The Royal Society—or, as its full title reads, The Royal Society of London for Improving Natural Knowledge—began without royal patronage as a group of private gentlemen who started to meet, about the middle of the century, at Oxford or in London. As a group, the members were neither Anglican nor Puritan in their sympathies; and they avoided political as well as religious labels. Taking advantage of a strong interest in scientific observation which had been fostered by the Gresham lectures—under the terms of the original grant, they were to be delivered in the English language, and in London city, and were free for all to attend—the members of the Society concerned themselves with “natural knowledge,” that is, scientific experiments and observations. Often the details with which they were concerned struck outsiders as ridiculously trivial; Charles II learned they had spent an entire meeting discussing the weight of air, and laughed himself inarticulate over it. (As it happened, the subject was one of the most serious and important with which they could have been concerned.) But the king agreed to grant the group a royal charter, and the Society began to flourish at once. It remains to this day one of the most distinguished scientific academies in the world.

Yet from the beginning a good many of the clergy had an uneasy sense that scientific investigation of nature might lead to neglect of the God who created nature. And so, to answer that criticism and others, the Society enlisted the pen of Thomas Sprat, a bright young clergyman very much in tune with the times, who was later to rise in the church and become Bishop of Rochester. He was an able young man with a flair for argumentation, and though the Royal Society of which he was writing a “history” was less than ten years old, he at least produced a vigorous defense of it. About the rest of Sprat’s career there is not very much to say; nothing that he ever did in the rest of his long life equaled the significance of this one book in behalf of the Society. Not the least effective of its arguments concerned the merits of a plain English prose style, uncontrived and unadorned, devoted to a bare recital of the facts. This argument took effect far beyond the narrow range of professed scientists. Even fine gentlemen and wits, who indulged in what they called “raillery” at the expense of the Royal Society, were touched by the steady resolution of its members to talk only about those matters for which they had demonstrable evidence. And the middle classes, as they gradually surrendered their Puritan dream of establishing the Kingdom of God on earth, found in the practical exploitation of scientific knowledge an alternative outlet for their stirring and restless ambitions. For them too a doctrine of plain sense and methodical accumulation turned out to have its attractions. Our selections are from Part II, section xx, and Part III, section xxxv, of The History of the Royal Society.

From The History of the Royal Society

[ON THE LANGUAGE OF THE MEMBERS]

Thus they have directed, judged, conjectured upon, and improved experiments. But lastly, in these and other businesses that have come under their care, there is one thing more about which the Society has been most solicitous, and that is the manner of their discourse; which, unless they had been very
watchful to keep in due temper, the whole spirit and vigor of their design had been soon eaten out by the luxury and redundancy of speech. The ill effects of this superfluity of talking have already overwhelmed most other arts and professions, insomuch that when I consider the means of happy living and the causes of their corruption, I can hardly forbear recanting what I said before, and concluding that eloquence ought to be banished out of all civil societies as a thing fatal to peace and good manners. To this opinion I should wholly incline if I did not find that it is a weapon which may be as easily procured by bad men as good, and that if these should only cast it away, and those retain it, the naked innocence of virtue would be upon all occasions exposed to the armed malice of the wicked. This is the chief reason that should now keep up the ornaments of speaking in any request, since they are so much degenerated from their original usefulness. They were at first, no doubt, an admirable instrument in the hands of wise men, when they were only employed to describe goodness, honesty, obedience in larger, fairer, and more moving images; to represent truth clothed with bodies; and to bring knowledge back again to our very senses, from whence it was at first derived to our understandings. But now they are generally changed to worse uses. They make the fancy\(^1\) disgust the best things if they come sound and unadorned; they are in open defiance against reason, professing not to hold much correspondence with that, but with its slaves, the passions; they give the mind a motion too changeable and bewitching to consist with right practice. Who can behold without indignation how many mists and uncertainties these specious tropes and figures\(^2\) have brought on our knowledge? How many rewards which are due to more profitable and difficult arts have been still snatched away by the easy vanity of fine speaking?\(^3\) For now I am warmed with this just anger, I cannot withhold myself from betraying the shallowness of all these seeming mysteries upon which we writers and speakers look so big.\(^4\) And, in few words, I dare say that of all the studies of men, nothing may be sooner obtained than this vicious abundance of phrase, this trick of metaphors, this volubility of tongue, which makes so great a noise in the world. But I spend words in vain, for the evil is now so inveterate that it is hard to know whom to blame or where to begin reform. We all value one another so much on this beautiful deceit, and labor so long after it in the years of our education, that we cannot but ever after think kinder of it than it deserves. And indeed in most other parts of learning I look on it to be a thing almost utterly desperate in its cure; and I think it may be placed amongst those “general mischiefs,” such as the dissension of Christian princes, the want of practice in religion, and the like, which have been so long spoken against, that men are become insensible about them, every one shifting off the fault from himself to others, and so they are only made bare commonplaces of complaint. It will suffice my present purpose to point out what has been done by the Royal Society toward the correcting of its excesses in natural philosophy, to which it is, of all others, a most professed enemy. They have therefore been most rigorous in putting in execution the only remedy that can be found for this extravagance: and that has been a constant

1. Words like “fancy,” “humor,” and “judgment” were very loosely used in the 17th century, and a great deal of their meaning comes from the individual context. In this sentence “fancy” means the impression we have of a thing before we have actually experienced it.

2. Figures of speech, rhetorical “flowers” such as the ancient Greek sophists used; many of the objections raised by Sprat against rhetoric go back to charges laid against the sophists primarily by Plato.

3. Probably without realizing it, Sprat has fallen here into one of the oldest of rhetorical topics, the argument between the pen and the sword, the man of words and the man of deeds.

4. I.e., pride ourselves.
resolution to reject all the amplifications, digressions, and swellings of style, to return back to the primitive purity and shortness, when men delivered so many things almost in an equal number of words.\(^5\) They have exacted from all their members a close, naked, natural way of speaking; positive expressions, clear senses, a native easiness bringing all things as near the mathematical plainness as they can; and preferring the language of artisans, countrymen, and merchants before that of wits or scholars.

And here there is one thing not to be passed by, which will render this established custom of the Society well-nigh everlasting: and that is the general constitution of the minds of the English. I have already often insisted on some of the prerogatives of England, whereby it may justly lay claim to be the head of a philosophical league above all other countries in Europe. I have urged its situation, its present genius, and the disposition of its merchants; and many more such arguments to encourage us still remain to be used. But of all others, this which I am now urging is of the most weighty and important consideration. If there can be a true character given of the universal temper of any nation under heaven, then certainly this must be ascribed to our countrymen: that they have commonly an unaffected sincerity; that they love to deliver their minds with a sound simplicity; that they have the middle qualities between the reserved subtle southern and the rough unhewn northern people; that they are not extremely prone to speak; that they are more concerned what others will think of the strength than of the fineness of what they say; and that a universal modesty possesses them. These qualities are so conspicuous and proper to our soil that we often hear them objected to us by some of our neighbor satirists in more disgraceful expressions. For they are wont to revile the English with a want of familiarity, with a melancholy dumpishness, with slowness, silence, and with the unrefined sullenness of their behavior. But these are only the reproaches of partiality or ignorance; for they ought rather to be commended for an honorable integrity; for a neglect of circumstances and flourishes; for regarding things of greater moment more than less; for a scorn to deceive as well as to be deceived—which are all the best endowments that can enter into a philosophical mind. So that even the position of our climate, the air, the influence of the heaven, the composition of the English blood, as well as the embraces of the ocean, seem to join with the labors of the Royal Society to render our country a land of experimental knowledge. And it is a good sign that nature will reveal more of its secrets to the English than to others,\(^6\) because it has already furnished them with a genius so well proportioned for the receiving and retaining its mysteries.

[WIT LESS TO BE PRIZED THAN SOUND SENSE]

To this address which I have made to our nobility and gentry, I will add as an appendix another benefit of experiments, which perhaps it will scarce become me to name amidst so many matters of greater weight: and that is that their discoveries will be very serviceable to the wits and writers of this and all future ages. But this I am provoked to mention by the consideration of the present genius of the English nation; wherein the study of wit and humor of

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5. Again Sprat falls back on a rhetorical formula: the contrast of words and things goes back to Quintilian and before that to Cato the Elder. “So many words, so many things” is a favorite catch-phrase of some language reformers, but it describes a state that never was and never will be.

6. Sprat echoes Milton’s conviction in *Areopagitica* that God will reveal himself, “as his manner is, first to his Englishmen.” Behind such cadences lie generations of belief in the special destiny of England.
writing’ prevails so much that there are very few conditions or degrees or ages of men who are free from its infection. I will therefore declare to all those whom this spirit has possessed that there is in the works of nature an inexhaustible treasure of fancy and invention which will be revealed proportionally to the increase of their knowledge.

To this purpose I must premise that it is required in the best and most delightful wit that it be founded on such images which are generally known, and are able to bring a strong and sensible impression on the mind. The several subjects from which it has been raised in all times are the fables and religions of the ancients, the civil histories of all countries, the customs of nations, the Bible, the sciences and manners of men, the several arts of their hands, and the works of nature. In all these, where there may be a resemblance of one thing to another, as there may be in all, there is a sufficient foundation for wit. This in all its kinds has its increases, heights, and decays, as well as all other things. Let us then examine what parts of it are already exhausted, and what remain new and untouched and are still likely to be farther advanced.

The wit of the fables and religions of the ancient world is well nigh consumed. They have already served the poets long enough, and it is now high time to dismiss them, especially seeing they have this peculiar imperfection, that they were only fictions at first; whereas truth is never so well expressed or amplified as by those ornaments which are true and real in themselves.

The wit which is raised from civil histories and the customs of countries is solid and lasting. The similitudes it affords are substantial and equal to the minds of men, being drawn from themselves and their own actions. Of this the Wittiest nations have always made the greatest use; their writings being adorned with a wit that was free of their own cities, consisting of examples and apothegms and proverbs derived from their ancestors. This I allege because this kind is scarce yet begun in the English language, though our own civil history abounds as much as any other with great examples and memorable events which may serve for the ornament of comparison.

The manners and tempers and extravagances of men are a standing and eternal foundation of wit. This, if it be gathered from particular observations, is called humor; and the more particular they are, they are still the pleasanter. In this kind I may well affirm that our nation excels all others, as our dramatic poetry may witness.

The wit that may be borrowed from the Bible is magnificent, and, as all the other treasures of knowledge it contains, inexhaustible. This may be used and allowed without any danger of profaneness. The ancient heathens did the same. They made their divine ceremonies the chief subjects of their fancies. By that means their religions had a more awful impression, became more popular, and lasted longer in force, than else they would have done. And why may not Christianity admit the same thing, if it be practiced with sobriety and reverence? What irreverence can there be in applying some Scripture-expressions to natural things? Why are not the one rather exalted and purified than the other defiled by such applications? The very enthusiasts themselves, who are wont to start at such wit
as atheistical, are more guilty of its excesses than any other sort of men. For what-
ever they allege out of the historical, prophetical, or evangelical writings, and apply it to themselves, their enemies, or their country, though they call it the mind of God, yet it is nothing else but Scripture-comparison and similitude.

The sciences of men’s brains are none of the best materials for this kind of wit. Very few have happily succeeded in logical, metaphysical, grammatical, nay even scarce in mathematical comparisons; and the reason is, because they are most of them conversant about things removed from the senses, and so cannot surprise the fancy with very obvious or quick or sensible delights.

The wit that is founded on the arts of men’s hands is masculine and durable; it consists of images that are generally observed, and such visible things which are familiar to men’s minds. This therefore I will reckon as the first sort, which is still improvable by the advancement of experiments.

And to this I will add the works of nature, which are one of the best and most fruitful soils for the growth of wit. It is apparent that the defect of the ancients in natural knowledge did also straiten their fancies. Those few things which they knew they used so much, and applied so often, that they even almost wore them away by their using. The sweetness of flowers and fruits and herbs they had quite devoured; they had tired out the sun and moon and stars with their similitudes, more than they fancy them to be wearied by their daily journeys round the heavens.

It is now therefore seasonable for natural knowledge to come forth and to give us the understanding of new virtues and qualities of things; which may relieve their fellow creatures that have long borne the burden alone and have long been vexed by the imaginations of poets. This charitable assistance experiments will soon bestow. The comparisons which these may afford will be intelligible to all, because they proceed from things that enter into all men’s senses. These will make the most vigorous impression on men’s fancies, because they do even touch their eyes and are nearest to their nature. Of these the variety will be infinite, for the particulars are so from whence they may be deduced. These may be always new and unsullied, seeing there is such a vast number of natural and mechanical things not yet fully known or improved, and by consequence not yet sufficiently applied.

The use of experiments to this purpose is evident, by the wonderful advantage that my Lord Bacon received from them. This excellent writer was abundantly recompensed for his noble labors in that philosophy by a vast treasure of admirable imaginations which it afforded him, wherewith to express and adorn his thoughts about other matters. But I will not confine this observation to one single author, though he was one of the first and most artificial managers of this way of wit. I will venture to declare in general of the English tongue, that as it contains a greater stock of natural and mechanical discoveries, so it is also more enriched with beautiful conceptions and inimitable similitudes, gathered from the arts of men’s hands and the works of nature, than ever any other language could produce.

And now I hope what I have here said will prevail something with the wits and railleurs of this age, to reconcile their opinions and discourses to these

2. Limit.
3. Artful, dexterous.
4. The word, like the quality it denotes, is French. It implies a vein of superficial, sarcastic humor in a person who talks to show off his cleverness, and who expects to be answered in kind. Being relatively new in England, this sort of talking and writing was just gaining its own name (adapted from the French) of “raillery.”
studies. For now they may behold that if they shall decry the promoting of experiments, they will deprive themselves of the most fertile subject of fancy. And indeed it has been with respect to these terrible men that I have made this long digression. I acknowledge that we ought to have a great dread of their power; I confess I believe that new philosophy need not (as Caesar) fear the pale or the melancholy as much as the humorous and the merry. For they perhaps, by making it ridiculous because it is new, and because they themselves are unwilling to take pains about it, may do it more injury than all the arguments of our severe and frowning and dogmatical adversaries.

But to gain their good will, I must acquaint them, that the family of the raiIeurs is derived from the same original with the philosophers. The founder of philosophy is confessed by all to be Socrates; and he also was the famous father of all irony. They ought therefore to be tender in this matter, wherein the honor of their common parent is concerned; it becomes them to remember that it is the fault, and not the excellence of wit, to defile its own nest, and not to spare its own friends and relations for the sake of a jest.

The truth is, the extremes of raillery are more offensive than those of stupidity. It is a work of such a tender and subtle spirit, that it cannot be decently performed by all pretenders to it; nor does it always agree well with the temper of our nation, which as it has a greater courage than to suffer derision, so it has a firmer virtue than to be wholly taken up about deriding of others. Such men are therefore to know that all things are capable of abuse from the same topics by which they may be commended. They are to consider that laughter is the easiest and the slenderest fruit of wit. They are to understand that it proceeds from the observation of the deformity of things, but that there is a nobler and more masculine pleasure which is raised from beholding their order and beauty. From thence they may conclude how great the difference is between them and the real philosophers; for while nature has only formed them to be pleased with its irregularities and monsters, it has given the other the delight of knowing and studying its most beautiful works.

In plain terms, a universal abuse of everything, though it may tickle the fancy never so much, is inhuman madness, as one of the ancients well expresses it, who calls such mirth humanis Bacchari rebus. If all things were made the subjects of such humor, all worthy designs would soon be laughed out of the world; and for our present sport, our posterity would become barbarous. All good enterprises ought to find assistance when they are begun, applause when they succeed, and even pity and praise if they fail. The true raillery should be a defense for good and virtuous works, and should only intend the derision of extravagant, and the disgrace of vile and dishonorable things. This kind of wit ought to have the nature of salt, to which it is usually compared, which preserves and keeps sweet the good and the sound parts of all bodies, and only frets, dries up, and destroys those humors which putrefy and corrupt.

5. Julius Caesar, in Shakespeare’s play as in Plutarch’s Life of Caesar, mistrusted Brutus and Cassius for their lean and hungry looks.
6. Socrates, the protagonist of many of Plato’s dialogues, was by no means the founder of philosophy; but even without this detail, the argument that jokers shouldn’t deride philosophers because Socrates was a joker and a philosopher, is flimsy enough.
7. “Sporting riotously with human affairs” (Claudian 18.25).
8. Eats away, corrodes. Wit was frequently compared to salt by the ancients, on the score that it gives flavor to discourse.