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## The Ideal and Reality of the Republic of Letters in the Enlightenment

### The Argument

The Republic of Letters of the late seventeenth and eighteenth centuries teaches us two lessons about style in science. First, the bearer of style — individual, nation, institution, religious group, region, class — depends crucially on historical context. When the organization and values of intellectual life are self-consciously cosmopolitan, and when allegiances to other entities (e.g., Protestant versus Catholic, or urban versus rural) are culturally more compelling than those to the nation-state, distinctively national styles are far to seek. This was largely the case for the Republic of Letters, that immaterial (it lacked location, formal administration, and brick and mortar) but nonetheless real (it exercised dominion over thoughts and deeds) realm among the sovereign states of the Enlightenment. Second, that form of objectivity which made science seem so curiously detached from scientists, and therefore so apparently unmarked by style at any level, also has a history. The unremitting emphasis on impartial criticism and evaluation within the Republic of Letters encouraged its citizens to distance themselves first from friends and family, then from compatriots and contemporaries, and finally, in the early nineteenth century, from themselves as well. Although this psychological process of estrangement and ultimately of self-estrangement may seldom have been completely realized, the striving was genuine and constitutes part of the moral history of objectivity.

### Introduction

In 1780 the editor of the annual *Histoire de la République des Lettres en France* conjured up a vast but invisible empire for his readers:

In the midst of all the governments that decide the fate of men; in the bosom of so many states, the majority of them despotic, governed by sovereigns or magistrates whose authority extends over people and property, there exists a certain empire, which holds sway over only the mind, [an empire] that we honor with the name Republic, because it preserves a measure of independence, and because it is almost its essence to be free. It is the empire of talent and of thought. The academies are its tribunals; people distinguished by their talents are its

dignitaries. Their reputation is their title . . . they are, if you will, a kind of orphan, to whom fortune denies those distinctions for which nature intends them. They form a species by their merit, and gain a reputation as brilliant as that of the great powers of the earth. (Pp. 5–6)

The editor of the *Histoire* was no original thinker, and I have quoted his vision of the Republic of Letters at such length just because its hackneyed images and threadbare analogies are Enlightenment commonplaces. Here we find neither whimsical cities surrounded by moats filled with ink and towers crowned with paper mills, as in the Spaniard Diego Saaverda's satirical *Republic of Letters* (1655), nor ponderous discussions as to whether the Republic of Letters should be a monarchy, oligarchy, or democracy, as in the several early-eighteenth-century German dissertations devoted to the topic — just the by then familiar comparisons between the powers of sovereign states and the powers of mind. In this paper I shall be concerned with what these clichés, and the reality that they imperfectly described, can tell us about how the Republic of Letters coexisted with the nation-states of Europe during its heyday — roughly 1660–1789.

The Republic of Letters and the internationalism it symbolized seem at first glance out of place in a collection devoted to national styles in science. Not that its citizens were blind to the existence of such styles — Voltaire's witty contrast of the Parisian plenum and the London void is memorable testimony to the contrary (Voltaire 1733, letter 14). But it should be recalled that although Voltaire opposed London and Paris to sharpen the barb for his largely French (and largely Parisian) audience, his metonymy referred not to Britain versus France, but to Britain versus the Continent — embracing Germany, the Low Countries, Italy, Switzerland, and parts of Russia, as well as France. Much the same could be said about the lines of fissure that sundered the European mathematical community (see Hall 1980, chap. 11). Neither nationality nor language was the primary unit of style or affiliation.

This is the first lesson the Enlightenment history of the Republic of Letters holds for a comprehensive study of national styles in science: the existence and recognition of national styles depends greatly on the ascent of the nation-state as the principal bearer of cultural identity, and this is a rather recent development. Considerations of nationality were not absent from Enlightenment science, and they assumed increasing prominence with the rise of other forms of cultural nationalism toward the end of the eighteenth century. But it would be anachronistic to parse the Enlightenment intellectual scene in terms of national divisions, for other divisions of confession and training were far more telling at the time.

The historical specificity of nationalism has important consequences for the explanation of national styles. If we believe that different styles in science are rooted in the different institutions of science, we would expect to find in institutions deliberately organized along international lines — such as many of the eighteenth-century academies — just that cosmopolitanism that was the hallmark of the Republic of Letters of that period. This is simply the converse of the claim that scientific institutions

organized nationally tend to produce distinctive national scientific styles. Moreover, once freed from the *idée fixe* of the nation as the fundamental unit of cultural analysis, we can pinpoint with greater accuracy the causes of striking stylistic differences. For example, a great deal of ink has been spilled contrasting the distinctively “English” style of the Royal Society of London with the distinctively “French” style of the Académie des Sciences of Paris. But a closer look at the more scientifically oriented French provincial academies, such as Bordeaux, suggests that a penchant for Baconian investigations has less to do with nationality than with the social composition of the membership.

The second lesson that the Enlightenment Republic of Letters teaches the student of national styles concerns the origins of the ideology that makes such styles seem at best dubious and at worst subversive. The eighteenth-century Republic of Letters created the values of universalism and the international network of communication and collaboration in the sciences that still pose the sharpest challenge to analysts of national styles: if such local styles do exist, then how is the global character of science possible? How did London and Parisian physicists even understand, much less convert, one another? I believe this universalism is a real phenomenon, but one with a history. That history is one of a slow transformation of the social life and values of intellectuals, first and foremost those of scientists. The uniformity of nature is a necessary but not sufficient condition for universalism: the history of science reveals that interpreting the book of nature allows almost as much latitude as interpreting conventional texts. What is further required is a method of adjudicating between rival interpretations — still a vexed question — and a process of socialization that trains scientists to prize the good opinion of other scientists over that of compatriots, coreligionists, friends, or relatives. I shall argue that the ideology of detachment trumpeted by the Republic of Letters was the first and most important chapter in the history of that socialization process otherwise known as objectivity.

With these two general lessons in mind, I shall address several specific questions about the relationship of the Republic of Letters to the “governments that decide the fates of men.” How did this transnational confederation of the learned make its peace with the nationalism that was often the key to its financial support? What was the precise meaning, and what were the limits of the cardinal virtue of tolerance for Enlightenment intellectuals? If the citizens of the Republic of Letters refused their ultimate allegiance to their respective nations, to whom or what did they swear fealty? I shall attempt at least provisional answers to these questions about the ideal and reality of cosmopolitanism in the Republic of Letters by appeal to its manifestos, its journals, its academies, and the voluminous correspondence of its far-flung members. Although the Republic of Letters embraced all intellectuals, I shall be primarily concerned with scientists. This will necessarily qualify some of my conclusions about the Republic of Letters in general, but in some cases I shall argue that the precepts and practice of scientists expressed the characteristic values and tensions of the entire Republic of Letters in their most intense and concentrated form.

My paper divides into three parts: first, an account of the ideal of the Republic of

Letters, with particular attention to the values of cosmopolitanism and tolerance; second, a comparison of that ideal with the reality of the international contacts among intellectuals, with emphasis on the various European academies; and finally, some concluding reflections on the transcendent values of independence and detachment that pressed intellectuals to sever all human ties — those of family and friendship as well as those of nationality.

### The Ideal

The idea of a “Res Publica Litteraria” dates back to antiquity, but it attained prominence and a degree of concreteness only in the late seventeenth and eighteenth centuries. The catalyst was not simply the increased circulation of books and authors throughout Western Europe, although the impact of the printing press was great: medieval universities had welcomed students and masters of many nationalities, and the ubiquity of Latin favored international connections more than the seventeenth-century vogue for national vernaculars. Rather, it was the new social status of intellectuals and their consequent plunge into a gregarious sociability, both with one another and with their betters, that revived and promoted the ideal of the Republic of Letters. As Jean d’Alembert observed apropos of late-seventeenth-century France, men of letters had been plucked from their solitary studies and thrust into the “whirlwind” of fine and fashionable society (d’Alembert 1759b, 331). Although the French may have carried lionizing the literati to extremes unmatched elsewhere (d’Alembert claimed that even mathematicians were coveted by high society hostesses; *ibid.*, 355), the social stock of intellectuals rose throughout Western Europe. Besides the aristocratic friends and admirers of such luminaries as Erasmus and Galileo, we have the more prosaic evidence of late-seventeenth-century German etiquette manuals, which resolve the age-old problem posed by intellectuals — that is, relatively low income combined with relatively high status — in their favor: the Strasbourg *Kleiderordnung* of 1628 placed scholars with city patricians and wealthy merchants, just below the highest rank of aristocrat; a number of seventeenth-century guides simply promoted the *doctores* to aristocratic rank: “Aequiparantur enim nobilibus” (Beetz 1987, 157–58).

These flattering social attentions entitled career intellectuals to a measure of self-esteem and self-confidence that often expressed itself in the bold rhetoric of the Republic of Letters. Although the self-proclaimed citizens of the Republic often had no niche either in the universities or in the liberal professions, they nonetheless preened themselves on their ability to mold public opinion and increasingly asserted their independence. Even if they were still financially dependent on wealthy and aristocratic patrons, they now had a *quid pro quo* to offer in exchange for the tactful gifts of books and cash. When the earl of Shaftesbury sent the impecunious Amsterdam publicist Jean Le Clerc a present of money, the latter could reciprocate not only with the traditional fulsome dedicatory epistle, but also with an offer to rehabilitate the

memory of Shaftesbury’s grandfather in the pages of Le Clerc’s widely circulated *Bibliothèque choisie* (Barnes 1938, 172–75). The steady decline of the flowery dedicatory epistle in the eighteenth century is a measure of the growing perceived power of intellectuals to create or destroy the reputations even of kings. As forgers of public opinion and writers of history, they no longer needed to pay elaborate compliments; the old word “protector” took on a pejorative meaning among them. Scientists were for some time in a weaker position than journalists or historians, for they did not pronounce the verdict of history, and Bacon’s promises of the utility of science had yet to be fulfilled. But they were also fiercely jealous of their independence. D’Alembert quoted with approval the Abbé de Saint-Pierre’s words to Varignon, when he gave that mathematician a large sum of money: “I am not giving you a pension, because I don’t want you to be dependent on me” (d’Alembert 1759b, 396).

Socializing with royalty and the aristocracy gave the Republic of Letters a title to independence; socializing with one another gave it international purview. There is a striking change in the artistic portrayal of the learned in the course of the seventeenth century, from the lone scholar secluded in his study (e.g., Dürer’s etching of St. Jerome) to groups of animated discussants (e.g., Frans Hals’ portrait of Casper Sibelius) (Warnke 1987, 9). The life of the mind was now to be led collectively, and the academic movement that began in Italy and spread to France, Germany, the Netherlands, and England was its institutional expression. Of course, collective endeavors are not necessarily international ones. The members of the House of Solomon in Bacon’s *New Atlantis* worked together, but the Merchants of Light they dispatched to gather information in foreign lands guarded the secret of the very existence of Bensalem and a fortiori of its scientific activities. In contrast, the Republic of Letters was cross-hatched with lines of correspondence, with letters passing from Basel to Oxford, Paris to Prague, Amsterdam to Florence, and back again. Marin Mersenne’s epistolary network included over seventy widely dispersed scientific correspondents, and the pace of learned letter-writing quickened in the course of the eighteenth century, dispatched in care of diplomats or cardinal legations (Rochot 1966).

The scholarly letter of this period was a peculiar hybrid of the personal and the public, composed with both a particular reader and a general readership in mind. The transition between learned letter and learned article was not always smooth. For example, the Secretary of the Royal Society, Henry Oldenburg, diplomatically pruned letters of “all Personal Reflections,” polished compliments as well as rude remarks, before publishing them in the *Philosophical Transactions* (Shapin 1987, 420). Only very gradually did scientific articles shed the vestiges of the epistolary genre from which they had sprung: eighteenth-century astronomers and chemists (and indeed some mathematicians) still reported their observations in the first person (see, for example, De Moivre 1714–16).

Much of this correspondence was between people who had never met; but increased opportunities for travel, both voluntary and involuntary, brought scholars of different nationalities into face-to-face contact. If there is any meager consolation to be derived

from the political and religious upheavals that convulsed Europe in the mid-seventeenth century, it may be in the streams of learned refugees who found kindred spirits in foreign parts. Hobbes in France; Descartes, Locke, and a score of others in Amsterdam; French Huguenots in London and in Prussia—these exiles became, as it were, the diplomats of the Republic of Letters, and the friendships they cherished in letters helped for years afterward to give the Republic its genuinely international character.

The structure of the early scientific academies faithfully reflected that character. Almost all included provisions for foreign or “corresponding” members. Colbert invited the Dutch physicist Christiaan Huygens to head the newly established Paris Académie des Sciences in the 1660s, and he installed the Italian astronomer Cassini as head of the observatory. Friedrich II of Prussia invited the French physicist Maupertuis to lead the Berlin Academy; the French astronomer Delisle was only one of several illustrious savants of French, Swiss, and German origin to spend years at the Russian Academy of St. Petersburg. The prizes of the Parisian Académie des Sciences (and also of less lofty academies such as those of Bordeaux, Amsterdam, Stockholm, Vienna, and about thirty others; see Barrière 1952) were explicitly open to foreigners, and the 1719 rules governing the Académie des Sciences competitions offered foreign contestants the option of writing in Latin rather than French, with the costs of translation to be borne by the Perpetual Secretary (Maindron 1881, 15–16).

This cosmopolitanism distinguished the scientific academies from their literary and artistic counterparts. This was largely but not entirely due to the barriers of language: the Académie Française for example excluded also provincial Frenchmen, recruiting its members solely among Parisians. In contrast, even provincial academies devoted to the sciences — such as the Société Royale des Sciences de Montpellier — had contacts in Bologna, Switzerland, Uppsala, London, and St. Petersburg; the correspondents of the academies of Rouen and Bordeaux were similarly far-flung (Roche 1978, 1:311–14). In most cases, foreign contacts translated into prestige for both individual scientists and whole academies. A roster of international academic memberships could be the yeast in a domestic career (*ibid.*, 1:304), and the Académie de Bordeaux quite calculatingly chose to offer scientific rather than literary prize topics in order to spread the fame of the Academy to “all the savants of Europe, language limiting poetry and eloquence to within the kingdom” (quoted in Barrière 1951, 116).

There are a few exceptions to this (in principle) dedication to the international character of the Republic of Letters, almost all of them German. Leibniz’ various plans for academies for Saxony, Prussia, and all of the German-speaking lands celebrated the peculiarly German contributions to the sciences (Leibniz believed his compatriots excelled at practical inventions, particularly in chemistry and mining; Leibniz [1875] 1969b, 64–77), and he bemoaned the fact that the Germans, despite their many natural advantages, had fallen behind the English and the French in cultivation of the sciences. Comparing England to Germany, he sneered:

Now what is England compared to Germany, which latter has so many princes . . . so many famous and important people (who only want employment),

is filled with universities, whereas England only has two . . . Germany is a spacious land filled with mining, variety, and natural wonders, undoubtedly more than in so small and paltry a land as England. (*Ibid.*, 83)

Some seventy-five years later, German backwardness and aping of foreign models were still the leitmotif of Friedrich-Gottlieb Klopstock’s *Gelehrtenrepublik* (1774), and it was fitting that Klopstock should erect a monument to Leibniz at the entrance to his imagined society of German scholars. Its inscription was to read:

Stand silent, Researcher, be you German or Briton. Leibniz plowed the furrow and sowed the seeds, just as Newton did. But he alone built upon that furrow and seed, beyond Newton. You hesitate in vain, Briton, to concede him to be the better man. For all Europe names him so. (Quoted in Kirchstein 1928, 99)

In Klopstock’s exclusively German republic, high treason was defined as writing in a foreign tongue or praising foreign intellectuals above Germans. (Acerbic references to Friedrich II’s frenchified Berlin Academy make it clear that Klopstock thought Maupertuis an unworthy and unpatriotic successor to Leibniz, the first president of that academy.)

Yet even such academic nationalists as Leibniz and Klopstock made concessions to the cosmopolitan spirit of the Republic of Letters. Leibniz himself would have run afoul of Klopstock’s attempts to keep the German language pure of foreign words, for his pleas for a German academy were peppered with italicized borrowings from Latin and French, the old and new “Esperantos” of the Republic of Letters, respectively. Moreover, Leibniz hoped to recruit academicians from among outstanding foreigners as well as native lights, in explicit emulation of the Royal Society of London and the Paris Académie des Sciences (Leibniz [1875] 1969a, 227). And for all Klopstock’s ridicule of “Ausländerei” — the servile imitation of foreign models — he himself turned to Shakespeare as the shining example of an original genius in postclassical times (Kirchstein 1928, 65). The acute sense of national inferiority that stung both Leibniz and Klopstock into their pro-German harangues ironically also obliged them to learn from and admire their foreign colleagues. Moreover, some German voices swelled the chorus of cosmopolitanism. Johann Gottfried Herder’s essay “On the Influence of the Government on the Sciences, and of the Sciences on the Government,” which was awarded a prize by the Berlin Academy in 1779, praised the scholarly achievements of other lands in generous terms. Herder even called for the importation of foreign ideas, albeit ideas carefully sifted by an enlightened ruler (Herder [1780] 1893, 347, 362–64, 407).<sup>1</sup>

Indeed, for national academies in the intellectual hinterlands, such as the academies of Berlin and St. Petersburg, one might almost speak of the cosmopolitanism of desperation. The recruitment policies of Frederick II of Prussia and Catherine II of Russia for their respective academies were certainly tinged with the Francomania that

<sup>1</sup> I am grateful to *Science in Context*’s anonymous referee for drawing this essay to my attention.

so rankled Klopstock, but they were also responses to the underdeveloped state of domestic intellectual life. As Leibniz delicately put it to Peter I of Russia in his proposal for a learned academy in Moscow, it might eventually be possible to induct members not only from foreigners resident in that city, "but also even the Russians themselves" (Leibniz [1875] 1969c, 396). Monarchs ambitious for the reputations of their fledgling academies, even if these ambitions were nationalistic rather than personal in nature, often had no choice but to practice a kind of cosmopolitanism in spite of themselves.

It would, however, be misleading to suggest that cosmopolitanism featured prominently in Enlightenment manifestoes on the nature and goals of the Republic of Letters. The tolerance and freedom from prejudice they vaunted pertained largely to religion, not nationality. Leibniz took care to specify that his academy would be blind to religion as well as to nationality so long as merit was patent (Leibniz [1875] 1969b); Klopstock proclaimed reason as the true religion of the Republic of Letters, uniting Christian, Jew, Mohammedan, and pagan (Kirchstein 1928, 60); Pierre Bayle prefaced his first issue of the *Nouvelles de la République des Lettres* of March 1684 with the promise that books of both Protestant and Catholic authors would be reviewed without prejudice, and that illustrious scholars of all confessions would be honored with an *éloge* upon their deaths. When Bayle insisted on the essential equality of citizens of the Republic of Letters, the major obstacle he fought to overcome was religious, not national, prejudice: "Here it is a question not of religion, but of science. We must therefore lay aside all those terms that divide men into factions, and consider that point that unites them, which is the quality of being an illustrious man in the Republic of Letters."

Bayle knew whereof he spoke. Denis de Sallo's *Journal des savants* had been suppressed in Rome and ultimately in France because of suspected Gallican and Jansenist sympathies (Birn 1965); savants who had been welcome as foreigners in Paris, such as Huygens and Roemer, fled after the revocation of the Edict of Nantes in 1685 denied Protestants protection under the law (Delorme 1937, 222). In contrast, national prejudice barely merited a line, much less a crusade, on the part of the doyens of the Republic of Letters. It does not appear in the *Encyclopédie* article on "Prejudice," and although the article on "Nation" contains a one-sentence roundup of national stereotypes (frivolous French, proud Scots, drunken Germans, lazy Irish, etc.), there is no hint that these character differences might impede the intercourse of men of letters from different nations. The most influential Enlightenment work on national differences, Montesquieu's *De l'Esprit des lois* (1748), attributed these to climate rather than to nationality per se and took an ecumenical view of the myriad national "esprits," each admirable when it freely followed its own "genius" (Montesquieu [1748] 1945, 320 [book xix, para. 4]). There was little in these theoretical pronouncements on national character to impede the free exchange of ideas and information among the citizens of the invisible empire of the Republic of Letters.

This, then, was the ideal of the Republic of Letters: an elite confraternity distinguished by merit in literature, scholarship, and science; by near total freedom of

expression (Bayle was not alone in drawing the line at libellous satires; Bayle [1697] 1820, 584); by equality among members, in defiance of rank and birth; and by tolerance — tolerance that was emphatically religious and incidentally national. To what degree did the reality correspond to this ideal, particularly with regard to its cosmopolitan aspect?

### The Reality

When in 1750 d'Alembert reflected on the state of the Republic of Letters in France, he could honestly write of its citizens that they "believed one could be a good Frenchman without courting the great; a good citizen without inflaming national prejudices; a good Christian without persecuting anyone (d'Alembert 1967, 73). Religious and national tolerance among savants was not unrestricted. But the instances of cordial and regular contact through private correspondence, of the international circulation of learned journals, of the openness of the principal academies to foreign members and entries in their prize competitions, and of collaboration across national frontiers on scientific investigations were numerous and occasionally remarkable. I shall briefly survey each of these fronts as they pertain to the sciences.

Although scientific correspondents could not wholly ignore the national and religious differences that separated them, particularly in times of raging hostilities, they could agree not to broach inflammatory topics. When the Abbé Bignon, editor of the *Journal des savants*, reorganizer of the French academies, and nephew of the powerful controller-general Count Pontchartrain, addressed the Protestant Pierre Desmaizeaux in 1708, he could write, "I am very happy that my name does not frighten you, and that in effect your letters and mine can all be sent openly without anyone finding in them anything but great zeal and union for the sciences in general despite the division of states and particular sentiments." Bignon's scientific correspondence with Hans Sloane in England and Jean Le Clerc in the Netherlands was uninterrupted even by French wars against these nations (Ultée 1987, 542).

Not all intellectuals stood above the fray, and some were not above perverting their scholarly connections to religious or nationalistic ends (the two were often poorly distinguished): Bossuet kept up his lively correspondence with Leibniz during the French wars against the League of Augsburg, in a futile attempt to convert Leibniz to Catholicism; and the exiled Huguenot minister Pierre Jurieu exploited the Republic of Letters network to set up a spy ring in France (*ibid.*, 536–37). But in general, even the devout overcame their reservations about corresponding with intellectually interesting heretics. Mersenne's worries about creeping Socinianism did not prevent him from writing cordial letters to such dissidents as Bisterfeld in Transylvania and Ruarus in Poland (Rochot 1966, 63). Nor did Jean Le Clerc's heterodox brand of Calvinism scare off the bevy of erudite abbés who kept him abreast of the French intellectual scene (Barnes 1938, 191). Letters flowed back and forth across the Channel between members of the Royal Society and their opposite numbers in the Académie des Sciences

throughout the eighteenth century, despite strained diplomatic relations and outright war between the two countries; much the same can be asserted regarding scientific correspondence between France and Prussia during this period. Even militarily sensitive information (for example in cartography) was freely exchanged by French and English mapmakers (Faivre 1966, 114–15).

Journals were more sensitive to the disruptions of war and the vicissitudes of censors than were private letters. Indeed, the very first learned journals of the seventeenth century were in large part an attempt to fill the bibliographic vacuum left when the catalogues of the annual Frankfurt book fairs disappeared from foreign shelves during the Thirty Years' War (Birn 1965, 15–16). The impact varied from journal to journal, some showing a sharp drop in the number of foreign books and letters from foreign correspondents, others relatively little affected. Leibniz put his diplomatic contacts to good use, and the *Acta eruditorum* was able to publish foreign reviews at an unslackened pace even in the midst of war. But dissemination suffered everywhere, even in neutral nations. After Henry Oldenburg's death, Leibniz was still trying to get back numbers of the *Philosophical Transactions* published some twenty years before (Ultée 1987, 540).

The centrifugal forces of language and distance, though less brutal to the traffic of information within the Republic of Letters than those of war, were no less serious in the long run. By the turn of the eighteenth century, French had replaced Latin as the lingua franca of the learned world, reflecting the ascendancy of French science and letters under the reign of Louis XIV. Some academies — that of St. Petersburg, for example — continued to publish their annals in Latin; but this was exceptional. By 1752, Maupertuis could seriously propose an artificial village in which the inhabitants would be forced to speak Latin, in order to keep it alive among scholars (Faivre 1966, 104). For all his hopes that German could be perfected into a “bright mirror of reason,” Leibniz himself ([1875] 1969c, 390–91) addressed the great majority of his 400-odd correspondents — including many fellow Germans — in French (Ultée 1987, 538).

Although all scholars read French, the proudly local character of many academies nevertheless sometimes prevented publication in that language. Scientific journals were particularly alert to the potential damage that a proliferation of academic annals in a babel of languages could do to collective efforts. The *Collections académiques* (1755–79) translated and published extracts from the *Philosophical Transactions* of the Royal Society of London, the *Mémoires* of the Berlin Academy, and the *Handligar* of the Swedish Academy, and other journals; the Abbé Rozier announced his journal in 1773 as an attempt to bring together the scientific knowledge “transmitted by the learned of all centuries and all countries” (McClellan 1979, 431, 440). Despite its privileged position as the premier scientific academy of the age, the Paris Académie des Sciences was interested enough in the German scientific literature to petition for funds to hire a translator (Tourneaux 1901, 303).

The editorial policies and the readership of these learned journals aimed to be international; indeed, it was often their *raison d'être*. Bayle apologized to Parisian readers of the *Nouvelles de la République des Lettres* for boring them with a review of

a French book they might already have heard about, but recalled his obligation to keep “the whole world” *au courant* of new works (Bayle 1684). Despite its quasi-official character under Richelieu, the *Journal des savants* included an international section and altered its format to ensure better circulation in the provinces and abroad (Birn 1965, 18, 24). Rozier assured the American Philosophical Society that if they communicated their discoveries to him, “All Europe will be informed in the space of three months or less of the works in which your company is engaged” (McClellan 1979, 444). Academies actively solicited reports of scientific work from nonmembers, including foreigners. The Académie des Sciences created the *Savants étrangers* (1751–79) as an organ for these memoirs; the Swedish astronomer Anders Lexell reported in 1780 that its sessions were mostly taken up with reading letters from correspondents, rather than presenting memoirs by resident members ([Lexell] [1781] 1957, 153).

Of course, the corresponding members of the Académie des Sciences and its sister institutions were as often compatriots living in the provinces as they were foreign colleagues; in this sense, the Frenchman Laplace was as much a “savant étranger” as the Swede Linnaeus or the Englishman Joseph Banks — a fact that indirectly shows the anachronism of imposing our categories of nationality on the eighteenth century, which drew boundaries between insiders and outsiders somewhat differently. The French astronomer Lalande profusely thanked the Berlin Academy for welcoming him in to their midst, for he had despaired of academic honors, having been born “in a province, remote from the capital, that is, remote from the center of activity that forces Nature, as it were, to produce great men” (Lalande 1752, 10).

The relative indifference to nationality emerged clearly in the academic competitions, which were not only open to all comers, but whose prizes were as often as not awarded to foreigners. Out of ninety-two prizes granted by the Paris Académie des Sciences between 1720 and 1793, at least forty-seven were presented to foreign scientists and mathematicians (Maindron 1881, 17–22). By about 1750, most scientific academies had established regular contact with one another, exchanging publications and occasionally collaborating on joint scientific projects requiring many scattered observers. Some societies were more eager than others to form alliances with their sister institutions abroad, the academies of St. Petersburg and Berlin defining the poles of sociability and isolationism, respectively. Such bonds were considerably strengthened by common members, whose professional correspondence was more important to institutional partnerships than were the official quadrille of compliments or even the (woefully delayed) publications exchanged (McClellan 1985, chap. 5).

The most spectacular instances of cosmopolitanism within the Republic of Letters are to be found in international scientific collaborations of an astronomical and geographical sort designed to test or elaborate Newtonian theories. D'Alembert praised Maupertuis for understanding that he could still be a “good citizen without blindly adopting the physics of his country” (d'Alembert 1759a, 149–50), speaking of the expedition that definitively showed that the shape of the earth conformed to Newton's rather than to Cassini's predictions. In order to make these clinching

measurements to confirm an Englishman's theory, the French physicists Maupertuis and Clairaut journeyed to Lapland with the Swedish astronomer Anders Celsius as their guide, aided by Spanish sailors and armed with instruments made in London (Faivre 1966, 106).

The transits of Venus in 1761 and 1769 were the occasion of an impressive international effort, largely initiated and coordinated by the French astronomer Joseph-Nicholas Delisle, which ultimately involved some five hundred observers — French, English, German, Russian, Swedish, Portuguese, Italian, Spanish, Danish — all over the globe. Despite the war between France and England in 1761, the British Admiralty guaranteed the French astronomer Pingré safe passage to make his observations. (However, official clemency did not always prevail in actual skirmishes, and the efforts of both British and French observers were frustrated at points by the hostilities [Woolf 1959, 100–107].)<sup>2</sup> The Royal Society hoped to establish an international network of meteorological observers (McClellan 1985, chap. 6). Scientifically oriented explorers such as Captain Cook were granted immunity by all parties even in times of war; the French *Ministre de la Marine* went to the trouble of posting bills in all ports instructing sailors to render to Cook all necessary services despite the war with England, “as a man whose work interests all nations” (*Histoire de la République des Lettres . . . 1781*, 76–77).

It is just these examples of international cooperation and gallantry that bring to a sharp focus the paradoxical relationship of the Republic of Letters, particularly as embodied in local academies, to national glory. Not only were such national academies as those of Paris and Berlin created partly as the ornaments and instruments of the state, or at least of its rulers; spokesmen for the more free-floating Republic of Letters also sometimes attached themselves to the ideal of national glory. D'Alembert was cosmopolitan in his scientific outlook but nonetheless asserted that intellectual “reputation, so desired, so sought after, is . . . the patrimony of the state” (d'Alembert 1967, 69). Lord Macclesfield, then President of the Royal Society, sharpened his plea to the duke of Newcastle for funds to underwrite the English observing expedition of the 1761 transit of Venus with an appeal to “the Honour of this Nation,” lest the government's niggardliness give “too just ground to Foreigners for reproaching this Nation in general (not inferior to any other in every branch of learning and more especially in Astronomie [sic])” (quoted in Woolf 1959, 83).

Undoubtedly much of this rhetoric was self-serving and instrumental: d'Alembert shored up the standing of intellectuals vis-à-vis a none too well disposed government; the Royal Society received its 800 pounds sterling pronto. Scientists have never ceased to stroke the harp of national rivalries to play their own tunes. Moreover, the thirst for national glory among scientists rarely impeded international exchanges and collaborations, in contrast to the more virulent nationalism initiated under Napoleon (Daston 1990). But the issue of glory, personal if not national, and the judgment of

<sup>2</sup> For examples of Anglo-French cooperation in natural history, see also Jacquot 1953.

foreigners went deeper than mere expediency and self-aggrandizement. It struck at the heart of the code of values that united the diffuse and often quarrelsome Republic of Letters. Merit was its avowed foundation, and many Enlightenment intellectuals came to believe that foreigners were more trustworthy judges of merit than compatriots.

If its precise political organization remained a matter of debate, there was never any question but that in principle the Republic of Letters was a meritocracy, self-consciously opposed to the aristocracies of title and wealth. The class of “Honoraires” in many academies — originally intended to lend the fledgling enterprises luster, prestige, and aristocratic protection — had become a matter of embarrassment by the mid-eighteenth century, for it suggested that mere rank had equal rights with merit in the Republic of Letters. The *Encyclopédie* article on “Honoraire” quoted Fontenelle's rebuff to the Duc d'Orléans as a model: “Fontenelle, who understood better than anyone the true interests of his glory, responded to the Regent, who had offered to make him Perpetual President of the Académie des Sciences, ‘Eh, Monseigneur, why do you want to prevent me from living with my equals?’”

However, in contrast to inherited rank, merit had the disadvantage of being a matter of judgment rather than simple recognition. Enlightenment intellectuals had no truck with relativism in this regard and firmly believed that impartial judges would agree in the rating of true merit. But therein lay the rub: in the Republic of Letters all were competing against one another for what laurels were to be had, and its bitter polemics were notorious. Who was impartial in this fracas? Intellectuals clung to the standard of peer approval, and the academies performed important judicative roles in appraising the quality of work submitted to their judgment (Hahn 1971, 47). But there were bound to be miscarriages of justice and suspicions that the personal ambitions of the judges had skewed the results.

The sciences were no exception. D'Alembert, who as a member of both the Académie Française and the Académie des Sciences had witnessed literary as well as scientific squabbles, thought the latter were the more acrimonious and petty: “A bad epigram is sometimes all the vengeance a poet takes, but that of a savant is more constant and premeditated” (d'Alembert 1759b, 353). Even the idealized portraits of academic life Fontenelle painted in his *éloges* of deceased members of the Académie des Sciences revealed how gracelessly such scientists as Hartsoecker, Leibniz, and Méry had reacted to criticism that might diminish their reputation (Delorme 1937, 226). Formey, speaking for the Berlin Academy, regretted that the noble ideals of academic life had been subverted by flawed human nature: “[academies] presuppose frankness and cordiality, sentiments which are never to be found in the majority of people; and [which] envy and jealousy, arrogance and self-interest, more or less extinguish in the others. . . . To speak frankly, there are hardly any savants who know how to criticize judiciously, and even fewer who can bear [such criticism]” (Formey 1769, 376).

Despite this jaundiced view of the judgment of their peers, the citizens of the Republic of Letters refused to relinquish their right to assign to others praise and blame in intellectual matters. All of their cultural authority derived from that prerogative, and little as they trusted one another, they trusted the general public or the

cultivated aristocracy still less. D'Alembert spoke for all when he declared that it was for savants alone to judge whether the "Société de Gens de Lettres" responsible for the *Encyclopédie* was celebrated and whether justly so (d'Alembert 1759a, 9). Others complained that ceaseless bickering among intellectuals would deliver them willy-nilly into the hands of the enemies of enlightenment (Duclos 1784, 181–83): in a satirical depiction of the Republic of Letters its leaders were characteristically unable to agree among themselves even when the attacking Goths and Vandals were at the gate (Kirchstein 1928, 33).

The almost universal solution proposed to the problem of partisan strife was distance, both literal and figurative. D'Alembert suggested that while rivalry distorted judgment of merit among intellectuals of comparable gifts, they could nonetheless be accurately appraised by those both more *and less* gifted (d'Alembert 1759b, 346). It was not so much talent as the absence of direct competition that mattered here, and impartiality was more highly prized than acumen. Proximity in time and space were perceived to be in inverse relation to that impartiality, and for this reason the good opinion of posterity and of foreigners was particularly sought after. Indeed, foreigners sometimes bade fair to replace posterity as the ultimate tribunal of merit, for they had the advantage of awarding their laurels on this side of the grave. Hence intimate relations with foreigners took on an ambivalent cast. As d'Alembert remarked apropos of French anglomania, "the closer one becomes to foreigners, the more they lose that character of posterity for which the distance of space is at least necessary, in default of the distance of time" (ibid., 362).

This is why the thirst for personal and national glory converged in a kind of patriotic cosmopolitanism so typical of the international scientific efforts of the eighteenth century. Here, the glory of an individual scientist or scientific institution also became that of the nation, and the only tribunal that could impartially confer that glory was composed of other European savants. Just as the praise of those nearest was suspect to the Republic of Letters, so the paeans of compatriots counted for little in the arena of nations. Moreover, by the late eighteenth century intellectual distinction or "talent" counted among the most precious elements of national glory. This was perhaps in part because, unlike territories, it was inalienable, and in part because of the same rising prestige of letters that accounted for the ascent of the Republic of Letters. (*Why* image, or "public opinion" as it was then known, should have become a matter of such obsessive interest on the part of monarchs and nations is more difficult to explain; that it did become so, and that the Republic of Letters was its prime beneficiary, is indisputable.) Nations, like savants, courted the admiration of foreigners for their achievements; more precisely, they sought the admiration of foreigners for the achievements of their savants: "a nation is chiefly indebted to its talents for the esteem of foreigners, and for the good fortune of attaching to herself a crowd of equitable and jealous neighbors" (ibid., 366).

Hence leaflets distributing the French astronomer Delisle's observing instructions to English colonists in New York and Pennsylvania could call upon patriotism to enlist help in the transits of Venus project, and the Royal Society could inveigle funds for its

observers by pointing out that participation "is by foreign Countries in general expected from us (quoted in Woolf 1959, 83). The rhetoric of such cooperation was often that of the united interests of mankind, "making of all mankind but a single society," as Maupertuis put it ("Réponse de M. de Maupertuis" 1752, 20). But it was pleasant that serving the aims of humanity simultaneously entitled a nation to be admired and, still more pleasant, envied by her rivals. Intellectual distinction could console a nation whose military fortunes were sagging, dignifying the savant with a patriotic role that conveniently coincided with his own personal quest for fame. Thus did d'Alembert address his colleagues during the French military defeats of 1760: "And you who do honor to letters by your talents, you who represent the nation in the eyes of foreigners, you who uphold her glory in the midst of her misfortunes . . . wait in silence upon the judgment of Europe, which will silence and shame your enemies" (d'Alembert 1967, 78).

There were purer expressions of cosmopolitanism in the Republic of Letters in contexts more sharply divorced from national interest — one thinks of the Parisian Lodge of Les Neuf Soeurs, which welcomed intellectual masons from America, Poland, the Netherlands, Italy, Germany, Russia, and Spain, and of which Vauvenargues rhapsodized, "What a pleasure to be able to live amongst . . . a multitude that assembles all the knowledge, all the sentiments, and all the talents of the world" (quoted in Hans 1953, 514).<sup>3</sup> Moreover, prior to the French Revolution concerns for personal glory greatly overshadowed concern for national glory among savants. Personal glory was more securely rooted in the essential nature of the Republic of Letters, in its worship of talent and its insistence on impartial judgment. Nor did the patriotic appetite for national glory extinguish cosmopolitanism within the Republic of Letters, as it ultimately did under Napoleon. So long as glory was a good treasured by nation and savant alike, and so long as intellectual glory could be transmuted into national glory, even the thoroughly local academies could be turned to cosmopolitan ends. Glory required an audience, preferably an international one. This is why when Klopstock wanted to vindicate the reputation of Leibniz, and that of his stridently German *Gelehrtenrepublik*, he was obliged to appeal to the judgment of all Europe, against the parochial pro-Newtonianism of the British.

### Conclusion

But even if academies and the glory they burnished had not loomed so large in the late-eighteenth-century intellectual landscape, the Republic of Letters would still have found a special use for foreigners, and indeed for all those remote enough to pass impartial judgment on the merits of its citizens. In this sense, its cosmopolitanism cannot be sharply distinguished from its reverence for posterity, and from its incessant

<sup>3</sup> On the Enlightenment character of the masonic movement in the French provinces, see Roche 1978, 257–80.



concern with independence and detachment — detachment from religious fervor, from aristocratic favors, even from family and friends — all in the name of impartiality and disinterestedness. Fame was the currency of the realm in the Republic of Letters, and if the Republic was just, i.e. if fame was to be apportioned to merit, its judges must be incorruptible. Rent asunder, then as now, by blistering polemics and bitter rivalries, the Republic of Letters despaired of such judges, at least in the here and now. Extreme detachment became its chief civic virtue, not only to the end of impartially judging one's peers, but also to that of withstanding the (possibly biased) judgment of those same peers.

This is why some of the heralds of the Republic of Letters happily likened it to a rather Hobbesian state of nature, and reveled in the war of all against all, at least on the intellectual plane. Although Bayle would have had all citizens of the Republic of Letters repeat in unison, "We are all equal, we are all related, as children of Apollo" (1684), he urged friends to make war upon friends, fathers upon sons, to the greater glory of "the empire of truth and reason," for "the Republic of Letters preserves its independence by the refutation of authors, without the relationship of father, father-in-law, husband, or brother introducing prejudice" (Bayle [1697] 1820, 216–17). Strife among savants could be petty and personal, but it could also be in the service of the commonweal, the very opposite of partiality. Allegiance to the Republic of Letters in principle came before all other loyalties. The standard fifteen hours a day that Enlightenment men of letters habitually spent at their desks no doubt made such bellicose impartiality toward kith and kin easier: Leibniz' secretary Johann von Eckhart broke off a four-page letter on learned matters to Jean Le Clerc with the sheepish excuse that he was getting married that day (Barnes 1938, 205).

Freedom to criticize without respect for rank or affection implied detachment on the receiving as well as on the sending end. Some — Adam Smith among them — hoped that subject matter alone might insulate at least mathematicians and natural philosophers from the debilitating dependence on the opinion of others. Satisfied that his demonstrations were correct, Newton was undisturbed, or so Smith sanguinely believed, by the initial tepid reception of the *Principia*: "The tranquility of that great man, it is probable, never suffered, upon that account, the interruption of a single quarter of an hour" (Smith [1759] 1976, p. 124 [book III, ii. 20]). D'Alembert, who was more privy to the ways of mathematicians and natural philosophers, knew better. He sadly admitted that scientists were at least as bad as poets in the "envenomed hatred" with which they repaid their detractors. He therefore recommended a stoic, and somewhat schizophrenic, indifference: "Write as if you loved glory, but behave as if you were indifferent" (d'Alembert 1759b, 352–53).

Caught between these competing claims of ambition and indifference, the savants of the latter part of the eighteenth century waxed nostalgic for the hermit-like existence of scholars that had preceded the rise to power of the Republic of Letters in the mid-seventeenth century. D'Alembert preached associability and poverty to his colleagues — not on the traditional monastic grounds but in order to preserve their independence in judging others and their equanimity in being judged (*ibid.*, 399). The

state of nature of Rousseau's *Discourse on Inequality*, in which the solitary and self-sufficient hunter-gatherer cared not a whit who was "the handsomest, the strongest, the most dexterous, or the most eloquent" (Rousseau [1755] 1950, 241), gradually replaced Bayle's high-minded Hobbesian ideal for the Republic of Letters.

As we have seen, cosmopolitanism was one form that this yearning for distance, impartiality, and independence took, but it was a cosmopolitanism that held foreigners at arm's length. Closer contact detracted from the aloof attractions of that "living posterity." Late seventeenth-century intellectuals had eagerly contrived to meet their foreign correspondents; but their late eighteenth-century successors sighed that it was better never to lay eyes on one another, for friendships begun at a distance were all "too often destroyed by presence" (d'Alembert 1759b, 362). This yearning for distance, both literal and metaphorical, had a special role to play in the scientific sector of the Republic of Letters. What began in the eighteenth century as a quest for impartiality in relationship to others, became in the nineteenth century a quest for objectivity even in relationship to one's self. In light of the close eighteenth-century identification of impartiality and criticism, it is no surprise that one form that objectivity took was severe self-criticism. As Michael Faraday was to put it, "The world little knows how many of the thoughts and theories which have passed through the mind of a scientific investigator have been crushed in silence and secrecy by his own severe criticism and adverse examination" (quoted in Pearson 1892, 38). The impartial critic, once remote in space and/or time, had taken up residence within.

This internalization of the impartial critic implied that the faceless anonymity of foreigners or posterity now paradoxically extended to one's self: only by treating one's own discoveries and ideas as those of a complete stranger could the standards of impartial self-criticism be psychologically upheld. Here is one moment in the gradual self-effacement of the scientist that culminated in the disappearance of the first-person singular in scientific publications by the turn of the twentieth century. Along with the several other historical impulses that helped to erase the persona of the individual scientist from the public presentation of science, this self-estrangement came to constitute one aspect of the multifarious modern ideal of scientific objectivity. (Other impulses included the finer division of labor and more far-flung cooperation that demanded interchangeable observers, the externally imposed discipline of formalized methods of investigation and mechanical techniques of data reduction that reined in personal idiosyncracies, and the internally imposed discipline of restraint from judgment and interpretation that became tantamount to a moral creed.)<sup>4</sup> The socialization process of detachment that had begun in the eighteenth century to distance scholars first from family and friends and then from contemporaries and compatriots, in the nineteenth century eventually estranged them from themselves as well. An eminently psychological process was thereby enlisted to eliminate all that was

<sup>4</sup> On the division of labor and labor discipline, see Schaffer 1988; on scientific method, Yeo 1986; on mechanical data analysis, Swijtink 1987; on the morality of scientific self-restraint, Daston and Galison forthcoming.

"merely" psychological, and it ultimately forged that peculiar identification of scientific objectivity with the invisibility of the scientist.

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## The History of Sexuality in Context: National Sexological Traditions

### The Argument

I argue here that in its historical development, sexology developed differently in France than elsewhere in Europe. Though I concur that the modern notion of "sexuality" arose some time in the last half of the nineteenth century, the older notion of "sex" persisted in French science and medicine for a far longer time than elsewhere because of a fear that nonreproductive sexual behavior would deepen the country's population crisis. I argue that the scientific and medical concepts of the sexual perversions, particularly homosexuality, were considered by French sexologists to be abnormal deviations from heterosexuality, whereas some English, German, and Austrian sexologists — including Freud — viewed the perversions more tolerantly as natural variations of the norm. I also address here the inadequacies of historical accounts of these developments that favor discursive ruptures in the Foucauldian manner, and stress the advantages of social history and causal historical explanation.

Are there sexological traditions? May we break down the history of knowledge about sexual function and behavior along national lines? I wish to argue here that we must do so or risk misunderstanding how sexology developed at the end of the nineteenth century in rather well-defined national cadres and in response to local concerns and issues relating to sexual matters. In this brief format I cannot make my case with an exhaustive comparison of national sexological traditions. I will try to cope with this limitation by asserting a few general principles that I believe apply to most national traditions and then building a more systematic case for a particular national tradition that departs in significant ways from these principles.

The founders of modern sexology sprang from all the European nations and America. The most influential among them wrote huge compendia of medical knowledge, examples being Richard von Krafft-Ebing's *Psychopathia Sexualis* (1886), Magnus Hirschfeld's *Die Homosexualität des Mannes und des Weibes* (1914), Havelock Ellis' multivolume *Studies in the Psychology of Sex* (1897–1910), or such conceptually important memoirs as Sigmund Freud's *Three Essays on the Theory of Sexuality* (1905). All these writers, and most of their less famous contemporaries, were more or less consciously seeking to create a new medical specialty within psychiatry, enriched by data drawn from psychology, anthropology, history, and the arts, but