt but that he would have agreed with me in opinion.

As to what you say of Sir Isaac's demonstration of the fourth proposition of the seventh book, I do not deny the force of it. But then it proceeds entirely upon the hypothesis of the combined motion of the Moon. For Sir Isaac has certainly not demonstrated that the motion of the Moon must necessarily be combined, and could not have been produced, by one single power. But he supposes—and the possibility of the supposition must be admitted—that the motion of the Moon might have been produced in the same manner as the motion of projectiles upon Earth. And from the similarity he has observed betwixt the motion of these projectiles, and the motion of the Planets, he has demonstrated that the same power which makes a stone fall to the Earth will be necessary to keep the moon in her orbit, and prevent her from going on in the line of projection.

Here it may be observed that Sir Isaac's whole system is founded not upon the actual existence of the motions of projection and gravitation in the Celestial Regions, but upon the analysis of the motion of the Planets into these two kinds, in the same manner as the motion in a straight line is analyzed into two lateral motions, of which the rectilinear is said to be compounded. And, accordingly, the demonstration of this composition of motion is a fundamental proposition in the *Principia*.

Thus I have given you, at great length—much greater than I first proposed—my answers to your objections; by which, if I have not convinced you, I have at least given you the pleasure of being more confirmed in your own opinion, by seeing the frivolessness of the reasons urged against it! In return for this pleasure, I hope you will take the trouble to let me know how you have convinced yourself of the fallacy of my reasoning; that so I may either come over to your opinion, or have the pleasure—in my turn—to be more confirmed in my

own. Whichever of the ways our correspondence ends, we shall both profit by it; and we have already so far profited that we are both clear as to that most important distinction betwixt Body and Mind, that the one is extended, the other not. You seem now to be of opinion that Space cannot be set up as a rival to Deity, or held out as being eternal, independent, immoveable, as well as Deity. And I hope, upon further reflexion, you will be convinced that it is truly no Being at all, but only the capacity of containing Being; which must no doubt be previous, or at least concomitant, to all Being, for no Being could exist, if there was no-where that it could exist.\*...

#### XXIV.

# SAMUEL HORSLEY TO LORD MONBODDO.

THORLEY, Feb. 25th 1781.

My Lord,—I am your debtor for two letters. I have so much to say to both of them, that I hardly know where to begin: and were I to utter everything that is in my mind, I know not when I should end. I must in the first place thank your Lordship for your hints about the study of *Ideas*. I certainly do not yet understand the whole of the *Parmenides*. However it was not the first of Plato's dialogues that I read, nor did I read it last summer for the first time. Indeed there is little of Plato that I have not read, and much of him repeatedly. For from the first time that I ever took him into my hand, I was captivated with the beauties of his writing.

<sup>\*</sup> For obvious reasons many of the capital letters made use of in this letter are retained.—ED.

I am the least acquainted with his book of the Laws; for what may appear to you a whimsical reason; that I have never been able to meet with any edition of that book, in a size that I can hold in my hand at breakfast, which is my usual time for that kind of reading. I believe there is an old quarto edition, but I have never met with it. There is one (Fischer) at Leipsic, who I hope may in time supply that want. He has already obliged us with a great deal of Plato, upon a white-brown paper, but in a very commodious size. And I hear he intends to go on.

I lately heard that they are fabricating a pompous edition of Plato in folio at the Glasgow press. I wish they would rather publish it, in the size of their Thucydides. I should think it might answer better to the printer. For a small edition is wanted, and would have a sale; a folio edition is not wanted, and will have none. Your Lordship would hear, I dare say, with great concern of the death of Mr Harris. For my own part I exceedingly lament, that my acquaintance should have been so short with a man so worthy to be known. His history of the learning of the Middle Ages is finished;\* and, had the author lived, would have been published I suppose before this time. It is imagined that his library will be sold, in which it is said there are some Greek MSS.

Your letter upon the subject of Ideas was the more agreeable to me, that it flattered my vanity, by shewing me the great agreement between my own notions upon that subject and your Lordship's. Your doctrine of Ideas which are not *genera*—and with which you suppose the mind of brutes may be furnished—is indeed quite new to me: and, to say the truth, I am not quite satisfied about it. If there be any such Ideas, I doubt not but the brute may

<sup>\*</sup> The third part of Harris's *Philological Inquiries* dealt with the Middle Ages, and was translated into French, under the title of *Histoire Littéraire du moyen Age*, par Aut. Marie Henri Boulard. Paris, 1789,—ED.

partake of them. But my doubt is, whether any such Ideas do exist. To explain my objection with the greater brevity, I shall deal with your instance of the sun, rather than argue upon the question generally.

"There is but one sun," you say, "in the Universe; therefore the idea of the sun, is the idea of an individual, not of a genus."

That there is only one sun I admit; for the question between us is not whether there be one sun or many, but whether being but one, the idea of the sun may nevertheless be the idea of a genus. This you seem to me to deny; and I am not satisfied that it is denied upon good grounds. For I apprehend that it is not necessary to the idea of a genus, that many individuals of it should actually exist at the same time. I am not sure, that the actual existence of any one is necessary at any given time. All that is required is the possibility of the existence of an indefinite number at any time. There was a genus of man before Eve was formed, when Adam was the only individual of the genus in actual existence. And even before Adam was created. the idea of man existed in the Divine mind, when not one individual of that genus was in being. So there is but one sun actually existing, yet there is no impossibility that more may exist. And if this sun were annihilated, the idea of a sun would still remain in the Divine mind, and perhaps in many inferior minds. Besides this, if you analyse the ideas, which you have considered as individuals, will not each of them be found to contain a variety of genera. This I am sure is the case in the sun. The sun is a round, shining body which enlightens the atmosphere, warms the earth, makes the regular vicissitudes of day and night by its rising and setting, and causes the varieties of the seasons, by its various elevations in the sky at noon. Here are the ideas of corporeity, roundness, shining, cause and effect, and motion in various directions.

The idea of the sun is the idea of these, with many other genera, united. Or it is the idea of a thing partaking of all those genera. This one sun, which now exists, is an exemplification of that participation. The Deity, in whose mind the idea of this participation originally exists, might have produced innumerable exemplifications of that same idea, had it been his pleasure to do it. The multitude therefore of individuals in the genus of the sun, in intellect, is indefinite; no less than in the genus of flies or ants; though but one individual is in actual existence in the first instance, and myriads in the other.

Therefore the idea of the sun is not the idea of an individual, although there be but one exemplification of that idea in the universe. I wish your Lordship to consider, whether this reasoning be just, whether it will apply to every instance in which you have supposed the idea to be the idea of an individual. And if it should, whether the minds of brutes can possess such ideas. And I beg you would let me know the result of your further thoughts upon the subject; for it is for the sake of getting more information from you that I have ventured to object to your doctrine.

I have read repeatedly, and with great attention, the printed sheets you sent me about the Newtonian Philosophy. I would wish your Lordship to consider well whether it might not be advisable to alter the whole form of that discourse. I imagine that what you propose by writing it, is to procure a favourable reception of your system, notwithstanding the opposition you may expect to meet with, from those who may imagine that it contradicts Newton's system, and will suppose all men to be in an error, rather than Newton. Now I think your purpose would be better answered by shewing—what I am persuaded

is the truth—that there is no disagreement at all between your system and his. That your principles do not in the least interfere with any of his discoveries concerning the motions of the planets, the motions of bodies in resisting fluids, the propagation of sounds, the properties of light, and the production of colours.

Newton's investigations, as they terminate in a principle which can never be explained mechanically, aid your scheme of deriving all motion from the immediate activity of Mind. This at least is proved by the Newtonian system, in the instance of the celestial motions; which are resolved into two, of which the one, the projectile, can be derived from no known mechanical cause; and the other, the centripetal, is such as no mechanical cause could possibly produce. The motions of the celestial bodies, being what mechanical causes are unable to produce, must proceed from some cause that is not mechanical; *i.e.* from Mind.

Since the celestial motions are the immediate effects of Mind, the motions of projectiles here below must, upon the Newtonian plan, be refered to the like cause. Again, if the motions of projectiles be the effect of Mind, there can be no doubt that the descent of bodies, falling perpendicularly by their weight, has the same origin. For in the case of a projectile, the uniform progression in the line of projection is the only part of the motion, which can be accounted for from external impulse. The descent of the projectile is therefore the effect of Mind. But this descent, abstracted from the progressive motion, is just the same as the descent of a body which has received no projection. Therefore, the descent in both cases comes from the same cause.

This conclusion is confirmed by the seventh section of the first book of the *Principia*, where Newton states all the circumstances of the descent of a body in a straight line, the space despatched, and the velocity

acquired in a given time; by considering the straight line as the form, to which the curve of the projectile may be ultimately reduced, gradually lessening the velocity of projection, and thereby contracting the breadth of the area of the curve, till both come to nothing. The case of uniform motion in a straight line is perhaps hardly worth while considering, because it no-where exists, except where the natural motions of bodies are restrained, and modified by external impediments. In every instance of motion really existing, the Newtonian system—to be consistent with itself-must adopt (you may say) my principle of the constant and immediate energy of mind on body. It is an objection of no great moment that Newton himself was not aware of this. The fact is, that that great man, having once seized some leading principles, was much more inquisitive as to the consequences that might follow from them, than the higher causes on which they might depend; which consequences will be just the same, whatever the higher causes may be.

It is in these principles that Newton's system and mine unite. From them Newton descends to the effects wrought in the material world. I endeavour to ascend to the true causes acting in the world of Spirit; where alone original activity, and true causes, are to be found. It has perhaps been fortunate for the world, that Newton himself did not perceive that the principle of universal animation was the consequence of his system. Had this been understood, when his Philosophy first came abroad—such was the rage among the learned of that time for mechanical hypotheses—the force of truth would perhaps hardly by this time have overcome the disgust and prejudice which this circumstance occasioned; and Philosophy would still have been afloat in the Cartesian Vortices.

Not aware of the consequences to which it leads, Materialists—not indeed the most clear-sighted of mortals —have greedily embraced a system which ruins their cause, by affording an experimental proof of the unremitted activity of mind in every part of the Universe. I cannot but think that something which could reconcile the leading principle of your system with the general scheme of Newton's, would have a much better effect, than anything that has the appearance of an attack upon his opinions.

Consider, my Lord, that the Newtonian philosophy is in possession of the good opinion of the learned, and of the prejudices of the ignorant. Tell the world that you do not contradict anything, that is really a part of this admired system; tell them that this system, pursued to its remote but certain consequences, terminates in yours; all men will give you a patient and favourable hearing. But, tell them that you can convict Newton of great mistakes, I fear you will find but few who will enter into the merits of the question; and you will only raise a prejudice against the Philosophy you would revive.

If you shall determine to send out this fourth book, in the form in which it now stands; there are some parts of it which I would wish you to revise.

In the first chapter you insist much on the imperfections of Newton's machine. "N. having told us that the planets disturb one another's motions: that the comets disturb the motions of all the planets; and therefore his system will require the mending hand of the Creator."

These imperfections, my Lord, are not peculiar to Newton's system, but are originally in Nature's. They must be in *your* system, and in every system in which Nature is faithfully delineated. For these disturbances, at least the motions which are referred to these disturbances as the cause, are no fictions or assumptions of Newton. They are facts, obvious to the eyes of every astronomer; and the great nicety, with which modern Astronomy

computes the motions of the planets, is attained by making a due allowance for these disturbing forces. The changes in the motions are evident, from whatever cause they may arise.

And although some of them have a period (as the nutation for instance of the earth's axis) which after a certain time brings things back to the first state; yet there are others that have not (as the secular diminution of the obliquity of the elliptic). Of these the effect accumulates, and must in length of time—in a great length of time I must confess—make very sensible changes in the constitution and arrangement of the bodies of our system. And, therefore, if it be intended that the present constitution and arrangement of these bodies should continue for so long a time, as that in which these changes will become considerable, the system will undoubtedly require the Maker's mending hand.

This however is not my opinion. I suppose that by these changes - which are very slowly going onthe bodies of our system are gradually to be prepared and fitted, in a remote period of their existence, for some other purposes than they now serve. And in this view of them, these changes are no imperfections, but the regular progress of Nature towards its Creator's ends. These views the system of Newton does not reject. Being adopted, they remove the imperfection from Newton's machine, as much as from any other system. And any other view of these changes, which leave Newton's machine encumbered with this imperfection, leaves the same imperfection in every other system; because it leaves it in the nature of things. You will observe, my Lord, that I do not defend the opinion, that the world is an inanimate machine. I think that this is not properly to be called Newton's opinion, who appears to me never to have been decided in this, or any other

opinion concerning the original causes of the planetary motions. But if this was his opinion, I still think that his machine is not chargeable with that particular defect of disordering itself; the changes that are observed to take place in it, being designed by the Maker, effected by particular contrivances in the machine, and therefore no disorders.

The analogy between the motions of the planets and falling bodies seems to me much more complete, than you suppose. Not to multiply words unnecessarily, I admit that the more immediate comparison is between the planets and projectiles. But I apprehend that the affinity, which the planets bear to projectiles, connects them with falling bodies. For surely you will allow, that the cause of the incurvation of a projectile's path is the same principle which makes any body, that is not projected, fall in a straight line towards the centre of the earth. The steps of the analogical argument, as it lies in Newton, seem to me to be these. Projectiles are made to move in curve lines, by the very same principle by which bodies not projected, descend in straight lines. And the curve which a body, projected with a sufficient velocity, would describe is an ellipsis.

The moon describes an ellipsis. Is the moon then moved by these principles which govern the motions of projectiles? It may be so, if the gravition towards the earth extends to such a distance from the earth, as that at which the moon revolves. If the moon be revolved by the combination of a projectile and a gravitating force; the gravitating force, to give the orbit its elliptical form, must vary, in some regular manner, as the distance of the moon varies from that centre to which gravitation tends. To deduce the law of this variation from the form of the orbit, is a mere mathematical problem. Let us resolve it, says Newton. It is resolved: The

law is such. Is it not probable, that the power of the terrestrial gravitation is different at different distances from the earth's centre? It is highly probable. May not the law of its variation be the same, which would be necessary to regulate a gravitating force which would revolve the moon in her elliptical orbit?

There is no inconsistency in such a proposition. If gravity is different at different distances from the earth's surface, and if it varies by the law supposed, what will be the degree of it at the moon's orbit? So much.—And with what velocity must a body be projected, in order that this degree of gravitating force may resolve it, in that ellipsis which the moon describes? Precisely that, wherewith the moon moves in this orbit. Shall we conclude then that the moon is carried about in her orbit, by the same principles by which projectiles are moved in their proper curves? The conclusion has the highest probability. The moon therefore, and projectiles, are bodies in similar circumstances; the projectile is a body describing an orbit round the earth, and at the same time carried, with the earth, about the sun. And the only difference is that the projectile describes its orbit at a small distance from the earth, and the moon at a great one. This is indeed the only difference that appears in the motions of the moon and projectiles. But do not the motions of the planets about the sun resemble that of the moon around the earth?

They describe orbits of the same kind, and their motions in these orbits are regulated by the same laws. The resemblance cannot be denied. The motions of the planets therefore about the sun might be produced by a projection, and a gravitating force tending to the sun's centre? They might be so produced. And that gravitating force must be different at different distances from the sun, and must vary by the same law which governs the variation of the moon's gravitation to the earth. The same elliptical

form, which is common to the lunar and the planetary orbits, proves, that the variation of the gravitating force must be governed in both by the same laws. The principles of motion therefore, in the planets and in the moon, are similar. The only difference is, that the principles of the lunar motions respect the earth, those of the planets respect the sun. This seems to be the only difference that can be admitted. But it has been shewn that projectiles are little moons revolving at small distances. The planetary motions therefore are governed by no other principles than those which regulate the motions of projectiles.

In this dialogue, my Lord, which I have imagined to be carried on between yourself and Newton, you have the detail of his analogical argument. I must only add that the supposition that the terrestrial gravitation may extend to the sphere of the moon, and far beyond it, receives great confirmation from a circumstance observed in the primary planets, which Newton will explain, if you think fit to question him about it. Do you imagine that it is the same force that acts upon the nearer and the remoter planets, only varying with the distance according to the same law, which you find regulates the force in different parts of each particular orbit? This, my Lord, is my hypothesis. You suppose that the force of gravity is diffused, from the centre of the sun through the whole of our system, quite to the orb of Saturn, subject to that law of variation which you deduce from the elliptical form of the orbit. This I suppose, or to speak more properly, this I have discovered. And I will explain to your Lordship the principles on which I rest.

If my assumption be true, you will perceive that it establishes some fixed relation between the mean velocity of every planet, and its distance from the sun. This I easily perceive; for since the velocity of the planet must

be adjusted in some due proportion to the gravitating force, and the degree of the gravitating force depends upon the distance, I perceive that there cannot but be, in the nature of things, some fixed relation between the mean velocity and the distance. Your Lordship will as easily perceive that the time of any planet's complete resolution must depend upon the length of the whole circuit of its orbit, and the velocity of its motion; being increased by the greater length of the journey and lessened by a swifter rate of travelling. All this is too obvious to be doubted. And do you not further see, that in an ellipsis of a particular figure there must be a connection between the length of the whole circuit of the ellipsis, and the length of its transverse axis? This no reasonable man can doubt. The time therefore of every planet's entire revolution has a necessary relation to its velocity, and to the length of the transverse axis, as that is connected with the length of the journey to be performed. I grant it. But the relation between the time and the velocity, must bring on another relation between the time and the length of the transverse axis; to the half of which length the velocity bears a fixed relation, by means of its necessary adjustment to the gravitating force. Hence your Lordship will perceive that there must be some very complicated relation of the time of the planet's entire revolution to the length of the transverse axis of its orbit, arising from a double cause; if there be any truth in my assumption.

I do indeed perceive that your assumption will imply some very complex relation between the time and the length of the transverse axis, but I cannot at all divine what that relation may be. But your Lordship will allow that to assign this relation is merely a mathematical problem?—And I do not in the least question Sir Isaac's abilities for the investigation. But

I cannot see how this complicated relation, whatever it may be, should favour your assumption. And to speak my mind, I fear you have been losing your time, in making deductions from mere fictions of your own, which deductions you have considered as great discoveries, only because they were difficult to be made. Of that your Lordship will be a better judge, when you know the issue of my investigation.

Now, my Lord, let me assure you, that the relation which this assumption of mine requires between the times and the transverse axes, is no other than what Kepler had found by observation actually to exist, before I was born, or any assumption like mine had been made. Tell me then, my Lord—for you are an excellent judge of proof and argument in every shape—does this extraordinary coincidence of the consequences of my assumption with the realities of Nature give that assumption the air of fiction, or of probable conjecture. I must confess it gives it some show of probability. And do you not think, my Lord, that this wide extent of the solar force is some confirmation of my former supposition that the force of terrestrial gravity might reach up to the moon?

This is the whole of Newton's analogical argument as it appears to me. I cannot but think it more complete than you seem to apprehend. But I do not see that it thwarts your system, be it ever so complete. For what is the true consequence from this analogy, allowing it to be entire and conclusive. The materialist will assume that the motions of projectiles are merely mechanical, and this assumption a great many honest well-meaning gentlemen will very rashly grant. Then, from the analogy between projectiles and the planets, the materialist will infer that the motions of the planets are also mechanical. And those who shall have granted

the assumption, will not easily gainsay the consequence. But you and I, my Lord, have not entangled ourselves in any such dangerous concession.

We begin in the Heavens. There we say the planets are moved in their orbits by Mind. And the inference that we shall draw, from the analogy between the planets and projectiles and falling bodies is this: that projectiles and falling bodies, as well as the planets, are moved by Mind. We shall not be driven from this conclusion by being told, that in every instance of projectile motion, we may be sensible of an external force.

We shall insist that in all motions that follow upon external impulse, Mind is still the immediate mover, that the external impulse is rather the occasion than the cause; and perhaps we may say, that the excitation of motion in unorganized bodies by impulse is analogous to the excitation of the faculties of the human mind, by the impression of external objects on the senses. But let us not be too hasty to attack an analogy, which seems founded in truth; and seems as well calculated to serve our purpose as that of our antagonists. The analogy indeed seems to me too complete to leave a doubt about what I should call a real gravitation of the planets to the sun.

Observe that gravitation is with me the name of an effect wrought in body by mind. For I have been many years of the opinion, that it is impossible to account for it by any mechanism. I had used myself to consider it either as an immediate act of the Deity, or of some subordinate intelligences. But since I have read your Lordship's book, and have had the advantage of conversing with you upon the subject, I am much inclined to the opinion that it is the work of minds of another sort, animating the bodies in which the effect is wrought, and when I see your Lordship again in London, I hope to converse with you about these minds which animate

even stocks and stones; for I have speculated much about them.

But you seem unwilling to grant so much as this. You seem to deny that gravitation of the celestial bodies to the sun, from any cause, exists. There has been no projection you say of the planets, therefore there is no gravitation. For gravitation is introduced by Newton to be combined with the projective force. Therefore gravitation is not, if there be no projective force wherewithal to combine it. I am not quite sure that your opinion and mine are really very widely different upon this subject. I shall therefore explain, in what sense I maintain that both projection and gravitation exist in the planets; that you may consider whether in that sense you would deny it. If you would not, I think you will alter or expunge what you have written in the paragraph at the bottom of p. 417.

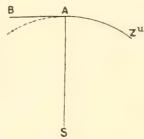
Now, my Lord, I no more believe than you do, that any of the planets originally received their progressive motion by an impulse of body, because I know of no body able to give the impulse. Nor can I frame any hypothesis about such an impulse, which I could undertake to maintain. Not but that there are many fine theories in the world upon this subject, which perhaps I may let my boy read now and then, instead of Mother Goose's Tales; because they are no less marvellous, but less terrible, than the cruelties of Blue-beard and the Ogres. But I adopt none of these, nor have I any better of my own. Neither shall I pretend to say that the planets, being once put in motion-no matter how-the force of gravity, without any other activity of Mind, is sufficient to carry on that motion for ever, or at least for a vast length of time. For I agree with you that an active principle is necessary for the continuance of all motion; whether uniform in a right line, or variable in

any line, straight or curved. I allow, therefore, that the progressive motion of the planet, no less than its gravitation, must arise from the incessant activity of the mind which animates it. Do you then imagine, you will say to me, that the mind puts forth two acts; one which by itself would produce uniform motion in a straight line; another, which by itself would produce an accelerated motion of the planet in a straight line towards the sun? and that these separate actions, constantly put forth in the same instant, produce the compound effect of the unequal motion in the curve? Or do you suppose that two minds animate the planet; one endeavouring to project it, the other to urge it towards the sun: and that a third mind comprises the matter between the two, by advising the planet to take a middle path between their several directions? I embrace no such hypothesis. I would employ neither two nor three minds, nor imagine several acts of one mind. I suppose that by a simple individual act Mind produces the motion of the planet in the curve.

But I would wish your Lordship to consider, whether though the act of the mind be simple and one, the effect wrought upon body may not be compounded, and divisible into parts. It seems to me that the effect must partake of the nature of that substance in which it is wrought, as well as of that which is the cause of it. Here an effect is wrought, by a simple cause, in an extended compound substance. Will the effect be perfectly simple, like its cause? or will it not rather partake of the divisibility of the substance, in which it is produced? I apprehend that many acts, even of the intelligent mind, are simple in themselves, which produce effects on body much compounded, and divisible into many parts. In the case under consideration, let us suppose a plane surface of some firm unyielding matter, to be placed in contact

with the orbit of the planet Jupiter, at A: so that the planet, rolling in its orbit from  $Z^{\alpha}$  to A might there

be received upon this plane. I apprehend the planet would continue (for some long time at least) to roll along that plane in the direction of the straight line AB, in which that plane and the plane of the planet's orbit intersect. And thus we should have the progressive motion separated from the



centripetal, which the resistance of this unyielding plane could not but destroy. Again suppose this plane put in another situation, namely to cut the plane of Jupiter's, or hit at right angles in a straight line SA, passing thro' the sun's centre, and in that situation to be fixed immoveably. The plane, thus placed, presents itself as an obstacle to the planet's motion at A, and must entirely stop its further progress in its orbit. But then I conceive that the planet would descend along the line AS to the sun. And thus we should have the centripetal tendency separated from the progressive motion. The great analogy that Newton has shewn between the motion of the planets, and of projectiles, seems to justify these conclusions. The first seems too evident to admit a doubt. For I think the plane in contact cannot possibly destroy a motion, which it does not in the least oppose.

In the second case, there may perhaps be a possibility, but I think little probability, that the consequence would be other than I have supposed; and that the planet would be without motion at A, and would not descend. This I say appears to me not altogether an impossibility, but an improbability in the highest degree. And in this manner I apprehend that gravitation and progression are

contained in the curvilinear motion of a planet, as much as the motion in either side of a parallelogram is contained in the motion along the diagonal. But I hold with you that gravitation is in all instances the effect of animation. I believe that the mind, which incites the planet to curvilinear motion, says not "I will run straight forward so much, I will run down so much towards the sun." It says simply "I will walk in this curve." And that this curvilinear motion should be divisible into the two parts of projectile motion and gravitation is the consequence, not of any conspiration of distinct acts of the mind; but of the compound nature of that extended substance upon which mind, in this instance, acts.

And now, my Lord, if you should acquiesce in these views of gravitation, will not your question about the final cause of gravitation disappear. If these views of the thing be just, of what do you ask the final cause, when you ask the final cause of gravitation. Gravitation is no more than the name of one of those parts, into which the curvilinear motion of a planet happens to be divisible. The final cause therefore of gravitation is no other than the final cause of the revolution about the sun. For the cause of the part is surely included in the cause of the whole. Perhaps I mistake your question. You would ask perhaps not why the planets gravitate towards the sun, but why any other body, if it were placed in the planetary regions, without any progressive motion, should be obnoxious to gravitation, as the Newtonians seem to suppose. I answer that this is a question about a mere fiction. No other bodies but the planets-with their atmospheres, their light, and their imperceptible effluvia - exists in the planetary regions. We have no reason to imagine that any other bodies ever will be placed there. And Nature is not to be questioned about effects which she means not to produce.

If no bodies are placed by Nature, or can be placed by Art, in a situation where they may gravitate to the Sun, but those which gravitate for some useful end; then, however universal gravitation may be, yet the causes of Nature do not operate in vain. But I apprehend, my Lord, that we are to use great caution that we do not abuse the argument from final causes; which I think we shall often do, if we conclude that a thing is not, because the reason, why it should be, is to us unknown. For how many things do actually exist, of which the final cause is entirely a secret? Do you know, my Lord, the final cause of Saturn's ring? Yet you doubt not its existence. Do you know the final cause of the secular diminution of the obliquity of the ecliptic? The investigation of final Causes is the noblest aim of Philosophy. When the final cause is previously known, it may often lead us to a discovery of the means.

But where the existence of a thing is dubious, one cannot conclude with certainty that it is not, because a final cause does not appear to us.

You speak of the simplicity of the line in which the planets move. You will remember that when Aristotle speaks of the simplicity of this line it is upon a supposition that it is circular; which is not the case.

These are the principal points which I think exceptionable in your fourth book, in its present form, except one thing indeed which had almost slipt my memory; which is that in p. 421 you speak as if Newton might have decomposed or analysed the motion of a planet into the two parts of which the other motion (that of projectiles) is composed; you speak, I say, as if Sir Isaac might have done this, but has not done it. Whereas the fact is that he has done this, in the two first propositions of the second section of the first book of the *Principia*, and he intended those

propositions for no other purpose. The great discoveries of Newton lie in these three points.

First, that the motion of a Planet, however produced, may in every point of the orbit be resolved into a uniform progression in the direction of the tangent, and a centripetal tendency towards the sun: and will have all the properties of a motion really produced by a combination of such forces.

Secondly, that when a motion is so produced the centripetal force at different distances from the centre, must be always understood to be greater or less in proportion as the square of the distance is less or greater, in order to give the orbit the figure of an ellipsis, which is the figure of the planetary orbits.

Thirdly, that a centripetal force, subject to this law of variation which gives the orbit its proper figure, will also induce that particular relation between the transverse axes of the orbits and the times of the entire revolutions, which Kepler found to obtain in the planetary system.

These are the great discoveries of Newton in Celestial Physics. These are the glory of his system; and whatever the cause of the planetary motions may be, these discoveries will stand the test of ages. And his Philosophy so far as it consists of an evaluation of effects, and a deduction of consequences from these principles, is no dream. As to the causes preceding these principles, he may have had various opinions about them in different periods of his life. He may, at some times, have embraced false opinions about them. As every opinion, in my judgment, is false that makes them mechanical. But these erroneous opinions do not enter into his system. And why is he to be questioned about opinions, on which he always professed himself undecided, and from which he never drew conclusions?

If you determine after all to let your fourth book stand

as it is, I wish that you would annex to it, in a smaller type as an appendix, all that part of the papers I gave you which relate to the Newtonian Philosophy, omitting that inaccurate part at the end about gravitation, κατὰ δίναμιν. For, as you have made me in some measure a party in the cause, I think it is possible I may be called to account, as well as you. And the opinions which I have expressed in that paper, or in this letter upon these subjects, I shall not hesitate to maintain against all my brethren of the Newtonian school. But then I think it will be necessary that the world should be possessed of all that I have said upon the subject. The principle of animation I receive with as firm an assent, as I do the first proposition of the second section of the first book of the Principia. And the continuation of motion, by the supposed indifference of matter to motion, or rest, I reject as an evident absurdity. But Newton's system, i.e. his deduction of effects, appears to me perfectly consistent with the first principle, and independent of the last. I wish, my Lord, you would come to Town. We should talk in half the time that we can write, and on a greater variety of interesting subjects.

Since the above was written I have read your printed sheets again, and have a few remarks to make upon particular passages. [For these see Appendix, p. 281.]

You mention your desire of being acquainted with the Bishop of London. If I live to see your Lordship in town, I shall be happy to have the honour of introducing you. You will find in him an elegant scholar, as his Isaiah, and his great work *De Sacra Poesi Hebræorum* sufficiently shew him to be.\*

I am, my Lord, with the most cordial esteem, your Lordship's most obedient humble servant,

S. HORSLEY.

<sup>\*</sup> I shall remove to London as soon as I can do it with safety. You will write to me as before, under cover, to the Bishop of London.

#### XXV.

#### RICHARD PRICE TO LORD MONBODDO.

[Spring 1781.]

My Lord,—I am very sorry I have so much reason for again entreating your Lordship's forgiveness of my dilatoriness in the correspondence with which you honour me. For the last seven weeks I have resided in London, and had my time and attention taken almost entirely from all my usual employments and pursuits. Had I continued at my quiet home, and my thoughts been less dissipated by London engagements, you would undoubtedly have heard from me much sooner. I am now returned to Newington Green, and having for some time reflected with pain on the debt I owe your Lordship, I have resolved to make the discharge of it my first employment.

I have not however much to say; and I believe we must be contented with the differences of our opinions. I have read with care the dissertation at the end of your Lordship's Ancient Metaphysics; but without seeing reason to alter my sentiment of Sir Isaac Newton's first Law of Motion. A body, you acknowledge, cannot stop itself. Must it not then, after being once moved whether by Mind or any other Cause, continue to move forever, unless some foreign action upon it stops it; and in the same direction too, unless some cause alters that direction?

Your Lordship seems (in the third page of your letter) to acknowledge that this may hold with respect to motion produced by the impulse of other bodies; but you at the same time intimate, if I understand your Lordship, that it cannot be applied to motion produced

by the action of mind. To me it appears to be equally applicable to both; nor can I conceive how this can be denied without maintaining that a body once moved needs no action upon it to stop it, but will stop itself. For if it does not stop itself, and nothing else stops it, it is self-evident that it will *never* be stopped; or, in other words, that it will continue to move for ever.

Mind, let us suppose, has moved a body. If that body afterward ceases to move, it must be in consequence of being stopped either by its own action upon itself, or by the action of another body, or by the action of Mind. Let there then be no such action, and it will move for ever. I must think that this is as clear a demonstration as can be given of any point. When I describe a circle with my finger on a table, there is a constant action of my mind on my finger to keep it in the circle; and were it to be separated instantly from my hand, or-as your Lordship speaks-to cease to be animated, it would go off in a tangent, and never stop till something (that is either body or mind) stopped it. What Sir Isaac Newton says of the projectile, and centripetal forces by which the planets are kept in their orbits, is no more than this.

Your Lordship (in the fourth page of your letter) tells me that you desire I would inform you whether I think it possible to apply Sir Isaac Newton's Laws of Motion to the celestial bodies, if we suppose them to be moved immediately by Mind, and not by bodily impulse. Your Lordship has my answer in what I have just said. It makes no difference with respect to the truth of this law, by what cause bodies are moved.

You intimate, (p. 5), that I differ from Dr Clarke, who thought that the motions of the celestial bodies could not be accounted for by one original impulse upon them, without the constant agency of mind; and also

from Newton, who has said that "neither the beginning, nor the continuance of motion can be accounted for otherwise than from an active principle." But in this your Lordship has mistaken me. I agree entirely with Dr Clarke in thinking that no original impulse will account for the motions of the planets without the action of gravity, continually turning them out of their rectilineal direction; and gravity, as well as all the other active principles in Nature, must, in my opinion, be derived -either mediately, or immediately-from the power of the Creator constantly exerted. This I have maintained with some zeal in my Dissertation on Providence. When Newton says that neither the beginning nor the continuance of motion' in Nature can be accounted for, except from the active principles in Nature, he means that as (according to him) the quantity of motion in the world is always diminishing by the collisions of bodies, there must be active powers—such as gravity, electricity, etc.,—which keep it up; and these active principles, I also think with him, must be resolved into powers not mechanical.

In p. 9 your Lordship says that Sir Isaac Newton must have supposed that the projectile motion of the planets is produced by bodily impulse. I cannot think that he supposed this; nor do I believe that he has said anything that implies it. But, whatever cause produced the projectile motion, his first law of motion is equally applicable to it.

These remarks will shew your Lordship what reply I would make to those parts of your letter, of which I take no explicit notice. Were I to reply to them in the manner to which I am inclined, by the respect due to your Lordship, I should probably only make myself tiresome, without being able to say anything that your Lordship would think of much consequence. I will

however just observe concerning Space—with which your Lordship's letter concludes—that though it may not be proper to call it either a being, or a mode of a being, yet being (as your Lordship seems to acknowledge) some what that is eternal, independent, infinite, and necessary to the existence of every thing, it cannot, in my opinion, but be related to that Nature, whose attributes these are.

I have inclosed a sermon which I have lately published. Will your Lordship be so good as to accept it, merely as a token of respect? I did not think it worth the sending to you before publication.

Sir John Pringle is lately removed to Edinburgh. Should he come in your way, be so good as to deliver to him my very respectful remembrances. I have been very happy in his friendship.

Relying on your Lordship's candour I am, with great regard, your Lordship's most obedient and humble servant,

RICHARD PRICE.

# XXVI.

## ALLAN RAMSAY TO LORD MONBODDO.

LONDON, March 20, 1781.

My Lord,—The approbation you were pleased to express, in your last letter, of my Observations on the Riot Act, joined to the like sentiments from other persons of undoubted judgement here, has encouraged me to bring the subject—by the help of a Newspaper—still more within the notice of the Public; hoping, by that means, to stimulate our legislators to take into their serious consideration, how little legal security we have for our lives and properties against tumultuous outrage and violence.

The enclosed narrative, though fictitiously ushered into the world, is I believe, in point of fact, unsusceptible of controversy; and, though my writings should not produce any change in our Statute Book, I shall not think my time or pains in composing them altogether thrown away. For, I have been long in the habit of considering every discovery of Truth, not only as an addition to the common stock of human knowledge, but as an addition to the common stock of human happiness; and that even those who are not able to see its beneficial consequences, will, sooner or later, feel them.

I congratulate you on the success of our forces at Eustatia. It is certainly an event from which great advantages may be expected, in the course of the War; but I do not forsee any issue of the War, which can be productive of a happy settlement for this Country. No mischief can ever cease till the real cause of it is removed, and it is easy to trace back the cause of the American Rebellion, and of all our subsequent wars with France Spain and Holland, to an error in the present constitution of the British State, in which no change has yet been attempted, or even thought necessary. Haeret lateri lethalis arundo; and the utmost success in War, which the most sanguine imagination can suggest, would—in my opinion—rather increase than remove the original evil, which was, such an extent of Riches and Territory as, while it tended to corrupt the legislative, at the same time weakened the executive part of our Government. These are what Lucian calls the

> Publica belli Semina quae *populos* semper mersere potentis,

and which he has so emphatically set forth in his first book.\* A Free Empire is a phrase which nothing recorded in History

<sup>\*</sup> See Pharsalia, book i. II. 158-9.-ED.

has yet authorised, and by what I can see of the progress of things, the History of England is not likely to entitle it to a place in the Dictionary. There are certain things, which God has been pleased to put asunder, and which it is in vain for man to attempt to join. From such considerations merely, and without any pretensions to second sight, I will venture to fortell, that in a little time the people of Great Britain must either part with that factious thing which it is still the fashion to call by the name of Liberty, or part with their extended Dominion, in all the four quarters of the Globe; and, with it probably their own political existence, as an independent State.

With my wife's best compliments, I am, with great respect and esteem, my Lord, your Lordship's most obliged and most obedient servant,

ALLAN RAMSAY.

## XXVII.

# LORD MONBODDO TO RICHARD PRICE.

8th June 1781.

DEAR SIR,—You have made me ample amends for your long silence by the pamphlet, which you have sent me. I heard of you in London as one of a party, I was not very desirous to be acquainted with; but having read some of your works upon Political and Civil Liberty, which I was much pleased with, I desired Dr Gartshore to introduce me to you, which accordingly he did, as you will remember. I thought I discovered, by your conversation, that you were not that tool of Party, which you had been represented to be; but I am now fully convinced you are not, by the Sermon

you have sent me, and by the postscript you have added to it, containing some things that you had formerly published concerning the American War.\* I think you may say, what Cicero says of himself, Sc nunquam de Republica nisi divine sensisse. You really have written of our affairs with the spirit of divination, for that is the true meaning of the passage in Cicero, (though I see Dr Middleton has mistaken it, and I am very sorry) but you have been a true prophet. I will say no more of Politics, of which I hate to speak, write, or even think.

I come now to Philosophy. I admire very much your ingenuity in maintaining the most violent paradox that ever was maintained by any philosopher since the beginning of the world! viz. that a body, once set in motion, will continue in motion for ever, i.e. will continue to change its place an infinite number of times, by virtue of one impulse (as slight as can be imagined) given to it many millions of years ago, without any other cause moving it; and with this considerable addition, as I think, to the paradox, that though the velocity of the motion will be affected by the greater or less violence of the impulse, velocity has not the least effect upon its duration. This proposition, if it can be maintained, is the greatest triumph that ever was obtained by Philosophy over common-sense, and the apprehensions of the vulgar; and it is also I think the greatest discovery that has been made in modern times. I only wish that the glory of it had belonged to our great Sir Isaac Newton, and not to the French dreamer, Des Cartes, who certainly invented it for a purpose that you

<sup>\*</sup> Richard Price published, in 1776, Observations on the Nature of Civil Liberty: and, in 1777, Additional Observations on the Nature and Value of Civil Liberty, and the War with America. In 1784, he returned to the subject in his Observations on the Importance of the American Revolution, and the Means of making it useful to the World.—ED.

will not approve of, to support his mechanical Philosophy; for which I think it is absolutely necessary, but not at all necessary for Sir Isaac Newton's astronomy, and directly contrary to Dr Clarke's notion of the cause of the motion of the Celestial Bodies, which he says is produced by the constant agency of Mind, and not by any original impulse. This I see you would apply only to one part of the combined motion of the planets as you suppose it, viz. gravitation: but certainly Dr Clarke's words will not bear that meaning; for, in the first place, it does not appear to me that he supposed a motion produced by the agency of a single power, and that power combined. Secondly, if he had supposed it to be combined, he would certainly have distinguished—as all the Newtonians now do-betwixt the two motions, and said that the one motion viz. gravitation, was produced by the constant agency of Mind, whereas the other, projection, was produced by an original impulse. Instead of this he has said of the motion in general that it is produced by the constant agency of Mind, and has denied expressly that it is produced by an original impulse; and as to Sir Isaac Newton in his Quaeries, I have not the book before me, at present, but I do not think that Sir Isaac is there speaking at all of the decrease of motion in the Universe. If he were, you might acknowledge that he speaks much too generally, and very inaccurately, upon the supposition of the truth of his first law of motion, when he says that by the vis inertiae alone, by which bodies continue in their motion or rest, their continuance in motion cannot be accounted for; which I think is giving up, in so many words, his first law of motion.

There is one argument you mention, which I agree with you would be perfect demonstration, if the enumeration upon which it was founded were complete. You

say that a body in motion cannot cease to move, unless it be stopped either by itself, by another body, or by Mind; therefore, if it does not cease its Motion in one or other of these ways, it must continue to move for ever. This would indeed, as you say, be demonstration, if there was not a fourth way by which a body might cease to be moved, but which you have not mentioned, the ceasing of the moving power to act. And I think there is no more natural way of motion ceasing; for as body is by its nature absolutely inert, and incapable of moving itself, (which you admit,) the consequence necessarily is that as soon as the moving power ceases to act, the body ceases to be in motion, and returns to its natural state of inertness. That this is the case when Mind moves Body, I think we have daily experience in the motions of our own bodies, for I have no idea that our mind stops our bodies; nor indeed have I the least conception how an immaterial and unresisting substance can act in that way upon bodies, but it makes their motions cease by discontinuing its action upon them: and not only does motion cease in that way when Mind moves the body, but also when body moves body by trusion or pressure, for as soon as the pressure is withdrawn the motion ceases. I think therefore that this kind of motion by body should be an exception to the general rule, as well as the motion by mind.

I have two very ingenious friends in Edinburgh with whom I converse frequently on this subject, and who are as zealous as you for the honour of Sir Isaac, and of Modern Philosophy, and therefore desire very much to support this first law of motion. The one in answer to my argument from the motion of our own bodies denies that our mind moves them, and in this I suppose your friend Dr Priestley will agree with him; but he goes farther than Dr Priestley I believe would be inclined to

go, for he says that our bodies move themselves and stop themselves. And indeed I have always thought that Sir Isaac's first law could not well be defended except upon the hypothesis of body moving itself, and if we allow it to move itself, I think we cannot well deny it the power of likewise stopping itself. The other gentleman, foreseeing the consequence of admitting that motion by pressure ceases when the pressure ceases, denies that there is any such thing as motion by pressure in vacuo, and that such motion can only be where there is friction or resistance in the medium. Now I should be glad to know your opinion on this matter, whether you are satisfied with the answers given by these two gentlemen to my arguments, or whether you think any better can be given.

## XXVIII.

# RICHARD PRICE TO LORD MONBODDO.

NEWINGTON GREEN, August 6th, 1781.

My Lord,—Having been lately in a state of health and spirits that has been rather languid, I have been advised to go to the sea-side for change of scene and air. I am, therefore, preparing to go for Brighthelmstone, where I intend to stay till some time in next month; but I cannot set out without first acknowledging the favour of your Lordship's letter, and sending you the remarks which have occurred to me on some passages in it.

I still think that when Dr Clarke says that the motion of the planets is produced by the constant agency of the Deity he means only their curvilineal motion; or their motion in their orbits, which certainly

could not be produced by any original single impulse or projection without the constant action of gravity, which gravity he makes to be the agency of the Deity.

I cannot find that Sir Isaac Newton has anywhere asserted that by the *vis inertiae* alone the continuance of bodies in motion cannot be accounted for. Had he said this, he would indeed, as you say, have given up his first law of motion. All he could mean is, that the continuance of motion in the Universe cannot be thus accounted for, on account of the many causes which are continually diminishing it.

The proposition which your Lordship represents as a triumph over common sense, and the most violent paradox that was ever' started, namely, that a body once in motion will for ever continue in motion till some cause stops it, appears to me no more a paradox than the proposition, that a body once at rest will for ever continue at rest till some cause moves it. Both amount to no more than that an effect once produced will for ever remain till some cause destroys it; and this I look upon as one of the fundamental principles of human Knowledge.

I have said that if a body in motion is stopped it must be stopped either by itself, or by the impulse of other matter, or by some spiritual agency; and that consequently if none of these causes operate it must go on moving for ever. To this you answer, that there is another cause which may stop it; and that is, the ceasing of the action of the power that moves it. The reply I shall make seems to me clear and decisive. The stopping of motion once produced requires—like all other effects—some action, or the positive exertion of some power. But the ceasing of action is not action; and it would be a contradiction to say that it can do anything, for it would be the same as saying that a power

acts when it ceases to act, or that a body may be stopped, not by any action upon it, but by the negation of action. Upon the whole it seems wonderful to me that it should be possible there should be any difference between us on this point. It has a tendency to teach me the utmost candour with respect to those who differ from me in other instances the most widely, and to impress me with a deep sense of the frailty of our faculties.

As for trusion, it differs in nothing from impulse. It is only a succession or repetition of impulses either to accelerate motion, or to overcome some resistance that is continually destroying motion after it has been produced; and, therefore, your friend who, at the conclusion of your Lordship's letter, you say asserts that there can be no such thing as trusion in vacuo (except to accelerate) appears to me to be very right. The assertion of your other friend, that our bodies move and stop themselves is quite unintelligible to me. Certainly our bodies cease to move, after the action of the will ceases, only in consequence of some resistance they meet with.

Accept my best thanks for the candour with which your Lordship speaks of me at the beginning of your letter. Nothing indeed can be more unjust than to charge me with being a tool of party. But I am willing to submit to such censures, having a consciousness in my own breast that makes me insensible to them.

Wishing you, my Lord, all happiness, I am, with great respect, your Lordship's most obedient and humble servant,

RICHARD PRICE.

Should Sir John Pringle ever come in your way, deliver my very respectful remembrances to him; and should you favour me with another letter inform me, if you easily can, how he is.

#### XXIX.

#### LORD MONBODDO TO SAMUEL HORSLEY.

EDINR. October 1781.

DEAR SIR,—I begin to be very uneasy at your long silence. If you are busy, I do not so much regret it, as I know you can be better employed than in corresponding with me; but I am afraid your health is not good. In the meantime, however, I will write you in the ordinary style of my correspondence upon the supposition that you are well: and, leaving Sir Isaac Newton's astronomy for some time, I will do what I should have done long ago if I had not been so much taken up with that astronomy. I will endeavour to satisfy some doubts you have concerning my doctrine of Ideas, which you have stated in the beginning of the last letter I had from you, with your usual candour and perspicuity. I sent you something concerning Ideas to be forwarded to Oxford; and, accordingly, I find you have taken the trouble to forward it. I find also that I have satisfied the doubts of my correspondent there. But, as they were not exactly the same as yours, I will endeavour also to satisfy you.

You are, I think, in the error that I was in for a long time, and which every man must be in who has read nothing upon the subject of Ideas, but Mr Locke, and other modern writers. The error I mean is that of confounding Ideas with general Ideas, as if they were all synonymous terms, and believing that there is no such thing as an idea of a single or individual thing. In the volume I am to publish, I hope I shall make this matter perfectly clear, but in the meantime I am very desirous to satisfy you.

There are two questions upon this subject, or rather three, which I think deserve separate consideration. The

first is whether there be any such thing in Nature as an idea of a particular thing. My second is whether we can, with the faculties we have at present, form any such idea: and lastly, if we can form it, in what manner we form it.

As to the first question I think it is evident that, in every individual thing, there must be something which constitutes its nature and essence, and from which all its qualities result; for I hold that there is a system in every particular thing as well as in the Universe, and if so, there must be something principal in that thing, to which everything else belonging to it is subordinate. This principal thing, which makes it what it is, and distinguishes it from everything else, is called in the language of Aristotle the τὸ τί ἦν εἶναι, or simply the τὸ εἶναι of the things. Some-the thing: But, in the language of Plato and of the Pythagorean School, it is called an ἐδέα, from whence Mr Locke has taken the word idea, which I believe he first made English; but which he uses in a sense altogether different from that which Plato and the Pythagoreans give to the Greek word, for they mean by it that form of the thing, not the outward (though from thence the word is etymologized) but the inward, which constitutes its nature and essence; for you know it was a fundamental maxim of the Natural Philosophy of the ancients that the whole Universe consisted of matter and form; and, accordingly, Timaeus Locrus, sets out in his treatise, De anima Mundi, with that proposition.

Thus I think it is evident that there might be an idea of every particular thing, as well as of the species, or the genus; and indeed it is impossible to conceive that there should be one thing in *the many*, (which is the nature of genus and species,) and that it should not be in every individual comprehended under that genus or species.

But what is this one thing in every individual, which

constitutes its nature and essence? I say it is Mind; and the very same principle, which moves the body from place to place. Nor is there any thing more natural than that the same principle, which moves it in that way, should move it also internally, and produce that arrangement and configuration of parts, which distinguishes one substance from another. With respect to animals, there can I think be no doubt that it is the mind which constitutes their nature and essence, and discriminates them from one another, more—as Aristotle has observed—than their outward form. Now there is, according to the same philosopher, a  $\psi v \chi \dot{\eta}$  likewise in the vegetable and, as he says, something  $\omega \sigma \pi \epsilon \rho \psi v \chi \dot{\eta}$ , which informs every physical body, and which therefore must constitute its nature and essence, and be what Plato calls its  $o \dot{v} \sigma i a$ .

And here I think we may clearly see, in what the identity of any object consists, about which Mr Locke has written more nonsense than is to be found in any book of Philosophy, and that is saying a bold word. If identity is made to consist in matter, or any material quality, I defy all the philosophers in the world to prove that any one substance—animal, vegetable, or mineral—is the same to-day that it was yesterday; for Heraclitus and Protagoras were certainly in the right, so far as concerns the material part of all substances in the Universe, when they said that everything was in a flux, and continually passing away like the stream of a river. It is therefore evident that it is this immaterial principle, which I say constitutes the essence of every substance, that must likewise be the principle of Identity, making a substance to continue the same, though every particle of matter in it be changed.

The second thing to be considered is whether we can form any distinct notion of this mysterious thing which I call the idea of every particular substance. If we cannot, I think it is evident that we can have no distinct notion

either of genus nor species; for if we cannot perceive this essential thing in the *one*, it is impossible that we ever can perceive it in *the many*. But I say we do perceive it in both, not by the senses indeed, as Mr Locke would have us believe, but by a higher faculty, the same by which we perceive our own minds and other minds; I mean the intellect, of which it does not appear to me, that Mr Locke has any clear idea.

But though we know in general that Mind is the essence of every substance, yet we do not know what the essence of Mind is, nor indeed have we faculties that can reach to the knowledge of the essence of anything. All therefore we can know of Mind, or of any thing, is by qualities that are essential to it, and which we are sure do flow from its nature and essence. The minds of different animals we distinguish, one from the other, by their several energies and operations; and therefore Aristotle is certainly in the right, when he says that the several species of animals are better distinguished in that way than in any other. But in vegetables, and still more in minerals, it is not easy to distinguish the several minds that inform them by their operations; although, in certain instances, even that may be done, as in the case of the loadstone and the iron, electrical bodies and salts. But where that cannot be done, we can only form an idea of any substance by bodily qualities, such as figure, taste, smell, or any other quality, which we conceive to be essential to it.

Unless we can distinguish such essential qualities of any substance from those that are accidental to it, and unless we can conceive all those qualities so united as to make but one substance, we never can have any idea of that substance, for the idea of unity is essential to every idea. It is for this reason that the brute, having no idea of unity, and being utterly incapable of making the distinction betwixt essential and accidental qualities, has no

ideas which would not be the case, if it were true (what Mr Locke has told us) that the idea of any substance was nothing else but a collection of the several qualities of that substance perceived by our senses. But Mr Locke was so ignorant of the philosophy of Mind that he could not rightly distinguish betwixt Ideas and Sensations; and therefore—though he has written a whole book upon Ideas—I maintain that he did not know what an Idea was.

And now I come to the last thing I proposed to consider, which is how we acquire the ideas of particular Substances. I say that it is in the same way, in which we acquire the idea of genus or species, for it is by generalization that we form all our ideas: nor have we anything that can be called Knowledge, except by comparison with another thing. This I think is a most beautiful part of our fabric, and constitution,-showing more perhaps than any other thing the wisdom and goodness of the Creator-although I do not know that it has been taken notice of by any philosopher, ancient or modern. What I mean is this; that, as our intellect is by far the noblest part of our Nature, it is chiefly for the improvement of it that we are here in this state of trial and probation. Now the business of intellect is contemplation; and its chief happiness must consist in the contemplation of the noblest subjects. And what subject so noble, as the system of the Universe, with which is inseparably connected the knowledge of its great Author. For this reason it is that we are so framed, as to know nothing but in system; for every genus and species is a system, greater or less; and it is only by genus and species that we know anything. So that from our earliest youth, and from the first dawn of intellect in us, we are in the exercise of systematizing, and in that way preparing ourselves for the highest felicity of which our nature is capable. And as we advance in Arts, Sciences, and Philosophy we are always enlarging our system, till at last we arrive to the knowledge of the greatest, as well as the most perfect, of all systems, and which may be called the System of Systems, I mean the system of the Universe. This knowledge we can never attain perfectly, in this short life; but, we may go a certain length; and, if we do so, I have no doubt but our knowledge shall be made perfect in the life to come.

But, though the idea of particular substance be thus formed by generalization, there is nothing to hinder the idea of that substance to be particular, and even singular; and this leads me to your difficulty about monadic things, such as some of the ancients supposed the sun to be. You are perfectly right that we can have no idea of the sun except by generalization; for how else can we have an idea of his colour, figure, light, emission of rays, or whatever else we may suppose to be essential to him. But, in this way, I say we have as clear and distinct an idea of the sun as of anything else: nor should our idea be less distinct, if we could suppose there was no other sun in the Universe, which I think is a supposition that may be made; for, though I believe that there is but one monadic thing in the Universe-I mean God-yet I think there is no absurdity, or impossibility, in supposing that any one thing may be the only one of the kind having qualities which are to be found separately in other substances—otherwise we could have no idea of them but which are not to be found in any other substance, joined together as they are in the monadic substance.

You seem to allow that the brutes cannot generalise; but your difficulty is that, if there be such a thing as an idea of a particular thing, a brute may have that idea. But you say—and say right—that it is impossible to have

an idea even of a particular thing without generalising; and, therefore, if the brutes have such an idea, they must also generalize. The fact truly is that the brute has nothing but perceptions of sense, produced by the motion of external objects, making an impression upon the organs of sense; whereas an idea has nothing to do with motion, and is a thing of pure intellect, being the perception of the ovoía or essence of the thing, which may be indicated by the outward qualities, or bodily affections of the thing, but is quite different from them.

This is my notion of the idea of a particular thing, and this is what I call simply an idea, which may be considered by the mind either conjointly with the matter of the substance, or separately. In the first of these ways it is considered by all savages, and by a great part of the vulgar among us: and considered in this way it is the whole thing, both form and matter. In the latter way, the form is considered without the matter, and then it is what we call an abstract idea, or δι' άφαιρέσεως in the language of Aristotle: but says that philosopher it exists only λόγφ, and is a mere creature of the mind; whereas, according to Plato, it has a real existence, out of the mind of any intelligent being; and for that reason he calls it the τὸ ὄν, or the τὸ ὄντως ὄν, and such he takes to be the only stable and permanent thing in Nature. Here lies the great difference betwixt the two philosophers; nor do I know that they differ materially on any other point.

Again, this idea may be considered either as in one thing only, or as in many things: and considered in this latter way it is called a general idea, which is either a species or a genus: and, if it is of the highest *genera*, such as the categories, it takes the name of an *universal*.

This is my notion of the idea of a particular thing, which so far as it concerns its existence joined with the matter of the particular thing, I am sure is the notion

both of Plato and Aristotle. But I will not be confident that either they or I are in the right, till I know your sentiments upon the subject.

Before I left home at this time I read, with a great deal of pleasure, the Philebus of Plato, which I think is as abstruse a dialogue as any in his works, the Parmenides only excepted. He there explains, I think very well, the Pythagorean doctrine of the Infinite and finite being the principle of things, which is the foundation of that famous saying of theirs-that Number was everything in the Universe-for it is by number and measure that the Infinite is bounded and limited, and assumes various forms of beings. In reading this dialogue I used the translation and notes of Sydenham, who I think understands the Greek of Plato, but not his philosophy. Nor indeed does he seem to know much of the philosophy of mind; for he cannot distinguish the various kinds of mind, one from another; the vegetable from the animal, or either from the intellectual; and as to the mind which informs the elements and unorganized bodies he does not appear to have the least conception of it. The want of this knowledge of the difference of minds is I find very common with you, as well as here.

Your John Hunter told me that he could not only preserve the circulation of the juices, and the nourishment of a member of the human body that was cut off, but that it would be also sensitive; and he further added that it would be rational, which indeed surprised me a good deal; for, though I could excuse him for not distinguishing the vegetable life in the member, by which it is nourished and preserved from putrifaction, from the animal or sensitive, I could hardly excuse him for not distinguishing either from the rational part.

One of the things that I laboured chiefly in this volume I am to publish, is to distinguish accurately these four

several minds one from the other. This, I know, will be unnecessary for such readers as you; but very necessary for almost all those who call themselves philosophers, both in England and Scotland. Without this knowledge I think it is impossible to have any idea at all of the System of Nature. There will be also many things in this volume concerning the human soul, which I think are absolutely necessary to be known, before we can have any conception at all of the Divinity; for, it is only by the perfect knowledge of our own minds, that we ever can attain to any knowledge at all of the Supreme Mind. . . .

#### XXX.

### WELBORE ELLIS TO LORD MONBODDO.

POPE's, at Twickenham, August 6th 1782.

My LORD,—When I returned the other day from an excursion into the West upon business, which had lasted three weeks, I found the honour of your Lordship's letter, than which nothing could have been more welcome to me.

It is extremely flattering to me that you have thought me worthy your correspondence, and I beg leave to assure you that I am not so void of taste, or have so little appetite for knowledge, not to embrace with gratitude the ample means your goodness offers me to gratify both. I have read with great satisfaction the greatest part of your second volume, and should have finished it before now, if this journey had not interrupted me. I had however travelled into your fifth book on the principles of Sir Isaac Newton's Astronomy, and this part in particular must require repeated reading, and much consideration.

I shall possibly, with your permission and encouragement, trouble you with some doubts and difficulties, some perhaps arising from points in your book, some relating to the science itself of Metaphysics, or rather—to express myself more correctly-to the extension and application of that science. I think that you have been very modest in the title of your book, in calling it "Ancient Metaphysics." It certainly is the best and clearest substance of ancient Metaphysics which has been yet produced, but it is a very great improvement and extension of ancient Metaphysics; and Aristotle, so far as I am competent to judge, seems to owe much more to you, than to any or all of his numerous commentators. You stand upon the basis of his principles, to which you give an additional firmness and solidity, and from thence you take your flight to altos nubium tractus, with your strong eagle wings; and, though I flutter after you as well as I can, I sometimes almost lose sight of you.

I congratulate you upon the discovery of those papers which you mention in the Journal of Trevoux, which serve so much to your purpose. It may be owing to ignorance, or to a weakness of understanding, that I—who firmly believe God to be not only the origin but continuer of all motion—am not so much offended as you are, with the expressions of *Vis insita*, and *Vis impressa*, which seem to me as innocent—and as little liable to the necessary consequence of atheism—as the expression *principle of motion*.

Vis insita, a power ingrafted, implanted, supposes an ingrafter, an implanter; and I have not hitherto understood that Sir Isaac had a doubt that the ingrafter, or implanter of that force or power, was not the same as the creator of the matter. The same observation applies to the Vis impressa, which must have relation to the first source, from whence—mediately or immediately—the impulse or the beginning of the motion was derived. We are agreed I

believe in the fact, that motion of body is originally caused by Mind; but how an immaterial substance acts upon matter to put it into motion, I suspect that neither of us can explain, nor perhaps comprehend.

If motion be change, then may it not fairly be doubted—and will not all the phenomena support such doubt—whether in our mundane system there is a single particle of matter at absolute rest; that is, void of all motion, or misus, which is incipient motion? Is it then so dangerous to hold that motion of matter, begun by Divine energy, may continue—if it meet with no resistance from other bodies—without other limitation than that of its own existence?

I can have no doubt that matter is a *creature*. It necessarily follows from the admission of a First Cause. Pure matter is of itself so slippery and so subtle an idea that the mind can hardly seize it, and when sometimes one thinks one has hold of it, it escapes "Par levibus ventis volucriq simillima Somno."

But it is yet harder to the human mind to conceive the creation of something out of nothing. Yet both these things are so; viz. that there is such an existence as matter, and that it was formed out of nothing. Is there then any thing incongruous in asserting or supposing that the Creator has imposed that law on his creature, matter that, being once put into motion by almighty Power, it must continue, unless resisted by other matter, without other limitation than that of its own existence?

I beg your pardon; my desire of information from you has led me insensibly out of my depth, and without having obtained your permission. I am troubling you before I have completed the perusal of your book, where all my doubts may be satisfied.

I return you my sincere thanks for the account of the Cookies. I have never heard of them before, but shall

make much further enquiries concerning them among my Asiatic acquaintances.

I shall be very happy, when your leisure shall permit, to receive your solution of the question how it comes that the language of Homer is so copious, so expressive, so grammatically exact, and so harmonious, as scarce to be equalled—not excelled—by any later Greek author. There certainly must be admitted to be a great resemblance in some places, even a competition for excellence, in the language of Hesiod.

I shall frighten you, on the first outset, by the length of my writing; "verbum non amplius addam"—except to assure you of the truth and respect with which I have the honour to be, my Lord, your most obedient and obliged humble servant,

W. ELLIS.

### XXXI.

# LORD MONBODDO TO SIR GEORGE BAKER.

Monboddo, 20 August, 1782.

DEAR SIR,— . . . To make you some amends for breaking in upon you in this way, I send you a copy of a letter, which I had from an unknown correspondent in Bengal, enclosing an account of a people in India never before heard of in Europe, and who if it be true that they have not the use of speech, and yet are so far advanced in other arts of life, are, I think, one of the greatest curiosities in the world. They confirm my notion of the Origin of Language—which I believe at the time that it was published, was generally thought to be a mere fiction—beyond my most sanguine expectations. The gentleman Mr Verelst, under whose chiefship, my corres-

pondent says, one of that nation was brought to Chittagon, is I am told at present in London. I hope you will think it worth your while to enquire about him.

I will fill up the rest of this half sheet with something relative to the subject of some of the Attic Evenings, which I passed with you last time I was in London. You may remember that we then compared two similies which Virgil has translated from Homer—that of the Nightingale, and that of Diana among her Virgins—with the original; and I think we both agreed, that they were inferior to the original, both in pomp of numbers, and accuracy of description. But there is a description of Heaven in the Odyssey of Homer, which Lucretius has translated, but which Virgil—very judiciously in my opinion—has let alone. In this passage I must admit, notwithstanding the partiality I have for Homer, that the Latin poet has come up to him, if not exceeded him. The verses of Homer are,

'Ημὲν ἄρ' ὧς εἰποῦσ' ἀπέβη γλαυκῶπις 'Αθήνη Οὔλυμπόνδ', ὅθι φασὶ θεῶν ἔδος ἀσφαλὲς αἰεὶ "Εμμεναι οὔτ ἀνέμοισι τινάσσεται οὔτε ποτ' ὅμβρφ Δεύεται, οὔτε χιὼν ἐπιπίλναται, ἀλλὰ μάλ' αἴθρη Πέπταται ἀνέφελος, λευκὴ δ' ἐπιδέδρομεν αἴγλη.

Odyssey, § v. 41.

# Lucretius' verses are,

Apparet divum numen sedesque quietae Quas neque concutiunt venti nec nubila nimbis Aspergunt neque nix acri concreta pruina Cana cadens violat semperque innubilus aether Integit, et large diffuso lumine rident.

Lib. 3. v. 18-22.

In the first place, I cannot help observing that this description in Lucretius is more to the purpose than it is in Homer, where it appears to me to be a mere ornament of Poetry, interrupting the narrative in a part

of it; which is very interesting, as it relates how Nausicaa went to that place where she met with Ulysses. Thither she went by the counsel of Minerva, but what occasion was there to describe so particularly the Heaven to which Minerva returned? or what propriety was there in the description introduced here, more than upon many other occasions, when she returns to Heaven, after doing her business on earth? whereas there could be nothing more proper than the description by Lucretius of the seat of the Gods, who—according to the philosophy of Epicurus—lived in perfect tranquility,

Sejuncti a rebus nostris longeque remoti,

which was far from being the case with Homer's Gods.

Secondly, the description of Lucretius is as accurate as that of Homer, omitting not the least circumstance, and expressing some of them, more fully and with more ornament, both of diction and versification; particularly the χιων ἐπιπίλναται, which is most elegantly paraphrased by

Neque nix acri concreta pruina Cana cadens violat,

where the *frost* is very properly joined with the *snow*, and the alliteration in the words, *Cana cadens*, makes the verse run very smoothly and sweetly. It may be thought too perhaps that the

λευκή έπιδέδρομεν αἴγλη

is improved by the paraphrase: but that white splendor, which Homer mentions, is so exact a description of what I saw in my dream at the crisis of my fever, and which I can never forget, that I cannot help referring it to the diffused light of Lucretius.

But this is description merely. As to similies I still maintain, that he excells all authors that ever wrote, Greek or Latin, ancient or modern. All his similies illustrate, for if

they did not do so, they could not be called similies. But some of them not only illustrate, they likewise adorn and amplify. Of the first kind are such similies, as that in the second book, l. 469; where he compares the Greeks assembled to battle, before they were put into order by their commanders, to flies about milk pails in the spring, (not your English spring, but the Greek spring); and that where he compares Ajax retiring sullenly from the Trojans, who were following him and pelting him, to an ass driven by boys out of a field of corn. Of the other kind are such similies as that of Diana among her Virgins, or that in the second book, l. 455, where he compares the shining of the arms of the Greeks, to a fire kindled among wood on the top of a mountain. These amplify; others again only embellish, like the simile of the nightingale. But in all of them, whether they only illustrate amplify or embellish, there is a propriety and exactness of description, that is not to be found in any other author. The one that comes nearest him, I think is your million, in this as well as in other respects, whom Dr Johnson has said, as I am told? (for I do not lose my time in reading such works) he never reads with pleasure, and puts up upon the shelf, with much more satisfaction than he takes him down. . . .

Your sincere friend, and very humble servant,

JAMES BURNETT.

# XXXII.

# LORD MONBODDO TO WELBORE ELLIS.

28th August 1782.

DEAR SIR,—I have read and studied with the greatest pleasure your philosophical letter, in which you have

joined after the ancient manner, a great deal of politeness with your philosophy. I would have answered it sooner, if it had been an ordinary letter, that might have been answered in course of post.

I am extremely pleased and flattered that you have gone so deep into my philosophy. I hope you will contribute to take away what I have always thought a reproach to your nation, viz., that though you are excellent classical scholars, the best in Europe at present—and have the key of the treasures of Greek philosophy, I mean the knowledge of the Greek language which we here in Scotland wantyet you have not used it, at least of late. I do not know that any man in England, since the days of Dr Cudworth, has philosophised in the ancient way; so that I think I may claim the honour of endeavouring at least to revive that Philosophy; but, hitherto, with very little success. Unless it be yourself, Dr Horsley, that young man Dr Jackson who dined with us at my Lord Stormont's, and I think I may add the Bishop of Exeter -a very worthy learned and ingenious man, and whom I beg leave to recommend to your acquaintance if you are not acquainted with him already—I do not know another man that applies to it in good earnest. And yet I think it is of absolute necessity, as I have said in my preface, that in a country where there is any curiosity, or spirit of enquiry, there should be some philosophying of one kind or another, concerning the first causes and principles of things. Accordingly we have a philosophy of that kindbegun by Mr David Hume in Scotland, and now carried on by Dr Priestley in England-which I believe you will agree with me is such as ought to recommend more than ever the study of the Ancient Philosophy.

The question, which is the subject of your letter concerning the origin and continuation of motion, is of the utmost consequence in Philosophy; for unless we can determine it one way or another, we are neither metaphysicians nor natural philosophers. It would be ridiculous to pretend to philosophise concerning Nature if we could not give an account of the beginning and continuance of that great agent in all natural operations, viz. motion.

The question concerning motion naturally leads us to inquire concerning the body that is moved; and here I perfectly agree with you that matter, as well as mind, is to be derived from the first Cause; for I hold that there is no being self-existent but that Cause; and therefore I have maintained that even space is no being, which if it were would be self-existent, infinite, immutable, as well as God. (Lib. I. Chap. 5.)\* At the same time I maintain, that matter is of a nature quite distinct from mind; and that it is impossible, in the nature of things, that matter can be mind, any more than mind can be matter; and, as I hold that the nature of things is part of the nature of the Divinity, I likewise maintain that as God cannot alter his own nature, neither can He alter the nature of things, nor make truth falsehood or falsehood truth, or things essentially different to be the same.

Now I think that body and mind are essentially different, and besides the other differences of extension impenetrability and resistance, there is also the essential difference that mind only moves, whereas body is only moved; the consequence of which necessarily is that while body continues body, it cannot move itself, but must be moved by something different from itself. And thus far, likewise, I believe we are agreed.

There is another thing in which we are also agreed, viz. that God is the author of all the motion in the Universe, which all proceeds from him, mediately or immediately. That the beginning of all motion should

<sup>\*</sup> The reference here is to Ancient Metaphysics. - ED.

be accounted for in this way, I think no theist can doubt. But the question betwixt you and me is, concerning the continuation of it, when once begun: and so far we are agreed as to this that I hold as well as you that the continuation of motion, as well as the beginning of it, is to be ascribed to Mind. But we differ on these two points. First, you say that the supreme Mind is the immediate cause of the continuation of motion, whereas I say it is inferior minds. Secondly, we differ as to the manner in which this continued motion is produced by Mind; for you say it is by an original impression made upon the body, by virtue of which, being once set in motion, it continues to be moved till it is stopped by something external. Whereas I maintain that it continues in motion, not by virtue of any original impression made upon it, but by the constant agency of Mind. This is the question fairly stated betwixt us, and you know well that in all questions, and particularly in such subtle metaphysical questions, doubt that is distinctly stated may be said to be half solved.

As to the first of these questions, I suppose your proposition that God is the immediate author of motion, is confined to unorganized bodies, such as are commonly said to be inanimate, and not extended, to our bodies or the bodies of other animals. For, otherwise, your philosophy would be the same as the philosophy of Dr Priestley, who believes (as I am informed) in God, but maintains that God is the immediate author of our motions, as well as of the motions of other animals; and that therefore animals have no minds, but are mere machines. But, if you allow that animals have a mind of their own which moves them, I think it is difficult to stop, and to say that they are so moved, but that vegetables, and unorganized bodies, are moved by the supreme Mind; and therefore I have said (p. 58) that Dr Priestley

has argued irregularly, when he has said that both must be moved by particular minds, or neither.

But, though this argument from analogy be very strong, I think there is still a stronger one, which arises from the nature of motion by Mind: for I cannot agree with you that we are entirely ignorant of the manner in which mind moves body. We not only know negatively that it does not move it in the way that body moves body, by pulsion, or trusion, or by surface acting on surface; but we know positively that it moves body by acting upon every particle of it, even the inmost particles, in the same manner as Sir Isaac has described gravitation acting upon bodies.\* And this action of mind, I think, I call by a proper name, when I call it animation.

This being the nature of motion by mind, the consequence of your hypothesis is, that if God be the immediate cause of the motions of the bodies in the Universe, he must animate those bodies, and be truly the anima mundi, and that therefore there is truly no distinction betwixt God and Nature. This was the doctrine of the ancient atheists such as Strabo, and of the modern such as Spinosa.

Whereas the theists, both of ancient and modern times, have maintained that God is something distinct from Nature, and that He is  $\epsilon \xi \eta \rho \mu \epsilon \nu \sigma s$ —as the ancients expressed it, quite out of the material world, and not at all incorporated with body, as we and other animals are.

Further, this hypothesis of a supreme Mind being the immediate mover of all unorganised bodies destroys that beautiful subordination of minds, which I suppose to be in the Universe, from the highest intelligence down to that which moves brute matter. According to Dr Priestley's system there is but one mind in the Universe, and according to your system there is none below the

See Principia, p. 47, de.

animal, or at least the vegetable mind; but, according to mine, all the operations of Nature of whatever kind are carried on by inferior minds, proceeding from the Supreme Mind, and under his direction and instruction.

The last consideration upon this head which I shall suggest, appears to me decisive of the question. It is this, that we must conceive Deity to be pure intelligence, without any mixture of animal or vegetable life. Now the intellectual principle does not move body immediately, and directly; but it is the animal or vegetable life, which moves body in that way. That the motions of brute animals, and of vegetables, are performed without intellect in them, we are very sure: and we know also that, though there be intellect in us, it is not by that intellect that our bodies are moved immediately and directly. With respect to the vegetable part of us-I mean that by which we grow, and are nourished-we know that the motions of it, are not only immediately produced by intellect, but are not under the direction or control of it. As to our animal motions, although they are under the direction of our intellectual part, yet they are certainly not immediately produced by it: and, accordingly, there are many of those motions-which we make just as other animals do-without intellect having any direction of them. So much for the first question.

As to the second, your opinion appears to me to be singular, viz., that the motion, though begun by mind, is continued by virtue of an original impression upon the body. When the motion is begun by bodily impulse, I know it is the general opinion of the Newtonians that it continues by virtue of that impulse. This opinion I think I have refuted, and, if I do not flatter myself much, have demonstrated à priori—that is from the nature of motion—that it cannot be true. But, supposing it were true, the argument could not proceed from motion so begun to

motion begun by mind; for, if we know anything at all of the nature of that motion, we know with the greatest certainty that it is not begun, any more than carried on, by anything like the impulse or pressure of body upon body; but that it is both begun, and carried on, by an internal principle of movement. This I say we know most certainly, because we know it from the most certain of all knowledge, viz. consciousness. We are conscious that our own bodies are moved in that way, and it is only by this consciousness that we have any idea of the motion of body by mind.

But further if I could conceive that body, by virtue of an original impression from mind—given I do not know how—should continue in motion without ceasing, how can I conceive that, by virtue of one impression, it should (after the motion has ceased) be moved again? This argument I have already urged, and indeed it appears to me unanswerable.

All the authorities, both ancient and modern, are on my side, except that of Sir Isaac Newton, singly. I thought that Des Cartes was also against me; but, from what I wrote you in my last letter, it appears that he was of my opinion that the motionhowever begun-is carried on by mind: and we only differ, in this, that he says the mind that carries it on is the supreme Mind, whereas I say it is an inferior mind. It therefore appears to me that Sir Isaac is singular in his opinion, even with respect to the continuation of motion begun by bodily impulse; for it is only of such motion that Sir Isaac speaks. But as to motion begun by mind, it does not appear that he ever thought of it. I would have you therefore consider again this opinion of yours, which may be true, but is altogether singular.

What you say is certainly true, that the Creator has

imposed this law upon his creature—matter—that being once put into motion, it will continue in motion at least for some time. But this proposition must be restricted, first to motion begun by bodily impulse; secondly, the motion must be carried on according to the ordinary laws of Nature, not by virtue of an impulse that has ceased, which I have shown to be contrary to the nature of motion; and therefore it must be carried on in the way in which we know animal motion is carried on, that is by the constant agency of mind. The whole truth of the matter is this, that the Creator has been pleased to incorporate mind with unorganized matter, as well as with organized; but mind of a different kind.

As to Sir Isaac Newton's notion concerning the continuation of motion, I was once much disposed to believe that Sir Isaac, by the Vis insita which carries on motion, meant mind; but, when I consider his definition of Vis insita,\* I am convinced he meant, not mind, but a power inherent in body, by which it continues in a state of rest as well as of motion. If to this you will join his account of gravitation or attraction,† you will I am persuaded be convinced, that at the time he wrote his Principia, he did not think at all of motion either begun, or carried on, by mind. As to the Vis impressa, I think I have made it evident that he means by it bodily impulse. Now I must own that I think it is a position dangerous to theism to maintain that body, by a power inherent in it, and essential to its nature, can carry on motion; and this appears to me to have been the opinion of Sir Isaac, not that the motion continued by virtue of the impulse, after it had ceased. But whichever of the two was his opinion, it is plain that it was an invention of his own, unsupported by any authority, ancient or modern.

Thus I have endeavoured to solve your doubts, and

<sup>\*</sup> See Principia, p. 326.

<sup>†</sup> See Principia, p. 324.

difficulties; and if I have done it at too great length, you must ascribe it to my anxiety to gain such a convert to Ancient Philosophy as you are. For my philosophy is truly nothing but the ancient philosophy revived; and though you compliment me upon my making improvements on Aristotle, yet I have really done no more than explain at greater length than he has done, that principle of motion which he says is in all physical bodies; and to extend it to all the motions here on earth, as well as to motions in the Heavens, which Aristotle has not done, but endeavoured to explain these motions—and particularly the motion of projectiles—by mechanical causes. This is a defect in his philosophy, which Proclus observed many hundred years ago; and this defect I have endeavoured to supply.

### XXXIII.

# WELBORE ELLIS TO LORD MONBODDO.

PAULTONS, HANTS, Sepr. 23d 1782.

My Lord,—I persuade myself that you will not be offended with me for not hastily answering your last letter, which required much consideration, and which I could not well give it; as I have constantly—since I came into this country—had my house full of company, and do not now expect to get through this letter without many interruptions. I beg leave to assure you that I know not how to express sufficiently my sense of your goodness in having bestowed so much of your time and attention on doubts, so loosely and inaccurately suggested, as mine were in my letter; and, if I did not know that you take as much delight in rendering your knowledge beneficial to others, as your means of doing so are great, I should have felt

much confusion on the occasion. I acknowledge most thankfully that you have—by your book, and letter—fully convinced me that the constant agency of Mind is as necessary to the continuation of Motion, as to the beginning of it; and, consequently, you have gained a complete victory over the axiom of Sir Isaac; and you seem to me, who am I confess a very indifferent judge, to have succeeded in simplifying the principles of his Philosophy. I am also ready to pay a just tribute of praise to the beauty and ingenuity of your hypothesis of a chain of subordination of minds, like that of Homer, fastened to the throne of the supreme Author of all things, and descending to that mind which actuates the parts of stones and minerals in their growth and corruption.

Nevertheless, it does not seem to simplify, in like manner, the motions of bodies upon earth, all of which—those in particular which are organized and animated—some must have two, and some must have three, minds. While I admit that this possibly may be so, you will forgive me that I do not conclude that it is so. However I meant, and mean, to go no farther than to doubt. I do not doubt that there is a subordinate class of minds, actuating (in part) all organized or animated bodies, under and by supreme Intelligence mediately. I only mean to doubt whether the parts assigned by you to several subaltern minds—in unorganized, as well as organized bodies—may not, with more simplicity, be supposed to be performed by the immediate agency of the supreme Mind, acting in each invariably according to that rule or law, which results from the essential properties assigned by Him to every arrangement of matter. This is his own law to which he conforms, and which I call Nature, and which does not confound God and Nature, any more than cause is confounded with effect, or the lawgiver with the law. I have said actuating in part all animated bodies; for, beside the

variety of motion in the bodies of all animated beings which are not spontaneous, there are many, which are called spontaneous, in which neither brutes nor even men are quite free agents. I see that brutes are in some actions free agents, that is have a choice; but in many they have not. I know that in many more man is a free agent, for he has a superior intellect to be his guide, and is accountable for the use he makes of it, but even he partakes in some instances of the advantage which the brute enjoys in most, viz. that of the divine wisdom directing the "Mind of the animal to that which is best for the animal itself and for its kind," which is your definition of instinct. Having explained myself on this point, I return to the former no farther than to observe that it seemed to me more simple to suppose that, as God must be present everywhere, and therefore must be present in every particle of matter, (for otherwise there would be somewhere in which He was not present,) and therefore must pervade all matter and body, that He immediately actuated unorganized bodies in the whole, and organized bodies in part. I see many difficulties attending either side of the question; but, so far as I conceive, the question is more curious than important, as we both agree that God is the source of all being and motion, and either immediately or mediately connects governs and directs the whole to some great and wise end.

I am gradually becoming your disciple, and if I do not immediately subscribe to all your opinions, it is not from want of deference to your authority, but of that activity and pliancy of mind which old age seldom has; and, added to that, there is a reluctant slowness "Quae juvenes didicere senes perdenda fateri." However, as I early dabbled a little in Plato and Aristotle, and some few notions of theirs stick to me—which the business

and bustle of Politics had not quite obliterated—I am not without expectation that I shall, by being driven from public station, become yours in body and mind on the subject of Philosophy; as I beg leave to assure you that I already am on all other matters, with great deference and respect, your Lordship's most obedient and most humble servant,

W. ELLIS.

#### XXXIV.

### LORD MONBODDO TO SIR GEORGE BAKER.

MONBODDO, Oct. 2, 1782.

. . . I THANK you for the eulogium upon Lucretius, which I remember to have read, but had forgot; I think he well deserves it. His poem is the most perfect model of a didactic one, more perfect than Virgil's *Georgics*; and, though not so much ornamented throughout, better ornamented in the proper places, and not ornamented at all where, "ornari res ipsa negat, contenta doceri."

I think in the passage I sent you he has fairly taken the club from Hercules, which was Asinius Pollio's expression—if I am not mistaken—for taking a line from Homer. However, if I ever shall carry on my work upon Language, and write upon Poetry—which ought to be the subject of a fourth volume—I will certainly make Homer my text; who, I think, is the standard of all kinds of writing, not only Poetry, but Rhetoric, and even History, if a man has discernment and taste enough to be able to distinguish the style of Prose from that of Poetry. Herodotus, having that skill, has—by making Homer his model for History—written the most instructive and at the same time the most agreeable History,

both for matter and style, that ever was written, or I believe ever will be.

He has exceeded even Homer in giving union to a History of very much greater variety than either, or both, of Homer's Poems. Indeed it is the most various History that can well be imagined, and yet it is as much one, as either the Iliad or Odyssey. "Magni est viri," says Ouintilian, "Homeri virtutes intellectu complecti." I doubt very few of this age are such great men as to comprehend fully the beauties of Homer. Doctor Johnson certainly has not genius enough to comprehend even the beauties of Milton, who I think is the only poet in English that can be compared with Homer. But, in Paradise Lost, he wants that, without which neither poem nor picture can have any great degree of excellence, I mean the choice of a proper subject. The subject of his Comus is—as I believe I observed to you in conversation -much better chosen; and therefore I hold Comus to be the better poem of the two, but there is one thing in Paradise Lost, in which he excells very much, and comes nearer to Homer than in anything else; I mean the rhetorical part. That is very fine likewise in Comus; but, as he was so much farther advanced in age when he wrote Paradise Lost, and had studied and practised so much more rhetorical writing, it is wonderful how he has excelled in it. His deliberative speeches, in the second book of Paradise Lost, are out of all degree of comparison the best in modern times; and his style of altercation and invective in the conversation betwixt Gabriel and Satan, where Satan was discovered at the ear of Eve, may be compared with anything of the kind in Demosthenes, as far as I am able to judge. As you have both studied and practised the rhetorical style with so much success, and particularly the panagerical style, which—though seemingly opposite to the invective—is very much akin to it, I beg you would take the trouble to read the above passage in Milton, and let me know whether I be in the right.

Having so much leisure, you will not be at a loss to know how I employ it. I read, and write, a great deal; for, I commonly join these two together, finding that to set down observations upon what I read is the best way both to digest it properly, and to preserve it from what it is very liable to, oblivion. I have been for some days past employed in reading over, correcting, and enlarging very much, what I wrote upon my Journey; for I do not write metaphysics, as Dr Bentley wrote his notes upon Milton. Those notes, says the Dr, I wrote extempore, and sent them to the press as soon as written; not being apprehensive of growing leaner by censure, or fatter by applause!

I believe I told you that I have been collecting observations for a History and Philosophy of Man, in which I have now been engaged during twenty years. The quantity of materials I have collected is so great that I have spent the chief part of the time that I have been in the country—since the middle of August—in reading them over, and taking notes of them. If I live to execute my plan, and—if it be well executed—it will be the greatest work of history, philosophy, and learning that has been published in this country. The moral of it will be that nothing can save us, and indeed I think all Europe, from absolute destruction and annihilation, but the study of ancient Men and ancient Manners by those who govern us. Ennius, who lived in the time of the first Punic war, said that,

Moribus antiquis stat Res Romana, virisque.\*

If this was true at so early a period of the Roman State, how much more applicable is it to us!

<sup>\*</sup> Ann. v. 492, p. 41, Vahlen.—ED.

I had a letter some posts ago from a correspondent of mine in Oxford, one Mr Burgess, an excellent Greek scholar, and a very hopeful young man. He tells me he is named to the office of tutor in his college, which is Corpus Christi College, and part of his province is to teach Metaphysics, which he has studied for some time in my works, and is to finish what his predecessor in office had begun, an Encheiridion or abridgement of them, which he is to teach. So that I think my prediction that Aristotle would come to be as much in fashion in one of the Universities in England as ever he was, is in a fair way of being accomplished. . . .

Your most faithful humble servant, and sincere friend. . . .

#### XXXV.

### SIR GEORGE BAKER TO LORD MONBODDO.

JERMYN STREET, 30 Oct. 1782.

MY DEAR LORD,—Before I enter upon the subject of either of your Lordship's letters, let me mention a passage, which I lately stumbled on in Salmasius, *De Linguâ Hellenisticâ*. This author says (p. 128):—

Χαρακτήρα non habere dicitur, si qua gens nutibus, aut signis, sonisve quibusdam, vel gestibus, loco sermonis, animi sui sensa exprimere novit. Quod de natione quâdam tradit Agatharchides quam χαρακτήρα negat habere, id est dialectum vel sermonem, quo vis, quas enuntiare vult, signare queat. Τῶν δ' εἰθισμένων, in quit, ἀνθρώπω πρὸς ἄνθρωπον οὐδὲ τὴν ἐλαχίστην διδόασιν ἐννοίαν, ὅθεν, ἔγωγε νομίζω μηδὲ χαρακτήρα εὐγνωστον ἔχειν αὐτοὺς, εθίσμω καὶ νευματι, ἤχοις τε καὶ μιμητικŷ δηλώσει διοικεῖν πάντα τὰ πρὸς βίον. Dicit eos non habere

χαρακτήρα εὖγνωστον id est loquendi formam intelligibilem et articulatam, etc.

Agatharchides was not an author of my acquaintance; but, after some search, I found the only remaining piece of him, (viz. de Mare Rubro), first printed by H. Stephens in the year 1557, with some other treatises Ex Clesiâ, Agatharchide, Memnone selectae historiae. Appiani Iberica. Item de gestis Annibalis. Agatharchides is supposed to have lived under Ptolomy Philometor. Hudson has inserted this author's piece, De Marie Erythræs, in his first volume of his Geographiae Scriptores veteres Graeci minores, and you will find prefixed to that first volume, a dissertation by Dodwell, De aetate peripli maris erythraei ejusque authore, in which it appears that Dodwell and Salmasius disagreed about the age in which Agatharchides lived. But the subject was not sufficiently interesting to me; nor did I peruse the whole of that dissertation. The following are a few particulars, which I extracted from the Greek author.

There is a very numerous and far extended tribe on the southern part of Egypt, bordering on the sea-coast, who live entirely on fish. They have no settled habitation. They know neither city, nor country; nor have they the least rudiment of any artificial convenience. Both men and women go naked; and get children in common. They have a natural sense of pleasure and pain, but not the smallest idea of right or wrong, "turpe or honestum." They know no art of catching fish, but take what are brought by the tide, and left in the hollows of rocks. On account of the simplicity of their diet, they have very few diseases; and it is observed by the author, that their lives are the shorter, in proportion as they abstain from bodily exercise. He adds, that they do not appear to have any sense of what we esteem the greatest evils. If they are threatened by a drawn sword pointed at them, they do not endeavour to avoid it. They are neither provoked by personal injuries; nor do they shew any sympathy with those who suffer. They drink only once in four days, but then an immense quantity of water out of the brooks, on their hands and knees, like the cattle.

The whole account is closed with what is said above, that they have no articulate language, and are not, according to Homer,  $\mu \acute{\epsilon} \rho o \pi \epsilon s$   $\mathring{a} r \theta \rho o \pi a$ . Salmasius likewise quotes from Apollonius two lines (which I cannot find) of a nation, quae *latravit non locuta est*.

Τῶν μέν θ' ὅστε κυνῶν ὑλακὴ πέλει, οὐδέ τι τοίγε
"Αλλων ἀν γμώσσουσι βροτῶν, ὀνομάκλυτον αὐδήν.

As to the philosophy of the Res Metrica, it never once employed my thoughts. My ear is pleased with the hephthemimeris-caesura, which prevails so much in the poems of Virgil; but what reason there is in nature for this pause,

Juxta scio cum ignarissimis.

But, it has frequently occurred to me, that Virgil is particularly dexterous in the variety of caesura; and that, if he had confined himself more closely to that which is the most harmonious, he would have pleased us less. The ear cannot bear the perpetual repetition of the same notes, though they charm it ever so wisely.

I am, my dear Lord, with great esteem, your most obliged, and very faithful servant,

G. BAKER.

# XXXVI.

### LORD MONBODDO TO WELBORE ELLIS.

MONBODDO, 5 November 1782.

DEAR SIR,—I should have answered your last letter much sooner, but I am really afraid to surfeit you with

my opinions, which I should be exceedingly sorry for, as I think you are an *eleve*, who will do much honour not only to me, but to Philosophy. A Statesman and a Philosopher joined in one, though common enough in ancient times, is very uncommon now; and I have observed that when men of business have applied themselves to Philosophy, they have always succeeded better than mere schoolmen; for business—and especially public business, with the knowledge of the world, and of men and manners, which necessarily accompanies it—very much improves the understanding. It enlarges the mind much more than secluded study can do.

To this you have joined another advantage, without which your knowledge of business would but little avail you, in Philosophy; and that is being a Scholar, for that I hold to be the foundation of all Philosophy among us, which is only to be found in Ancient Books. It is for want of this that I think the French philosophy quite contemptible. Even our great Sir Isaac, when—leaving his Geometry and Mechanics—he ventured into the region of Metaphysics, and enquired concerning the continuation of Motion, without taking the Ancients for his guides, has gone wildly wrong; and laid down as an axiom, a proposition—which is not only not self-evident, but absolutely false—and has disgraced the most beautiful system of Science that perhaps ever was invented by a single man, by founding it on such a proposition.

You may see, by my preamble, that I am much more at leisure than you are; but I will now come to the subject of your letter. We are, as you say, agreed about what is principal and fundamental in this matter, viz. the beginning and continuation of motion; and what we now only differ upon is rather a matter of curious speculation than essential, either to Philosophy or Natural Religion; for the only question betwixt us is, whether — as Mind, supreme or

subordinate, is the cause of all motion—the Supreme Mind is not the immediate cause of at least one motion here on earth, the motion of unorganized bodies.

You admit that our bodies are moved by an inferior mind; you admit likewise that brutes are moved by a mind of their own, but inferior even to ours; and further you allow that likewise vegetables are moved by a mind inferior still to that of the brute. So far therefore you think Homer's chain goes. But there is one link more that I will add to it, which is a mind inferior still to any of those I mentioned, which moves all unorganized bodies, and by which a great part of the business of Nature is performed here below.

You carry the chain no farther than the vegetable; and you say that this motion of unorganized bodies is all the immediate operation of Deity, without the intervention of any inferior agent, as in the other motions.

First, I would have you consider how this hypothesis will answer, when applied to our own motions. Our animal motions—of which you say rightly that there are many—you allow are performed by the animal mind in us. Further the vegetable part of us, by which we grow and are nourished, you allow is also moved by a mind of its own. But what shall we say when a man falls from a height. This motion is certainly different from either his animal or vegetable motions; for he does not fall either as an animal or as a vegetable, but as a composition of elemental or unorganized bodies. Shall we say then that the animal and vegetable motions in us, so much more complicated and exquisite, are produced by inferior minds? but that this most simple motion—by which bodies tend to the centre of the earth—requires the interposition of the supreme Mind?

Again it is certainly not our intellectual mind, to which belongs our faculty of thinking and willing, that directly and immediately moves our bodies; but it is the subordinate animal mind, which acts by the command of our intellectual part. This, anatomists well know, who will tell you that if the nerves of any member—by which spontaneous or animal motion is produced—be cut, no act of the will can move that member. Now, is it not agreeable to that wonderful analogy, which we see runs through all Nature, to suppose that as the governing Mind in our microcosm does not immediately perform any of the motions in it, but only directs and superintends them, so also does the governing principle in the great World perform all the motions in it, by inferior and subordinate minds, whom it superintends and directs.

But what makes this question of some importance, both to Philosophy and Theology, is that I think we cannot conceive mind moving body otherwise than by being incorporated with it. Now I do not suppose that you hold with Spinoza that the Deity is the *Anima mundi*, incorporated with it as our mind is with our body, and which moves it, in the same manner as our animal and vegetable mind moves our body—that is immediately and directly—for our intellectual mind, as I have shown, though joined with our body in such a manner that it cannot act without it, does not move it immediately and directly. But I suppose you maintain that the supreme Mind is not joined with body, as our intellectual part is; and much less that he is incorporated with matter, as our animal and vegetable mind is.

You will say that we only know that mind moves body, but we cannot tell in what manner: and I admit that we cannot tell how substances—of natures so different—are joined together, so as to act upon one another; but we know, with the most certain of all knowledge—I mean consciousness—that our mind moves our body internally, not externally; and I think I can demonstrate,

by the following argument, that no mind can move body any other way.

Body can only be moved, either externally or internally, or in both ways; καὶ παρὰ ταῦτα οἰδέν, as Aristotle says. Body is moved externally, when it is moved by impulse or pressure. Now it cannot be moved in that way, except by another body. For it is impossible to conceive that an immaterial substance can impell or press a body, having no solidity, nor any surface by which bodies act upon bodies. If therefore body cannot at all be moved externally by mind, it follows—of necessary consequence—that it is moved by mind only, internally; that is to say, mind acts upon every particle of the body even the inmost particles of it, in other words, animates it. Now this really appears to me demonstration α priori, being from the nature of body and mind; and I should be glad to know whether you do not think it so.

There is one objection you mention, which deserves a very serious consideration. It arises from the omnipresence of God, who you say must be present in every particle of matter. I agree with you that omnipresence is an essential property of Divinity, but I do not think it implies that he should animate or move matter directly and immediately; for that is the office of the lowest mind. Nor do I think that any intellectual mind is so embodied with matter, as to move it; even our intellectual mind as I have shown, though so much connected with body, does not move it. And much less does the Deity, who is pure intellect, and free from all contagion of matter. I think we can know nothing of Deity, or of mind in general, but from the study of our own minds. Now, our minds are very often abroad, and present in very distant places. The minds of the people of England at present spend a great deal of the day, and perhaps part of the night, with Lord

How and General Elliot: and I am frequently with you in Maddox Street, and hear you correct Eustathius and me, with respect to the meaning of the words  $\lambda i \gamma i s$   $\dot{\alpha} \gamma o \rho \eta \tau i s$ . But, in those places to which our mind can transport itself, it moves no body; and, so far I think, there is a resemblance betwixt our mind and the Divine.

But, there are two most material differences: the first is, that our mind is present only in one place at one time, whereas the Deity is present in all places at all times. Secondly, as we do not move bodies by being present in distant places, so neither do we operate upon minds, except by the intervention of letters and other symbols; whereas the Deity, by his presence, does immediately and directly influence inferior minds. It is in this way, as I apprehend, that He governs this Universe; for I am not of opinion that He governs it only by general laws, but that it is under his immediate care and inspection. This system of mine will I think account, in the most natural way, for that extraordinary interposition of the Providence of God, which we call a Miracle; but which those philosophers will not admit, who believe that the Universe is governed by general and unalterable laws. This notion of the omnipresence of God is entirely my own: nor is it to be found, so far as I know, in any book ancient or modern. Therefore, I am diffident of it; and shall be much more so, if it is not confirmed by your approbation. As to what vou say of mind pervading all Nature, I am perfectly of your opinion; and you know my system is the same with Virgil's, that Spiritus intus alit, and animates every particle of matter; but it is mind inferior, and not the Supreme Mind.

I have the honour to be, with the greatest regard and highest esteem, your most faithful humble servant. . . .

#### XXXVII.

# WELBORE ELLIS TO LORD MONBODDO.

Dec. 29, 1782.

My LORD,—I at length sit down to express my sincere acknowledgement to you for the honour and pleasure of your letter of the 5th November. I should be mortified if I was to give you just reason to imagine that I was so void of taste and appetite for knowledge as to be surfeited with your Philosophy or your manner of treating it. I am glad, like Homer's Jupiter, to turn my eyes from the contemplation of war and destruction to the more pleasing views of calm philosophy. The question on which I had entertained a doubt is-as you observerather a matter of curious speculation than essential, either to Philosophy or Natural Religion; and if, in the course of discussion, there is anything like collision, it is only meant on my part to elicit that spark of light from you, which is to enlighten my understanding. You admit, with me, that omnipresence is an essential property of the Deity, and that he is therefore present in the smallest particle of matter. If so, may I ask what is the meaning of the word incorporated? In my sense of it, I should say that God is incorporated in every particle of matter; that he is there, as a free agent, to act or not, as he shall think fit, either mediately or immediately, or not at all. If I trust to consciousness, and reason, I know that I am free to choose in moral action; and, if I was not, he would not-because he is just-make me accountable for such choice.

Therefore, though he is present in every particle which composes my frame, yet he leaves my mind at liberty to direct my actions; nevertheless I will not deny that he may

not interpose, on some occasions. I have here got to the utmost verge of metaphysical ground. I am scarce sure of the last step; but I see that, if I take another, there is a vast vacuity; where my fluttering penons could not bear me up, or assist me. I look down into the abyss, and see—or think I see—some imperfect objects, of a very uncertain outline, skimming about. As they appear through the gloom very beautiful, and seem sometimes to come within my reach, I am tempted to catch at them, but they elude my grasp. "Par levibus ventis volucrique simillima somno." Of this kind, you will forgive me for owning, is your bold poetical metaphor, "peregrè est animus." I cannot follow you on to

That dark
Illimitable Ocean, without bound
Without dimension, where length breadth and height
And Time and Space are lost.

I may take a short airing with you upon it, but always "in manibus terrae"; for I see some technical metaphysical nets, amongst which if I venture, I may not be able to break through, and regain the firm land. My consciousness, which is firm land, satisfies me that my mind is locally acting at this minute on my brain, in my study, in my house, and there exerting its energy to call up again some impressions which have been made, or painted upon the imagination, and which had been laid aside for some time. Some of these impressions were made by perceptions of objects presented immediately by my senses, and others by the more artificial media of written or printed words, conveying ideas the materials of which were very familiar to my memory; but the order in which I find them arranged may be new. My mind, having got a clear conception of that arrangement, exercises the wonderful faculty called Memory, and lays up this new set of ideas, formed by itself out of this arrangement. It can, by that

faculty retain—and recal for use—these ideas, though they have been succeeded by an immense multiplicity of others.

I this instant recollect to have had the perception of a number of circumstances, with the objects of which I had been familiar, which were represented to me (wonderfuly arranged) by the author of a narrative of a particular plague, which he says visited Athens at the time of the Peloponnesian war, while Pericles administered the affairs of that government. My mind exerts its energy only where it is; and I can feel an action so like to the act of corporeal searching, that I am obliged to express the idea by the same word, by which it again presents all those images of the various symptoms of the disease and of its effects, with 'each of which I have been conversant separately; and, moreover, I recollect to have met these so arranged by this author. Now, if I am to believe that my mind goes to Athens, of which, the only idea it has, is of a town; and its existence is to be transported to the period of duration of that man called Pericles, when I am recollecting and contemplating the plague of Athens as represented by Thucydides, I can only say, "Such knowledge is too excellent for me I cannot attain unto it."

But I will admit this hypothesis, in order to ask you a question. Athens was a town that really existed, and does exist at this day, and there really was such a man as Pericles, and such a war as that which is called the Peloponesian war, and such a malignant disease as the particular one described by Thucydides; but, whither is my mind to transport itself, when I read Spencer's Fairy Queen, Tasso's Gerusalemme Liberata, or the Arabian Nights Entertainments, wherein are described places which never existed, circumstances related which never did and some of which never could have existed, and persons who never had reality?

And now I beg leave to come on shore to the safe

ground of consciousness, and I must aver—with great deference to wiser men—that I feel my mind locally energizing in (or upon) my brain when I reflect, when I reason, when I recollect. If you ask me where are the impressions made, and where are the pictures talked of hung up? My answer is, if I may trust my feelings, in my head. If I am asked how this is done, my answer is that I think it all inexplicable, that I own my ignorance, that the attempt will be like that of the tower of Babel, and the event the same, viz. a confusion of sounds without conveying clear conceptions.

I ask your pardon, as I write in some hurry. I have not time to abridge and methodize my letters. I deliver my ideas crude, as they arise; but there are always, inseparably connected with them, sentiments of real respect, and gratitude towards you, for your goodness and condescension to me, to which I now add every wish which the benevolence of this season suggests. Having the honour to be your most obedient humble servant,

W. Ellis.

# XXXVIII.

# LORD MONBODDO TO WELBORE ELLIS.

16th April 1783.

... AND this leads me to our Philosophy, which is now come to a point of most curious speculation, viz. In what sense the omnipresence of God is to be understood, for we both agree as to the fact that God is everywhere present. We only differ as to the manner. Upon this subject you have stated your doubts in a most agreeable manner, and made a subject, in its nature exceedingly abstruse and dry, very pleasant, by the classical ornaments you have bestowed upon it. It is only classical

learning that furnishes the ornaments of speech, and in my apprehension is also the ground-work of all good learning, and particularly of Philosophy. Though a man may be a Geometer, a Mechanic, a Chemist, or learned in Natural or Civil History, I maintain that he cannot be a Philosopher without the knowledge of ancient Books, in which Philosophy is only to be learned.

There is one thing, in which I am persuaded you will agree with me, viz. that we know nothing of the Divine Mind but from what we know of our own, and therefore that the study of our own mind is the foundation of Theology. There is another thing in which you will also agree with me, that it is only in our intellectual part that we have any resemblance to Divinity; for in our animal or vegetable life, or that elemental mind as I call it—which we have in common with all other bodies on this earth, and which is most plainly perceived when we fall from a height—I suppose you allow we have no resemblance at all to Divinity. The question therefore is, in what manner this divine part of us exists, with respect to Space and Time; and, first, with respect to Space.

Does it exist in Space, as body does? that is, has it length, breadth, and depth, and in that manner occupy a portion of Space, which is called the place of a body that so fills it? This I am persuaded you do not maintain, and yet our intellect exists somewhere, as well as the Divine Intellect; and the difference which we conceive betwixt the two in this respect is, that the Divine Intellect exists everywhere, whereas our intellect does not exist everywhere, but only in certain portions of Space.

The question then is, in what portion of Space it exists? and how it there exists? As to the first you seem to be of opinion that it exists in our brain; but you certainly do not think that it is contained there, as one body is

contained in another, for then it must be extended and occupy space, which I am persuaded you do not believe. But your meaning I suppose is, that it cannot act without the brain. But no more can it act without the heart, or whatever else is essential to the animal and vegetable part of us, with which in this state of our existence it is so intimately united. But I think I have shown very evidently that neither brain nor heart is the cause, or even the instrument, of the operations of our intellect; though it be true that, in this state of our existence, it cannot operate without both. For this distinction betwixt the cause or the instrument, and that without which a cause cannot operate, I must refer you to what I have said in book 4 chapter 4 of the last volume.\*

That our mind therefore does not exist in any portion of Space, as body does, is I think certain; but, as it necessarily does exist in some portion of Space, the question is in what manner does it exist? And, as it is of a substance perfectly different from body, it is natural to think, that it exists in Space in a manner quite different; therefore not by filling Space as body does, but by acting in it; and that we should have no other knowledge of the existence of mind will not appear extraordinary to any one who considers that we have no knowledge of the essence of any thing, except by its qualities, and particularly by its operations. We know nothing of body, but by its qualities of extension figure and solidity; but what it is that is extended figured and solid, we know not. Of the materia prima, of which all these things are qualities, we have no idea, as the Ancients themselves confessed. And even the qualities of body we perceive only by its operations upon the organs of our senses. Now I say that it is in this way, and this way only, that we know that mind exists, I mean by its operations; and therefore, when

<sup>\*</sup> Of the Ancient Metaphysics .- ED.

we say that our intellect exists in any portion of Space, we mean nothing but that it acts there.

The question then is, in what way mind acts; for, if we know that, then we shall know in what way it exists in any portion of Space. Now I say that mind can only act in two ways, either by moving body, or by perceiving. In the first way, and in that way only, the vegetative mind, and the elemental mind in our composition act. In both ways, the animal part of our nature acts; for it both moves our bodies, and it perceives. But our intellectual mind acts only in the last way, that is by perception; for, though it directs and superintends the animal movement of our bodies, I hold it to be certain that it is not the immediate cause of them.

It is the animal life which immediately produces them; for those animal movements are as perfect in the brute, who has no intellect, as in us; and we ourselves, while we are yet infants, and before the intellect begins to exert itself, have all the movements of the animal. And as to the vegetable movements in us, by which we grow and are nourished, it is evident that they go on altogether by the ministry of the vegetable life, without being even under the direction and control of the intellect. And therefore, though I think it is impossible that mind can move body otherwise than by being incorporated with it, there is no occasion to dispute on that subject, as I think it is evident that our intellect at least does not move our body.

Thus it appears that Intellect can only act by perceiving, or thinking: and if so, it can only exist in that portion of Space, where it *perceives*, or thinks. There it must exist, for it is impossible to conceive that any thing can act where it does not exist, any more than when it does not exist.

The only question then is, in what place it perceives or

thinks? Now I say that it perceives, not only things that are present, and in the same place where our bodies are, but things at the greatest distance and out of the reach of all our senses: and, if so, the Mind must necessarily be there, where those things are, otherwise it could not perceive them.

You make a very ingenious objection, that we often perceive things in places that have no existence, except in our own imaginations: and the fact is most certainly true that we build castles in the air, and paint fairy scenes that have no real existence. But my answer is that it makes no difference whether the world to which we transport ourselves be a world made by God and Nature, or created by ourselves. We are still out of ourselves, and acting somewhere else than at home. Thus much for the place of the mind.

As to Time, whatever I have said of Place will apply to it; for if the mind can transport itself to a place where the body is not, it also can transport itself to a time in which the body does not exist, whether that time be past or future. So much with respect to the human intellect as to time and place, in which respect the difference betwixt it, and the vegetable and elemental life is carefully to be observed; for neither of these can act, nor consequently exist, except where they are, and when they are. As to the animal life, though it can perceive where it is not, by means of the phantasia, yet its perceptions are confined to what relates to the animal life; whereas the perceptions and thoughts of our intellect expatiate all over the Universe. So much with respect to the human intellect.

As to the Divine, if it be true that our intellect does not immediately move matter—and by consequence is not incorporated with it—I think (à fortiori) we are to conclude that the Divine Mind is pure intellect, unmixed

with matter; and, indeed, to a man who has studied the philosophy of Plato and Aristotle, an embodied Deity appears a very extraordinary notion, leading to very strange consequences. An intellectual and sensitive nature, incorporated with body, must necessarily suffer by the fleeting and transitory nature of the substance to which it is joined, and all the accidents to which that substance is liable. Accordingly there is no sensitive mind animating body, which does not suffer more or less; so that here we have a Deity, which like inferior minds not only acts, but suffers. At the same time I say he is present everywhere, and at all times, in such a way as intellect can by its nature be present. Whereas our intellect is present only at/some times, and in some places, and never but at one time in one place, the Divine Mind is always in all places and in all times. There is another most remarkable difference betwixt the Supreme Mind and our mind, that we can only act by perceiving in different times and different places; whereas the Divine Mind can act in all places and at all times, not only by perceiving but by directing and controlling the operations of inferior minds. We can only direct the operations of our own animal life, and can have no influence upon other intellectual minds, except in so far as we can communicate with them by bodily organs.

It is in our sleep more than at any other time that our intellect exerts its genuine and native powers; for then, while our animal part is at rest, and our vegetable life is employed (as it always is) at home, our intellect makes excursions everywhere, and not contented with the world of God and Nature, creates a world for itself,

# A world of higher tint and grace,

as Thomson calls it, in his Castle of Indolence. But even in the world, it goes to places, and converses with persons,

far distant from the place where the body lies; and there it not only acts, but suffers. That being the case, we must admit that the objects are present with it. Now as we cannot suppose that the objects come to the mind, it is I think of necessity that the mind should go to the objects; for, some way or other, they must be present together. As to what is commonly said, that the mind perceives those distant objects by a kind of picture in the imagination, that is nothing but a figurative expression; nor is it possible that there can be any real picture in the case. It cannot be upon the mind itself, being an immaterial substance, nor can we conceive it upon the brain, or any part of the body; for, if there were room for itwhich there is not—the mind is by its nature as incapable of being the painter of such a picture, as of being the canvas.

What makes the difficulty in this matter is conceiving mind to be of a nature analogous to body, which we know cannot be moved in a short time from one place to another very distant. But the nature of mind and body is so very different in every circumstance—and particularly as to their manner of existing in space—that I should think we might conclude *a priori*, without the evidence of fact that it differed also from body in this respect, that it is transported from place to place not par levibus ventis, whose speed it transcends by infinite degrees, but as the poet better expresses it,

Volucrique similima somno,

or, as our Shakespeare better still I think describes great speed,

Swift as meditation, or the thoughts of love.

With this volatility as it may be called of mind, I think I have reconciled the common notion of a mind being confined to a body, (p. 308 of the last volume)

where I have said that it is so far confined to our body that it cannot exert one part of its power, I mean that of moving or directing the moving of bodies otherwise than in the place where its own body is. I remember the late Mr Harris was exceedingly pleased with his explication of our confinement in the body, which I communicated to him.

Now, my dear Sir, if I have fatigued you with this very long letter, you have yourself to blame, as you express so much curiosity to be informed about my philosophy. I once thought of answering your letter in person this spring; but I wait till things are better settled, and till we shall have Peace at home, as well as abroad. When that will happen, God knows; but, in the mean time, my mind makes frequent journeys to London, and enjoys both the instruction and politeness of your conversation, which distinguishes you so much among the Men-of-letters in London—some of whom are very learned, but not polite—not having had the advantage that you have had, of an education both as a scholar and a gentleman. . . .

# XXXIX.

# LORD MONBODDO TO SAMUEL HORSLEY.

Monboddo, April 1783.

DEAR SIR,—Our correspondence has been very long interrupted. I am not sure whether you are a letter in my debt, or I in yours; but one thing I know certainly, that I am the loser by the interruption, as there is no man from whose conversation or correspondence I have got more instruction. I believe you know enough of me

to know that there is nothing I value so much as instruction; and indeed—in the present situation both of our public and private affairs—it appears to me that nothing is left us of any value except knowledge. But this, according to the judgment of Homer, is to be preferred to everything, even to one's country and family; so that, if we can trust to him, we have still left to us the most valuable thing in the world.

What makes me desire at present to renew my correspondence with you, and upon the old subject-I mean the principles of Sir Isaac Newton's astronomy-is a great deal of conversation which I have had lately upon that subject with a man whom you know, and who, I think is a very ingenious man, Mr Playfair,\* who is not only a very good geometer and mechanic, but also a scholar; and if he applies his Greek learning as you have done to the study of Plato and Aristotle. will in time become a philosopher. He has convinced me that I am mistaken in supposing that the eternity of motion is the consequence of the impulse originally given to the body; and that Sir Isaac is perfectly in the right in supposing that, if any such eternal motion exists, it is produced by a vis insita in the body, which he expressly distinguishes from the vis impressa by which the body is set in motion. Without this vis insita the vis centripeta in the planetary motion would not only be quite unnecessary, but could not exist any more than the vis centrifuga, which is a necessary consequence of the vis insita. The vis centripeta therefore being absolutely necessary for producing the elliptical motion of the planets, if it should cease in any part of the orbit of the planet, the planet will go on, not in the curve but in the tangent to that part of the orbit by

<sup>\*</sup> John Playfair, (1748-1819), Professor of Natural Philosophy in the University of Edinburgh,—Ed.

virtue of the vis insita. Now that tangent may be a straight line perfectly different from the straight line in which the planet was projected, and must be so if the vis centripeta ceases at any other point of the orbit except where the planet was first projected. And it may also be in a very different direction; for it may not be parallel to it, but perpendicular or oblique. So that here we have the planet finding out a new path for itself, in a straight line quite different from the line of original projection, and even in a different direction.

Now it is impossible that this can be the consequence of the impulse in the original line of projection, but must be produced by a vis insita, by which the body is naturally and necessarily disposed to move in a straight line in whatever direction the motion is begun, and whether by body or mind. Mr Playfair does not deny that body may be moved by mind as well as by this vis insita, but on the contrary he asserts that all motion began originally by Mind, though he says that if it be begun by bodily impulse, it will go in a straight line without mind. But suppose the motion of the planet is not begun by bodily impulse, but by mind; still he says the motion will be carried on without mind by the vis insita. He admits however that the motion may not only be begun by mind, but carried on by its continual energy. Even in that case he asserts that if the energy of mind should cease, the motion would still go on by the vis insita in a straight line. And therefore the first law of motion is universal, extending to motion begun and carried on by mind as well as by body; and even suppose the motion not only begun but carried on by body, not in the way of pulsion but of trusion or pressure, when that pressure ceases, the body, says he, will still continue in motion; and therefore, according to this philosophy, there is but

one way in which motion once begun can cease, that is by external obstruction.

This is the philosophy of the Newtonians in this part of the Island. My philosophy upon the subject you know well. I say that body is a substance altogether inert, incapable of either beginning, continuing, or stopping its own motion, and merely passive to any motion that is given it by mind in any direction, whether in a straight line or in a curve; that mind moves it by constant and unceasing energies; and that when these energies cease, the motion ceases. So that according to my philosophy there are two ways in which motion ceases; first by the obstruction of other bodies, and secondly by the moving power ceasing to act.

Whether this vis insita of body, by which it is moved in so extraordinary a manner, and without ceasing, can be reconciled to the principles of genuine theism; and whether for the same reason that it moves itself thus in a straight line of different directions, it might not move itself every way and in all directions, so as to perform all those wonderful operations of Nature, which are all undoubtedly produced by motion of different kinds, I leave you to judge. But I ask them,\* for what purpose they lay down such principles as must startle every theist, and, if they are not downright materialism, have at least a tendency to it? And their answer is that otherwise the motion of the celestial bodies would not be compounded of projection and gravitation, but quite simple. But suppose it is so, say I, what then? The laws, say they, and the properties of the celestial motions cannot be demonstrated.

To this I make two answers; first that our incapacity to demonstrate the laws of the celestial motions upon the supposition of their being simple is no reason for

<sup>\*</sup> The Newtonians,-Ep.

supposing them otherwise; and I say further that if it be possible, in the nature of things, that these motions should be simple, they must be so. I think I argue well, in such a case, from the posse to the esse; for, if the universe be the production of supreme intelligence, every thing must be carried on in the simplest and shortest evay possible; and this you know is a maxim laid down by Sir Isaac, frustra fit per plura quod fieiri potest per pauciora [which really means something very different from the above statement].

But, 2nd., I say that upon the principles of my philosophy all Sir Isaac's demonstratious will stand firm; for I admit that the motion may be produced in the compounded way they suppose; for in fact such compounded motions do exist, as in the case of a sling, or of a horse lounged. Now the motion is the same, and will have all the same properties and be governed by the same laws, in whichever of the two ways it is produced, whether in the simple way I suppose, by one power moving the body, or in the compounded way they suppose by two powers moving in different directions; and if so, the motion being the same the demonstration of its properties will be as certain upon the one hypothesis as upon the other, in the same manner as the demonstration of the properties of a straight line will be perfectly conclusive upon the supposition of the body being moved by the impulse of two bodies in different directions, though in fact the bodies be moved by the impulse of only one Body.

And here the Newtonians appear to me not to have made a most obvious distinction betwixt the motion and the cause of the motion, and not to have considered that whatever the cause efficient of the motion may be, the nature and properties of the motion are the same, and may be demonstrated upon the hypothesis of any one of the causes having produced it.

Thus in the case just now mentioned, which I think applies exactly to the case in hand, the body may be moved in a straight line either by the impulse of one body, and then the motion is what I call simple and direct; or it may be moved by two bodies acting upon it in different directions, and then the motion will be what I call a compounded motion, being produced by two moving powers such as the motion of the planets may be supposed to be. Now though the motion in the straight be in fact produced by one single moving power, yet the properties of it may be demonstrated upon the hypothesis of the motion being produced by a different cause, viz. two moving powers acting upon the body. To bring the case still nearer to the present, I can suppose the motion in a straight line to be produced not by body at all, but by mind, and one single mind, as I hold the motion of the planets is produced, and the demonstration upon the hypothesis of the composition of the motion will still be a good demonstration. Of this Mr Playfair furnished me a proof in the case of the mutual tendency of bodies here on earth, or attraction as it is commonly called. This cannot be accounted for otherwise than by mind operating upon the bodies, and yet the quantity of the motion he showed me could be demonstrated upon the hypothesis of the composition of motion; though the motion by which bodies tend towards one another be perfectly simple, and in reality produced by mind not by any bodily impulse.

To this reasoning I have as yet heard no answer except one, which if it be true is decisive of the question, and supersedes all further argument upon the subject. It is this, that by the nature of things it is impossible that the circular or elliptical motion, whether produced by mind or body, should be simple, but must necessarily be compounded of two forces a centripetal and a pro-

jectile. Now this is a proposition, as it concerns the nature of the circular figure, belonging to geometry, and therefore if true is capable of a geometrical demonstration. As to geometry I pretend to know no more than the principles of it; and as to the circle it is clear from Euclid's definition of it that he understood it to be one line. And it is one of his postulations that the one line may be drawn round any centre; from which I think it is evident that Euclid thought it was possible to draw this one line, and consequently that the body which described it might be moved in that line.

But, say they, tho' Euclid no doubt supposes that such a line may be drawn, and that it is one line and not many, yet he does not say, but that in order to make a body describe this line, there must be two forces applied, one vis insita, by which the body goes on in a straight line, the other a vis centripeta, by which the body is drawn towards the centre. And this, say they, is truly the fact when the hand describes a circle upon the paper or in the air; for there is one force which gives it the progressive motion, and there is the arm which pulls it towards the centre, in the same manner as a rope would do any body that is projected.

To this I answer that the case of a body projected with a rope tied to it, the other end of which is fixed to a centre, is the same case with that of a horse in a lounge; and I shall allow it to be the same case as that of a hand describing a circle. But in all those cases, body acts upon body; and where that is the case I admit that the motion must be necessarily compounded even though mind should have a share in the motion, as in the case of the horse lounged, or the hand describing the circle. But the present question is concerning the planetary bodies moved in vacuo, and by mind only, and which are bodies of such a nature, being spheres, that they can have no divided

motion like our bodies, but must be moved in every part at once, or not moved at all. And the question is by what principles of geometry, or mechanics, it can be proved that such bodies can only be moved in a circle, or ellipsis, by a combined motion? I say by what principles of Geometry or Mechanics; for as to Philosophy, I think there can be no doubt but that one power of mind animating the body and not acting upon the surface of it, but every inmost particle, can move it in a circle or any other direction, in the most simple and direct manner; for motion being a continual change of place, there is nothing to hinder this change to be in every direction, and in every instant of the motion of mind, the moving power.

I should therefore be glad to know what there is in Geometry or Mechanics that can show a motion to be impossible, which Philosophy asserts to be possible: and I doubt that Geometry or Mechanics, in order to prove that, must assume a proposition from Philosophy, viz. that there is a vis insita in body, by which being once put in motion, it has a tendency to go on in a straight line, and will go on in a straight line unless it be turned from it by some other force. But such a proposition is merely assumed without the least proof, and is truly a petitio principii; for it assumes what is to be proved, namely that there is such a vis insita. I think I prove the contrary from the nature of body which I say is a substance perfectly inert and passive, which can neither begin to move itself nor continue its motion, nor stop its motion, but by its own nature is always at rest, and is only moved or kept in motion by mind, and this in any direction. The Newtonians so far agree with me, with respect to the inertness and passivity of matter, that they admit that a body cannot begin to move itself, nor stop itself, nor alter the direction of its motion; but they say that it is so far not inert, that

by a power essential to its nature it can (being once put in motion) go on in a straight line, and when it is put out of one straight line it can go on in another, though in a quite different direction. Now of this so extraordinary property of a passive and inert substance I demand a proof, which Philosophy certainly does not furnish, but the contrary; and therefore, if it is to be proved, it must be by some principle of Geometry or Mechanics to me unknown.

Such a proof à priori I have not heard pretended by any of the Newtonians; but, say they, it is proved by fact, and experiments; for a body being once set in motion in a straight line will continue in that motion for ever.

To this I answer, I mo. that the experiment only applies to motion begun by bodily impulse, not to motion begun by mind; with respect to which experience proves quite the contrary, viz. that the motion ceases as soon as the energising power ceases. 2do Even when the motion is produced by bodily impulse, it is begging the question to suppose that it goes on by a vis insita; for I say it is carried on by mind. But 3tin the experiment can only apply to motion once begun in a straight line, in which case the Newtonians say that the rectilineal motion being once impressed upon the body, and its being once in that state of motion as they express it, this original impression still remains, although by some other force the body may be moved in a different direction, and therefore when that force ceases, the body returns to its first state of motion.

This is the Newtonian notion of a vis insita fairly stated, and I think it clearly applies only to the case of a motion begun in a straight line, to which certainly the experiments only apply. But suppose the motion to be begun in a circle, or any other curve, by what reasoning,

fact, or observation can it be proved that in such a case there will be a vis insita in the body, by which it will be disposed to go on in a straight line, if not forced into a contrary motion? To apply therefore this vis insita to the planetary motion they must maintain that it was impossible even for Almighty Power to move the planets in a circle or ellipsis without first projecting them in a straight line. If they think that too strong a position to be maintained, they must say that the body has a propensity to move in a straight line, not acquired by its being moved in that line, but truly a power essential to the body, and which must be supposed to be in the body even before it begins to move. Such being the nature of this vis insita, it will be difficult to assign a reason why the body should not begin to move itself, as well as continue in motion.

It therefore appears to me that if the proposition maintained by these gentlemen, that it is impossible in the nature of things that the circular motion can be simple and produced only by the action of one power, is to be demonstrated geometrically, it must be by that sublime Geometry as the French call it, which I do not understand, but which I know you do; and therefore I very earnestly desire of you to know whether that Geometry can afford any such demonstration.

Our Newtonians here object to my system that I make Sir Isaac's demonstrations rest all upon hypotheses, whereas, say they, they stand much firmer upon real facts.

But to this I answer that the very principles upon which Sir Isaac has founded his Astronomy are all hypothetical; and particularly his first law of motion, asserting that a body goes on in a straight line is a mere hypothesis, as in fact there is no such thing known in Nature, as a motion in a straight line, not even of falling bodies, as you one day demonstrated to me.

A fundamental proposition of his Astronomy, upon which all his demonstrations of the laws of the planetary motion hang—I mean that proposition which asserts that the spaces described by the planets in their orbits, are as the times—is demonstrated upon a mere hypothesis, namely that the elliptical orbit is a polygon of an infinite number of sides. After that it is no wonder that in the course of his demonstrations he should have made use of another hypothesis, namely, that the planetary motion is produced by two causes instead of one, an hypothesis much less violent than the other, because it may exist and in fact does exist, whereas the other neither does nor can by the nature of things exist; for though the polygon may be conceived to come always nearer and nearer to the circle or ellipsis, yet it never can come altogether to it.

There is another objection they make to me, taken from the diurnal motion of the earth upon its axis, where they say the centrifugal force is apparent from the motion of bodies upon its surface.

But my answer is that this motion of the earth is the same with the motion of a stone in a sling, which is a motion compounded of body and mind. And there the body being impelled, and consequently having by a law of Nature a tendency to go on; and being restrained from that, it must necessarily have a centrifugal force, or a tendency to go out of the circular motion. But this never will apply to the motion of the earth in its annual revolution, which being performed by one mind moving the spherical body in the most simple and direct manner there can be neither centrifugal nor centripetal force.

I have given you the trouble of this very long letter, upon a subject which I am persuaded you will think deserves to be fully considered. The Astronomy of Sir Isaac Newton is the noblest system of Science that I

believe ever was invented by one man, and does more honour to modern times than all our discoveries put together. And therefore I think it is for the honour not only of the English nation but of modern times that it should be put upon principles that can bear the examination of the philosopher, and of the religious philosopher, who holds that mind is the moving principle in the Universe, and that body is only moved and altogether passive. Now I think it is impossible to reconcile this fundamental principle of theism, with the principles upon which the generality of the Newtonians found their astronomy; and I cannot help saying that their philosophy would be much more consistent with itself, if they were materialists altogether, and maintained that body by a power essential to its nature could not only continue motion but begin it, and carry it on in all directions. Neither do I think their principles can be reconciled with common sense and observation, any more than with good philosophy; for who can believe that his body does not cease to be moved when his mind ceases to energise; or that his mind cannot move his body in a circle, though as his body consists of joints and limbs, and is not all moved at once, the line it describes cannot be so perfectly circular as that described by a sphere, which must be moved altogether, or not at all.

What has led the Newtonians into these errors, is that there has not been among them, so far as I know, any philosopher except yourself. For this reason it is, that the principles are not laid down philosophically, nor the distinctions made that ought to be made; particularly that capital distinction betwixt mind and body, and betwixt motion by mind, and motion by body. Nor even as to bodily motion has the distinction been made by any of the Newtonians betwixt motion by pulsion,

and motion by trusion; nor betwixt motion ceasing by any obstruction in its way, and motion ceasing by the moving power ceasing to act. Now all these distinctions ought to have been made, and the general nature of motion fully considered and explained. But the Newtonians without telling us what motion is, but leaving it—as Mr Locke does—to be perceived only by the sense, proceed immediately to measure and compute it, and tell us by what law it is governed. To know this is to be nothing more than a mechanic—a scientific Mechanic I grant you—but even such a mechanic will, in the opinion of the Philosopher, be accounted of a rank not much superior to the common mechanic. . . .

### XL.

## WELBORE ELLIS TO LORD MONBODDO

June 28, 1783.

My Good Lord,—I sit down to express a small part of the gratitude I feel for your goodness to me in bestowing so much of your valuable time and trouble to give me great pleasure and much information. I am most truly sensible of the friendly part you take in my personal situation in these extraordinary times. If it was good advice "solvere senescentem," it must be wise "solvere jam senem;" whether my sepulchre is to be decorated or not. I can only say in Homer's words, 'λλλ' ἤτοι μὲν ταῦτα θεῶν ἐν γούνασι κεῖται.

I am much more sorry than surprised that you laid aside your intention of coming to London in the spring. Your Philosophy is not of a kind to inspire an insensibility of the misfortunes, the disgrace, and the debasement of

your Country. I am now writing in a small but beautifully situated villa, on the banks of the Thames at Twickenham, once possessed by Mr Pope, but much enlarged and beautified by the late Sir William Stanhope, who was so kind as to leave it to me for my life; where I should be most happy to have the honour to receive your Lordship, and where we might converse philosophically, with at least as much convenience—if not more—than was done of old in the groves of Academus.

No man can express himself on the most abstruse subjects with more precision and perspicuity than you do, but we have got, as I said in my last, to the very verge of rational Metaphysics according to my conception, and every step we take beyond this verge, we are ἀεροβατῶντες; we may deal in ingenious conjectures, but no solid conclusion can be drawn. We are agreed in the fact of the omnipresence of the Deity, but as to its manner we can neither of us pretend to know much. I had inferred from the fact, that He must necessarily be present in every particle of matter, you seem to be alarmed at the notion of an embodied Deity, and concerned for the credit of a student of Plato, and Aristotle and a disciple of yours leaning to such a notion. I had certainly said that it seemed to me of unavoidable necessity that the Deity must be present everywhere, therefore in every particle of matter: all bodies being formed out of particles of matter, therefore the Deity must be incorporated or embodied in all assemblages of those particles, else there would be a somewhere, where He was not. But, say you, this would lead to strange consequences, for an intellectual and sensitive Nature incorporated with Body must necessarily suffer by the fleeting and transitory nature of the substance to which it is joined. You admit that God is a Spirit, that he is pure Intellect, then I must beg your pardon if I deny that any of those consequences follow.

Spirit, by being incorporated, doth not change its nature, but is still Spirit. Therefore, not consisting of parts it cannot change, nor suffer by the constant change of the particles of matter, and is impassive to all which affects *body*.

I do not admit that any argument drawn from the effects we feel our material may have on the immaterial part of us will apply to the Divinity, however intimately He may be blended in every particle of matter. But the sum of the whole on this point is, that we both agree in the fact of the omnipresence of the Deity, but in what manner he is present, seems to me to be far beyond the utmost stretch of human comprehension. I am afraid that with regard to some things you attribute to Intellect, I must likewise conclude that "such knowledge is too excellent for me, I cannot attain unto it." I do not know that I have asserted where our intellect exists, but my consciousness informs me where it energizes; for, when I think, I feel that my brain is acted upon, and that gland is a body, and occupies space. If I have been long thinking intensely, I feel the like sense of weariness, of soreness and sometimes of pain, that I do in any limb of my body if I exercise it too long. I therefore can have no doubt but that it has been acted upon.

Now if it be true that nothing can act but where it is present, it seems to follow that my intellect has been present where my feelings make me sensible that it has been acting; but how, or in what manner it is present, I cannot explain no more than I can the manner of the presence of the Deity. What I have said seems to prove, not only that our intellect cannot, while united with our body, act without the brain, in the sense you suppose me to use that expression—as it cannot act without the heart and the other parts necessary to animal life—but also that the brain is its immediate instrument in the act of thinking. Where those airy beings our ideas

are lodged I cannot say, nor that they occupy space; but I know that, when I exercise my imagination, or endeavour to recollect any past events or expressions, I feel some emotions in that gland, my brain. These, among many other reasons, induce me to doubt your theory of the mind transporting itself from its instrument to places and times the most remote, which have existed, but have long ceased to exist, and even to such as never did or could exist, and these not the creatures of our own but of other men's minds, such as Shakespeare poetically describes.

The Poet's eye in a fine frenzy rolling, Glances from heaven to earth, from earth to Heaven; And as imagination bodies forth The forms of things unknown, the Poet's pen Turns them to shapes, and gives to airy nothings A local habitation and a name.

You admit that intellect must be somewhere, but to send it to the country of these nothings, is sending it no where; and so, I believe that it stays at home, where in the treasuries of memory it finds materials for all its compositions, whether waking, or in the partial stupor in which we are when we dream. The fault I am confident is not in the theory but in me, who want philosophical perspicacity; and am not ashamed to own my ignorance when I have in vain attempted to cure it. I have frequent recourse to your book, and never without instruction and great delight, the style of which I think a most perfect pattern for philosophic expression καὶ τοῦτο μὲν ἐστὶ τοῦ μανθάνειν φίλτρον, of which no one furnishes more than you do. As I never have any copy, and have not been accustomed to philosophic correspondence, I fear that I have repeated the same things which I expressed in former letters.

You are so kind as to exhort me to employ part of

my leisure in cultivating the Greek Language and Literature, I owe you therefore some account of myself on that head. I had occasion to consult Thucydides. He caught my eye, and I could not lay him entirely aside for two or three days. Mr Potter, who translated Aeschylus and one volume of Euripides, brought me his second volume, and this led me to compare his translation with one play of the original; and having done that, I was drawn on to read some more of his plays, and these again led me to consult Pindar, whom it was impossible to quit for some days; and in this desultory manner I have dealt with Homer and Strabo, but still this goes towards the capital stock, and I hope will improve it. These are at least verba et voces, which divert the mind from less pleasing thoughts, and, as Milton says of Music for a time

Take the imprisoned Soul, and lap it in Elysium.

May you long preserve health to enable you to enjoy the substantial pleasure which must result from the consciousness of having done most essential service to mankind, by improving their knowledge and enlightening their understandings; and may I long enjoy the honour of your favourable opinion, which I shall be happy to improve into friendship; being, with the greatest sincerity and respect, your Lordship's most obliged and most obedient servant,

W. ELLIS.

### XLI.

## WELBORE ELLIS TO LORD MONBODDO

Pope's, August 11, 1783.

My LORD,—I am just returned from an excursion I have been obliged to make, which I mention, as an apology for not having sooner thanked you for your very kind and excellent letter, which is an admirable epitome of your philosophy, as far as relates to the questions we have been discussing; but which I shall push no farther, as I find, with great satisfaction, that you are employed in carrying on and completing your great work. I am not so blind to my own interest, or to that of the public, as to be guilty of abusing your goodness to me by interrupting your thoughts, and engrossing your time with my doubts and discussions. I only beg leave to set myself right in your opinion, that I may not be misunderstood to have reasoned so inconsequentially as to have held the omnipresence of the Deity, and at the same time to have held that he was moveable. This seems to me a contradiction in terms; for whatever is everywhere, at one and the same instant, must occupy all space at the same instant, and therefore cannot possibly move. Neither is my hypothesis of his being most intimately present in, and pervading, every particle of matter inconsistent with that rest of the Deity; for all the particles of matter are not only by their nature moveable—for they occupy but small portions of space—but are all, as I believe, always in actual motion, and He alone can be truly asserted to be at rest.

Nevertheless, their motion can no way affect that essential property of the Divine Nature, which although pervading neither obstructs their motion, nor is carried with them, for *He* cannot be *carried*, who is everywhere. I

do you no more than bare justice, when I assert that this country, and I believe all the learned world, will be under lasting obligations to you for reviving and improving sound Philosophy. Your work is truly κτήμα ès ἀεὶ. The French Philosophy makes some little progress, because it is for the present a fashionable topic of discourse among some French women, and some men of companionable wit, with some share of polite literature; but it makes no deep impression, for it is all forgotten by our young men when they return. Neither that, nor more sound Philosophy, can make much progress among the higher ranks at present; not owing, as you politely suppose, to their greater share of scholarship, but to the prevailing levity and frivolity of these' times, when those who possess any share of real learning must in the polite world as carefully conceal it, as a modest man would disease, least he should be ridiculed and shunned as a boar, which is an elegant metaphor which even ladies have adopted.

I am almost persuaded that if it were not for the resident members of the Universities, and the three learned professions of Divinity, Law and Medicine, we should—in half a century—gradually relapse into barbarism. My principal reliance is on the first of them, for the two last have not leisure in general to pursue their studies while they are in the height of their practice; and therefore I believe that you too frequently find among them men of very unsettled notions in Philosophy. For nothing is more dangerous than to sip, in Philosophy; "Drink deep, or taste not." The first makes men conceited, and opinionative, and what they call free-thinkers; the latter calls them back to modesty, and true Religion.

I am very happy to find that I concur with you in taste, for upon comparison I undoubtedly give the preference to Sophocles; but I am confident that you do justice to the pathos, the eloquence, and philosophy of

Euripides. At the same time, I agree that Homer takes the lead of all. I shall be very glad, when you rest your mind from more serious studies, to have your comment on the passage of the Œdipus Tyrannus to which you allude; and I rejoice to understand that you have studied and commented upon that author, who well deserves the pains, and who still wants the assistance of such a master of the language as you are, to render him more accessible by the young Grecian, and in several places by even the old.

The great heat, which you mention to have prevailed in your country, has been very general and more intense in southern latitudes, and has been attended in most parts of Europe by an extraordinary phænomenon, viz. gloom, or dry mist, which lasted about three weeks; notwithstanding frequent fresh breezes, and these from every point of the compass, though certainly the easterly winds were most prevalent. It often brought to my mind, the like appearance of the sun in the summer, which succeeded the death of Cæsar—

Cum caput obscura nitidum ferrugine texit Impiaque aeternam timuerunt saecula noctem.\*

The naturalists have not accounted for the former but by a supposition of an extraordinary spot upon the sun. I am apt to believe it was a similar state of the atmosphere to what we have experienced, but which lasted longer than ours has done; and our naturalists are, I believe, in vain attempting conjectures of the cause. Thank God, it has had no bad effect upon the productions of the earth, except upon the beans; and a more plentiful harvest of wheat, barley, and oats I have not seen. I accept with the utmost gratitude the obliging assurances of your friendship, which I esteem as the highest happiness and honour, and which I shall study to cultivate with

<sup>\*</sup> Virgil, Georgies 1., 469.-ED.

the most sincere attachment on my part. I greatly admire the plan of your work, in embryo; I am confident that you will take great care in selecting your facts particularly from the Greek authors; for, with all my reverence for them, I cannot forgive the levity with which they sacrifice truth to ornament, or entertainment, as some of their own authors accuse them, as well as the Roman. "Quicquid Graecia mendax. Audet in historia."

But "sit pudor et finis," I must recollect that I am keeping you from entertaining and informing mankind, and therefore I will conclude with assuring you of the sincere respect and attachment with which I have the honour to be, your Lordship's most obliged and affectionate humble servant,

W. ELLIS.

LORD MONBODDO.

### XLII.

# SIR GEORGE BAKER TO LORD MONBODDO.

JERMYN STREET, 13 Sep. 1783.

My Dear Lord,—Since I received the honour of your last letter, I have taken a long journey into my native country, Devon; where, for a fortnight, I enjoyed the exercise of riding, free from all business and anxiety. I travelled with my wife and children, like the Patriarchs of old, though I believe, a little quicker than they travelled, who had not the convenience of post horses. I have ever held Devonshire (pace tua dixerim) to be the finest part of this island. But that part of it, with which I have been lately conversant—namely the neighbourhood of Torbay—is so delightful, that it has filled me with a kind of enthusiasm, and almost made me a poet. I will not however attempt a description of scenes which no

description can equal. Nor was I wholly engaged in the contemplation of natural beauty. I received pleasure even from an object in itself disagreeable, but which filled my imagination with the idea of one of the most important events in the history of our country. I mean the piece of marshy ground, on which the Prince of Orange landed.

Just before my arrival in Devon, the shock of an earthquake had been felt in several places towards the north-west of the county; and the following story was related to the Bishop of Exeter, on very good authority. A farmer's wife was one night greatly distressed by a dream, that the whole village was swallowed up by an earthquake. In the morning she communicated the subject of this dream to her husband, who laughed at her folly. But, on that very day, during divine service, an earthquake actually was felt, and the farmer jumping over the pew, ran out of the Church most precipitately, with these words in his mouth, "By G—d my wife's dream is come to pass." The Bishop particularly desired that this history should be transmitted to your Lordship.

You have probably heard of the Essex miller, Mr Thomas Wood, whose history I published in the medical transactions. This man had not only cured himself of a complication of chronic disorders, but had reduced his body from immoderate fatness to an ordinary size, by the most strict regimen of diet that ever was observed. During many years his food was confined to a pudding made of coarse flour and water; and he absolutely drank nothing. Whilst he was in this course, he was active and vigorous, both in body and mind; and, even two days before his death, rode sixty miles without fatigue. This man was a living lesson in temperance to his whole neighbourhood; but unfortunately he was killed last May by an inflammation of the bowels at the age of 64.

The attention of philosophers in this place, as well as at Paris, is wholly absorbed by the globe of air, of which the public papers have informed you. They talk here of instituting a set of experiments on this bladder; and at Paris they are actually preparing a baloon of 110 feet diameter. That, on which the experiment was made in the Champ-de-Mars at Paris, burst, and fell in a village four leagues from that city. The country people were extremely alarmed at so uncommon a phenomenon; and the generally prevailing opinion was that it could be no other than a devil, and we are told, that the curè was the first bold man who dared approach it.

The other day I took up, in a bookseller's shop, some very indifferent Greek verses under the title of μετρικά τινα μονοστροφικά written by a certain Mr Huntingford. I should not have read ten lines, had I not at the bottom of a page seen Honoratissimum Iacobum Burnett, Dominum de Monboddo. The author addresses you, in about twenty iambic verses, by the name of ἄλλος ἀριστοτέλης; and introduces you as just arrived from the Lyceum, and making a speech on

... νοῦς οῦ νόμοις τὸ πῶν τέτακται \*

You see, therefore, you are not only honoured in our University, but our great schools likewise pay you tribute. The author I take to be one of the undermasters at Winchester School.†

Whilst I am writing this letter, I receive a book printed at Glasgow, as a present from the author. It is entitled Disquisitions concerning the Antiquities of the Christian Church. It is inscribed to the Bishop of Gloucester, but is ἀδέσποτον. Perhaps it comes from my old friend, Sir

\* "Mind, by whose law the all is ordered."-ED.

<sup>†</sup> The author, George Isaac Huntingford, became Warden of Winchester, and afterwards Bishop of Gloucester. The Μετρικά was published at London, in 1782.—ED.

D. Dalrymple. You will be able to inform me to whom I am obliged.

I have the honour to be, with sincere respect, your Lordship's most obliged and very faithful servant,

G. BAKER.

P.S.—My wife salutes you affectionately.

### XLIII.

### RICHARD PRICE TO LORD MONBODDO.

NEWINGTON GREEN, September 25th, 1783.

My LORD, - . . . The act of the Legislature in 1744 which your Lordship takes notice of, by which—in order to raise money—the prohibition of spirituous liquors was taken off, was indeed very pernicious. The consequence was that the lower people destroyed themselves so fast by drinking gin, as to oblige our governors in 1751 to restore the prohibition. The grand business of government for many years among us has been raising money, and increasing the revenue by all possible means. The value of everything has been estimated by its effect in this way. The value of America in particular was thus estimated; and an attempt made to tax it. But never did a measure defeat its own end so miserably. By attempting to draw a pepper-corn to the revenue from America, we have lost one of the main sources of our opulence, and added to a debt before intolerable, one hundred and twenty millions.

Thanks to Lord North for this. The enclosed pamphlet may give your Lordship an idea of our state in this respect. The first edition of it was published in May last, but I hope it is not now too late to desire your acceptance of it, as a further testimony of gratitude for your volumes

on Ancient Metaphysics; from which, though I do not always agree with you, I have derived pleasure and instruction. Dr Priestley is likely to be engaged in a warm controversy. What he has said in his late History of the Corruptions of Christianity, concerning the opinion of the primitive Church with respect to the pre-existence of Christ, has been opposed with zeal, and among others by Dr Horsley, who has just published a pamphlet on this subject. Dr Priestley will soon reply; but I do not expect that the dispute will be so amicable a one, as that between him and me, on the subjects of materialism and necessity. . . .

l am, my Lord, your lordship's most obedient and humble servant, ' RICHARD PRICE.

### XLIV.

## WELBORE ELLIS TO LORD MONBODDO.

Paultons, Hants, Octr. 5, 1783.

My GOOD LORD,—The honour of your letter of the roth ult. came to my hands after my return from a journey I was obliged to make; first into the West of England, and from thence into Glamorganshire in S. Wales; and, as Mrs Ellis accompanied me, I made it matter of amusement and health, as well as of business. I therefore every day made at least half—but generally two thirds—of the day's march on horseback. Since my return, my house has constantly been either full or nearly full of company. I have troubled you with this account of myself, as an apology for some delay in my acknowledgement of the pleasure and instruction which your letter gave me: and, on the one hand, as some

excuse for my not being able at present to obey your commands in the manner I could wish, on one of the subjects you propose, and on the other to adjourn it to another time.

You do me the honour to desire my opinion on what you have said, in the sixth and seventh chapters of the 2d book in your second volume, on the subject of Virtue; viz, that it is the sense of the pulchrum et honestum, (and that only,) which makes an action virtuous. If I were only to say, what is very truly my opinion, that you have, in your manner of treating this interesting subject, given us a specimen of Beauty-which had almost misled me to mistake her for her elder sister Truth—you would not be satisfied; but would say that I had eluded-not answered -your question, which regarded the matter and the doctrine, not the manner. In the course of your argument, I can, in general, subscribe to what you advance; but there are some points on which I entertain some doubts, (as I do also as to the conclusion,) with great deference to your more extensive knowledge and better judgement. The desires of the intellect, say you, may be reduced to one head, namely, the desire of knowledge; but may it not properly be said that the object of the desires of the intellect, and its pursuit, is the attainment of Truth; and the appetite for knowledge is so far the necessary means to that end. This is implanted in us, as an instinct by our wise and good Creator; which, rendered more active by another instinct, viz. self-love, lead us by their joint co-operation to the discovery of our greatest good.

By the first of these instincts we are led to the discovery of our own nature, and of the relation we stand in to others of our own species, and to other beings around us. From thence we deduce the duties which arise from that relation. By the second of these

instincts we are induced to consider, in the first instance, the immediate personal interest we have in the observance of these duties, and we soon discover that our own welfare is inseparably connected with that of others. We then naturally look up to the Author of our nature and consequently find that these are *his* laws, which impose an obligation to obedience, more cogent and effectual than any contemplation of their fitness, or of the general or particular benefits to be derived from them.

A strict obedience to these laws constitutes the very essence of virtue, for we then act in perfect conformity to our nature, and to the system of Moral Government established by God. The result of such an union of parts, of such exact relation and proportion, constitutes the idea of Truth, of which Beauty is the inseparable companion. I agree that God annexes pleasure to the pursuit of knowledge, for without knowledge we should not discover our duty; and therefore, as I have observed, he has given us an intellectual appetite for knowledge. To the gratification of every appetite, pleasure is annexed; and to the consciousness of doing our duty he has added the reward of a very great intellectual pleasure, and this alike to the unlearned as to the learned; the former of which have very imperfect ideas of the beauty of virtue. I admit that whatever is done without choice or deliberation, though proceeding from the kindest and best affections, belongs not to virtue. There must be a due consideration of the occasion and the fitness of the subject, and a sense of Duty, to make it a morally virtuous action.

The  $\tau \delta$   $\kappa \alpha \lambda \delta \nu$  was a very good foundation for a philosopher's virtue; but it was not designed to become a monopoly to philosophers only; and therefore, for the every day use of plain men, I suspect that the

Sense of Duty is the best, and therefore the true foundation of virtue. On this basis, I hold it to be no ways derogatory to its quality that we combine the reflection of its utility to ourselves, and the rest of mankind.

These are such hasty thoughts as occur under a variety of interruptions, and which my desire always to obey your commands has extorted from me. Your observation on the arrangement of the words in the line of Virgil which I had quoted is just; and the reason of such arrangement in Prose or Verse is obvious, viz. that no other will afford such a mixture and variety of terminations, and this is equally applicable to Greek as to Latin. I do not observe that they very studiously affect that arrangement, when a certain variety of cadence and termination can be had without it; but their ears were certainly more delicate than ours, and better tuned to "concord of sweet sounds" by a most harmonious language. I am mortified to find that I must leave this pleasant retreat early in November; but I propose to entrench myself amongst my books as much as I can, and make that post good as long as I may be permitted.

But, wherever I shall be, I shall always remain, with true attachment and respect, your Lordship's most obedient and obliged humble servant, W. ELLIS.

# XLV.

LORD MONBODDO TO WELBORE ELLIS, ESQ.

EDINBURGH, 5th Jany. 1784.

DEAR SIR,—... My studies during our holidays have been chiefly of the philological kind. You will ask

me, quae circum volitas, agilis, thyma? My answer is that I have not gone about like the bee, but have fixed almost wholly upon one flower, of which I have sucked as much as I could. The flower I mean is Homer, which I believe contains the quintessence of all the flowers of Literature. There is nobody I know that understands him better than you do, or has a higher relish for the beauties of his poetry.

But have you considered particularly the excellency of his language, as language merely, considered from a grammatical point of view? It is the perfection of the most perfect language, I believe, that ever was on earth, and is the greatest wonder of the most wonderful art among men, I mean the art of Speech. It is more copious than any other language in the expression of the things which are the subject of the two poems. But what is more wonderful still than the abundance of his words is the variety of his analogies, and that prodigious number of flexions and terminations, in which he so far exceeds all other authors who now write in Greek, either in verse or in prose. Besides the variety of his cases and tenses, he makes innumerable changes upon his words by the addition (or taking away) of letters or syllables, or changing long vowels into short or vice versa, or simple vowels into diphthongs, (see what the Halicarnassian says upon this subject in a passage quoted by Clarke ad. v. 415 of Odyssey 9). In short he uses the materials which the language furnishes him in the same manner that a mason uses the stones with which he builds; who not only ranges them in the order he thinks both the firmest and the most ornamental, but chips and hews them, so as to make them join best together. That the mason proceeds according to the rules of art, I believe nobody will deny. But there are many who think that there is no art or system in Homer's language, that it is a jumble of several dialects spoken by different tribes of the Greeks,

thrown together without any art or method, so as not to make one language, but a kind of Babylonish jargon. If this were so, his language would ill deserve the praise that I have bestowed upon it. But, if I am not much mistaken, I have shown—in what I have written upon the formation of the Greek Language-that Homer has proceeded according to the rules by which the language was originally formed. In that Treatise \* I have only considered the words, and shown how they are to be derived from a few radical sounds; but I have said little of the analogy of the Language, I mean the changes made upon declinable words, and nothing at all of the wonderful variety of Homer's analogies. This would require a treatise by itself, and I have little doubt that—various and multiform as it is-it might be all reduced to rule (without making use of any of the common ways by which it is explained), by saving that such a case or tense is Ionice, Dorice, Æolice, Attice, and if none of these will do, Poëtice. . . .

### XLVI.

## LORD MONBODDO TO PROFESSOR YOUNG. †

EDINBURGH, 17 Feby. 1784.

DEAR SIR,—I received your letter, and shall make a present of your book; as you desire, to my Lord Gardenstone. But I wish you would choose a better subject for your pen than Dr Johnson; and I beg leave to propose one to you, for which in the opinion of your friend John Hunter, you are better qualified than any other man.

<sup>\*</sup> The Origin and Progress of Language.—ED.

<sup>†</sup> Though this letter repeats much of the previous one, it deserves a place by itself. It is incomplete, as was that to Mr Ellis on the same subject.—ED.

<sup>‡</sup> Probably his Criticism on Gray's Elegy. - ED.

The subject, I think, is a great one;—the language of Homer, which the more I study, the more I admire. It is much superior, in my opinion, to the language of any other author even in Greek; and is, I believe, the most copious and the richest in analogy of any Language in the I think I have proved in what I have written upon the origin of Language that language is the most wonderful as well as the most useful art among men, and of most difficult invention; and of this most wonderful Art, I take the language of Homer to be the perfection: so that it may be said to be the Wonder of Wonders. But in order to prove it to be the greatest wonder of this wonderful art, we must show that it is an art, and that it is reducible to rules and principles. I have given a system of etymology of the whole Greek language, which, I think, will particularly apply to the language of Homer. In this I have been so fortunate, as by a wonderful coincidence, to agree with a man of whom I knew nothing except by reputation, I mean Hempsterhusius, the greatest Greek scholar, I believe, in Europe in his time, and who besides had a very general knowledge of other languages, particularly the Hebrew, whose roots are not duads of letters, but triads.

With respect to the Greek of Homer a great deal more remains to be done, for his analogy—so much more various than that of any other writer in Greek—is to be reduced to rule, and we are not to be told that such a word is *Ionice*, Æolice, Dorice, Attice, Bwotice, and when every thing else fails, Poëtice, which would be making Homer's language such a piece of patch-work, as I believe never was seen: And it would be truly, what . . . Dr Johnson calls, the language of Milton, a Babylonish Dialect, not intelligible by any one of the different tribes of Greeks, any more than the language of Babel, when compounded, was to the different people who were there assembled.

After you have explained the grammar of the language, I would have you say something of the sound of it. Upon that subject I have written a short dissertation, to which I am sure you can add a great deal. I will only say here that it is not only the highest sounding language, which fills the ear more than any other, but there is that variety in its pronunciation, without which no work of Art can be perfect.

Having finished those two articles I would have you consider what may be properly called the style of Homer, which I hold to be a simple style, much more simple than the prose writing that is now in fashion, at the same time sufficiently adorned. But then you must show how it is adorned; and I say it is not by metaphors and other tropes, as our modern style is, but by figures of composition; for Homer appears to me to have possessed, more than any other writer, that greatest talent of an author, viz. the ability to make an uncommon style out of common words.

This every writer of every kind, and upon every subject, in prose or in verse, may do to a certain degree. But there is one ornament of Homer's style, which he ought not to attempt to imitate, if he be a man of taste, unless he is to write in verse; and that is his epithets; for by these the poet is what he ought to be, a painter; whereas a prosewriter, whether in the historical or didactic style, makes himself ridiculous to a man of good taste by the frequent use of them: and even in the rhetorical style they should be but sparingly used, and never for mere ornament, but only to enforce the argument, or to excite any passion, which we mean to raise in the hearer or reader. . . .

### XLVII.

### SIR GEORGE BAKER TO LORD MONBODDO.

JERMYN STREET, 30 July 1785.

My DEAR LORD,—It gave me real satisfaction to find that you performed your journey to Scotland with so much ease, and so much advantage to your health and spirits. A man of sentiment and curiosity enjoys a peculiar pleasure when he travels. It is not only a fine place, or palace, like Stow that delights him. He can find amusement to his mind wherever there is novelty. And what is more novel in this age, and this country, than a community of virtuous and religious men, living like the primitive Christians; and, though separated from the rest of the world, maintaining themselves decently by manufactures and agriculture? Your Lordship had great obligations to Mr Seward, for having introduced you to the Moravian minister; from whom, I dare say, you gleaned much information.

I have been as active, as possible, in attempting to execute your commission. I first called on some of the inferior booksellers; but they seemed afraid to meddle with the business. Then I called on Paine, and on White, and explained to each the contents of your letter, and your statement of the remaining copies, desiring them not to give me an immediate answer, but to send it in writing after mature consideration. Inclosed are their answers; on which I shall only make this observation, that I have ever found booksellers to be the most selfish, and the most impracticable of all tradesmen.

I have lately been much embarrassed by a trifling accident.

"Όφις μ' ἔτυψε μικρὸς Πτερωτός. In plain English, a gnat stung my leg; and the little wound—not being properly attended to—brought on inflammation, and a sore. But I am now better, though not quite in a whole skin. Why did Providence create such animals? Was it as a punishment for our sins?

Believe me to remain, your Lordship's most obedient and faithful servant, • G. BAKER.

My wife desires me to present her best respects to you.

### XLVIII.

# LORD MONBODDO TO SIR WILLIAM JONES.

EDINBURGH, June 20, 1789.

DEAR SIR,—I had the honour of your very polite letter and with it a discourse pronounced by you \* in that noble Society t which you have erected in India, and from which I expect information concerning many curious things relating to the history of Man, and of Arts and Sciences. In this discourse you propose to open a wonderful field of enquiry: and if you can discover that central country from which all those nations, which you have named, have derived their affinity in language, manners and arts, which you observe, it will be a most wonderful discovery in the history of man. Of the three things I have named, by which the connection and relation of one nation to another is discovered, I hold Language to be the principal. It is the first art that was invented among men: and it is the foundation of civil society, and of all other arts. And as it is the first of arts, so it is the most lasting, and one that

<sup>\*</sup> Discourse on the Institution of a Society.-ED.

<sup>†</sup> The Bengal Asiatic Society.-ED.

travels the farthest, and is propagated to the most distant regions. The substance of this has been lately discovered by a Prussian gentleman, who was sometime in Lapland, and learned the language there: he had also learned the language of Hungary. Upon the subject of these two languages he has written a treatise, in which I think he has proved demonstratively that the two are the same.

Now we know with great certainty that the Hungarians are originally of a country lying betwixt the Euxine and the Caspian Seas. They call themselves not Hungarians, but Magars: and the Russians not long ago discovered a people of that name, in the country I have mentioned, betwixt the 'two Seas. This joined with the testimony of Ammianus Marcellinus, who says that the Huns came from that country, puts the matter beyond all doubt. So here we have a language that has travelled all the way from betwixt the Euxine and Caspian Seas and Lapland, and I am persuaded that the language of a country still further north, I mean Greenland-of which I have seen a grammar, and find it to be a language of more art than the Latin-must have also come with the people from the East, as it is impossible it could have been formed among a people living the savage life that the Greenlanders live in that country.

From what I have been able to learn of the history of Man, which I have studied for several years, I have formed an opinion that not only all arts and sciences have come from the East, but even the race of man. For I hold that man is not originally of all countries, any more than the horse, the ox, and many other animals, but that his native country is the East, from whence he has spread over all the rest of the earth. And this migration is to be traced chiefly by language: and I believe that the same language you mention—the Sanscrit—is the original of many other

languages. I made a kind of study of it this last spring when I was in London, under a man you speak of in the end of your paper, but do not name—I mean Mr Wilkins\* -who appears to be perfectly master of it, having studied it for years under two Brahmins. I entirely agree with you that it is a more perfect language than the Greek, and in three great arts of language, viz. derivation, composition, and flection it excells, I am persuaded, all the languages that ever existed. And its rules of analogy are so complete that it has no heteroclites: and I am persuaded it is true, what a Jesuit says of it-Du Pont I think is his name -that if a man have learned the roots of this language, which are not many in number, and has learned the rules of its derivations, compositions and flections, he may make a language himself which will be very well understood by those who have learned Sanscrit; whereas, in other languages, though we know the grammatical art of them never so well, we must learn the words of them, otherwise we never can speak or write in them so as to be understood. But the most curious thing concerning this language, and which appears to me to decide a most important point in the history of man, is its affinity with the Greek, and the most ancient dialect of Greek, the Latin. This affinity is so great that either the Greek is a dialect of the Sanscrit, or they are both dialects of the same parent language.

He has collected about seventy words, in which the two languages agree, with such variations as must be in different dialects of the same language: and many of these are words that must have been original in all languages, such as the names of numbers, the names of relations—such as that of father, mother, and brother—and the names of members of the human body, and particularly the foot, the name for which is precisely the same with the Greek

<sup>\*</sup> Probably Charles Wilkins, LL.D., F.R.S., author of Băguăt Ghtetă; A Grammar of the Sanscrita language, &c. &c.—ED.

word. Not only so, but there is a compound of it, with the number three, (viz. tripod), denoting precisely the same thing that it does in Greek. Now the question is this where, or whence did the Greeks learn this language? They certainly did not go to India to learn it, nor did the Indians come to them. And if so, I can find no other place where they could have learned it except Egypt, where we know they learned all their arts and sciences, and-as it appears—language among other arts. So that here we have discovered that the ancient language of Egypt was Sanscrit, and it is not to be wondered that the Greeks learned it from Egypt; when we consider that they got not only their arts and sciences thence, and also their religion, and even their péople. For the most ancient people in Greece, the Arcadians, were from Egypt; and the Athenians were also an Egyptian colony: And Herodotus tells us that all the chief men or leaders of the Dorians—the most ancient people in Greece—were from Egypt.

The only question then that remains to be considered, is one in which I expect to get great light from your Society; the question is, whether the Egyptians learned the language from the Indians, or the Indians from the Egyptians, or both from some other nation. That the Indians did not come to Egypt is I think certain. But, if we can give any credit to the Sacred Books of the Egyptians, or to the Indian traditions in the days of Alexander, the Egyptians were in India. There they may have found this Sanscrit language in use, and so have learnt it. And then the only remaining question will be, whether the Indians were self-taught, or learnt this language from any other nation. And all I shall say further upon the subject is that there is such a wonderful conformity betwixt the religion, policy, customs, manners, and (as it now appears) language of the two countries, that

it is impossible but that the one must have copied from the other, or both from some third nation.

I present my best respects to my Lady Jones. . . .

### XLIX.

### LORD MONBODDO TO THE LORD CHANCELLOR.\*

EDINBURGH, 4 Jany. 1792.

My Good Lord,— . . . Since the last conversation I had with your Lordship, I have thought much upon Aristotle's Logic, which I perfectly agree with you is the greatest piece of Art that ever was executed by man, and at the same time the most useful. To be convinced of this we need only consider what a wonderful piece of Art such a language as the Greek is. Yet this language the women and children in Athens spoke by imitation, and habit merely; but without being able to render a reason why one word or phrase was right and another wrong. In the same manner the vulgar among us reason without being able to give any account why one argument is conclusive and another not. Now what a work it was at first to make a complete grammar of such a language as the Greek, and to form an art of it.

This was done first by analyzing the material part of the language into its elemental sounds, that is the Alphabet: and then, by similarly analyzing the formal part of it—that is the words considered as significant—into what are called the parts of speech, and showing how these parts were varied by the three great arts of language, viz. derivation, composition, and flection, by which that greatest art of language was accomplished.

<sup>\*</sup> Lord Thurlow was Lord Chancellor of England up to June 15, 1792.—ED.

I mean the saving the excessive multiplication of words, so that the language might be comprehended in the memory, and readily applied to use, which would not have been possible if all things were to be marked by names having no relation to one another. Last of all comes syntax - which may be called the syllogism of words-by which they are so connected together as to make sense, which otherwise the most significant words, not so connected together, would not make. manner, Aristotle has analyzed the reasoning art, and in that way formed a complete system, as complete as the system of Grammar, but much nobler; as the subject of it is not words but ideas, and the operations of the human intellect in forming science. The analysis of these is first into simple terms, expressing ideas only; then into propositions, by which ideas are joined together; and lastly into syllogisms, by which propositions are joined together, so as to infer from them a demonstrative conclusion.

This great analysis is contained in three works, (1) his book of Categories, in which he treats of simple Terms; (2) his book of Interpretation, the subject of which is Pro positions, and (3) his first and second Analytics, in which he has explained, first the nature of the Syllogism in general and then the demonstrative Syllogism. The first book, which may be called the elements of Logic, contains a most wonderful discovery—first made by Archytas the Pythagorean-of the division of the whole of things in this Universe, which can be the subject of the thoughts of man, into ten classes, or by Aristotle's Categories, which may be said to be the foundation, not only of Logic, but of all Science: for, as they contain the highest genuses of things, there cannot be without them any complete definition of anything. The subject of the second bookviz. the book of Interpretation—is Propositions, which as they are the materials of Syllogism, without the accurate

explanation of them, the syllogism is not to be understood. Accordingly, Aristotle has given us in this book a most accurate explanation of them, dividing them into species, so many in number as must appear incredible to those who never thought upon the Subject, being no less than 3024. So wonderful an analysis this is of a thing, which at first sight should appear so simple. But the differences of Propositions, arising from the prædicate, the subject, the matter and the manner of the Propositions, made all those distinctions necessary for explaining the great work of syllogism, which is the conclusion of the work, being the subject of the first and second *Analytics*.

In this way Aristotle has answered that grand question about which Plato has disputed so much in his Dialogue entitled Theaetetus, but has decided nothing. The question I mean is, what Science is; to answer which Aristotle has told us, in the beginning of his work, he wrote his Logic-a question of such importance that, unless we know what Science in general is, we cannot be said perfectly to understand any particular Science. I think it may be said that Aristotle has likewise answered the question-which Pilate the Roman Governor put to our Saviour-asking him What Truth was; which I think shows that though Aristotle's books were not much studied in Rome at that time, Pilate must have read his Analytics. Otherwise I do not think it would have come into his head to have asked such a question. This work of Aristotle is so complete, that—as I remember your Lordship told me,-you had looked into several modern books upon the subject of Logic, but found none of them comparable to Aristotle. There is only one modern treatise that I have read upon the subject, namely Locke's Essay upon Human Understanding, which is a most miserable work, compared with Aristotle's. All that he has told us concerning Truth is, that it is the perception of the agreement or disagreement of our ideas. But how they agree, or disagree, he has not informed us; and, as far as I can remember, he has not so much as distinguished betwixt the predicate and subject of a proposition. . . .

L.

# LETTER ON RHETORIC.

[No name, place, or date.]

SIR,—... You must not be surprised that I have recommended to your perusal on this subject only Greek books. I really know none, even in Latin, and much less in any modern language, from which you can get any good instruction. I cannot judge of Quintilian, because I never read him; but I am persuaded you will do as well to learn from his masters, as from himself. As for Cicero you may profit by reading him, after you are taught, but he will not teach you; and, in general, I do not find that any of the Arts and Sciences are to be learned in the Latin language, so that a mere Latin scholar has always appeared to me contemptible. . . .

LI.

# LETTER CONCERNING THE STUDY OF PHILO-SOPHY, BY LORD MONBODDO.

[No name, place, or date.]

DEAR SIR,—... I am far from thinking that no further discoveries can be made in Philosophy. But I think that a man must have studied very long before he can make any discoveries of importance that had escaped

the sagacity and diligence of the philosophers of Greece, and that he must have studied most carefully the writings of these philosophers who for many ages together cultivated with the utmost application the several branches of Philosophy, dedicating themselves entirely to study, and for that purpose abstracting themselves from all the business as well as pleasures of life. . . . A system of Aristotelian Philosophy made out in this manner from the text of Aristotle himself, and the explanations of those commentators is still one of the desiderata; and, I think, the greatest in the republic of Letters. The Philosophy of the Schoolmen was certainly quite different from what I propose, for they neither understood the language of Aristotle nor of his commentators, without the knowledge of which his Philosophy is not to be learnt.

The course of study I require may seem long and laborious, and indeed it is so, at least to me who have not the time, if I had the abilities to perfect it; and all I can do is to take such a general survey of the country, as to see that the road to true Science and Philosophy lies that way. But what hinders a man who, like your friend, is resolved to take to a collegiate life, and dedicate himself to books, to go through such a course of study? I know nothing, and I am mistaken if in the end it would not prove the shortest road, and save him the trouble of reading a great many modern books on the subject which are multiplied much of late years, and from which he can reap no other fruit, but the vanity of thinking he knows what he does not know. If he wants to see a specimen of what may be done in that way, let him consult Harris's books, where he will find a Philosophy quite new to us both in respect of the matter and style; and yet it is in reality a little more than a translation of some passages of those authors I recommend, as the author himself is at great pains to let us know in his notes. . . .

# CHAPTER FIFTH.

# SOME NOTES ON OTHER MONBODDO MSS., IN THE POSSESSION OF THE FAMILY,

BY THE EDITOR.

I.

THE largest of these is entitled *The Degeneracy of Man in a state of Society*. It consists of 80 closely-written folio pages, and it is evidently the rough draft of an project treatise upon this subject. The MS. contains several blank spaces, left for the incorporation of additional material. It is divided into ten chapters, but these are not numbered, and the contents of several are little more than notes, consisting of only a few lines.

The first chapter is a general Introduction, recapitulating views expressed elsewhere upon social degeneracy. The second proposes to deal with Health and Longevity, Populousness and its causes, Depopulation and its causes. The third introduces the subject of degeneracy due to Commerce, and the fourth continues the discussion with reference to foreign wars. The fifth supports the thesis by citation of authorities, e.g. (a) Homer and Hesiod amongst the poets, (b) facts from Ancient History, (c) recent events in France and England. A long digression follows on Monboddo's favourite topic of the decreasing stature of man, and he returns to the support of his original thesis by quoting the views of such philosophers as Heraclitus, Socrates, Plato, Aristotle,

the Stoics and Epicureans. The remaining chapters are replies to various objections, in the course of which the Law of Nations, Family Life, Feudal Government, and the depopulation caused by trade, are discussed.

II.

A MS. of 4 pp. quarto, entitled *Intended Publications*. This MS. has only headings of chapters for a projected work upon Brahminism, which was to have been divided into two parts—the first containing a sketch of the opinions of the sect, and the second an account of their ceremonies.

III.

An Addendum to the foregoing, consists of a Catalogue for a Museum designed to illustrate the subject. There are eight headings which have not been subdivided, e.g. No. 3 consists of fourteen books of paintings and drawings, executed by the natives of India, nearly one thousand exhibiting a variety of their idols, religious and other ceremonies, tribes or castes of people, trades, occupations, amusements, country scenes, views, etc.

IV.

Endorsed "No. 121," and entitled "A Letter upon Education," contains 7 pp. folio. Monboddo's ideal of Education was that "lads should learn Arts and Sciences at the same time that they learn words."

First the student should learn his Greek Grammar, then read "some things of the moral kind," e.g. Xenophon's Memorabilia, or Cycropædia. He should next learn "the Art of the Greek Language," for which Lascan's Greek Grammar is recommended. Afterwards Homer should

be studied, and his life ascribed to Plutarch, and then the *Treatise* on Composition by Dionysius. By this time the student should have acquired a taste for good style, and this should be further cultivated by re-reading approved passages from Demosthenes and others. About this period, in his studies, if not earlier, Euclid should be read *in the original*. He should next read subjects relating to the "practice of Life" from *Plato's Dialogues*. At the same time Greek History ought to be read; and even Roman History, as written by Greek authors! In no case should a translation be allowed.

### V.

Endorsed "No. 13," and entitled "Letter to Lord Littleton concerning the origin of Language," consists of 10 pp. folio. This MS. is a reply to objections urged against Monboddo's theory. The letter is dated May 7th, 1773.

### VI.

Endorsed "No. 109," and entitled "Of the Oran-Outang, and whether he be of the Human Species." This MS., which contains 44 pp. folio, is a discussion of various sidelights on Monboddo's theory of Languages, derived chiefly from the cries of animals, and the speech of various savage tribes.

### VII.

Endorsed "No. 293a," and entitled "Notes for vol. 4 of Metaphysics." Headed "Notes for the sheets that are to go to Press." These notes consist of 7 pp. folio, and are of interest as showing the sources of Monboddo's facts. The first ten remarks deal with India, and the authorities

mentioned are Dow's History of India,\* and another series of notes is taken from The Code of Gentoo Laws, translated by Mr Brassey Halked, and Mr Holwell's Account of India,† also Porphry' De Abstinentia. The last series of twelve remarks is taken from the Pocket Book, vol. xvi.; and an addendum from vol. xii., and La Croze's History of Christianism in India,\* in which the remark occurs "Religion of Brama pure Theism, and the Idols, which they worship, only types (p. 87). The type of the Trinity very remarkable."

### VIII.

Endorsed "No. 151," and entitled "Observations on the Ancient Music; an account of the Music of the Ottahietie, the Friendly Islands, New Zealand and Zama, also of the Huron and Chinese Music," contains pp. 15 folio.

### IX.

Endorsed "No. 108," and entitled "O'conner's Dissertations on the History of Ireland printed at Dublin, 1766" (pp. 7 folio).

#### X.

Entitled "Of the Ancient History of Scotland and the Origin of the Nation" (pp. 16 folio). This MS. contains the first pages of a work of considerable size. Unfortunately the matter contained in them does not extend beyond the discussion of the credibility of various early chronicles.

<sup>\*</sup> The History of Hindostan, from the Earliest Times, to the Death of Akbar; Translated from the Persian of Mahammed Casim Ferishta of Delhi. Together with a Dissertation concerning the Religion and Philosophy of the Brahmins. With an Appendix containing a History of the Mogul Empire, from its decline in the Reign of Mohammed Shah to the present Times, by Alexander Dow. London 1767-68.—ED.

<sup>†</sup> John Zephaniah Holwell, (1711-1798), author of numerous works on British India. *India Tracts, Historical events relative to Bengal*, the Mythology of the Gentoos, etc.—ED.

<sup>‡</sup> Mathurim Veyssiere la Croze (1661-1739). His Histoire du Christianism des Indes was published at the Hague, in 1724.—ED.





CONTEMPLATION, A CARICATURE OF LORD MONBODDO.

FROM "KAY'S PORTRAITS." [To face page 280.



# APPENDIX

T.

# OBSERVATIONS ON "ANCIENT METAPHYSICS," By Samuel Horsley, 1780.

P. 183.—With respect to the axiom that "Action and re-action are equal and contrary," Lord Monboddo may very safely affirm, that the sense he puts upon it, p. 29, is the true sense. At least Lord Monboddo's axiom differs from Sir Isaac Newton's only in this, that it is the more general proposition of the two. Lord Monboddo's extends to all agents (except the First Mind) and all patients. Whereas Sir Isaac Newton's extends only to the reciprocation of mechanical agency. I must confess that I have nowhere found the doctrine of reaction and resistance perspicuously stated. Baxter, I believe, had right notions upon these subjects, but he has expressed them with much confusion and perplexity. The resistance of Body consists in this; that the exertion of some force is always necessary to move it when at rest, or to stop it when in motion. Now this resistance, that requires a force to be overcome, is an active resistance, for which there must be some active cause, and it can never be a consequence of the passivity of matter; because to overcome passivity is to overcome nothing.

Resistance therefore I consider as the energy of some active being, always exerting itself either in or on body. This active principle being supposed, that phaenomenon in

the mechanical propagation of motion "that any body, which receives motion from another, destroys just as much in that which gives it" ceases to be mysterious. And the third law of Motion admits-if I mistake not-a very natural explication, namely this, that when one body gives motion to another, there is a reciprocal action between the two; the effects of which on each body separately, when compared together, will always be found to be equal. As for the vis inertiae, I agree that vis perseverantiae, would be a much better name for the thing intended. Whoever attends to Sir Isaac Newton's explication of his 3d Definition, will see that the vis inertiae with Sir Isaac Newton is an active principle; and that he considers resistance and reaction as exertions of this activity. And there never could have been a doubt about his meaning, but for the use of this word inertia. Whether this activity belongs to Body as Body, it was not to his purpose to enquire. It was sufficient for him, in the prosecution of his physical enquiries, to know that it is the constant concomitant of Body.

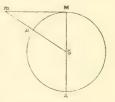
I would observe with respect to the three laws of motion, and the definitions by which they are preceded, that they are to be considered as a summary of what was known of physical principles, when Sir Isaac Newton entered upon the explication of Nature; and in the framing of them Sir Isaac Newton seems to have been much more studious of brevity, than of accuracy of language. Indeed he was not nice about words. He was too apt to take up the names of things, which he found made ready to his hand. The vis inertiae was one of these. I think that Mr Baxter's book has been very much the cause that the vis inertiae of the Newtonians has been so generally confounded with that notion of the passivity of matter, which I take to be common to the Newtonians with the Platonic and Peripatetic schools. Baxter's reasoning to infer the

immateriality of the soul from the passivity of matter, professes to infer it from the *vis inertiae* of matter, thus confounding the two; though, from many passages in his book, I should conclude that he was well aware that resistance and reaction could not result from inactivity.

p. 185. ["Newtonian philosophers speak of attraction as an effect."]—Attraction is a name which Newton gives to the *unknown* cause of a mutual approach of distant bodies. The approach is the effect, of which the cause is as occult, as any cause in the whole compass of the Peripatetic Philosophy.

Suppose the line  $M\mu A$  to represent the orbit of a planet: That the planet moves in this line round the

sun, placed in S, is a phenomenon, brought to light by a long series of astronomical observations. This motion therefore in the orbit is an effect, produced by some cause or other. Now this effect, the human mind resolves



into two parts. It considers the motion of the planet, in any point of its orbit M, as resulting from the composition of two motions; one of which, acting by itself, would carry the planet along the straight line Mm with a certain degree of velocity; such, suppose, that in a certain time, the planet, if no other power were exerted upon it, would be removed from M to m. By the other of the motions, into which we resolve the whole observed motion, the planet is supposed to be constantly carried from the tangent Mm towards the curve, with such degrees of force and in such directions, that in that time in which the former force would have carried it to m, it may by this other be brought to  $\mu$ , that place in its orbit, where, at the expiration of the time supposed, it ought to be.

Astronomers have not only discovered, that the planets move round the sun in curve lines such as  $M\mu A$ , which

returns in to itself, but they have moreover discovered many rules, by which the motion in these curves seems hitherto to have been constantly guided. It is reasonable to suppose that these rules, which have obtained for ages, will continue to obtain; *i.e.* that they are really constant rules of the motion of every one of the planets.

Sir Isaac Newton takes this for granted, and he demonstrates, that the circumstances of the motions of the planets being such as they have been found to be, it is a consequence, that if we resolve the observed motion of a planet, in any point M of its orbit, into different motions, one of which shall be understood to be an equable motion in the direction of the tangent Mm; the other constituent parts of the observed curvilinear motion, must be motions constantly directed towards S. And he shows, that motions so directed, bearing certain proportions each to other, and duly adjusted to the degree of motion in the direction Mm, will produce a motion in such a line as any planet (Mars for instance) describes; and the same, in all its circumstances, as the motions of Mars are found to be. The effect, the curvilinear motion of Mars, being thus resolved into several effects, the human mind cannot but make a corresponding resolution or partition of the cause. That is, it cannot but refer each of the motions to a cause of its own. And by doing this, there will be no danger of making false conclusions concerning the joint effect; any more than there is danger of making false conclusions concerning the motion of a body in the straight line AD, by considering it as the result

of two strokes, one in the direction AB, another in the direction AC; when perhaps we know that it was really produced by a single stroke in the

direction AD. The only difference, that I am aware of, being this, that in the latter instance we may be able to

assign the true mechanical cause of the motion along the line AD, as well as a variety of other mechanical causes. which, acting all at once upon the body at A, might be equivalent. In the instance of the planet's motions, we can neither assign any mechanical cause of the curvilinear motions, nor any mechanical causes of the separate motions into which we resolve it. We can only demonstrate the equivalence in effect, be the causes what they may. And this equivalence is sufficient for the certainty of our conclusions. Having found it convenient, for the prosecution of our enquiries into the motions of Mars (we will suppose) to resolve the observed curvilinear motion into constituent parts, and to consider each of those parts as produced by a cause of its own, it will be convenient to have a name for each of those causes though unknown. The unknown cause, from which that part of the motion is supposed to arise, which hath its direction along the tangent, Sir Isaac Newton calls the projectile force; for this reason that it is analogous in its effect to that force, which, in conjunction with the tendency of heavy bodies towards the earth, produces the curvilinear motion of a cannon ball.

The unknown cause, from which that part of Mars's motion is supposed to arise, which has its constant tendency towards the sun's centre, Sir Isaac Newton calls Attraction. And when he has discovered that it is analogous to that part of the moon's motion which respects the earth's centre; and has moreover discovered, that that part of the moon's motion is analogous to the motion by which heavy bodies descend to the earth, he then changes the general name of attraction for the special name of gravitation. Thus projection, attraction, and gravitation are names for the unknown causes of perceived effects; or of the parts into which perceived effects are resolved by the human intellect. And if any one thinks that he assigns the cause of a planet's motion,

when he says that it is produced by attraction; he does not know the true limits of the philosophy he would defend.

- p. 187. ["Speak no more of combined motions or of centripetal and centrifugal forces."]—I apprehend that in the present state of our knowledge in Physics we cannot go on without speaking of them. Because we cannot prosecute our enquiries, without some artificial resolutions and combinations of the motions which we see. But to speak of them as causes is absurd.
- p. 236. ["Not by a motion originally impressed upon matters," etc.]—I do not know that any Newtonian has spoken of gravitation as a force originally impressed.
- p. 245. ["It is evident that the loco-motive life can descend no lower than to atoms."]—And so low as to these I think it must descend. For if the principle of motion be given only to certain collections or associations of them, will it not be a consequence, that all bodies below a certain size, will be incapable of motion?
- p. 251. ["In the points with respect to which they differ."]—I rather think that they do not differ, otherwise than in their objects. The object of the Newtonian philosophy is the investigation of effects: that of the ancient, the discovery of causes.
- p. 256. ["Sir Isaac Newton does not seem to understand that the centripetal and centrifugal forces, which he supposes to be originally impressed upon them will ever fail."]—I cannot think that Sir Isaac Newton considered the central forces as the lasting effects of an original impression: or that he conceived, that they would not fail, if not perpetually renewed. Much less that he thought, as is intimated,

p. 269, that there is any necessity in Matter which should make it tend to a centre. I never myself considered the central forces otherwise than as effects, continually renewed by some active cause. Nor do I imagine that Sir Isaac Newton ever thought of any other necessity in matter, than that which arises from its inactivity, a necessity of obeying the impulses, which it may receive from its Mover.

Notwithstanding the hints that Sir Isaac Newton has thrown out, that it might not be altogether impossible to divine mechanical causes of gravitation (for I consider his query about the Aether as nothing more than such a hint) it is clear to me, that his own opinion was, that the cause was not mechanical. And I suspect that he had no better reason for not speaking out upon the point, than a certain shyness of controversy; and perhaps an apprehension, that the explicit allegation of a Mind, as a physical Cause, might discredit his system with the Natural Philosophers of the Continent. At the same time, I think, he rather ascribed the motions of the celestial bodies to immediate exertions of the Divine Mind, than to other minds peculiarly united to those bodies.

p. 361. ["That by space the Deity perceives as we do by the Organs of Sense."]—I can hardly suppose that they who have spoken thus of space, among whom were Sir Isaac Newton and Dr Clark, conceived of space as an organ, or ascribed anything like organic sensation to the Deity. They certainly considered space as a simple thing without distinct parts: consequently without arrangement, or combination of parts, which is necessary in the notion of an organ. I imagine they meant no more than to describe figuratively the presence of everything to the Divine Intellect: that everything, in every place, is not

less present to the Divine Intellect, than the impressions on the human sensory are to man's. It is certainly not philosophical language. But I have sometimes thought, that there is something of a similar notion in a fragment of the Orphic verses, in which the world is mentioned as the body of Jupiter, and the parts of the world as the parts of his body: the Sky his head: the rays of the Stars his hair: the Sun and Moon his eyes:

Νοῦς δέ οἱ ἀψενδὴς βασιλήϊος, ἄφθιτος αἰθήρ, ῷ δὴ πάντα κλίει καὶ φράζεται.

The learned Gesner I find had the same notion of these verses.

p. 366. ["Space—the capacity of receiving body."]—There is a story of a conversation between Sir Isaac Newton and Mr Locke concerning the first production of Body, from which it should seem that Sir Isaac Newton at that time conceived of Space as the  $\tilde{v}\lambda\eta$   $\pi\rho\omega\tau\eta$ . Sir Isaac Newton's notion was that the Supreme Mind formed bodies, by investing certain finite portions of space with the properties of impenetrability and mobility.

p. 376.—["We can express these two propositions only in one way. Man cannot run."]

Man cannot run expresses only the last of the two. Both I think may be expressed thus.

Man hath the power not to run. Man hath not the power to run.

p. 393. ["By the same consciousness we perceive the relation."]—This is unquestionably the true state of the case. But I think it wants (to moderns I mean of  $\nu \nu \nu \nu \rho \rho \sigma \tau \sigma (\epsilon \sigma \mu \epsilon \nu)$  some explication. I think I know some modern Philosophers, who would say, that by consciousness they always understand some perception of the mind

relating to itself. Now when I affirm that the length of one yard and the length of three feet are equal each to the other, because either is equal to the length of 36 inches; what is there in this proposition that respects myself? If there be nothing in it that respects myself, what is there in it that can be the object of consciousness? If there be no object of consciousness in this proposition, how am I conscious of the truth of it? I imagine that to solve this difficulty recourse must be had to the doctrine of the Platonists, that the ideas and thoughts of the mind are the mind itself in certain states or modifications. That this thought of the mind is the mind thinking this. This being admitted, the consciousness whereby the mind perceives the connection betwixt the terms of self-evident propositions, will—if I mistake not—be a consciousness that there is no change in its own state, no passing from one state to another, in forming the ideas of which such propositions are composed. It is conscious therefore of that in itself, which may be called its rest; and by this consciousness it perceives the perfect agreement of the ideas. And, perhaps, the whole of our perception of truth consists in a consciousness of a certain ease and readiness, in passing from any one to any other of those consistent ideas, of which Truth is formed.

p. 403. ["But it does not show us why it is."]—I am not satisfied of this; though I know it is generally said. Suppose that a general proposition, A, has been demonstrated by direct proof. I would prove another general proposition, B. This I do by shewing that if B were not true, A must be false: which is absurd, because A has been demonstrated. Does not this kind of proof amount to the following: the reason of the truth of A is also the reason of the truth of B; and that is, that the why of A is the why of B; or that the truth of A and B are con-

comitant effects of one and the same cause? I suspect that propositions, which are really incapable of any other than indirect proof, are as evident, and immediately connected with those truths which the contrary suppositions would subvert, as the terms of an axiom with each other. This evidence of connection is that which makes the impossibility of direct proof. It seems to me that such propositions, for the most part at least, may be so stated as to differ from axioms only in this: that their evidence will arise from their connection with something, which itself must be previously demonstrated: whereas the evidence of axioms is independent of everything that may require proof. To explain myself.

If A, then B.

Here, suppose the connection of B with A to be selfevident. If A be something which requires no proof, then the proposition, "if A, then B" is an axiom. But if A be a proposition which requires proof, still when A has been proved, the proposition, "If A, then B," is evident. But to prove the proposition B by itself, the only method will be to shew, that to suppose it false would imply the falsity of A. There is indeed one kind of the reduction ad absurdum, which terminates in shewing that something which must be, if the proposition were false, is contrary to something assumed in the proposition itself. But this strictly considered is, if I mistake not, direct proof; because it shows that the falsity of the proposition is contrary to the known nature of the thing. That is that the truth of the proposition is of the nature of the thing. For there can be no medium.

p. 431. ["Nor can we otherwise prove—that the moment etc."]—This theorem cannot otherwise be proved, than by combining these two. First that the mass remaining the same, the moment will be proportional to the

velocity. Secondly, that the velocity remaining the same, the moment will be proportional to the mass. These two theorems may be proved by Euclid's method of equimultiples, two things only being assumed which I think may well pass for physical axioms. First that the mass remaining the same, the greater or less velocity will be accompanied with the greater or less moment, and equal velocities with equal moments. Secondly, that the velocities remaining the same, the greater or less mass will have the greater or less moment, and equal masses will have equal moments.

p. 433. ["One year is precisely equal to another."] —The better instance would be, the supposed equality of all sidereal days. As to the year, the thing may bear a question. Among the inequalities of the Moon, there is one which obliges us, in going back to ancient eclipses, to apply what is called the secular equation: a correction founded on a supposition (which observation has suggested) that the moon's orbit is in these later ages somewhat contracted; and the time of her revolution abridged. And hence may arise a question, whether something similar may not happen to the Earth. But although the mean length of the year should be allowed to be the same now as in former ages; yet two succeeding years will not be precisely equal, unless we speak of the anomalistic year reckoned from the appulse of the Earth to one or other apsis of her orbit.

# p. 436.—[Plato etc.——]

The imperfection of Geometry is well represented in a popular way by Lucian in his dialogue  $\pi\epsilon\rho\lambda$  αἰρέσεων.

Οἷα καὶ ή θαυμαστή γεωμετρία ποιεῖ. κἀκείνη γὰρ τοὺς ἐν ἀρχῷ ἀλλόκοτά τινα αἰτήματα, καὶ συγχωρηθήναι αὐτῷ ἀξιώσασα, οὐδὲ συστῆναι δυνάμενα, σημεῖά τινα ἀμερῆ, καὶ γραμμὰς ἀπλατεῖς καὶ τὰ τοιαῦτα, ἐπὶ σαθροῖς τοῖς θεμελίοις τούτοις οἰκοδομεῖ τὰ τοιαῦτα,

καὶ ἀξιοῦ εἰς ἀπόδειξιν ἀληθῆ λήγειν ἀπὸ ψευδοῦς τῆς ἀρχῆς ὁρμωμένη.

Lucian however goes too far, when he supposes that the foundations of Geometry must be in themselves unsound, because they are assumed without proof; and he does not seem to have been aware that the imperfection which he imputes to this science is common to it with all the subordinate sciences.

p. 459. ["If he do not demonstrate it from its true cause he cannot be said to know it scientifically."]-And yet I think this must be understood with some limitation, or we shall often be at a loss to know whether we have attained a just demonstration or no. The limitation I mean is this. That when the predicate is proved from the formal nature of the subject, this is a good demonstration, notwithstanding that the same thing may be predicable more generally. I will explain myself by an easy example. In the 47th proposition of the first book of Euclid the subject is the relation between the sum of the squares formed upon the two sides of a right angle triangle, and a third square formed upon the hypotenuse. The thing predicated of this relation is that it is the same with that of equals. The proof of this is deduced from the nature of squares, and the nature of triangles of that species, which, considered together, determine the nature of the relation in question. Here then the predicate is proved from the formal nature of the subject, and this, according to my rule, should be a good demonstration.

Nevertheless, when we come to the eighth book, we find that the equality of these squares belongs to them, not particularly as squares, but generally as similar right-lined figures. For in this book we have the same thing predicated of the relation between the sum of any two

similar right-lined figures on the sides, and a third similar figure on the hypotenuse of a right angled triangle. And the proof here again is deduced from the formal nature of the subject, and must therefore be a good proof. But again, this relation belongs not to these similar figures, as similar figures formed on the legs and hypotenuse of a right angled triangle; but as they make a part of a far more general class of figures which may be formed on the three sides of any right-lined triangle, as appears from a curious theorem of Pappus's.

However it is undoubtedly true, for the most part, that the best demonstration is that which is deduced from the most general cause. There are many properties of the Conic Sections which are common to all the three. Of these some of the most important are not peculiar to these lines; but belong to every part of a Conic Surface. And all these properties do equally belong to the Circle, because the Circle is a part of a Conic Surface. They belong also to any two right lines that meet in a point; because any two such lines may be placed in some Conic Surface having the point of their intersection for its vortex. Now when any one of these properties hath been proved of the Conic Surface in general, the proof of it in the lines I have mentioned is no more than this.

This is a property belonging to the whole and every part of the surface of every Cone.

The Parabola, the Ellipsis, the Circle, the Hyperbola, and any two right lines meeting in a point are parts of the surface of some Cone.

Therefore *this* is a property belonging to the Parabola, the Ellipsis, the Circle, the Hyperbola, and any two right lines which meet in a point.

I doubt not that there are many, who are well acquainted with these properties, as properties of these lines, to whom the reason why they belong to all these

lines, and consequently the primary reason why they belong to any one of them, is a secret. I have observed in those writers of Conic's, who have built their systems upon any other generation of these lines than the ancient one of cutting them from the cone, that they are sadly put to it to make out demonstrations of these properties.

p. 499. ["The Philosophy of Sir Isaac Newton not universal but confined to the heavens and motions of the celestial bodies."]—The mathematical principles of Philosophy, delivered in the Principia, are not indeed universal; but they extend to many things besides the Heavens, and the motions of the celestial bodies. To the refractions, reflections, and inflections of light: to the motion of bodies, both rectilinear and circular, in resisting fluids; to the vibrations of pendulous bodies in such fluids; to hydrostatics, and the pressure of the air, and to the propagation of sound.

p. 500. ["But the celestial bodies being once set a-going go on of themselves."]—I imagine the passage where Sir Isaac Newton is understood to have said this must be either that in the *Scholium Generale*.

"Perseverabunt quidem in orbibus suis per leges Gravitatis, sed regularem orbum situm primitus acquirere per leges hasce minimè potuerunt."

Or another, much to the same purpose in the Optics.

"It is unphilosophical to pretend that the world might arise out of a chaos by the mere laws of Nature, though being once found, it may continue by those laws for many ages."

Now I cannot imagine that either of these passages lay that foundation of Materialism, which is supposed to be contained in them. It is asserted in the Latin passage, that the motions of the celestial bodies continue "per leges

Gravitatis;" in the English, by the laws of Nature. Now what are these laws of Gravity or of Nature, but certain facts, which—from the numberless variety of instances in which they have been found to obtain, without a single exception—are supposed to be fixed rules, to which Providence conforms in the management of the Material World? This, I am persuaded, was Sir Isaac Newton's notion of these laws. And I cannot but think that, so often as a naturalist alleges these laws-if he understands what he says, and if he knows why he dignifies these conclusions from induction with the name of laws-he alleges the energy of Mind, and the Providence of God. Sir Isaac Newton in the passages under consideration seems to say, that we know some of the rules by which the world is managed, but know nothing of the manner in which it was produced.

p. 501. ["The projectile motion Sir Isaac says was impressed," etc.]—I do not recollect any passage in Sir Isaac Newton's own works where this is said.

p. 505. ["The third way of accounting for Gravitation is what Sir Isaac has chosen."]—To this I cannot assent. I have already observed that Sir Isaac Newton is very shy of speaking at all of the cause of gravity. Yet there are many passages, in which I think one may discover that his own opinion was, that it arose from the immediate act of Mind. I shall produce two, which seem the most remarkable.

"Vocem attractionis hic generaliter usurpo pro corporum conatu quocunque; accedendi ad invicem, sive conatus iste fiat ab actione corporum, vel se mutuò petentium, vel per Spiritus emissos se invicem agitantium, sive is ab actione Ætheris, aut Aeris, mediive cujuscunque; seu corporei seu incorporei oriatur corpora innatantia in se invicem utcunque; impellentis. Eodem sensu generali usurpo vocem impul-

sûs, non species virium et qualitates physicas, sed quantitates et proportiones Mathematicas in hoc Tractatu expendens" (*Principia*, Lib. I. Sect. xi. Scholium).

Here are six things mentioned as possible causes of Attraction, viz. mutual appetence, mutual agitations by spirits emitted, the action of æther, of air, of a corporeal medium, of an incorporeal medium. Newton does not say that he approves of any one of these: but, to recommend his system to all sects, he intimates that his mathematical theory may consist with any one of them. Now of these six causes of attraction, three—as it seems to me—amount to the immediate agency of Mind. Namely mutual appetite, which supposes a Mind in each body endued with sense; emission of spirits, which seems likewise to suppose internal animation; the incorporeal medium, by which I can understand nothing but some external Mind acting on the bodies, and whose activity pervades the whole of the space in which the motions of these bodies are performed. I cannot defend the notion of an incorporeal medium in which bodies may float. But the thing meant seems plainly to be a Mind, diffusing its activity through the whole of the planetary regions. For the name of medium implies a substance, and an incorporeal substance is an immaterial substance; and immaterial substance, other than Mind, there is none. Under the figure of the bodies floating in this medium, the extent of the activity of this Mind seems to be intended.

The other passage I shall produce is in the Scholium Generale.

"Oritur utique haec vis à causâ aliquâ, quae penetrat ad usque centrum Solis et Planetarum, sine virtutis diminutione; quaeque agit, non pro quantitate superficierum particularum in quas agit (ut solent causae mechanicae) sed pro quantitate materiae solidae."

I think, when it is considered that this passage is intro-

duced immediately after a disquisition concerning God, as the Maker Governor and Lord of all things, there can be no doubt in what manner that significant parenthesis, ut solent causae mechanicae, is to be understood; namely, as little less than a declaration of the author's opinion that the true cause of the planetary motions is to be sought in that which is farthest removed from matter and mechanism. As to the subtle æther, useful as that material hath been in the hands of modern world-builders, I wish Sir Isaac Newton had never mentioned it, as a possible cause of gravitation. I have always thought this notion unworthy of him, inconsistent with his own doctrine and the phænomena of Nature.

Concerning the question whether Motion in a circle or any other curve, be in its own nature combined or not, I shall give my opinion as briefly as possible.

- I. The two first propositions of the second section of the first book of the *Principia*, which are supposed to evince that curvilinear motion is in its own nature combined, are intended for no other purpose but to establish a certain criterion; whereby to distinguish in what cases curvilinear motion may, or may not, be resolved into a projectile and a central direction.
- 2. Curvilinear motion produced by Body, acting on body, is in its own nature combined.
- 3. Curvilinear motion produced by Mind is also in its own nature combined, if it be produced by the conspiring exertion of different powers either of one Mind, or of a number of Minds. But motion, though curvilinear, is nevertheless simple, if it be produced by any one power of one Mind.

As to the reality of the tendency of the Planets to the Sun, I apprehend this tendency exists κατὰ δύναμιν, but not κατ' ἐντε λέχειαν.

Suppose a planet moving in its orbit, from A through

P to B. Let the right line C D touch the planet's orbit in



P, the Sun being placed in S. Suppose that, in the instant the planet arrives at P, a motion were impressed upon it by some powerful Mind, (the first Mind that there may be no difficulty in the

supposition,) in the direction PC, just sufficient to extinguish the progressive velocity wherewith it arrives at P. this may be supposed; and, if this were done, I apprehend the consequence would be that the planet must descend to S. And thus I conceive that gravitation towards the Sun exists potentially. But, as no bodies exist in the planetary orbs, except the planets which revolve in orbits, it cannot without some violence done to one of them, exist actually.

As to the first Law of Motion, I have already said in what light I consider this-and all these laws-as maxims founded on induction: and, in the same light, I think Sir Isaac Newton considered them. The fact that the motion of unorganized body continues, till some Cause destroys it, is sufficient for all the purposes to which this law is applied. I believe, with Lord Monboddo, that some active principle is necessary for the continuance, as well as for the beginning of motion. I know that many Newtonians will not allow this. I believe they are misled, as I myself have formerly been misled, by the expression a state of motion. Motion is change. A continuance of motion is a farther change. A farther change is a repeated effect. A repeated effect requires a repeating cause. State implies the contrary of change. And motion being change, a state of motion is a contradiction in terms.

Upon the whole, I see no objection in any material part, to the argumentation of the Appendix, as addressed to those, who hold out the names of Attraction and

Gravitation as causes, an error against which Sir Isaac Newton repeatedly cautions his readers. I only wish that the misconceptions of his followers had not been imputed to Sir Isaac Newton himself.

Had Lord Monboddo ever found leisure to study the Newtonian Philosophy, in Newton's own writings, I am persuaded that his Lordship would have perceived, and—with more ability than any one else—would have shewn to the world, the entire consistency in all essential points of Sir Isaac Newton's mathematical theory of Motion with the ancient theory of Mind. The union of these two systems would make Philosophy complete, and would be the means of driving Atheism and Materialism—which will always set mere Physics at defiance—into holes and corners. There is one expression which I wish had not been used, as I think it will be taken in a sense not intended. Lord Monboddo says, he wishes to put an end to this Mechanical Philosophy.

To put an end to that error in Philosophy, of assigning mechanical for first Causes, is a wish in which every man must concur, who believes in God. I am persuaded his Lordship does not wish to discourage an enquiry into the facts of the Material World, and the connections of these with facts, one with another. Nor would he wish to discourage the cultivation of that system of Physics, which hath been so successful in bringing those connections to light. I think this is the sense, in which it is likely the expression may be understood. Perhaps his Lordship may find an opportunity of cautioning his readers against this misinterpretation in some subsequent part of his great and excellent work.

S. HORSLEY.

P. 402, line 10. ["The planets were some time or another projected," etc.]—I do not recollect that Newton has anywhere said, that the planets did at any certain time receive an impulse of projection. On the contrary he has very expressly said that his doctrine of gravity will account only for the continuance of the planetary motions, not for the beginning of them. Whereas a primitive projection being once supposed, gravitation, combined with this would account just as well for the beginning as for the continuance of the motions. But Newton says "Perseverabunt quidem in orbibus suis per leges Gravitatis, sed regularem orbium situm primitus acquirere per leges hasce minime potuerunt" (Princip. Schol. Gen.). And again—"Hi omnes motus regulares originem non habent ex causis mechanicis."

P. 404, line 19. ["A perfect vacuum in the celestial regions."]—This is a supposition which Newton never made. He supposes a "vacuum in rerum naturâ"; i.e. he supposes interstices of perfect vacuity between the solid corpuscles of which bodies are composed. And he supposes such a composition and arrangement of corpuscle and pore, as may render the proportion of empty space to full space, within the material Universe, very great. But he has nowhere supposed a great chasm or empty hole in the world, which is the notion of a perfect vacuum in the celestial regions. He supposes indeed no matter there that may be capable of producing sensible changes in the planetary motions for a great length of time. (See

*Princip.* Lib. 3, Prop. x.) And this supposition may stand although a fluid should pervade the planetary regions. Between whole solid corpuscles there should be no interstice exceeding any magnitude you will please to assign; suppose the  $\frac{1}{1000}$ th of an inch. Light may constitute such a fluid.

P. 404, line 22. ["And at last make it cease altogether."] At last, I grant. But it will be an immense time before this at last will arrive. Having occasion once to consider the consequences of the corporeity of Light; among other things I enquired what impression of the impact of the solar light may make upon the globe of the earth. determine the precise quantity is indeed impossible. But my enquiry was after the maximum, or the limit which the true quantity cannot possibly exceed: and, in computing this, I think I went upon sure grounds. Now I found that the force with which every emission of light acts upon the earth cannot exceed the force wherewith an iron ball of one yard in diameter, flying at the rate of 34 miles and 443 yards in a second, would strike anybody at rest, upon which it should impinge perpendicularly. And the progressive velocity, which this blow is sufficient to produce in the globe of the earth would not carry it a whole inch in 190,000,000 Egyptian years.

P. 410, line 27. ["Or denser medium."]—It will be proper to add to this sentence "and by comparing the time in which motion in resisting fluids is actually extinguished with that in which it should be extinguished if the resistance of the fluid were the only cause of its extinction." This will be a just view, and no more than the just one, of the experiments that have been actually made upon this Subject. But this being the case, consider whether the argument, if not perfectly conclusive, is not less defective than your Lordship has imagined. See more of this in the two next notes.

P. 411, line 3. ["To causes concurring to the same effect."]—Sr. I. N. contrived many experiments to explore, whether any other cause acts to the extinction of motion in bodies moving in fluids, besides the necessity that every moving body should gradually communicate its motion to the parts of the fluid, wherein it moves. All bodies seem to lose their motion faster than they ought to do from this single cause. But the difference is so small, that when friction, tenacity and elasticity in the particles of fluid have each had its proper share of the effect assigned to it; little if anything will remain to be done by the supposed principle of internal decay of motion.

P. 412, line 9. [" First law of motion cannot be defended."] If the first law of motion be understood as a proposition predicating body to be its own mover, to be either the beginner or the continuer of its own motion, it cannot be defended. And I entirely agree with you that this proposition is an absurdity in itself, and in its consequences atheistical. But why is the first law of motion to be any otherwise understood than as declarative, first of this fact, that motion once excited does continue till external impediment stops it. And then of a conclusion from that fact, that if all external impediment were removed, the motion of every impelled body would continue for ever. Considered in this light as a declaration of a fact of which it assigns not the cause, the first law of motion is not indefensible. Experiment must decide between him who shall affirm, and him who shall deny, the thing asserted. Nor is the matter so much out of the reach of Experiment as you suppose. Geometry must make an accurate evaluation of the several effects of inertia, elasticity, friction, and viscosity. Experiment must collect the degrees by which motion decays in resisting fluids, and the quantity by which it is diminished in a given time, or the time in which the whole is extinguished. If the progress of the decay answers in all these particulars to these external causes, then it must be allowed that these are the only causes of its decay, and that where these should be all removed, as they would be in a Vacuum, their motion once excited would continue for ever. And the principle of a natural elanguescence must not be admitted. But if the progress of the decay shall be found to be more rapid than these causes require it to be, then another cause must be called in. But though experiment should militate against the fact of the endless duration of motion, this will be no argument, in my judgment, that the thing moved is its own mover, but only of the endless duration of the activity of the moving principle, whatever it may be. And in this there is nothing that has the least tendency to Atheism.

P. 413. I would by all means expunge the note at the bottom of this page. For Simplicius's account of the continuance of motion will not bear examination. Were it true, if two globes were projected with the same velocity the motion of the larger must be soonest extinguished; because the moving force upon that would be the least in proportion to the mass to be moved. And if two equal globes were projected with unequal velocities the motion of the swiftest should be the soonest extinguished. But besides these and many other particular objections, Simplicius's notion is liable to this general objection. That the motion of the air is itself the effect of a previous motion in the body, and therefore to make the motion of the air continue the motion of the body, is to make the effect give continuance to the existence of its cause.

P. 420, line 12. ["The motion of these bodies was actually produced."]—Sr. I. N. did not suppose this whatever many of his followers may have done. *See* the note p. 402.

P. 421, line 8. ["To decompose or analyse the simple motion," etc.]—That which may be analysed must be a compound. That which is compounded cannot be simple. When the motion therefore to be analyzed is here called simple, I imagine it is no otherwise called so, than as proceeding from one cause, and not being the effect of the joint operation of various causes. And when it is spoken of as capable of being analyzed it is certainly considered as, in itself, a compound. Here then you seem yourself to suppose what, I have endeavoured to shew, in my letter that a motion proceeding from a simple cause, may yet consist of parts and be susceptible of resolution.

P. 422, line 5. ["Sir Isaac did really so believe."]—See p. 402.

P. 424, line 14. ["Produced by bodily impulse."]—See p. 402.

And now, my Lord, after all it may not be amiss to state briefly the particulars in which we agree, and those in which we yet differ. These I shall state in a few propositions annexing both our names to those which we both affirm, and to every other his only who affirms it.

The continuance of motion excited by the impulse of body is not sufficiently accounted for by the supposed indifference of matter to motion or rest. Monboddo. Horsley.

So long as motion is continued Mind acts, and the continuance of motion after impulse has ceased cannot be accounted for but by the continued activity of mind. Monboddo. Horsley.

If motion might continue without mind for a moment, it might continue for ever. And therefore the supposition that it continues for a moment without mind tends to atheism. Monboddo. Horsley.

Newton's first law of Motion contradicts the three preceding propositions. Monboddo.

Newton's first law of motion implies no contradiction of any one of these three propositions. It is declaratory of a fact which may be notwithstanding that these propositions are truth. Horsley.

The planets were not at any time put in motion by the impulse of body. Monboddo. Horsley.

Their curvilinear motion is not the effect of gravitation blending itself with a primæval projection. Monboddo. Horsley.

Neither projection nor gravitation exist in the planetary regions. Monboddo.

Projection and Gravitation exist as they are both contained in the curvilinear motion of the planet, and might, by external obstacles, be separately produced out of it. Horsley.

The final cause of gravitation of the planets to the sun is not assignable. Monboddo.

The final cause of gravitation is the same with the final cause of the revolution about the sun. Horsley.



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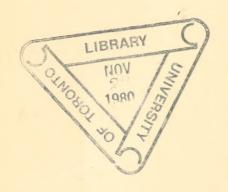
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