

Man and Nature L'homme et la nature

MAN AND NATURE
L'HOMME ET LA NATURE

Vico's Humanity

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Volume 9, 1990

URI: <https://id.erudit.org/iderudit/1012606ar>

DOI: <https://doi.org/10.7202/1012606ar>

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Publisher(s)

Canadian Society for Eighteenth-Century Studies / Société canadienne d'étude
du dix-huitième siècle

ISSN

0824-3298 (print)

1927-8810 (digital)

[Explore this journal](#)

Cite this article

Mooney, M. (1990). Vico's Humanity. *Man and Nature / L'homme et la nature*, 9,
1–22. <https://doi.org/10.7202/1012606ar>

1. Vico's Humanity

Our theme is *humanitas*, by which we mean humanity, *Menschlichkeit*, *humanité*, and — I am compelled to add — *umanità*. However we say the word, it trips from the tongue with a silken sureness that envelops us with its warmth, pulling us up short from the grind of doubt and caution with which we are wont to live our lives.

Or does it?

I look up at your heavens, made by your fingers,
at the moon and stars you set in place —
ah, what is man that you should spare a thought for him,
the son of man that you should care for him?

Yet you have made him little less than a god.
You have crowned him with glory and splendor,
made him lord over the work of your hands,
set all things under his feet. (Ps 8:3-6)

Throughout the tradition we know as our own, into the century we call the eighteenth, runs this same stubborn ambivalence about our humanity. Typical of the day are the gestures of Pope, whose elevated, and elevating, *Essay on Man* (1734) was published during the very years he was writing his brooding, satirical *Dunciad* (1728-43). Across the channel a wizening Voltaire would later grouse that 'Famine, plague, and war are the three most precious ingredients of this vile world,' rivaled in intensity only by the intolerance and fanaticism that he found all too persistent in the hearts of men.¹ But forty years and two revolutions thereafter, the Marquis de Condorcet could proclaim that 'nature has fixed no limits to our hopes,' blithely predicting for all mankind the equality, the knowledge, and — yes — even the virtue he had lately seen manifest among the French and Anglo-Americans.²

And so it went in the century we have as our subject. For all its swings in taste and mood, however, the age was clear on one point, ably put by Diderot in the plan for his *Encyclopedia*:

If one banishes from the face of the earth the thinking and contemplating entity, man, then the sublime and moving spectacle of nature will be but a sad and silent scene; the universe will be hushed; darkness and silence will regain their sway. All will be changed into a vast solitude where unobserved phenomena take their course unseen and unheard. It is only the presence of men that makes the existence of other beings significant. What better plan, then, in writing the history of these beings, than to subordinate oneself to this consideration? Why should we not introduce man into our *Encyclopedia*, giving him the same place that he occupies in the universe? Why should we not make him the center of all that is?³

I

Had he not already been dead some ten years by the time they were written, Vico would doubtless have taken these words to heart, for in spirit and orientation, if not in the task that underlies them, they describe precisely his own lifework. 'In the night of thick darkness which envelops the earliest antiquity, so remote from ourselves,' Vico wrote in one of his most famous passages,

there shines the eternal and never failing light of a truth beyond all question: that the world of human society has certainly been made by men, and its principles are therefore to be found within the modifications of our own human mind. Whoever reflects on this cannot but marvel that the philosophers should have bent all their energies to the study of the world of nature, which, since God made it, He alone truly knows; and that they should have neglected the study of the world of nations, which, since men have made it, man can truly know.⁴

For all his posturing against the *oltramontani*, Vico knew well his kinship with northern sensibilities. The University of Naples, where he taught rhetoric for forty years, was indeed set in its ways, but in the libraries of wealthy friends and through various academies and literary salons Vico had ample contact with the centers of enlightened thought. Apart from the pride he took in a precocious daughter, the highest emotion recorded in his Autobiography is the delight he took in an appreciative letter from Jean Le Clerc, the formidable editor of the *Bibliothèque ancienne et moderne*, who wrote to him — and subsequently said publicly in a review — that Vico's *Universal Law* (1720-22), which the author had sent him in Amsterdam, proved that 'more learned and acute things are being said by Italians than can be hoped for from dwellers in colder climes.'⁵ By 1725 Vico had recast his thought as the *New Science*, and again he dispatched a copy to Le Clerc, hoping for an equally enthusiastic reply; but in return

he received only silence, surmising (correctly) that the dean of Dutch letters was too feeble to continue his academic correspondence.⁶

It is plausibly thought that a copy of the *New Science* came also into the hands of the aging dean of British science, Sir Isaac Newton; but if it did, he too gave no reply.⁷ One wonders what the author of the *Principia mathematica* would have done with a book like that, filled not with diagrams and precise theorems but with dense paragraphs of etymologies and maxims, gods and laws, myths and chronologies, emblems and blazons, and all matter of exotica from Greece and Rome and five other ancient Mediterranean cultures — all bent on showing for the world of man the same coherence that Newton himself had supplied for the world of nature, to wit: ‘the Principles of a New Science of the Nature of Nations, from which are derived New Principles of the Natural Law of Peoples.’ Whatever Sir Isaac’s reaction might have been, we know from Vico’s own report how his book fared at home. Greeted largely with silence in Naples, in time it acquired a following, above all in Venice, where the noble and much-travelled abbot Antonio Conti was instrumental in having it published in a second and — in 1744, the year of Vico’s death — a third and final edition.⁸

In the first decades after his death, Vico was mainly remembered as the subject of a debate in Italy between the *ferini* and the *antiferini*, the former claiming that the hypothesis of an original untamed and lawless state brought new clarity to the philosophy of law; the latter holding that a descent into bestiality following the saving event of the Flood was rank theological nonsense.⁹ Quarrels of this kind were swept away in 1799, however, when a group of Neapolitan Patriots, having survived the Battle of Marengo, fled through the ‘gates of Milan’ into northern Europe, taking with them not only the *New Science* but also a conception of its author as a mind superior to his age, a full century beyond its thought.¹⁰ Thus began the myth of Vico as a genius isolated in his own culture, but ripe for discovery in a more congenial age — a notion that every generation since then, it seems, has tried to validate. Furnished a copy of the *New Science* by one of the Patriots, Jules Michelet promptly translated it as *Principes de la philosophie de l’histoire* (1827), an immensely influential reading that portrayed Vico as a democratic, progressivist philosopher of history. In Britain, Samuel Taylor Coleridge met up with another Italian exile, marveled at the mind who had discovered the true, ‘collective’ nature of Homer, and bequeathed this Vico to the Broad Church theologians, who found in his work an immanent God who teaches mankind through his common sense and the impulse to fellowship.¹¹ In Italy, meanwhile, a school of Augustinian Liberals, headed by Niccolo Tommaseo, read in Vico a stirring defence of the course of Providence, who leads fallen men back to integrity through the works

of culture.¹² But Marx had read Vico as well, doubtless in the translation of Michelet, and wrote to Lassalle that he would find there the philosophic conception of the spirit of Roman Law in opposition to the legal Philistines. Sorel would presently discover class warfare in Vico, and the *New Science* became the first stop on the road to the Finland Station.¹³ By century's end Vico was a Positivist, whose science of humanity fused traditional psychology with an empirical historiography: so we read in the studies of Carlo Cantoni, Pietro Siciliani, and their many followers.¹⁴ In powerful reaction to that rendering, Benedetto Croce began our own century with a beguiling monograph, widely read and translated (into English by R. G. Collingwood), that separated out from the 'dross' of Vico's social and historical theories the 'gold' of his philosophy of mind, which brought into being, Croce argued, a philosophical Idealism that would mature in Kant, Hegel, and Croce himself.¹⁵ And most recently, Nancy Struever has tried to rescue us all with a neo-Nietzschean Vico who deconstructs in the privacy of his room at night the confident truths about language and vice in society that he has taught his youthful charges by day.¹⁶

In light of all this — and of many other tales that could be added — we should be forgiven if we think of the *New Science* as the great inkblot of intellectual history onto which every thoughtful person can project — and apparently has projected — his own deepest feelings about himself and human history. In some final sense, of course, this is true, but no more so of the *New Science* than it is of Plato's *Republic*, the Gospel of John, *The Spirit of Laws*, *Moses and Monotheism*, or any other text that speaks deeply of the rise of humanity and its course through history. To read is to engage, the critics remind us; and so it is. Even more fundamental, however, is the engagement of the author with his world — the engagement with his learning, his occupation, and his ambition — out of which his text is produced. So it is that the humanity that Vico writes, and which he 'knows' (as every scientist knows) that we and all who follow us share with him, is also — if not solely or principally — Vico's own humanity. This, at any rate, is the perspective from which I write here.

From his letters, his orations, his pedagogical and his scholarly works, nothing seems to me plainer than the essential continuity between Vico's science of humanity and his sensibilities as teacher and citizen. Concretely said, Vico advanced to his startling theories on the birth and growth of humanity by holding fast to the classical (and humanist) ideal of the public servant as 'sage,' as man of learned eloquence, and by embracing and extending the 'philological' studies which, having already swelled by the time of Quintilian 'to the dimensions of a brimming river' (*Institutio oratoria* 2.1.4), were the stock in trade of Renaissance

humanists. Vico's 'new science,' in brief, emerged as a combination of principles adapted from classical rhetoric with philological discoveries and conjectures in ancient poetry, myth, language, and law. Basic to this contribution is his insistence on the primacy of language, that characteristic bias of traditional poetic and rhetoric. In his use and reformulation of this ancient conviction lies much of the excitement of his discovery and some considerable portion of his legacy.

II

While men still roamed the woods [wrote Horace], Orpheus, the holy prophet of the gods, made them shrink from bloodshed and brutal living; hence the fable that Amphion, builder of Thebes' citadel, moved stones by the sound of his lyre, and led them whither he would by his supplicating spell. In days of yore, this was wisdom, to draw a line between public and private rights, between things sacred and things common, to check vagrant union, to give rules for wedded life, to build towns, and grave laws on tables of wood; and so honor and fame fell to bards and their songs, as divine.

In some marginal comments on this passage from the *Ars poetica* (vv. 391-401), Vico noted that while Horace's chronology was wrong, his claim was correct: for 'first, or vulgar, wisdom was poetic in nature,' wrote Vico, and 'from poetic history are to be sought the origins of republics, laws, and all the arts and sciences that make humanity complete.' Thus my '*New Science* (of 1730), and especially its second book,' is essentially 'an extended commentary on this passage.'¹⁷

And so it is. But the passage itself is but one in a long tradition of Greek and Roman authors, dating at least from Aristophanes and Isocrates, who held that speech, not reason, is the basis of culture, that poetic heroes, not philosopher kings, create human society.¹⁸ The idea is stated most impressively by Cicero in *De inventione* (1.2.2-3), itself a summary of Hellenistic rhetoric. After speaking of 'men scattered in the fields and hidden in sylvan retreats,' he writes:

It does not seem possible that a mute and voiceless wisdom could have turned men suddenly from their (savage) habits and introduced them to different patterns of life. . . . (And) after cities had been established, how could it have been brought to pass that men should learn to keep faith and observe justice . . . unless men had been able by eloquence to persuade their fellows of the truth of what they had discovered by reason?

Or, as he says most simply in *De oratore* (1.8.33):

What other power (than eloquence) could have been strong enough either to gather scattered humanity into one place, or to lead it out of its brutish existence in the wilderness up to our present condition as men and as citizens, or, after the establishment of social communities, to give shape to laws, tribunals, and civic rights?

Fine humanist that he was, Vico himself, in his seminal Sixth Academic Oration, set aside the rather trivial subquarrel among the poets and rhetors over ascendancy in the realm of language (and thus in the founding of culture), combined elements from both the Horatian and Ciceronean versions, and offered his own reconstruction of the ancient topos:

So too we learn from the fables of the wisest poet that Orpheus tamed beasts with the music of his lyre and Amphion moved stones with his singing, charming them into place of their own accord, and so built the walls of Thebes; and for these merits it was thought that the lyre of the former and the dolphin of the latter were borne aloft and painted in the stars. These stones, these beams, these beasts are human fools, and Orpheus and Amphion the sages who conjoined their theoretical knowledge of divine things and their practical knowledge of human things with eloquent speech, and by its compelling force led men from solitude into social bonds, i.e. from love of self to respect for humanity, from inertia to industry, from unbridled freedom to the obedience of law, thus uniting fierce and weak men under the stability of reason.¹⁹

I cite these passages at length, not merely because, as will be plain to all, they form the distant background of the 'new science,' but because they embody, for me at least, the soul of Vico, his own deepest humanity. Vico spent his whole life, both as pedagogue and as a scholar, both in the classroom and in his writings, trying to combine wisdom and eloquence in such a way as to best serve the public good. Endlessly he inveighed against both a 'voiceless wisdom' and empty rhetoric. Societies fell apart when wisdom and eloquence became disjoined, when philosophers like the Cartesians forgot how to communicate and when rhetoricians like the Mannerists played games with language and sought merely to be clever, not true. The sign of utter social decadence, Vico noted — in a magnificent image also adapted from Cicero (*De re pub.* 1.17.28) — is when men, despite the great throng and press of their bodies, live in a deep solitude of spirit.²⁰ What is to be pitied more, he wrote, than the godless masses after the Deluge,

lawless and impious, wandering like vagabonds wherever their ability led them through the great forests of the world, all humanity lost, language confused,

dissolved into a brutal, uncertain, and — because uncertain — often wicked lust, rotting in an idleness brought on by the abundance of fruit that nature gave them, like wild beasts, each separated from the next, not knowing their own kind and thus leaving their dead unburied upon the ground.²¹

In the vocabulary of Vico's pedagogical and scientific writings there is no word more opprobrious than *solitudine*, a notion as vile to him as *servitus* was to Spinoza, *fanatisme* to Voltaire, *Unmündigkeit* to Kant. Whether original brutishness or ultra-sophistication caused it made no difference: solitude of spirit was a cultural disease. He went so far at one point, in fact, as to suggest a kind of state curriculum and civil religion not unlike that of Rousseau.²² If Decartes' passion was indubitability and Hobbes' was security, that of Vico was *civitas*, the wellfunctioning republic in which men acted like citizens.

III

Solitude, then, as the chaos of human existence, the antipode of civilization, is one of the great constants of Vico's thought. Equally central, though in ways more subtle and interesting, is his unfailing insistence that the union of wisdom and eloquence is the nature of a true polity. Convinced of this union, he set out as both teacher and scholar to argue their interpenetration. What is intriguing in this initiative is that the dual endeavors, initially separate, eventually merged with the happiest of issue — his *New Science* — but presented in turn a tormenting dilemma.

In his teaching and pedagogical orations, Vico's principal concern was to maintain the vision of classical rhetoric. Classical rhetoric had always held that its art had a share in the task of reasoning, that it was indeed the logic of social discourse, the kind of reasoning that went on among non-specialists (*inter rudes* was Vico's telling phrase²³) in matters that were merely or mainly probable, and that to be successful the rhetorician had to discover the most appropriate things to say (the *topoi* or *res*), arrange them in the right order, and find the most suitable language (*verba*) — the tropes and figures of speech — with which to make his case.²⁴ Now it was the dubious accomplishment of Peter Ramus to have simplified the liberal arts curriculum by transferring rhetoric's 'logical' tasks of discovery (*inventio*) and arrangement (*dispositio*) to the field of logic; the result was to destroy rhetoric as the logic of discourse, and in time it became largely an art of ornamentation, grandeur, or witticism.²⁵

Vico rejected this artificial separation of *res* and *verba*, of thought and language, for he saw in it the ruin of civil life. Public life required its

peculiar form of discourse; it was too complex and uncertain to be managed by scientific logic, and too important to be left to bombast. It required an imaginative mind to show a jury, a judge, or an assembly connections between seemingly unrelated things and to devise tropes for situations in life that had no names, for, as he liked to quote from Aristotle (*De soph. el.* 165a11-12), there are more things in the world than there are words, and therefore, as Cicero maintained (*De orat.* 3.38.155), metaphor is not mere ornamentation but a necessity of communication arising from the poverty of language.²⁶

In his annual course on the principles of oratory, Vico held firmly to a notion of rhetoric as the art of persuasion, paradigmatically practiced in a court of law, bent on serving the true and the equitable in matters of deliberate human action, the reality of which must be established through appropriate language. Though he adhered to the traditional practice of treating successively the two 'offices' of rhetoric concerned with *res* (the discovery and arrangement of 'places'), followed by that concerned with *verba* ('elocution' or 'style'), he was plainly uncomfortable with any separation of content and form. Thus, in discussing 'legal issues' (*status qualitatis legalis*) in his section on the *topica*, Vico stressed the intrinsic ambiguity of normative legal texts and the consequent necessity of living speech to make them applicable: the legal reality of a past deed (and thus the fate of the accused) depends on the ability of competing attorneys to sharpen the issue through speech.²⁷ Similarly, in the section on style, Vico favored 'figures of thought' over 'figures of speech,' since the former 'occupy the mind, not the ears';²⁸ he reduced the tropes to an economic four, not by the way in which they adorn, but by the way in which they transfer meaning;²⁹ and most significantly, in the fullest discussion in his unusually spare treatise, he related the 'conceits' of seventeenth-century rhetoric with the 'maxims' or *gnomai* of Aristotle (*Rhet.* 1394a19-1395b19) and the *sententiae* of the Roman orators (Quintilian 8.5.1-8). Properly understood, *concelli* are not those pithy, witty one-liners (*dicta arguta*) of the Mannerists by which an agile tongue dazzles and regales an audience, snaps back heads with laughter, and demonstrates his own cleverness; such conceits discover no truths, advance no civil ends. Rather, *concelli* are brief, sharp-witted statements (*dicta acuta*) having enthymematic force, with incisiveness equal to their conciseness, born of imaginative, ingenious minds intent on discovering the true; through them listeners see novel visions and discover new relationships, sinners are reduced to tears, implausible cases are won in court, legislation is gotten through intractable assemblies.³⁰

Meanwhile, as philologist, equally convinced of the unity of wisdom and eloquence, Vico set out to discover the truths of ancient legal and

literary texts. From the vantage of his *New Science*, he would eventually say that all commentators on earliest times, including himself until that time, had fallen victim in their accounts to one or both grievous 'conceits' that afflict our refined spirits, the one nationalistic, the other scholarly. The conceit of each nation is that it before all others invented the comforts of human life and that its remembered history goes back to the very beginning of the world; thus its chroniclers claim their kinsmen as the founders of humanity and are forever adjusting the chronology of the race to fit the events that are familiar to them. More serious is the conceit of the scholars, who assume that what they know is as old as the world itself; thus myths are made the repository of recondite truths, hieroglyphs become a code for mystic messages, Greek fables are turned into allegories, and sundry other anachronisms are committed.³¹

Vico's own early conceit was the attempt to discover ancient Italic wisdom by tracing the origin and meaning of Latin words.³² The philosophy he found, of course, looked strangely like an assortment of contemporary views. The problem, his anonymous reviewer suggested, was his approach: the etymological method, the critic argued, will only give rise to endless wrangling; why not dig up the ruins of Etruria, since it was the Etruscans who gave the Romans their first laws and sacred rites? But that approach, replied Vico, would be even less certain, for ancient myths were purposely enshrouded in mystery, the better to secure their venerableness, and as for laws, the number of those derived from the Etruscans are relatively few compared with those imported from Greece!³³

It is not the least irony in intellectual history that Vico progressed to his new science by disproving the substance of his own objections. He did not join in any archeological dig, nor did he abandon his fascination with etymologies, but he widened his philological concerns to include, among other things, the epics of Homer and ancient Roman law, and through a series of conjectures and transmutations he came to see them, not as esoteric philosophic products, but as gradually evolving, imaginative efforts by peoples, at first separated, to form themselves into nations.

At least from the time of Livy, the Law of the Twelve Tables, Rome's first written law, had been handed down as imported Greek wisdom, derived from the codes of the ancient lawgiver Solon by a delegation of patricians sent to Athens for counsel in dealing with the unruly plebs. If that be the case, Vico came eventually to ask, how much Athenian good taste does one find in the provision that 'a sick debtor accused of his crime should be hauled before the praetor on an ass or in a wheelbarrow'? How much Greek delicacy in the requirement that anyone harvesting another's crops or letting his cattle graze on a neighbor's

lands at night was to be hanged? Look closely into the tables, he argued, and you will find there the remains of an agrarian law, one that followed the struggles for justice of the plebs' own tribunes and ended with the concession of 'quiritary' or true legal ownership of land. The law that has come down to us in 'Twelve Tables' is the record, assembled over time, of this grand, heroic struggle for civil liberty.³⁴

Yet more remarkable was Vico's discovery of what he came to refer to as the 'true Homer' — remarkable if for no other reason than that Homer's alleged discoverer, Friedrich August Wolf, was anticipated by some 75 years. Already Longinus (*Subl.* 9.11ff.) had noticed the different spirits and styles of Homer's two poems, and thus thought the *Iliad* a work of his youth, the *Odyssey* a product of old age. The differences are far starker than this, Vico came eventually to argue, explainable only by turning the matter around. Make Homer a man of the people, 'lost in the crowd' of early Greeks; suppose this people to be crude, common, and unrefined, unable to think abstractly about what they valued, experienced, and knew to be true; suppose that they sang of themselves and their deeds in the images in which their natures compelled them to speak; that these songs were repeated by the bards, shaped, embellished, combined one with the next; and that in time the tyrants of Athens divided and arranged the poems into two groups, each united by one of the great figures of their highest ideals, Achilles and Ulysses, and ordered the poems sung from that time onward by the rhapsodes at the Panathenaic festivals — suppose all these things, each supported by evidence philosophical and philological alike, and you will be forced to conclude that Homer was not a philosopher, that he was not even a man, or two men. 'Homer was an idea or a heroic character of Grecian men insofar as they told their histories in song.'³⁵

IV

Suddenly Vico's work as pedagogue merged with his work as philologist and legal scholar. If no majestic Homer had risen up among the Greeks to tell their noble tales; if no sagacious Solon had ever stood at the gates of Rome to give it its first written codes; if instead, Homer was 'lost in the crowd' of brave but cruel peoples all taken up with their senses and images, and the tables of ancient Rome were literally the 'rudiments' of a simple agrarian society, then how much less abstract and esoteric, how much more entangled in the body and its passions were the minds of the true children of the race, those 'theological poets' whose austere myths and severe rites had established the whole of humanity? Vico recalled the logic of discourse he had been maintaining

in his lectures and orations; he recalled Cicero's view that metaphors and tropes are necessary to life (*De orat.* 3.38.155) since, as Aristotle had held (*De soph. el.* 165a11-12), there are more things in the world than there are words; he remembered the line from Aristotle's *Rhetoric* (1395b1-4) that simple minds like to hear stated as universal truth the opinions they hold about particular cases, and the lines from the *Poetics* (1451b5-7) that poetic statements, unlike those of history, have the nature of universals; he remembered as well that poetic maxims, the *sententiae* ingeniously grasped in a flash, were thought by the ancients to be, as their name implied, rather felt by the senses than seized by the mind (Quint. *Inst.* 8.5.1). All this he combined, in typically transmuted form, with his philological research and — in one of the most singular instances of *ingenium* on record — drew his famous conclusion: Poetry is the native tongue of the race, the clarion call of humanity's birth. Poetry is not a product of mind, but the logic of the mind's development. Not philosophy or human wisdom, but *poetic* wisdom was the wisdom of the ancients. Here, in a single phrase adapted from the Stoics, he had the perfect synthesis of wisdom and eloquence, or *res* and *verba*, for which he had striven his whole life.³⁶

To show how utterly natural and utterly vulgar this first wisdom was, Vico pushed back his analysis to the very moment of humanity's birth. The first human act was literally mute, wholly sensory and corporeal, scarcely imaginable. The descendants of Ham, Japheth, and Shem, scattered by the Flood throughout the earth, the offspring of promiscuous intercourse, were nursed by their mothers, then abandoned, left to wallow in their own filth, thus absorbing into their bodies the nitrous salts by which they grew to the stature of giants. These 'stupid, insensate, and horrible beasts,' all language and delicacy lost, having no mind at all but only bodies and a 'corporeal imagination,' roamed the great forests of the world, which themselves were restless with dehydration, sending gradually to the sky the 'dry exhalations' which might some day ignite in the air. And when at last the sky fearfully rolled with thunder and flashed with lightning,

thereupon a few giants, who must have been the most robust, and who were dispersed through the forests on the mountain heights where the strongest beasts have their dens, were frightened and astonished by the great effect whose cause they did not know, and raised their eyes and became aware of the sky. And because in such a case the nature of the human mind leads it to attribute its own nature to the effect, and because in that state their nature was that of men of robust bodily strength, who expressed their violent passions by shouting and grumbling, they pictured the sky to themselves as a great animated body, which in that aspect they called Jove, the first god of the so-called greater gentes,

who meant to tell them something by the hiss of his bolts and the clap of his thunder. And thus they began to exercise that natural curiosity which is the daughter of ignorance and the mother of knowledge, and which, opening the mind of man, gives birth to wonder.³⁷

No mysterious imagination or sober logic permitted Vico a glimpse of this first moment. If rhetoric is reasoning *inter rudes*, he reflected, then the logic of rhetoric applies as much to the first as to the most recent moment of our social existence. One must only make allowance, as 'conceited' commentators do not, for the cruelty of time. 'Truth is the daughter of time,' he remembered; thus the truth of our ancestors was a crude, dim, even violent truth, grasped more with the body than with the mind. Hearing thunder sound in the heavens, the wandering *giganti* craned their necks upward together, became aware of the sky, and 'saw' it as a great animated body, Jove. In this action, no longer mere reaction but act of 'poetic' imagination, of the transfer of meaning (*metapherein*) through the 'ingenious' discovery of relationships heretofore unnoticed, the *grossi bestioni* quit their spiritual isolation, established communication, and became men. Through their 'collective sense' (*sensus communis*) of Jove, life in society began. The rhetorical act, the art of speaking effectively *inter rudes* — of discerning new relationships, fashioning appropriate language, appealing never to abstract truths but always to the *sensus communis*, to 'what is held generally or by most' (Arist. *An. Pr.* 24b11, 70a3; *Top.* 100a30; *Rh.* 1357a35), and so persuading men to civil action — this act of the rhetor is here generalized, made the common, universal, and necessary act of the ancestors of the race.³⁸

Providence, then, as the grand mute gesture of awestruck beasts, is the *principium* or beginning of humanity, our first 'metaphysical concept,' entirely active and poetic, out of which would evolve over time the entire edifice of human wisdom, known to us now as the world of arts and sciences. Implied in this concept, moreover, are two further 'principles' of first philosophy, equally old and equally poetic, arising spontaneously with the worship of Jove: taking one woman to wife and burying one's dead. Truth, Vico held, begins with certainty, which is to say 'specificity' or focus. In their bestial state the brutes roamed the world 'aimlessly,' living promiscuously 'with an uncertain lust,' not distinguishing 'their own' from other creatures of the wild, and so leaving their dead unburied upon the ground.³⁹ Their lives in a word were 'common' (*commune*), wildly unfocused (*incertissime*), and thus fully beyond truth (*fallacissime*). All this is reversed by the voice of Jove. As lightning marks the close of the earth's own desperate dehydration, so the vision of Jove in a thundering sky arrests the pointlessness of feral wandering, literally stops the giants in their tracks, brings them to their

senses, and establishes authority. Authority comes about with the dawn of consciousness (*coscienza*) itself, the brutes now sensing themselves with reference to a provident deity. So begins the knowledge of certainty, the *certum*, and out of this initial certainty, Vico thinks, arise two others spontaneously: knowing one's children by living monogamously, and knowing one's kind in burying the dead. These particular human customs, these *certa* of man's existence, arose spontaneously from the original act of consciousness (*coscienza*), the recognition of Jove in a thundering sky, and banished forever an aimless, promiscuous, uncaring life in the wild. As our original, founding certainties, they are the core of our first philosophy, the tenets of 'poetic metaphysics.' As the defeat of unspecificity and chaos, they are the start of that wisdom which in time would lead from mere consciousness to science (*scienza*), knowledge of the true. They are thus the beginning of our language, the rise of our mind, the onset of our life in common. In a word, they are the 'principles' of our humanity.⁴⁰

Beyond that first dim glimpse of a provident Jove in which men discovered their humanity, wisdom is made with ever increasing complexity and articulateness. Habits are formed and become customs, relationships are established and solemnized, fields are tilled and access to the necessities of life is secured, rites are elaborated and laws emerge, families increase and are combined, and guardianships established, cities are founded, and in time men push out to the seas and beyond. Throughout it all, men are seized by wonder, the natural consequence of that first moment of awe before a thundering sky, and so are led to state, in the only way they can, the connections among things that they sense or create. That way is poetry, the way of image. Though bound to particulars and concrete instances, men sense uniformities and so create images of general or universal meanings. Thus arise emblems, blazons, symbols, and thus, too, metaphors, myths, and fables, the entire world of folklore and poetry in the narrower, articulate sense.

This transcendent impulse of culture, its spontaneous, pre-reflective need to state its existence linguistically, is nowhere more in evidence than in the gods and heroes the nations made, for in their theogonies, Vico argues, they truly recorded the major steps to their development, their most urgent sense of themselves. In turning the sky into the body of Jove, the brutes did more than create their humanity; they stated their sense of selves as large crude beings filled with passions. And so, too, for the other eleven deities that the nobles progressively made: the chaste Juno, wife and sister of Jove, who arose with the solemnization of marriage 'under the auspices'; the nubile Diana, goddess of the living springs, brought to life as the first human need, a dependable source of water, was secured; thereafter her brother and fellow hunter,

Apollo, god of civil light, who sits upon the now-secure mountaintop and from his Parnassus sends forth the Muses of the noble arts; so, too, Vulcan, who conquered the forests with fire, Saturn (sown fields), and Cybele or Vesta (cultivated land); in time came Mars and Venus, as altars and hearths had to be defended, and when the multitude of *famuli* or slaves mutinied with the practice of their servile arts, Minerva sprung from the bow of Jove, which the plebeian Vulcan had split with an ax, and soon thereafter Mercury was fashioned, who carried law to the plebs and so restored order; and last of all came Neptune with his trident, created by the peoples as they took to the sea for war and adventure.⁴¹

There is a logic at work in all this, Vico holds, a specific, definable process of reasoning, but one not at all like that expected of the refined minds of our own human age. What can it mean to think through the body, to reason with a mind that is torn with passions and immersed in the senses? It means to reason as a rhetor must reason when speaking *inter rudes*, arguing among the simple who cannot take in a complicated argument. It means first to canvass a situation in its full extent, trying to see it in all its many aspects and selecting from among them those which are most trenchant and persuasive. It means also to enlarge on particulars, to state as general maxims the opinions one's listeners hold about their own situations. And it means finally to catch up one's argument in stirring images, in language that can so much embrace oneself, one's listeners, and the shared situation that all are impelled to act effectively and as one. Such reasoning is an art to the rhetor, Vico held, but to minds *ab ovo*, buried in the body, it is a compulsion of nature. They have no *copia rerum et verborum* that they artfully sift, yet they sense what is trenchant in their social experience and enlarge such particulars by rendering them spontaneously in stirring images. Observe the birth of Jove, 'the greatest fable' the poets created. Jove is not a metaphysical god; he is God contemplated 'under the attribute of his providence,' the poetic enlargement of a finite but dramatic experience. Jove was created as a thundering voice in the sky, a giant body observing a cluster of frightened men. Out of this particular experience, moreover, came a god of enduring providence, as the founding metaphor was preserved and extended. Thus the auspices were born and the practice of divination, all referred to the provident Jove, and Jove himself acquired over time the additional titles of best (*optimus*), strongest (*fortissimus*), and greatest (*maximus*). In this wise, through a natural process of imagination, a particular experience of sense became a universal institution and an idea of general application.

As it was with Jove in the beginning, so it was with all the gods and heroes of the ancients — one image seeds the next; one word, one

symbol, one myth leads to another, not through any logical extrapolation but through an endless social dialectic between public language on the one hand and a culture's sense of itself on the other. Jove is an image of the brutes' own lumbering, passionate bodies, but through it they are reduced to men who know their kind, and out of the monogamous unions to which this leads comes forth the chaste goddess Juno, whose cult in turn embroiders the practice of the auspices and makes of them the legitimate form in which to contract and solemnize marriage. Through such a process — a kind of poetical sorites — symbolic systems and mythical structures are established, great chains of images that stretch over time and give a culture standing and identity.

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But men do eventually develop prose, and the poetic tropes, once necessary modes of expression and being, become mere figures of speech.⁴² The mind unfolded, man moves from his natural ambience of simile and metaphor, of poetic universals, to the land of genera and species, capable of formulating abstract principles for areas of inquiry and industry for which previously he had only a tradition of imaginative trials and errors, expressed in tropological form. He moves on, for instance, from a civil equity based on authority to a natural equity based on reason, from customs that are pious and punctilious to ones that are truly dutiful, taught to each man by his own sense of right.⁴³ With man's coming of age, the direction of mind reverses itself. No longer compelled to enlarge particulars into those imaginative genera in which life has its certainty, men are now able to grasp particulars within properly philosophical categories. The logic of topics is superseded by the logic of criticism; cities arise, and with them the academies.⁴⁴

Vico does not tell us how this change comes about; he does say, however, that it is signaled linguistically by the development of ironic statement. Irony as a trope, Vico argues, is based on a conscious distinction between truth and falsity: one thing is spoken while its opposite is intended. Such a capacity was entirely beyond the founders of the race who, like children, were naturally truthful, unable to reflect and thus unable to feign anything.⁴⁵ Irony, moreover, implies a split between tongue and brain, the rise of distance between language and the reality it seeks to contain. Irony is the conscious trope, and the consciousness it implies extends to the other tropes as well. Metaphor, metonymy, and synecdoche are now seen as figured, not literal statements, and the poetic characters lose the mark of univocity that they necessarily had in the beginning.⁴⁶

Here we arrive at the moment of truth, the point of judgment that Vico, like every surveyor of the course of humanity, must face headon: what is the nature of these, our own bright times, and how do they relate to those simpler days whose credulities they happily explode and whose 'truth,' such as it was, they refine or even perfect? Vico is face to face with his own humanity, with the feel and the fit of (in his phrase) 'the returned age of man' in which he is living. As much as Vico gloried in the achievements of his age — and he did until the end — and as much as he celebrated the march of humanity from its crude and cruel beginnings to the refinements of his day, as his spirit aged and his text grew dense and subtle, he came to doubt the power, and certainly the stamina, of an open, rational society. In time a pervasive gloom takes hold in his work, and cultural demise, once a mere theoretical possibility, is brought into the theoretical structure of his science, made part of that ideal eternal history of the rise, progress, maturity, decadence, and dissolution of nations, a course each nation would follow 'even if there were infinite worlds being born from time to time throughout eternity.'⁴⁷ Vico sets this all down in a memorable axiom: 'Men first feel necessity, then look for utility, next attend to comfort, still later amuse themselves with pleasure, thence grow dissolute in luxury, and finally go mad and waste their substance.'⁴⁸

In support of such a notion Vico not only invokes the wisdom of the ancients, from Polybius to Bodin, for whom the cycles of cultures were axiomatic; he puts in evidence the very ambiguities of human maturity. The stricter, more severe one's reasoning became, the drier and more sterile one's spirit seemed to grow. One need only observe the dour Cartesians who were now the models of learning. Similarly language, now rich, complex, and intricate, seemed to have lost the purity and power of a simpler, less conscious day, its erstwhile role in the struggle for conceptual clarity now having yielded to the lure of instant glory in the artistry of Mannerism. These developments held no surprise, Vico felt, for he thought he could find in rationality itself, or more precisely in the rationality of the critical intelligence, the source of its own undoing. As irony marked the onset of a full humanity, so, too, it displayed the fallibility of such an age. An ironic consciousness is one capable of science, for it knows to distinguish the true from the false; but by that same capacity it can also deceive, saying one thing and meaning another, and by this same route can come eventually to deceive itself, claiming that what it knows, in the quiet of its inner self, is right, rational, and correct despite any willingness or ability to state it in words or in actions or through any human risk at all. And so it pulls back into smugness, a desperate self-reliance. Similarly, an ironic consciousness is one capable of adornment, luxury, and pleasure, for

it necessarily distinguishes the literal from the figured and thus the plain from what is mannered. It has put some distance between language and thought and so can savor an image for its beauty and the arts for their splendor, no longer requiring that they teach or ennoble. Through this same action, however, it renders language precarious; severed through irony from the intention of mind, language can become self-absorbed, its images sought for their own sake. No longer asked to be acute or insightful or even to communicate a truth at all, language can descend to verbal coyness, a patter of witticisms intended only to titillate, cajole, or to parade a personality.⁴⁹

Thus the very triumph of refined humanity, the separation of language and thought of which natural, 'poetic' man was incapable, puts society in jeopardy. Without the authority of images on which an earlier age could rely spontaneously, the bond of society rests in the consensus that reason is to forge. Vico sensed the precariousness of this arrangement, for he argued that even in the best of circumstances a hearty eloquence must accompany abstract truth, inflaming the people to do things they know by reason to be true.⁵⁰ To one who had spent the better part of a career defining the role of language in the formation of culture that must have seemed a dismal suggestion. Had eloquence lost its logical, truth-seeking function and become merely hortatory, following fast on the heels of science? Having so brilliantly rewritten the first half of the ancient topos — that eloquence alone can establish society — was Vico now content to repeat its second half slavishly — that once society matures, eloquence is needed to persuade men of the truth of what they have discovered by reason?

In the end, I suspect, Vico compromised. Not wishing to abandon the architectonics of cultural development he had arrived at with such pain, he nonetheless erected humanity on a kind of cultural fault that, with the slightest shift in balance, would bring the edifice down entire. Thus humanity at its peak retained in its structure as acute a tension as that which marked its formative days, and history itself could be made to move, nearly with the regularity of tides, between eras that are stirring but slightly frightening, when men see visions that are large, paint images that are sweeping but not subtle, take great ingenious leaps in science and social experiment, but without regard for effects and implications; and eras that are cautious and refined, but vaguely effete, when every step is measured and every action conscious, when politenes and civility hold sway, to the point of social despair.

If we are beings of nature, therefore, we are equally — more obviously, indeed — men of the world, citizens, makers of one another's lives. The course of that making, Vico concluded, swung between poles of sundry dyads: imagination and reason, spontaneity and reflection,

severity and liberality, novelty and refinement. A more subtle analyst might have found in such dyads the inevitable tensions of any social structure; but to Vico they were the marks of actual chronological eras, the ebb and flow of history itself. So regular was this course, in fact, that he sought its guarantee in the hidden hand of a provident God: in its 'first principal aspect,' he concluded, his work was to be seen as a 'rational civil theology of divine providence.'⁵¹ The dramatic, poetic act of worship, at first no more than a mute response to a thundering heaven, drew men out of their horrible isolation and made them one. From this first, spontaneous, stumbling act men were led on to activities of increasing, and increasingly conscious, unity — taking one woman to wife and remaining with her (thus acknowledging *fidelitas*, responsibility for the other); burying and remembering their dead (thus acknowledging *humanitas*, the bond of humankind over time); and, fundamental to all else, worshipping a single and powerful god, in whose hands their future, as their past, lay (thus acknowledging *providentia*, the unity and integrity of human history). Through all the vicissitudes of history Vico found these marks of humanity, at least in their barest minimum, preserved, and in that, he argued, could be seen the work of Provident Design as surely as Newton and his many followers could show it in the formation of rocks and the movement of stars.⁵²

As a theological apologetic, as an attempt to prove a provident god in the fabric of human culture, Vico's work did not survive the eighteenth century. Between it and century's end stood the *Dialogues* of Hume, and under the critical knife of Hume's Philo fell equally all arguments to providence from design, whether that of Nature or that of Society.⁵³ Too little a subject of studied reflection, too much the expression of mere Enlightenment piety, we may say of the god of Vico what John Hermann Randall has said of Newton's: 'Such a deity really deserved his fate.'⁵⁴

As a rational theory of society, on the other hand, Vico's work enjoyed a kinder reception. Specific ideas on which he put stress, such as the multiple-independent-origin theory of culture, were quickly attacked and remain in debate today. Yet in its structure, its tenor, and its essential assumptions, Vico's work was a monument to his age, if not a legend in his time. That language has primacy in human life; that poetry is prior to prose, and image to concept; that society takes form as a growth of human senses; that human actions and arrangements are the first statements of ideas, and that mind and society, with language as a means, share a common history — these and other lead ideas of Vico's science, startling in his own day, have lost none of their lustre in ours. That society is a structure of sentiment and thought as well as a cluster of rites and forms, and that its gods and heroes, its customs and laws, its words

and its sciences depend for their plausibility as much on the common and collective sense of the people as on the refined ideas of intellectuals is as golden a principle today as when Vico urged it in the eighteenth century. Indeed it may even come easier to us than it did to the men of his age to read with assent his scornful rejection of Polybius' quip, put at the end of every version of his science, that 'if all men were wise there would be no need in the world for these superstitions.'⁵⁵

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Notes

- 1 *Philosophical Dictionary*, trans. Peter Gay (New York: Basic Books, 1962), p.301.
- 2 *The Progress of the Human Mind* (1794), Ninth and Tenth Epochs.
- 3 *Dictionnaire encyclopédique* (1755), in *Oeuvres complètes*, John Lough and Jacques Proust, vol. 7 (Paris: Hermann, 1976), p. 212.
- 4 *The New Science* (1744), trans. Thomas G. Bergin and Max H. Fisch (Ithaca, N.Y.: Cornell University Press, 1968), par. 331.
- 5 Cited by Vico in his *Autobiography*, trans. Max H. Fisch and Thomas G. Bergin (Ithaca, N.Y.: Cornell UP, 1944), p. 159.
- 6 *Ibid.*, p. 174.
- 7 A footnote in Fausto Nicolini's edition of Vico, *Opere di G.B. Vico* (Bari: Laterza, 1911-41), vol. 5, p. 55, cites a letter to Vico from Giuseppe Attias in Livorno, saying that he had received the shipments for Le Clerc and Newton and had consigned the latter to Benjamin Crow, Britain's consul in that city, who in turn forwarded it together with several Hebrew manuscripts intended for Conyers Middleton, the ecclesiastical librarian in Oxford.
- 8 *Autobiography*, pp. 182-86.
- 9 The *ferini* were led by Emmanuele Duni, *Origine e progressi del cittadino e governo di Roma*, 2 vols. (Rome, 1763); the *antiferini*, by Germano Federico Finetti, *Apologia del genere umano, accusato di essere stato una volta una bestia* (Venice, 1768).
- 10 Foremost proponents of this view were Vincenzo Cuoco and Francesco Lomonaco.
- 11 Coleridge gave us, likely from the French of Michelet, the first English version of Vico — that of the third 'book' of the *New Science*, 'On the Discovery of the True Homer.' Frederick Denison Maurice, who wrote vigorously on Vico in his *Modern Philosophy* (London, 1862), pp. 500-4, is the Broad Churchman most influenced by his thought.

- 12 Tommaseo's *Vico e il suo secolo* is included in his *Storia civile nella letteraria* (Turin, 1872) pp. 1-179.
- 13 Unlike Marx, Sorel made an extensive study of Vico, and in 1896 contributed a three-part 'Etude sur Vico' to the *Devenir Social*. Edmund Wilson was sufficiently impressed by these linkages to set Michelet's discovery of Vico at the beginning of *To the Finland Station*.
- 14 Cantoni, G.B. *Vico* (Turin, 1867); Siciliani, *Sul rinnovamento della filosofia positiva in Italia* (Florence, 1871).
- 15 *La filosofia di Giambattista Vico* (Bari: Laterza, 1911; 5th ed., 1962).
- 16 'Rhetoric and Philosophy in Vichian Inquiry,' *New Vico Studies* 3 (1985): 131-45. Struever overlooks the ongoing dialogue between Vico's 'school' and 'scientific' writings, and entirely ignores his letters, which contradict her thesis at every turn.
- 17 *Opere di G.B. Vico*, ed. Fausto Nicolini, 8 vols. in 11 (Bari: Laterza, 1911-4), vol. 7, p. 76. Hereafter *Opere*.
- 18 Cf., for example, Aristophanes, *Frogs*, vv. 1031-36; Isocrates, *Nicocles*, 5-9. On this tradition, see Friedrich Solmsen, 'Drei Rekonstruktionen zur antiken Rhetorik und Poetik,' *Hermes* 67 (1932): 133-54.
- 19 *Opere* 1: 60-61. For Vico's final handling of the topos, see the *Scienza nuova seconda*, *Opere* 4: pars. 81, 523, 615, and especially 734, where Horace's chronology is corrected.
- 20 *Scienza nuova seconda*, *Opere* 4: par. 1106. Cf. also his early oration, *Opere* 1:59.
- 21 'Sinopsi del Diritto universale,' *Opere* 2:10.
- 22 *De studiorum ratione*, *Opere* 1:119.
- 23 Sixth Oration, *Opere* 1:62.
- 24 For a systematic presentation of classical rhetoric see Heinrich Lausberg, *Handbuch der literarischen Rhetorik*, 2 vols. (Munich: Hueber, 1960).
- 25 Walter J. Ong, *Ramus, Method, and the Decay of Dialogue: From the Art of Discourse to the Art of Reason*, (Cambridge: Harvard UP, 1958), p. 291.
- 26 Vico, *Institutiones oratoriae*, ed. Giuliano Crifò (Naples: Istituto Suor Orsola Benincasa, 1989), p. 310. Vico's *Principles of Oratory*, of which Nicolini published only excerpts, is now available in full, with Italian translation and copious notes, in this handsome edition.
- 27 *Ibid.*, pp. 120-32. See also the prologue to the *Diritto universale*, *Opere* 2: 26-28.
- 28 *Institutiones oratoriae*, p. 364.
- 29 *Ibid.*, pp. 310-36.
- 30 *Ibid.*, pp. 282-306.
- 31 *Scienza nuova seconda*, *Opere* 4: pars. 120-28.
- 32 *De antiquissima Italorum sapientia ex linguae latinae originibus eruenda* (1710), *Opere* 1: 123-94, now available in English in the translation of Lucia Palmer, *On the Most Ancient Wisdom of the Italians: Unearthed from the Origins of the Latin Language* (Ithaca, N.Y.: Cornell UP, 1988).
- 33 'Polemiche relative al *De antiquissima Italorum sapientia*,' *Opere* 1: 197-276, esp. 237f., 242-48.

- 34 Vico's research into the origins of the Twelve Tables may be followed in the *Diritto universale*, *Opere* 2:564-80; an unpublished appendix to the 1731 version of the *New Science*, *Opere* 4: pars. 1430-32; and the final version of the *New Science*, *Opere* 4: pars. 73, 86, 88, 96, 102, 104-11, 420-22, and generally 981-1003.
- 35 Vico's discovery of the 'true Homer' also has a course, from the *Diritto universale*, *Opere* 2: 313f., 375-78, 675-700; to the first edition of the *New Science*, *Opere* 3: pars. 288-305; to the last, *Opere* 4: pars. 780-904.
- 36 This transformation of rhetorical principles into a theory of human origins occurs in the *De constantia jurisprudentiae*, *Opere* 2: 363-85; is extended in the first *New Science*, *Opere* 3: pars. 253-65; and comes fully into its own in the last, *Opere* 4: pars. 34, 199, 205-209, 361-63, 375, 379, 400-11, 424, 456, 494-98, 809, 816, 819, 821, 825. On this see my book, *Vico in the Tradition of Rhetoric*, (Princeton, N.J.: Princeton UP, 1985), especially chapter 4, from which the pages that follow are adapted.
- 37 *Scienza nuova seconda*, *Opere* 4: pars. 369-75. Translation of Bergin and Fisch.
- 38 *Ibid.*, pars. 495-98, 830-33.
- 39 See the 'Sinopsi del *Diritto universale*,' *Opere* 2:10, and the *Scienza nuova seconda*, *Opere* 4: par. 321.
- 40 *Scienza nuova prima*, *Opere* 3: pars. 61-78; *Scienza nuova seconda*, *Opere* 4: pars. 333, 360, 502-5, 529-31.
- 41 *Scienza nuova seconda*, *Opere* 4: pars. 502, 511, 528, 533, 549, 562, 589, 604, 634.
- 42 *Ibid.*, par. 409.
- 43 *Ibid.*, pars. 912-21, 947-53
- 44 *Ibid.*, pars. 219, 498, 821, 934.
- 45 *Ibid.*, par. 408.
- 46 *Ibid.*, par. 403. Cf. *Scienza nuova prima*, *Opere* 3: par. 265.
- 47 *Scienza nuova seconda*, *Opere* 4: par. 1096.
- 48 *Ibid.*, par. 241.
- 49 While irony is treated by the ancients quite casually as just another rhetorical possibility (e.g. Quint. *Inst.* 8.6.54-56), it assumes in Vico the ominous character of 'calculated falsity' or deceit, a distinctly 'human' posture unavailable to the childlike, spontaneous, 'naturally truthful' poets and heroes. Cf. *Scienza nuova seconda*, *Opere* 4: pars. 408, 817.
- 50 *Ibid.*, par. 1101.
- 51 *Ibid.*, pars. 342, 385.
- 52 *Ibid.*, par. 2. The Boyle Lectures of 1711 and 1712 were William Derham's *Physico-Theology, or a Demonstration of the Being and Attributes of God from His Works of Creation*, followed in 1721 by his *Astro-Theology, or a Demonstration of the Being and Attributes of God from a Survey of the Heavens*, both hugely popular works. On the genre see Wolfgang Philipp, 'Physicotheology in the Age of Enlightenment: Appearance and History,' *Studies on Voltaire and the Eighteenth Century* 57 (1967): 1233-67.
- 53 See Section XI of *An Enquiry Concerning Human Understanding* and the whole of the *Dialogues Concerning Natural Religion*. From a copious literature on the subject see

Robert H. Hurlbutt III, *Hume, Newton and the Design Argument*, rev. ed. (Lincoln & London: U of Nebraska P, 1963).

54 *The Career of Philosophy*, vol. 1: *From the Middle Ages to the Enlightenment* (New York & London: Columbia UP, 1962), p. 594

55 *Hist.* 6.56.10 Cf. *Scienza nuova prima*, *Opere* 3: par. 476; *Scienza nuova seconda*, *Opere* 4: par. 1110.