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Medicine in Mozart's Europe

For many years, Enlightenment medicine had a bad press. For not a few historians, it seemed a rather fallow, even sterile, period, sandwiched between the excitement of the age of William Harvey and the vast diagnostic, scientific and institutional achievements of the nineteenth century. Within this context, doctors in the eighteenth century were depicted as busying themselves with constructing elaborate, abstract systems based on superficial knowledge, and with torturing their patients with heroic bleedings and purgings. The doctors were more concerned with privilege, income and status, with powdered wigs and gold-headed canes, than with the sufferings of those who were unfortunate enough to become ill and to fall under their care. At the other end of the spectrum, rapacious quacks, mountebanks and charlatans preyed on people's anxieties and pocketbooks, made fortunes out of misfortunes and exploited a public which had difficulty telling the quacks from the regulars, except perhaps by the fact that the quack remedies were that much more pleasant to swallow (Bynum).

There are reasons why such a harsh picture of the medicine of two centuries ago might have been constructed. It is, after all, easy enough to caricature eighteenth-century medicine and its doctors: artists at the time delighted in doing so. Equally, it is easy to find examples of actual patients—Mozart may just be one such instance—whose clinical histories bear eloquent testimony to the old adage that there is a great difference between a good doctor and a bad one, but no difference between a good doctor and no doctor at all. Nevertheless, recent scholarship on the

medicine of Mozart's century is no longer content to discount doctors as complacent systematizers and pompous defenders of tradition. It has begun to look beyond the bastions of the old order—colleges of physicians anxious to preserve rank and privilege, medical faculties selling degrees to all and sundry—and discovered a much more responsive and energetic medical world. It has emphasized the increasing social and personal value placed on health; new demands for medical services and new schemes to provide them; educational initiatives and enterprising novel forms of medical charity; even the rudiments of a more systematic state involvement in the medical sphere (Riley; Porter and Porter; Cunningham and French).

Above all, perhaps, scholarship in the last decade or two has stressed that the eighteenth century was a time of a consumer-led commercialism within medicine—"health for sale"—and that this must be seen more broadly as part of the birth of the consumer society (Porter, *Health for Sale*). The strength of laissez-faire sentiment, of the marketplace, and of the middle classes whose energies lay behind it, varied of course from country to country. Nevertheless, in many places throughout Europe, the values of the marketplace impinged upon the practice of medicine, or as practitioners often referred to it, the business of medicine. Like it or not, we are all children of the Enlightenment.

In a short paper, I can touch on only a few of those themes, of course, and I am conscious that by painting on a broad canvass, I cannot do justice to some of the detailed analyses which scholars have recently undertaken. Nevertheless, I want to suggest at least some of the reasons why, despite Mozart's tragic and not untypical medical history, it is possible to use the phrase "enlightenment medicine" without a sense of condescension or irony. I shall first describe some of the principal features of this medicine, features which help explain Enlightenment medicine's bad press. I shall then briefly look at examples of entrepreneurialism in three European capitals with which Mozart was variously associated, London, Paris and Vienna.

First, the Enlightenment and its medicine. In these days, when "Europe without boundaries" has become a significant phrase, it is useful to remember that educated individuals in the eighteenth century also had a sense of belonging to a cultural realm which went beyond their own national boundaries. On the Grand Tour, itself a quintessentially

eighteenth-century phenomenon, the traveller would expect to see or hear familiar architectural, artistic and musical forms, and to have with him letters of introduction to local elites in the various points of his tour. He or she would expect to be able to converse with those for whom letters were brought, if not in Latin, still an important unifying force, then in French, a *lingua secunda* of the eighteenth century as English is today. It was not simply the present but also the past which unified educated people, for the study of the classics, especially Latin writers such as Cicero and Virgil, provided a common cultural currency. The English historian Edward Gibbon was not the only European to feel that, when he first set eyes on Rome, he was looking at home.¹ The surviving correspondence of eighteenth-century figures like Sir Hans Soane and Albrecht von Haller, Linnaeus and Voltaire, are monuments of an international age.

Doctors, too, had their shared traditions, both as participants in the cultural life of the time, and as inheritors of classical medicine. Galen had lost some of his lustre during seventeenth-century debates, but the Hippocratic writings remained as living influences throughout the Enlightenment. Thomas Sydenham (1624-89), the "English Hippocrates," was also much admired throughout Europe, not least by Hermann Boerhaave (1668-1738), by far the most famous medical teacher of his time. Not much of a traveller himself, but a cause of travel in others, Boerhaave turned the University of Leiden into the medical academy of Europe. Literally thousands of students from all over the continent—more than 700 from the English-speaking world alone—could claim to be his pupils (Innes Smith; Underwood). At nowhere more than Leiden during the first third of the century can the ecumenicalism of Enlightenment medicine be seen, especially since so many students combined study at Leiden with a tour of other continental medical schools—not infrequently because medical degrees were easier to obtain elsewhere.

Boerhaave had another English hero besides Sydenham: Isaac Newton. Newton's towering achievements in physics were widely admired throughout the century, even as the darker aspects of his complex personality were overlooked. He provided at once a goal for those in other disciplines to aim at; to be a Newton of your subject was to provide a unifying, synthetic set of laws comparable to those Newton himself had

elaborated for physics and astronomy in his *Principia*. At the same time, the very success of the physical sciences encouraged many to apply physical principles to physiology and pathology. Iatromechanics, the mechanics of doctors, had adherents in most European countries, although the mechanical models of physiological functions such as digestion, glandular secretion and respiration were often rather speculative and did not long command assent. The search for unifying laws within medicine, a sort of medical law of gravity, also encouraged the building of monolithic explanatory schemes within the discipline. Boerhaave had maintained that the vascular system was the key to understanding health and disease. From about the middle third of the century, the emphasis shifted from the blood vessels to the nervous system: as William Cullen (1710-90), the ornament of the University of Edinburgh as Boerhaave had been of Leiden, put it: "In my opinion, the generality of morbid affections so depend on the nervous system, that almost every disease might be called nervous" (Risse).

Cullen's pupil John Brown (1735-88) dropped the "almost" of Cullen's pronouncement and preached that all disease is caused by an excess or deficiency of a single basic biological principle which he called "excitability." Here was the medical equivalent of Newtonian gravity at last, a discovery which in Brown's opinion could simplify once and for all the practice of medicine, since doctors had merely to decide if the condition was one of hyper-excitability (or a "sthenic" state), in which case the patient needed to be "lowered" by depletive measures; or one of hypo-excitability (or asthenia), in which case stimulants such as alcohol and opium were called for. Brown was addicted to both these stimulants, as standard remedies for his patients and to take himself. He was reported to begin his lectures rather dully, but by the end, having fortified himself with the opium tincture laudanum, and occasional hits of alcohol, to be waxing eloquently if not always intelligibly. In any case, he argued that diseases which start as the result of overexcitability soon exhaust the system and, through indirect asthenia, ultimately require his beloved opium and alcohol (Bynum and Porter, *Brunonianism*).

Isaac Newton can hardly be blamed (or credited) for Brown's system, even if Brown was happy to see himself in Newton's shadow. The Scotsman argued that his discoveries cut through another tendency of eighteenth-century medical systems, the multiplication of diagnostic

entities. Long before international disease classifications began to be discussed in the late-nineteenth century, Enlightenment doctors carried on their own discussions on the nuances of nosology. The authority of Thomas Sydenham was often invoked as a rationale for the nosological enterprise, for in a famous passage, Sydenham had asserted that diseases are discrete entities with specific natural histories. They can thus be described and classified with the same authority that a botanist has when looking at the variation which individual violet plants or oak trees manifest, yet knowing that they also share common characteristics which make classification possible. The careful doctor knows that smallpox or gout will present in slightly different ways in each individual sufferer: yet, said Sydenham, it is also possible to discern the constant features of disease and to base sure and reliable diagnoses on these constancies (Meynell).

In his published writings, Sydenham concentrated on some fifteen or twenty common disorders, but doctors in the Enlightenment turned nosology into a major endeavor, especially after Linnaeus from 1735 began to make taxonomy one of the most prestigious and vital of scientific activities. Some of these disease taxonomies were wonderfully elaborate affairs, describing some 2,000 or more species of disease, based for the most part on what we would call symptoms. Thus, fever and pain were taken as diseases in themselves, with minute divisions based on the character and course of the fever, or on the nature, intensity and location of the pain. This symptom orientation allowed room for constant subdivision of entities and led to a good deal of debate and disagreement about the nuances of classification (King, *Medical Thinking*; King, *Medical World*). Nineteenth-century doctors preferred to base classification on lesions rather than symptoms; on what Frances Bacon had much earlier called the "footsteps of disease." Lesions were literally palpable, discoverable at post-mortem examination and at least inferable through the new diagnostic methods, symbolized above all by Laennec's stethoscope of 1816, which began to be more routinely employed by clinicians from the early-nineteenth century (Ackerknecht; Foucault; Reiser).

This switch from a symptom-oriented to a lesion-oriented approach to disease, its understanding and classification, is often cited as one of the landmarks demarcating the medicine of the old order from the medicine

of the new; the medicine of the eighteenth-century sickroom from the medicine of the nineteenth-century hospital ward. Whatever the merits of the view that dates the birth of modern medicine to the attitudes and achievements of the early nineteenth-century French hospital-based clinicians, it is worth recalling that the symptom approach of Enlightenment doctors coincided more closely with the experiences of their patients. Despite the seemingly impenetrable qualities of eighteenth-century nosological tables, the patient and his doctor would be likely to agree on the diagnosis; indeed, the patient would often simply inform the doctor what was wrong and then be treated for it.

This kind of doctor-patient encounter has been described as one of patient—or client—domination (Jewson). It resulted from several factors: first, from the fact that educated patients shared the same medical tradition and had access to the same medical knowledge as their doctors. It was not that eighteenth-century medical writing was not "technical"; rather that the intellectual framework within which doctors operated was available to any educated individual. Medical issues were widely discussed in newspapers and periodicals such as *The Gentleman's Magazine* (Porter, "Laymen, Doctors and Medical Knowledge"); medical allusions punctuated the essays of Swift, Johnson and the great writers of the age; medical treatises were often written for a general audience. Though Dr. Samuel Johnson was of course an LL.D., not an M.D., he nevertheless felt no difficulty in keeping abreast of medical developments and commenting on the medical theories of his day. He also held at least an equal partnership with his doctors in diagnosing and managing his own illnesses (Wiltshire).

A second factor which made for client-domination was the nature of the patronage system in eighteenth-century Europe. Composers and musicians were not the only ones who needed powerful and wealthy patrons in order to succeed. So did doctors, and a reputation could be made if an aristocratic, or above all, royal patient expressed satisfaction with the medical services which a doctor had rendered. Throughout Europe, court appointments were particularly important, as most public and most likely to lead to lucrative practices, ennoblement and a state pension (Nutton). Lower down the financial scale, local worthies—the squires, parsons, wealthy landowners, and so on—also aided the medical practitioner not simply by paying their bills but also by being known to

consult with him. Reputation counted for much and was generally acquired by the houses the doctor was seen to enter.

Enlightenment Europe was hierarchically arranged, and the practice of medicine was still not a particularly prestigious calling; it fell well below the other "learned" professions of law, the church, and the military, in social clout. It is thus easy to appreciate that doctors needed to please their patients: the word placebo is an eighteenth-century coinage. One might suppose from this that the uncomfortable sweatings, bleedings and vomits might have disappeared, as patients voted with their pocket books for doctors who offered them only sugary medicines and recommended a pleasant change of scenery. On the contrary, doctors and their patients seemed in agreement that vigorous remedies were necessary to root out serious illness. Dr. Johnson had contempt for what he called "popgun batteries," weak medicines taken in small doses. He felt all the better for a violent purge and a good bleed.

Related to these shared values is a third factor which helped keep medicine consumer-orientated, the unregulated state of the medical profession. We must use the word "profession" with caution in an eighteenth-century context, for medical services were on offer from a variety of sources, from farriers to wisewomen, itinerant quacks to midwives, friendly neighbors to druggists (Bynum and Porter, *Medical Fringe*). There was a tighter grip on licensing and regulation in many parts of Europe than there was in Britain, but everywhere doctors felt the spectre of competition, both from their peers—that was bad enough—but also from this vast array of entrepreneurs and do-gooders. Even among the regulars, physicians worried that apothecaries were stealing their customers, surgeons were eager to extend the territory of their practice, and all the regulars could be a little worried by the immense market in advice books and self-help manuals, from John Wesley's *Primitive Physick* to William Buchan's *Domestic Medicine* and Samuel Tissot's *Advice to the People in General with Regard to their Health* (Smith).

Each of these volumes went through multiple editions and translations, and while they were not necessarily encouraging readers to dispense entirely with the care of the doctor, they certainly encouraged self-diagnosis and self-medication. And they were just the tip of an iceberg of books, pamphlets and broadsheets, offering something of a medical nature to the public. Much of this literature was genuinely ephemeral,

designed to increase the author's reputation and to sell his medicines. The doctor's address might be given, along with his consultation hours; or the reader told that medicines for this or that disease were available by post or at the bookshops where the book or pamphlet was sold. Nor was this simply a ploy of the quacks; it is often difficult to distinguish advertising from informing, or to tell the regular doctors from the quackish fringe. What above all the whole genre testified to was the vitality of the unregulated medical marketplace, and the widespread public concern with health (Porter, *Health for Sale*).

Nowhere was this more apparent than in the largest city in Europe, London. Despite a large annual surplus of deaths over births, London continued to grow throughout the century, reaching a population of almost a million by the time of Mozart's death. Its size and wealth made it a magnet for medical practitioners of all stripes, including hundreds of Scottish doctors who, in Dr. Johnson's words, took the high road south. Two of them, the brothers William and John Hunter, were involved in much that was medically innovative in Georgian London. Significantly, London, for all its social and economic importance, did not possess a university, which meant that there was no traditional academic presence, no medical faculty to represent the systematic knowledge of the schools.

William Hunter (1718-83), the elder brother, came to London via Paris, where he had been impressed with the availability of bodies for dissection and the practical teaching of anatomy. He arrived in London as a trained surgeon-anatomist at exactly the right time, just before the surgeons formally separated themselves from the barbers, in 1745. The separation meant that the Company of Surgeons needed new premises, and building delays were as common a feature of eighteenth-century life as today. Temporarily without a roof over their heads, the surgeons had to give up the monopoly they had previously enjoyed on the teaching of practical anatomy in London. Hunter seized the opportunity and opened a private anatomy school, advertising that instruction could be given in the French manner, i.e. with the use of cadavers for dissection by the students. He was so successful so quickly that the Company of Surgeons did not bother to enforce their monopoly when their facilities became available a few years later. For about 40 years, Hunter enjoyed an unparalleled reputation in London. He moved his school from place to place, seeking ever larger accommodation until, in the 1760s, he opened

his purpose-built showpiece in Great Windmill Street. He had tried to secure a government grant to aid in the financing of it; when that failed, he went it alone, at the same time gradually expanding the variety of courses offered, so that only the lack of clinical facilities prevented his enterprise from becoming a complete medical school (Bynum and Porter, *William and Hunter*).

Medical teaching in the eighteenth century could also be individualistic and entrepreneurial. Even within the universities, teachers earned most of their incomes directly from student fees, which meant that the larger the class the larger the income. This discouraged teachers from producing textbooks, as these might inhibit large enrolments if it became easier for students to bone up on their subject from a book. The absence of a textbook tradition in turn encouraged students to take elaborate notes (and the occasional enterprising one to publish unauthorized pirated editions of his teacher's lectures). Hunter's major publication was his *The Anatomy of the Human Gravid Uterus*. This was a book for rich connoisseurs rather than poor students, with dramatic life-size plates, scrupulous production standards, and a price tag to reflect it. Surviving lecture notes from Hunter's course show that he gave a comprehensive set of lectures and demonstrations and could easily have turned them into a textbook.

Hunter's success as a teacher encouraged others to imitate him, and by the century's end, a large number of private schools attracted students from all over the country. At the same time, consultant physicians and surgeons took advantage of their hospital posts and started offering clinical instruction to pupils who signed up and paid their fees. The development of the voluntary hospital was another conspicuous feature of medical life in eighteenth-century Britain, beginning with the foundation of the Westminster Hospital in 1719. Four more general hospitals were started in London during the next three decades, and the movement spread to the provinces as well. These were charity institutions to which the physicians and surgeons donated their services without salary, in return for the prestige, the opportunity of acquiring private patients from among the governors and other well-to-do supporters of the hospital, and, from about mid-century, the added bonus of having paying pupils and apprentices (Granshaw and Porter).

Among surgeons, John Hunter (1728-93) had the most notable success in acquiring pupils, so much so that his colleagues at St. George's Hospital became jealous. The brothers had very different personalities: William was suave and cultured, spending much of his considerable earnings on paintings, old manuscripts and coins, and enjoying his association with the artistic and literary elite of London. John was of a rougher hew, socially awkward and devoting his collecting energies to anatomical and pathological specimens. The worst time of his life was the few weeks he spent at Oxford, where William had sent him to try to make a gentleman and a physician out of him. Ironically, John remained a surgeon, whereas William acquired a medical degree from the University of Glasgow, disenfranchised himself from the Company of Surgeons and joined the Royal College of Physicians, though only as a licentiate, since his medical degree was not from Oxford or Cambridge. He tried briefly to open up the ancient College to worthy outsiders like himself, but he would have recognized that the most fertile sources of institutional innovation within medicine were to be found in the hospitals and private medical schools, the student societies and new associations of medical men, such as the Medical Society of London, where physicians, surgeons and apothecaries could meet on terms of equality (Loudon).

In Paris, where Mozart first stayed in 1763, the College of Physicians and the medical faculty remained as conservative and inward-looking as the London College. Nevertheless, outside the old bastions, surgeons in particular were active in the creation of new institutions and new educational forms. The Academy of Surgery, founded in 1731, was in itself a reflection of the growing status of the craft. French surgeons and barbers were legally separated in 1743 and the College of Surgeons, established in 1750, had formal independence from the old-guard medical faculty (Gelfand). The State was a much more important patron of science and medicine in France than in Britain, but Paris also spawned numerous private anatomy and surgery schools. Pierre-Joseph Desault (1738-95), Bichat's mentor and the premier surgeon of his day, successfully gave private courses for most of his career, even while advancing himself within the public sector.

The French hospitals were rather more public institutions than their eighteenth-century British counterparts. Many of these were dependent on public funds, and the presence of nursing orders in most of them gave the

Catholic Church a formal stake in their running (Jones). Tensions between the demands of patient care and medical and surgical education sometimes surfaced on questions such as access to patients, how many beds could be used for teaching or the number of students permitted to witness an operation. Desault fought such battles when as the Chief Surgeon at the Hôtel Dieu, he introduced clinical surgical lessons to his students. There had long been a hierarchical system of surgical training within the French hospitals, with the successful student working his way through an ascending series of posts of increasing prestige and responsibility, including the now familiar positions of extern and intern. If, as Owsei Temkin suggested in a classic essay first published in 1951, modern medicine was the result of incorporating surgical approaches into the practice of physic, this was clearly well under way in Enlightenment Paris (Temkin).

The career of another Paris surgeon and comparative anatomist, Félix Vicq d'Azyr (1748-94), reminds us how fluid professional boundaries were becoming in the century. Although he had had surgical training, Vicq d'Azyr acquired his early reputation as a private teacher of anatomy and physiology, and was as interested in medicine as in surgery, and in veterinary as in human medicine. A successful committee man and academician turned reluctant revolutionary (or at least adapting his reformist spirit to the new circumstances of post-Bastille Paris), he was the perpetual secretary and guiding spirit of the Société Royale de Médecine, established in 1776. His efforts there give him status as a pioneer of public health and epidemiology, for he was ever active in trying to get doctors to take their public health responsibilities seriously. He masterminded a vast network of correspondents throughout France, all devoted to keeping detailed records of medical events: local epidemics, occupational diseases, the relationship between weather conditions and health. Although the Revolution put paid to the sifting down, systematization and publication of the collaborative project, its very existence was symptomatic of the Enlightenment's increasing concern with the social causes of disease (Hannaway).

Or, as Johann Peter Frank put it in the title of an oration which he delivered in 1790, "The People's Misery—Mother of Diseases." Perhaps no doctor better typifies the cosmopolitan spirit of the Enlightenment than Frank (1745-1821). He died in Vienna, and had earlier spent some of his

most productive years there, but his career had taken him to many places in eastern Europe, from Pavia to St. Petersburg, from Rastatt to Freiburg, from Heidelberg to Göttingen. He served during his long life not a few of the despots of Europe—some "enlightened," some rather less so. With none had he had a more fruitful relationship than with the Emperor Joseph II, who appointed him to a chair in Pavia, and then Protophysicus of Austrian Lombardy. After Joseph's death, Franz II appointed Frank as Director of one of Joseph's great monuments, the Allgemeines Krankenhaus, the 2,000-bed institution in Vienna which, Frank had warned his emperor would not function efficiently without "a heavy weight to drive the wheels" (Lesky, *Vienna Medical School*).

The old medical school itself had, of course, been revitalized by Gerhard van Swieten (1700-1772), Boerhaave's favorite pupil, but, as a Catholic, without a patron in protestant Holland after Boerhaave's death. At Maria Theresa's request, van Swieten came to Vienna in 1745 as her personal physician. Few physicians have ever enjoyed such a devoted royal patient, and their relationship gave van Swieten the scope to create a Boerhaavian-type clinical school in Vienna. Neither van Swieten nor Maria Theresa lived to see the opening, in 1784, of the new general hospital, but it was this institution to which, eleven years later, Frank was called (Lesky, *Gerard van Swieten*; Lesky, *Wien und die Weltmedizin*).

Frank was appreciative of the value of clinical medicine, of course, but he had a much broader vision of the role of medicine in society, to which he devoted his most creative endeavor. His *System of Complete Medical Police* was published in six volumes and three supplements between 1779 and 1827. It is a world away from the laissez-faire values of the medical London of the Hunter brothers; yet it expresses in systematic form the widespread Enlightenment concern with disease, its understanding, treatment and, above all, prevention. Frank's medical police are the benevolent agents of a benevolent but powerful state. His vision of civic life is one of harmony, regulation, order and rationality. Long before twentieth-century experiments with the welfare state, Frank outlined in volume after volume the range of social, economic, moral, religious, political and medical factors which touch upon health and proposed strategies to deal with them. His volumes are the *locus classicus* of the social medicine of our own day.

The death of Joseph II guaranteed that Frank would never be in a position to translate his ideas into reality. Nor, it has to be said, would many of us wish to live in a society so tightly regulated as the one Frank envisioned. His was a human vision of a humane society, with no place either for poverty or for luxury. Amusements there could be, but only innocent ones. There was no place in Frank's society for grand passions, late-night tipples, or gourmet meals. But at least there was a place for music. Like so many physicians in Enlightenment Vienna, Frank loved his music. I do not know if Frank ever saw Mozart, but Haydn was his friend. I can do no better than close with a passage from Frank, on the relation between music and health:

I do not want to indulge here in a eulogy of the power of music over our hearts, but it certainly constitutes a substantial part of the balm which has been provided by Providence to the human race against illnesses of the soul. Physicians have recorded in their diaries several cases of illnesses which were healed by the magic of music, and its effect on sensitive nerves is so obvious that the circulation and exhalation, which had been put into disorder and been impeded by the convulsive state of the solid parts, were put in order by it within a short time, much to the body's relief. . . .

The police, therefore, must see to it that this great means of encouragement and popular amusement is not lacking in large cities. It must provide in large cities good musicians who satisfy the ear of the listeners, and who drive out the devil of sadness in a sad hour, and, moreover, who are able to provide sound instruction in this art for the lovers of music, thus filling in many a gap of human life to the advantage of public health (Frank 173-4).

NOTE

1. But at the distance of twenty five years I can neither forget nor express the strong emotions which agitated my mind as I first approached and entered the *eternal City*. After a sleepless night I trod with a lofty step the ruins of the Forum; each memorable spot where Romulus *stood*, or Tully spoke, or Caesar fell was at once present to my eye; and several days of intoxication were lost or enjoyed before I could descend to a cool and minute investigation (Gibbon 134).

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