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JONATHAN SWIFT AND THE IDEA OF PROGRESS

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ABSTRACT

The article is an account of the attitudes of Jonathan Swift, the eighteenth-century English satirist, to his time's idea of progress, whether on the socio-political plane or the scientific. It considers the eighteenth-century vogue of progressivist thought in the organisation of social and economic management, and in celebrating the advances in scientific enquiry, and it plots the nature of Swift's reaction against this. As a traditional and conservative Christian thinker, conceiving man to live in a fallen world, and as a classical humanist of stoic leanings, Swift supported progress in so far as it led to purely practical results but he vividly satirised the experimental procedures and innovations which, in his view, went beyond the true benefit of mankind into dangerously uncharted regions. The result is a brilliantly satirical presentation of what he took to be aberrations from man's true nature, intended to startle his readers into rejecting contemporary progressive enterprises and returning to a traditional concentration on the conservative moral virtues as the true guides to living, instead of unconventional ventures into untried regions of new intellectual and social habit – a classical case of conservatism presented with a wholly individual brilliance of satiric distortion, but still relevant (perhaps more so than at any time since he wrote) as a provocation to thought on the proper nature of human endeavour.

The main tenor of eighteenth-century philosophical history in Europe, Professor Herbert Davis observes in his *Jonathan Swift*, is optimistic and progressivist. D'Alembert, whom I quote via Ernst Cassirer's *The Philosophy of the Enlightenment*, summed up its spirit in a survey of his intellectual world, the

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world of the 'Enlightenment', in words which, if more fully true of eighteenth century Continental Europe, yet apply also in considerable measure to much of English thought:

If one considers without bias the present state of our knowledge, one cannot deny that philosophy among us has shown progress. Natural science from day to day accumulates new riches. Geometry by extending its limits, has borne its torch into the regions of physical science which lay nearest at hand. The true system of the world has been recognized, developed, and perfected. ... In short, from the earth to Saturn, from the heavens to that of insects, natural philosophy has been revolutionized and nearly all other fields of knowledge have assumed new forms. . . The discovery and application of a new method of philosophizing, the kind of enthusiasm which accompanies discoveries, a certain exaltation of ideas which the spectacle of the universe produces in us, all these causes have brought about a lively fermentation of minds. . . Thus, from the principles of the secular sciences to the foundations of religious revelation, from metaphysics to matters of taste, from the scholastic disputes of theologians to matters of trade, from the laws of princes to those of peoples, from natural law to the arbitrary laws of nations, . . . everything has been discussed and analysed.

As Cassirer adds, 'Perhaps no other century is so completely permeated by the idea of intellectual progress as that of the 'Enlightenment' (op. cit., p. 5).

Now D'Alembert began with the words, 'If one considers without bias'. For the satirist, bias is the indispensable necessity: for Swift it was his greatest counterpoise against optimistic modernism. He was far from admitting that any 'true system of the world' had been 'recognized, developed, and perfected'. The ninth section of his *Tale of a Tub* (1704) proposes to

examine the great Introducers of new Schemes in Philosophy, and search till we can find, from what Faculty of the Soul the Disposition arises in mortal Man, of taking it into his Head, to advance new Systems with such an eager Zeal, in things agreed on all hands impossible to be known.

His satirised scientists, the Academy of Projectors, in the third section of *Gulliver's Travels*, aim at 'putting all arts, sciences, languages, and mechanics upon a new foot'. To Swift, the very idea was perverse.

Another quotation may serve at this point, this time from Malcolm Bradbury's *The Social Context of Modern English Literature*, a reflection on the prestige of modernity ('modernity' being, of course, a perennial rallying-cry

for progressivism):

One of the most important ideas of modern man is his idea of the modern itself. . . . The word 'modern' has not always been a weighty or an honorific word: but for us it is, and behind it lies a particular version of history and our relationship to it. . . . We characteristically acquiesce to change as an environment, since it enables us to have a radical conception of ourselves. . . . Modernisation can thus be represented as a logical culmination of scientific, rationalistic, and humanistic views of man. (Op. cit., p. 38)

The slogan for such enthusiasm might surely be borrowed from Tennyson's *Locksley Hall* – 'Forward, forward let us range, / Let the great world spin for ever down the ringing grooves of change'.

From all this Swift was wholly averse. Dr. Clive Probyn, prefacing his study, *The Art of Jonathan Swift* defines in Swift's work 'an obsessive desire to free itself from the demands of a culturally degraded present', and from the early satires of *A Tale of a Tub* and *The Battle of the Books* (both 1704) onwards Swift had been devastatingly derisive of 'modern' learning plagued by what he took to be its crazy pride in novelties. Far from 'acquies(ing) to change as an environment' he held most social and intellectual change to be deterioration. As for 'radical conceptions of ourselves', in the sense in which Professor Bradbury uses the phrase – that is, conceptions accepting root-and-branch change – nothing could be further from his approval. (In the quite opposite sense of 'radical – that of rooted centrality – Swift, going (as he would believe) to the permanent roots of human nature, would be Swift the radical, and the wisdom he would commend would be radical wisdom: but that is not the vogue meaning of the word). For Swift, our conceptions of human nature and conduct should not be 'radical' in the current sense; rather, they should conform to some assumed settled, traditional, non-'radical' wisdom. And the 'logical culmination of scientific, rationalistic, and humanistic views of man' struck him as dehumanisation, the treatment of human beings as the raw material for unscrupulous manipulation.

Professor John Chalker, in *Violence in Augustan Literature*, picks out that passage in the sixth chapter of the 'Voyage to Laputa' in *Gulliver's Travels* in which, at the Academy of Projectors (a take-off of Britain's Royal Society), a surgeon proposes to reconcile hostile politicians by cutting in two their brains, exchanging the halves, and so turning two opponents into two like-minded men. The *Transactions* of the Royal Society (which Swift often guyed) contain nothing so bizarre: but, as Professor Chalker observes, the physical shock conveyed by the idea is Swift's means of awakening us to the brutalities of ruthless manipulation.

He does this again with far greater effect in his devastating attack on the exploitation of the Irish poor — *A Modest Proposal for Preventing the Children of the People of Ireland from being a Burden to their Parents* (the proposal being that they should be fattened and sold for meat). The *Modest Proposal* is in fact horrific parody of the thinking of political economists: Sir William Petty, one of the most distinguished of their number, in his *Political Anatomy of Ireland* (written c. 1670, published 1691), suggested settling the Irish problem by transshipping 200,000 Irish folk to England, 200,000 English folk to Ireland, and so getting nearer to a uniformity of populations. Such notions were a glaring instance of the 'modern' propensity — as explained in *Gulliver's Voyage to Brobdingnag* for 'having. . . reduced politics into a science, as the more acute wits of Europe have done'. Such words as 'science', 'acute', 'refined', 'profound' and the like are ironic pointers to Swift's feelings — ironies so open in fact as to be sarcasms.

Swift was not against useful progress. In a phrase which has become proverbial, the wise King of Brobdingnag

gave it for his opinion, that whoever could make two ears of corn, or two blades of grass, grow upon a spot of ground where only one grew before, would deserve better of mankind . . . than the whole race of politicians put together.

This is not, perhaps, the highest imaginable praise, yet Swift certainly saw that some kinds of progress were advantageous. The Brobdingnagians cultivate 'morality, history, poetry, and mathematics', but the last of these only inasmuch as it is 'wholly applied to what may be useful in life, the improvement of agriculture, and all mechanic arts'. Presumably 'useful' mathematics would be applied, as by the Dutch, to (say) improving irrigation, road-surveying, and the like.

But as Swift inspected contemporary society in the early eighteenth century, instead of practical advances along fruitful lines he saw (so he believed) the onset of manipulative calculation and cunning in business and politics driving society from simple sober good sense — 'the old forms', the time — tested wisdom of tradition (what *A Tale of a Tub* ironically dismisses as 'vulgar Dictates of unrefined Reason', i.e. ordinary common sense) — into complexities of specialisation, technicality, and professionalism. The more complicated society became, the more it succumbed to manipulation and corruption. In the 1790's, in his *Thoughts on the Revolution in France*, Edmund Burke would lament that the age of chivalry had gone, and that of sophisters, economists, and calculators had replaced it. Swift in effect lamented this seventy years earlier. Important institutions of economic and political life were devised during his lifetime (from,

say, the 1670s onwards) – the Banks of England and of Scotland, insurance companies, and joint-stock financing. These and other mechanisms for, as it seemed, complicating society and replacing its understood relationships with a vast web of unreliable and often corrupt special skills and jargons were anathema to the Tory mind, and very much so to Swift's, while to the zestful eyes of Defoe, for instance, they were just what the nation needed. So two opposed interpretations proposed themselves for the words 'project' and 'projector'. To Defoe, as in his *Essay upon Projects* (1697), the words meant the profitable thrusts of constructive energy. To Swift, satirising the 'Academy of Projectors', they meant a wilful pride in the organising of crass or unnatural devices. If this seems the standard anti-progressivism of the conservative mind, it should be remembered that John Law's disastrous Mississippi scheme crashed in France in 1720, and the disastrous South-Sea Bubble burst in England in 1720-21; it has been called the greatest financial disaster in the country's history. Swift's ballad, *The Bubble*, after running a sprightly and generally gaily comic eye over the South Sea frenzy, has two trenchant stanzas near the end:

Oh, may some Western Tempest sweep
These Locusts whom our Fruits have fed,
That Plague, Directors, to the Deep,
Driv'n from the South-Sea to the Red.

May He whom Nature's Laws obey,
Who lifts the Poor, and sinks the Proud,
Quiet the Raging of the Sea,
And Still the Madness of the Crowd.

An absorbing chapter in Howard Erskine-Hill's study, *The Social Milieu of Alexander Pope*, called 'The Betrayal of Society', examines the sharpening effect on Pope's later satires of London's financial morass. Sir Robert Walpole's managerial skill after 1721, as a Prime Minister greatly gifted in economic matters, restored Britain after what seemed the Bubble madness; yet he himself was looked on as the embodiment of corrupt politicking, and Swift, Pope, Gay, Bolingbroke, and the writers of the Tory journal *The Examiner* (and later Fielding) lamented what Mr. Erskine-Hill calls 'the sneering and malign influence of the man with a purse of gold before whom all prostrate themselves or are chained in slavery' (*op. cit.*, p. 268).

For Swift, progress was not a national stampede into financial chicanery, nor an endless web of expert specialism where the 'experts' are as likely to go wrong as those they gull. He left the Whig party by 1710 primarily because it was lukewarm in supporting the Church of England but also because he came to identify it with the kinds of 'progress' he detested, with trade and moneyed

interests, laxness in religion, free-thinking, and cosmopolitanism. Defoe and the Whigs took economic advance to be the road to salvation, like their modern counterparts who look for an endlessly rising Gross National Product and standard of living (in 1972, on the other hand, the Club of Rome's 'project for the predicament of mankind' gave the world less than a hundred years to make the restraints and redirections necessary to ward off disaster caused through the growth of population and the wastage of resources. Swift by no means ignored the fact that the poor needed better conditions; his campaigns for the impoverished Irish made him an Irish national hero. But what he offered for the more general improvement of the human lot was something different. What did he hold up as the direction of advance?

Here we need to appreciate the force of those qualities which he habitually praised as God's ideal for man, qualities which the erring human will so often reject. When in *Paradise Lost* Adam laments his loss of Eden, Milton presents the Archangel Michael counselling him as follows (Book XII. 582 ff.):

Add Faith,
Add Vertue, Patience, Temperance, (and) Love,
... then thou wilt not be loath
To leave this Paradise, but shalt possess
A Paradise within thee, happier far.

In the spirit of this traditional morality, Swift's Lilliputians, *Gulliver's Travels'* race of pygmies,

suppose Truth, Justice, Temperance, and the like to be in every man's power: the Practice of which Virtues, assisted by Experience and a good intention, would qualify any man for the service of his Country.

The Lilliputians educate their children in 'Honour, Justice, Courage, Modesty, Clemency, Religion, and Love of their Country', as the Houyhnhnms, the race of rational horses, educate theirs in 'Temperance, Industry, Exercise, and Cleanliness'. It is often said, and truly, that Swift puts all his inventive energies into satiric demolition, 'creative powers exhibited consistently in negation and rejection' (to quote F.R. Leavis's fine essay on him). This is true of Swift's creative energies, but still there is no lack of force in what we may call his assertive energies. He did in fact feel strongly the positive strength of the virtues he so often enumerated — wisdom, virtue, fortitude, fidelity, benevolence. Certainly in a friend like his beloved Stella Johnson he found them movingly embodied, as the last of his birthday poems before her death very poignantly indicates, a poem in which he commends her courage, patience, and integrity. In this he refers to

... Virtue, still'd: its own Reward,
And by all Sages understood
To be the chief of human Good,

and he asks

... Is not Virtue In Mankind
The Nutriment that feeds the Mind,
Upheld by each good Action past,
And still continued by the last?

In *Cadenus to Vanessa*, the poem he wrote to Hester Vanhomrigh, he enumerates her qualities, the desired ones, as 'Knowledge, Judgement, Wit, . . . Justice, Truth, Fortitude,. . . Honour, Bounty,. . . Virtue, . . . Taste'. Swift's frame of conduct has been defined by the American scholar, Irvin Ehrenpreis, as comprised by 'the Established Church, limited monarchy, classical literary standards, and rational judgements,. . . the cultivation of Graeco-Roman antiquity improved by Christian ethics and a cheering hope of salvation' (Swift, i.202-3). There is traditional authority about all these qualities derived from the basic moral instincts of mankind, whether Christian or not, and Swift's anger when they are betrayed, as in public life they so often are, charges his satiric rage against their betrayers. What Swift says is that we let ourselves be carried away by the sophistications of cunning men and by our own moral shortsightedness. Progress would lie in seeing honestly how far we have strayed from the straight, central virtues. In a letter to a friend he begged him to try to redeem public life:

It is your business who are coming into the world to put a stop to these corruptions and recover that simplicity which in everything of value ought chiefly to be followed. (Correspondence, iv. 274)

Characteristically, his essay on prose style in Steele's journal, *The Tatler* (No.230), recommends 'that Simplicity which is the best and truest Ornament of most Things in human Life', and his constructive advice to a newly appointed curate, the *Letter to a Young Clergyman*, stresses 'that Simplicity, without which no human Performance can arrive to any great Perfection' – simplicity, that is, of preaching style, belief, and conduct. He seeks the 'common forms', the consensus of the silent majority, of supposedly oldfashioned good sense and moderation, like the classical-moral virtues he and his contemporaries attributed to the heroes of Graeco-Roman antiquity, and which he digested in the simple laws of the gigantic Brobdingnagians in *Gulliver's Travels* and the stoic (though bloodless) morals of the rational Houyhnhnms. Politicians should not work complicated ploys; this faith he states notably at the beginning of *Some Free Thoughts upon the Present State of Affairs* (1714):

Whatever may be thought or practised by profound politicians ('profound' is always an ironical word with him), they will hardly be able to convince the reasonable part of mankind that the most plain, short, easy, safe, and lawful way to any good end is not more eligible than one directly contrary in some or all of these qualities. . . . God hath given the bulk of mankind a capacity to understand reason when it is fairly offered, and by reason they would be easily governed if left to their choice.

Scathing though he is about mankind's collective stupidities, Swift has faith in individual reason, and, however much satiric demolition he may engage in, the individual's capacity to act responsibly is not impaired.

At such points two other voices echo in the mind, from opposite ends of the Christian era – one from Cicero, the other from Thoreau. In *De Officiis* Cicero lays it down that

What is true, simple, and sincere – that is most congenial to the nature of man.

Thoreau is even more admonitory in *Walden* (chapter 2):

Simplicity, simplicity, simplicity! I say, let your affairs be as two or three, and not a hundred or thousand. Simplify, simplify.

No wonder Thoreau has been a master to American utopians. There, anyway, is the conservative dream of the simple life of decency – not politically conservative since socialist idealists (like William Morris) have held it too, but morally conservative. It deserves respect, though descriptions of it are apt to sound very dull, like the life of the stoic Houyhnhnms, or the future perfect society as portrayed in Morris's *News from Nowhere*. Progress for Swift lies in such conservative simplicity, the simplicity of living honestly in the world, or would lie there if the world would perceive it. There is a clue to this in the familiar term 'Common Honesty'. 'You and I', it means, 'recognise honesty without further ado; we reckon on finding it, even though we are often disappointed. Why not abide by it?' Swift located his positives in honest country folk of old times, ordinary unintellectual citizens, the virtuous philosophers of antiquity, and such figures as the decent sea-captains who rescue Gulliver after each of his adventures, particularly the last of all, the Portuguese Don Pedro. The trouble is that we glimpse them only fleetingly and their very normality disables them from registering forcibly upon us, whereas the force with which Swift attacks vice and folly makes these seem the only social realities.

If virtuous simplicity is the goal Swift holds before us, it is one the

world has abandoned in a regression towards moral chaos. In the island of Glubbubdrib Gulliver is shown the Senate of Rome and a modern parliament. The former is heroic, even godlike, the latter a collection of rogues and bullies. There is a stoic-Puritan streak in Swift's praise of honesty sobriety, though he has more than one thrust at stoic austerity, and at Puritans. The only modern hero he admits into the circle of those ancient heroes, Socrates, Cato the younger, Junius and Marcus Brutus, and Epaminondas, is Sir Thomas More, the sixteenth-century English martyr and saint. Yet, Gulliver learns, even ancient Rome had been corrupted by luxury as it passed from its republican morals to the decadent age of the Caesars. Gulliver is very simpleminded about this; yet at least here his views certainly seem to be Swift's views too, those of a Swift as gullible as many of his contemporaries about contrasts of ancient virtue and modern vice. Bishop Berkeley, the outstanding English philosopher of the time, was so startled by the financial chaos resulting from the South-Sea Bubble (the hysterical speculation which caused the rocketlike rise and fall in the shares of the South Sea trading company in 1721) that he wrote his *Essay Towards Preventing the Ruin of Great Britain* that same year and proved that even so subtle a thinker could be extraordinarily uncritical about supposed modern degeneracy. Here is how he exhorts his readers:

God grant the time be not near when men shall say: 'This island was once inhabited by a religious, brave, sincere people, of plain, uncorrupt manners, respecting inbred worth rather than titles and appearances, asserters of liberty, lovers of their country, jealous of their own rights, and unwilling to infringe the rights of others; improvers of learning and useful arts, enemies to luxury, tender of other men's lives and prodigal of their own, inferior in nothing to the old Greeks or Romans, and superior to each of these peoples in the perfections of the other. Such were our ancestors during their rise and greatness. But they degenerated, grew servile flatterers of men in power, adopted Epicurean notions, became venal, corrupt, injurious, which drew upon them the hatred of God and man, and occasioned their final ruins. (Works, edited A.A. Luce and T.E. Jessop, vi. 85)

Anyone who can believe that can believe anything; Britain — and the observation may apply to any other country too — has in the eyes of moralists been heading for ruin ever since (one guesses) the time of the Ancient Britons, or earlier. To do Swift justice, his penchant for guying his own positions leads him to write a hilarious page about how the giant Brobdingnagian moralists lament the decline of their contemporaries from the physique and morals of their ancestors; these seventy-foot-high monsters are dwarfs compared with their forebears. But in general he shared the age-old fantasy that the moderns have de-

generated from some simple, honest, past. In the 8th chapter of the Laputa voyage in *Gulliver's Travels* Gulliver yearns nostalgically after

English yeomen of the old stamp, . . . once so famous for the simplicity of their manners, diet, and dress, for justice in their dealings, for their true spirit of liberty, for their valour and love of their country.

The period in which he locates this happy past is about the decade of his own birth, the 1660s, for it is the grandchildren of these paragons who 'have acquired every vice and corruption that can possibly be learned in a court' (he was writing in the 1720s). This is the perennial cry of conservative fantasy-nostalgia — 'In my father's time', or 'When I was young'. His friend Alexander Pope versified the same simpleminded retrospection in his *Epistle to Augustus* in 1733:

Time was, a sober Englishman would knock,
His servants up, and rise by five o'clock,
Instruct his family in ev'ry rule,
And send his wife to church, his son to school.
To worship like his fathers was his care
To teach their frugal virtues to his heir;
To prove, that Luxury can never hold,
And place, on good security, his gold.

One might rejoin, in the biblical words of Ecclesiastes the prophet (Ecclesiastes, chapter vii. 10):

Say not thou, What is the cause that the former days were better than these? For thou dost not inquire wisely concerning this.

But if one perennial myth is that of the ascent of man, another is that of his descent. It often seems a psychological need of middle age (and both Swift and Pope were by eighteenth-century standards in older middle age when they wrote thus) to hypothesize in thoughtless nostalgia — as Goldsmith was to do in one of the century's most charming poems, *The Deserted Village*, commemorating the past 'lovely bowers of innocence and ease' as against the present 'degenerate days of shame'. Distance lends enchantment to the view. But if this is a psychological need for many, it needs recognising for what it is, a compensatory emotional indulgence. Swift, anyway, does not see as progress any of his time's optimism about human improvement: for him the right tone of life is set not by theorists, intellectuals, philosophers, progressives, fashion-makers, and trend-setters but by the virtuous men of antiquity, his few chosen friends, and the honest folk of ordinary life.

Above all, the projects and prestige of natural science provoked him. These involve the most striking controversies of the seventeenth and eighteenth centuries, comparable with the impact of heredity theory in the nineteenth. That the earth was minute in comparison with stellar distances was not a new idea, but astronomically science gave it a new force: one thinks of Pascal, terrified by the silence of these infinite spaces. Stellar distances are impossible to assimilate to any human magnitudes; stellar events of thousands of millions of years ago can be photographed because their light, travelling nearly 600,000,000 miles an hour, has just reached earth. One could, then, be exalted by heavenly marvels and take them as signs of God's beneficence; to Addison, and other optimists, 'The spangled heavens, a shining frame,/Their great Original proclaim', and indeed in Voltaire's *Candide* Dr. Pangloss whose name means 'all tongue' (the man with views on everything), finds all for the best in the best of possible worlds. Or, on the other hand, one could be humbled by cosmic evidence of man's insignificance. Similarly with the microscope: one could rejoice that the divine designer had shown his infinite skill in even the tiniest of creatures, or one could conclude that man is no more God's special care than a worm is. The problem which faced eighteenth-century moralists (and is far from being unheard in the twentieth century) was, Does man not pervert his faculties when he studies natural science instead of concentrating on faith and morals? In *Paradise Lost* Adam asks the Archangel Raphael why earth should have God's special care in the celestial order when it is merely

a spot, a grain,
An atom, with the firmament compared,
And all her numbered stars, that seem to roll
Spaces incomprehensible.

Raphael tells him not to ponder things beyond human ken. And as Adam and Eve are about to leave Paradise, Adam confides to the Archangel Michael that he has learnt to trust in faith, and in return he is told

This having learnt, thou hast attained the sum
Of wisdom: hope no higher, though all the stars
Thou knew'st by name, and all th'ethereal powers,
All secrets of the deep, all Nature's works,
Or works of God in Heav'n, air, earth, and sea.

This theme was often heard then, as it is often heard now. In a paper he wrote for Addison's journal *The Spectator* (No. 408) Pope advised his readers that

It is of more Consequence to adjust the true Nature and Measures of Right

and Wrong, than to settle the Distance of the Planets and compute the Times of their Circumvolutions.

Dr. Johnson, too, characteristically rates 'the knowledge of external nature' as below 'the religious and moral knowledge of right and wrong' (*The Idler*, No. 3). And the philosopher David Hume asserts that 'Human nature is the only science of man; and yet it has been hitherto the most neglected' (*Treatise of Human Nature*, I.iv. vii).

Yet, as the quotation from D'Alembert shows, natural science aroused much enthusiasm about the idea of unprecedented progress. The reckoning of stellar distances and periodicities gave a tremendous sense of intellectual power; the astronomers' mathematics undercut the superstitious dread of comets as malign influences. In his philosophical fantasy *The New Atlantis* a century before Swift wrote, Francis Bacon, England's greatest celebrator of the new thought, had proposed a scientific college and had given an impulse which, along with others, led to the formation of the Royal Society in 1660 and its grant of a royal charter in 1662. Ever since it has been Britain's central organ of scientific enquiry.

This development might have appealed to Swift. Robert Boyle the eminent chemist, propounder of Boyle's Law about the compression of gases, and inventor of the airpump, affirmed that the new movement 'value(d) no knowledge but as it has a tendency to use': it might indeed make two ears of corn grow where only one grew before. But what are the criteria of use? And how is usefulness achieved? If science is to be applied, and useful, it must also be pure, and, to the lay eye, apparently useless. If pure, how pure, how divorced from apparent usefulness, or indeed from morality? The 'Voyage to Laputa' in *Gulliver's Travels* finds in both pure and applied science a rich field for satire. The sages of Laputa are obsessed with mathematics and music – music because they think its harmonies cosmically significant, mathematics not for usefulness, as with the Brobdingnagians, but for abstract calculation, so that when they descend to 'practical geometry' (which they think 'vulgar and mechanic'), they get the measurements of clothes and buildings all wrong. (It was announced recently, incidentally, that a laser beam can be programmed to cut a man's suit from a length of cloth. How Swift would have relished that!) Halley, the astronomer, informed his readers that had the comet of 1680 happened along thirty-one days later than it did it could have changed the earth's orbit; he also surmised that Noah's Flood had been a vast dislodgement of the sea caused by cometary collision. So the Laputan astronomers live in perpetual agitation over such possible disasters, shuddering to think that 'the earth very narrowly escaped from the tail of the last comet', and that other calamities, many of them actually mooted by scientists in Swift's day, could be impending. They might have reflected, as Dr. Johnson did in his

third Idler, that 'the ocean and the sun will last our time, and we may leave posterity to shift for themselves'.

Many parallels can be found to the butts of Swift's satire, though not all were actually his originals: derisive though his reactions, he was well informed. Robert Boyle had tried to make flame 'ponderable' (weighable); one of Swift's scientists tries to make it malleable. In 1709 a Portuguese inventor proposed a flying machine levitated by magnets – and that is how Swift's Flying Island rises. A French entomologist in 1710 sought to use spiderwebs for silk – and that is the pet craze of one of Swift's 'projectors'. In 1714 a patent was granted for an early typewriter (a prototypewriter, you might call it), though nothing is known of its operation: Swift's Academy of Projectors boasts a word-machine with forty handles which turn up random combinations of words in the hope that some of them will make sense, so that

the most ignorant person, at a reasonable charge, and with a little bodily labour, may write books in philosophy, poetry, politics, law, mathematics, and theology, without the least assistance from genius or learning.

William Derham, an early parson-scientist, published *Physico-Theology* in 1713 and described, among much else, microscopical dissections of the optic nerves of swordfish and moles, and the structure of feathers, hairs, and wasp-strings: Gulliver, on returning to England, presents the Royal Society with wasp-strings of Brobdingnagian size. Swift seems indeed to have had an uncanny sense of scientific and technological enquiry. The most famous example is his attributing to the Laputans the discovery that Mars has two satellites: this is in fact true but was scientifically confirmed only in 1877, and presumably it was just a lucky though ingenious hit on Swift's part.

Many satiric extravagances in the 'Voyage to Laputa' find their wierd validations in the twentieth century. The architects who build houses from the roof downwards foreshadow those engineers in Buenos Ayres who, I read, build the top floors of buildings at ground level and then jack them up higher and higher like a growing tree so as to build other floors underneath them. The Lagadon project of calcining ice into gunpowder is hardly more fantastic than the ideas of producing rain by sprinkling clouds with silver iodide to precipitate snow-flakes, and the attempt to soften marble for cushion-stuffing is outdone by modern processes of spinning glass into fibers softer than silk. Swift's agricultural 'improvers' who ruin the land with new processes could shake hands with those who destroy soil structure by heavy farm machinery, or created America's dustbowl, or have poisoned the Rhine and parts of the Mediterranean Sea. The proposal 'to reduce human excrement to its original food' was not, as far as I know, in the Royal Society's programme – Swift derived it from Rabelais – nor

have I heard that any modern revival of it has been grant-aided by Britain's Department of Education and Science or America's National Science Foundation; but a recent news bulletin announced that a scheme for turning hen-droppings into cattle fodder was not well received by farmers (or, one might surmise, by the cattle either). But we live in a time when highprotein foodstuffs are extracted from oil, and when soya beans are passed through a kind of knitting machine to make imitation beef. This, which apparently works pretty well, is at least less daunting than the headline in an American journal reported by the B.B.C. (28/11/72) – 'Scientists produce food from old rubber tires'.

Much today Swift would have revelled in. The European Economic Community encourages the sale of its surplus butter – the 'butter mountain' – not by reducing butter's price but by raising that of margarine. Britain's Department of Energy makes expensive electricity competitive as a fuel by overcharging for cheap gas. Microbes can be developed to consume certain sediments and leave others; it has been suggested that they could be employed as mine-workers to devour unwanted strata and expose the desired mineral deposits. The B.B.C. recently announced that a biologist was to get a grant for recording the heartbeats of a cockroach: it had a naturalist asking his hearers, 'Since a fly has 2,000 facets to its eye, how does it know which is giving it the right picture?'; and it heralded one natural history programme with the words, 'How does a centipede know which leg to start moving with?' and another with, 'Have you ever wondered what goes on in a kangaroo's pouch?'. My own university's reports on research recently included two items calculated to provoke hilarity among the unenlightened: one was, 'Urine production rate and water balance in the terrestrial crabs *Gecarcinus lateralis* and *Cardisoma guanhumi*', and the other, 'A study of guinea-pig vocalisation with particular reference to mother-infant interactions' – a touching subject indeed. Science, whether pure or applied, can be made to sound funnier than ever. But nothing in Swift's *Lagado* matches the gruesomeness of thalidomide, or of those corpses in Texas lying deep-frozen – so we are told – in the hope that at some time when the diseases from which they suffered can be cured they will be thawed out for a renewed lease of life. Such ideas match Swift at his most unnerving.

On the whole, though, Swift had his fun with 'natural philosophy', turn light or dark, sane or zany. He observed, even if he did not go along with, what the scientists were up to, but most of it he judged a diversion from, even a perversion of, the proper conduct of living, to the arcana of useless knowledge. Much of it, in his eyes, reflected an arrogant autonomy of the human intellect. He would certainly endorse the lines in Pope's *Essay on Man*:

Trace Science, then, with Modesty thy guide;
First strip off all her Equipage of Pride.

Yet there is proper pride, and improper. The joy in achievement that rings through a book like James Watson's *The Double Helix*, relating how the structure of DNA was analysed, is as legitimate as banner headlines like 'The Conquest of the Moon' are illegitimate. But to Swift scientific progress and moral degeneracy were twin phenomena, Gulliver enthusiastically relates details of Europe's advanced technology of war, only to have the benign King of Brobdingnag and the rational Houyhnhnm master recoil with the utmost horror that 'so impotent and grovelling an insect as I . . . could entertain such human ideas'

By temper and constitution, and by unquestioning acceptance of Christian tradition, Swift held that we live in a fallen world. No words can have been more familiar to him as a priest of the Church of England than those in the General Confession, recited by worshippers, which state that we have followed too much the devices and desires of our own hearts, have left undone those things which we ought to have done, and have done those things which we ought not to have done, and that there is no health in us — except we repent and seek God's forgiveness. It is our fundamental duty to use that Right Reason which God has implanted in us to guide us truly: Right Reason is the intellectual aspect of Conscience. Wrong reason, the intellectual aspect of man's fallen nature, can justify every wickedness and horror. It has justified persecution, torture, and genocide. It is that quality which, Gulliver's Houyhnhnm master declares, makes man worse than the bestial Yahoo, since the Yahoo has only natural infirmities while man, multiplying his powers of evil by inventing engines of destruction, has multiplied misery by his immoral reason. Such a quality, the Houyhnhnm declares, is not proper reason at all but a perversion of the mind. True Reason, Right Reason, is as powerful a talisman with Swift as is the Nature of which it is the intended expression. In this respect, however much he may differ from other exponents of it, he is at one with his age's conceptions; expressed again in Ernst Cassirer's *The Philosophy of the Enlightenment*:

Reason is the same for all thinking subjects, all nations, all epochs, and all cultures. From the changeability of religious creeds, of moral maxims and convictions, a firm and lasting element can be extracted which in this identity and permanence expresses the real essence of reason.

'Nature and Reason' are the Houyhnhnms' guiding principles, but only as interpreted by moral law and cosmic order: Reason is true when guided by benevolence, and Nature is true when the world proceeds as God means it to proceed, with all things working together for good. 'Nature and Reason', the Houyhnhnm master holds, are 'sufficient guides for a reasonable animal, . . . in showing us what we ought to do, and what to avoid'. Swift is in fact a Christian stoic. But the crucial fact is that he observed the world at a time when the advance of science — whether physical or social science — was delivering into human hands

the chances of widespread manipulation, much of which he judged futile, foolish, or indeed dangerous. What he required of mankind was to stop sliding into corruption and cruelty and to turn instead to honesty and benevolence, to accept the guidance of Right Reason in choosing virtue instead of vice.

We must agree, I think, with the conclusion Leavis offers in his brilliant essay, that Swift 'is distinguished by the intensity of his feelings, not by insight into them', and that he has a mind of great force (great creative virtuosity, I should add) rather than of high intelligence. What he saw provoked in him a tremendous force of prejudice, which he expressed in fictions directed by a marvellously inventive and controlled wit. Force and vitality are there in unsurpassed measure, and a superbly disorientating originality which shocks us into reassessing our assumptions.

ÖZET

Jonathan Swift'in hicivciliği çağının deneysel düşünüşünü insan doğasma aykırı olduğu inancından kaynaklanır. Swift'in ölçeği geleneksel ahlâk değerleridir ve çağında sapma olarak gördüğü ilerici ve deneyimci atılımları bu ölçeğe vurarak değerlendirir.