

## DR. WILLIAM OSLER: SOME REFLECTIONS

*Tom Middlebro'*

Value has traditionally been associated with permanence. In Christian theology, human beings have value as ends in themselves because they possess immortal souls. The jolt administered to religious value systems by the scientific arguments of Charles Darwin came only in part from the changed image of nature and of man's relationship to it. The brutal picture of nature as an aimless and unending power struggle attracted the hostility of many, and numbers of intellectuals attempted to modify Darwin's image by attributing to nature, or life, some teleological aspects. Father Pierre Teilhard de Chardin is in this honourable tradition. But more important: science was coming to view existence as a process, and to define man solely by his self-conscious participation in it. Can humans, if seen as infinitely malleable and constantly altering, be assigned transcendent value?

For our generation, the awareness of the divisions between religious values and the conclusions of science is a familiar ache. I want therefore to go back to examine the writings of one from the first generation to grow up while the impact of Darwin's theory was still fresh, and I have chosen Dr. William Osler. His writings are useful to delineate the problem for several reasons. First, as a physician and as a man of letters Dr. Osler was in a position to experience, appreciate and articulate the problem. Secondly, as the son of a clergyman and as one strongly influenced while growing up by the religious reaction of the Oxford movement, Osler was keenly aware of the points in dispute between religion and science. Thirdly, his success in his careers makes his responses to the issue of more than individual significance.

William Osler was born July 12, 1849,<sup>1</sup> in his father's rectory at Bond Head, Ontario, the eighth of nine children of the Reverend Featherstone Lake Osler and his wife, Ellen, née Pickton. Canon

---

<sup>1</sup>The biographical information is taken from Harvey Cushing, *The Life of Sir William Osler*, 2 Vols. (Oxford: Clarendon Press, 1925).

Osler was of Cornish stock, and had been a sailor in his youth, but in 1832 he left the navy to study for Holy Orders at Cambridge. A month after his ordination in March 1837, he left Falmouth with his new bride for Canada and missionary work in the sparsely populated rolling farmland north of Toronto. The early years were difficult, for the colony was suffering the uncertainties resulting from the Mackenzie-Papineau rebellions, a rectory and church had to be built, and the Canon had to serve the large surrounding area on horseback. By the time of the arrival of the youngest son on the "glorious twelfth" of 1849 these pioneer hardships were over. The Baldwin-LaFontaine reform government had brought responsible government to the colony, the countryside was more settled and Bond Head was a growing village with a school. As part of a large, lively and disciplined family William lived at the Bond Head rectory and farm until 1857, when his father was transferred to Dundas, Ontario.

The memory of these early days stayed with Osler. Here is one recollection, taken from an address given in Glasgow in 1911, "The Pathological Institute of a General Hospital." He is discussing the progressive accumulation of scientific knowledge.

The most vivid recollections of my boyhood in Canada cluster about the happy spring days when he went off to the bush to make maple sugar — the bright sunny days, the delicious cold nights, the camp fires, the log cabins, and the fascinating work tapping trees, putting in the birch-bark spouts, arranging the troughs, and then going from tree to tree collecting in pails the clear, sweet sap. One memory stands out above all others, the astonishment that so little sugar was left after boiling down so great a cauldron of liquid. And yet the sap was so abundant and so sweet.<sup>2</sup>

William Osler's early education was rather peripatetic: Bond Head, a Dundas grammar school until his pranks led to expulsion in 1864, a year and a half as a boarder at the Barrie Grammar school (which his brothers had also attended), then, in January 1866, the Trinity College School at Weston, recently founded by the Reverend W. A. Johnson. Father Johnson, a proficient amateur naturalist and a disciple of the Oxford movement, became a critical influence in William Osler's life.

---

<sup>2</sup>*Glasgow Medical Journal* 76 (November 1911), p. 15.

Canon Osler had taken Orders at a time when the reverberations from the evangelism of John and Charles Wesley were still strong within the Anglican Church, particularly at Cambridge through the teaching and example of the Reverend Charles Simeon.<sup>3</sup> When William was a student, he was introduced to the new ideas emanating from the high church or Anglo-Catholic movement by Father Johnson. The movement had begun in 1833 with a sermon preached at Oxford by John Keble entitled "National Apostacy." The sermon was a response to the abolition of twelve Anglican bishoprics in Ireland by the English parliament, but the issue addressed was a general one: the need of the Church to assert its autonomous corporate authority as government support was withdrawn and the state sought, in matters of religion, to become neutral. The conversion of one of the early Oxford leaders, John Henry Newman, to Roman Catholicism in 1845 and the desire of the Anglo-Catholic clergy who remained within the church to introduce more Catholic ritual into the Anglican service, aroused a good deal of distrust and hostility within the community. Bishop John Strachan was initially sympathetic to raising the status of the clergy, one of the consequences of the movement's emphasis on the church as holy, catholic and apostolic. Strachan, however, shared in the later distrust and gave Father Johnson little support in his difficulties with his low church parishioners at Cobourg and later at Yorkville. As warden of the Weston school and as an enthusiastic field naturalist who taught his students how to use the microscope, the Reverend Johnson greatly influenced Osler. William Osler was later to abandon his plan to take Orders and shift his allegiance to medicine, but he brought to his chosen profession a high church sense of vocation and a desire to assert and raise its status as an international fellowship dedicated to "lessening the sad sum of human misery and pain."<sup>4</sup> It colours all his writing. In his essay "Physic and Physicians as Depicted in Plato"<sup>5</sup> medicine is firmly linked with the only source that could rival Israel in legitimacy, classical Greece. Then in addresses such as "Chauvinism

---

<sup>3</sup>H. E. Hopkins, *Charles Simeon of Cambridge* (Sevenoaks: Hodder and Stoughton, 1977).

<sup>4</sup>William Osler, *Introductory Lecture on the Opening of the Forty-Fifth Session of the Medical Faculty, McGill University, Oct. 1st, 1877* (Montreal: Dawson Brothers, 1877), p. 5.

<sup>5</sup>John Hopkins Hospital Historical Club, 1893. Reprinted in *Aequanimitas*.

in Medicine”<sup>6</sup> delivered to the Canadian Medical Association, Montreal, 1902 Osler transfers the notes of the Church to medicine. Here is part of his description of four great features of the medical guide. First, its noble ancestry in classical Greece:

The critical sense and sceptical attitude of the Hippocratic school laid the foundations of modern medicine on broad lines, and we owe to it: first, the emancipation of medicine from the shackles of priestcraft and caste; secondly, the conception of medicine as an art based on accurate observation, and as a science, an integral part of the science of man and of nature; thirdly, the high moral ideals, expressed in that most “memorable of human documents” (Gomperz [*Greek Thinkers*]), the Hippocratic oath; and fourthly, the conception and realization of medicine as the profession of a cultivated gentleman. No other profession can boast of the same unbroken continuity of methods and of ideals. We may indeed be justly proud of our apostolic succession.<sup>7</sup>

The second feature is the fraternal solidarity in methods and aims. “Of no other profession is the word universal applicable in the same sense. The celebrated phrase used of the Catholic Church is in truth much more appropriate when applied to medicine.”<sup>8</sup> The third feature, medicine’s progressive character, with “the substitution of the scientific spirit of free inquiry for cast-iron dogmas”<sup>9</sup> links it to the modern age, but the final feature returns to the older creed, adding holiness — singular beneficence — to the apostolic and catholic features:

There seems to be no limit to the possibilities of scientific medicine, and while philanthropists are turning to it as to the hope of humanity, philosophers see, as in some far-off vision, a science from which may come in the prophetic words of the Son of Sirach, “Peace over all the world.”<sup>10</sup>

If Father Johnson was the source of one strand in Osler’s thought, another was to develop from the influence of Dr. James Bovell. Dr. Bovell, who was on the faculty of both the Toronto

---

<sup>6</sup>Sir William Osler, *Aequanimitas, With Other Addresses to Medical Students, Nurses and Practitioners of Medicine*, 3rd ed. (Philadelphia: P. Blakiston’s Son, 1932), pp. 265-89. Subsequent references are to this edition.

<sup>7</sup>*Aequanimitas*, p. 266.

<sup>8</sup>*Aequanimitas*, p. 267.

<sup>9</sup>*Aequanimitas*, p. 268.

<sup>10</sup>*Aequanimitas*, p. 269.

Medical School and Trinity College, often came to Weston on week-ends to share his interests in biology with Father Johnson. Thus Osler met the man who turned his interest to medicine. Osler entered Trinity College in the autumn of 1867 and spent one year in the Arts course, but at the beginning of his second year he suddenly switched to medicine and spent two years at the Toronto Medical School. During this period he read Lyell and Darwin and was a constant visitor at Dr. Bovell's. There is a description of this period in his reminiscent essay "The Collecting of a Library."

In such a decade of mental tumult as the sixties really devout students, of whom Dr. Bovell was one, were sore let and hindered, not to say bewildered, in attempts to reconcile Genesis and geology. It seems hardly credible, but I heard a long debate on Philip Henry Gosse's (of, to me, blessed memory) "Omphalos, an Attempt to untie the Geological Knot." A dear old parson, Canon Reade, stoutly maintained the possibility of the truth of Gosse's view that the strata and the fossils had been created by the Almighty to test our faith! A few years ago, reading Edmund Gosse's *Father and Son*, which appeared anonymously, the mention of this extraordinary "Omphalos" work revealed the identity, and, alas! to my intense regret, the personality of the father as Philip Henry Gosse.

Of this mental struggle the students reaped the benefit, for Dr. Bovell was much more likely to lecture on what was in his mind than on the schedule, and a new monograph on Darwin or a recent controversial pamphlet would occupy the allotted hour.<sup>11</sup>

Osler had lost the literal biblical faith of his father, but he was able to transfer his religious idealism to his new medical calling almost intact. This was possible because he accepted several Victorian assumptions. First, he assumed that material improvements in the conditions of life would lead to moral and spiritual improvement. It was an assumption apparently validated by colonial experience. The development of Upper Canada from a frontier to a settled agricultural and commercial society had been accompanied by an increase in material prosperity, the founding of churches, schools, hospitals and universities, and an improvement in the manners and morals of the people. Prosperity meant liberation from the tyranny of nature, just as health meant liberation from anquish of the body and

---

<sup>11</sup>William Osler, *A Way of Life and other selected writings*, ed. G. L. Keynes (New York: Dover, 1958), p. 256.

increased freedom and control for the soul. Medicine ties all scientific progress to an unchanging ethical goal, "to prevent disease, to relieve suffering and to heal the sick."<sup>12</sup> Osler expresses this in his address "Teaching and Thinking," delivered to the McGill Medical School, 1894.

In his *Grammar of Assent*, in a notable passage on suffering, John Henry Newman asks, "Who can weigh and measure the aggregate of pain which this one generation has endured, and will endure, from birth to death? Then add to this all the pain which has fallen and will fall on our race through centuries past and to come." But take the other view of it — think of the Nemesis which has overtaken pain in the past fifty years! Anaesthetics and antiseptic surgery have almost manacled the demon, and since their introduction the aggregate of pain which has been prevented far outweighs in civilized communities that which has been suffered. Even the curse of travail has been lifted from the soul of women.<sup>13</sup>

Secondly, Osler accepted the view that men are rational creatures (and science is merely the organized application of reason) and can therefore look forward to gaining, with the aid of an enlightened education, a wisdom that will reconcile all the apparent contradictions of our present lives — between body and soul, science and faith, wealth and poverty. Thus for him education was of supreme value and this view permeates his writings. Here is one example, taken from "The Leaven of Science," delivered to medical students at the University of Pennsylvania, 1894.

What, after all, is education but a subtle, slowly-affected change, due to the actions upon us of the Externals; of the written record of the great minds of all ages, of the beautiful and harmonious surroundings of nature and of art, and of the lives, good or ill, of our fellows — these alone educate us, these alone mould the developing minds. Within the bounds of this campus these influences will lead successive generations of youth from matriculation in the college to graduation in the special school, the complex, varied influences of Art, of Science, and of Charity;

---

<sup>12</sup>*Aequanimitas*, p. 267. For Osler, the Arts are distinguished by their commitment to the welfare of the individual human being, and in this special sense are partial, subjective. The Sciences are objective, for their goal is general truth. The doctor, like the poet, is an artist in that he is committed to aiding men more fully realize their humanity. But, unlike the poet, the doctor can utilize as means all that Science can learn.

<sup>13</sup>"Teaching and Thinking," *Aequanimitas*, p. 118.

of Art, the highest development of which can only come with that sustaining love for ideals which, "burns bright or dim as each are mirrors of the fire for which all thirst;" of Science, the cold logic of which keeps the mind independent and free from toils of self-deception and half-knowledge; of Charity, in which we of the medical profession, to walk worthily, must live and move and have our being.<sup>14</sup>

Osler was later forced to recognise the fallacies in this liberal Victorian hope, yet even in this early essay he could warn that the old passions over which reason claimed sovereignty were "chained, not tamed." He seems to have kept from his childhood a strong sense of the power of sin, which was perhaps associated with the deep melancholy many of his closest associates detected behind his brusque, sparkling manner. One can hear it in this comment, from a valedictory address of 1905: "Amid an eternal heritage of sorrow and suffering our work is laid and this eternal note of sadness would be insupportable if the daily tragedies were not relieved by the spectacle of the heroism and devotion displayed by the actors."<sup>15</sup>

After two years studying medicine at Toronto, Osler transferred to McGill University, Montreal, to finish. Here he came in contact with Robert Palmer Howard, whom he lists jointly with Father Johnson and Dr. James Bovell as his teachers in the dedication of his textbook, *The Principles and Practice of Medicine*. Howard, Dean of the McGill Medical School, taught him the value of patient experiment. Osler believed that Greek science had been based on accurate observation of nature, but that modern science had learned to supplement this by "interrogating nature" through experiments.<sup>16</sup> After graduation, Osler spent two years as a post-graduate student at London, Berlin and Vienna. He was then hired by his alma mater to teach medicine, and so at McGill began his distinguished pedagogical

<sup>14</sup>*Aequanimitas*, p. 95. The essay is prefaced by two appropriate mottos from Tennyson. It could be said of William Osler what Coleridge said of himself, that he was a "mottophilist, and almost a mottomanist." S. T. Coleridge, *Collected Letters*, ed. E. L. Griggs (Oxford: Clarendon Press, 1956), I, 293.

<sup>15</sup>"The Student Life," *Aequanimitas*, p. 404. This is not the place to record the extraordinary influence of Osler's personality on those around him, for that was done in *Sir William Osler Memorial Number*, published by the International Association of Medical Museums in 1926, but perhaps one quotation may suggest its nature. W. S. Thayer in "Reminiscences of Osler in the Early Baltimore Days" commented, "We who were his assistants had an uncanny sense of mental and moral nakedness in his presence," *Osler and Other Papers* (Baltimore: The Johns Hopkins Press), 1931, p. 21.

<sup>16</sup>William Osler, "The Evolution of the Idea of Experiment in Medicine," *Transactions of the Congress of American Physicians and Surgeons*, VII (1907), 1-8.

career. The essays written during the first ten years of his ink-pot career, 1874-84, are mainly of professional interest, although his post-mortem studies of the brains of a couple of executed murderers reveal his distrust of attempts to base morality on physiology. One work, however, his *Introductory Lecture* at McGill, October 1877, is worth a few comments, for it contains many of the ideas developed more fully in later essays. It begins with an exhortation, urging students to work with disciplined enthusiasm at their chosen calling, then praises the profession, called in the peroration a "glorious heritage." This is followed by a survey of the historical development of medical licencing and education in Canada. In discussing curriculum, Osler emphasizes the need to link lectures more closely with work on the hospital wards, in the laboratory and in the dead-house. This ideal was to provide the basis for his later reforms in American medical education. "The science and art of medicine is progressive," he notes, and goes on to state he is establishing a weekly demonstrative class in pathology on the model of "Virchow in Berlin."<sup>17</sup> Osler had attended Dr. Rudolf Virchow's clinics, and had been tremendously impressed by the great teacher, researcher and socialist reformer. The later crusades for improved sanitation and living conditions to lessen the incidence of typhoid fever, tuberculosis and venereal disease were probably influenced by Virchow's Berlin sanitation work.<sup>18</sup> Osler urges students to take advantage of the recently-founded Medical Society, a forecast of his work to make medical education a "life-long process of education"<sup>19</sup> by encouraging the establishment of medical societies, libraries and journals. And in advising students on the need for "the systematic arrangement of what you have to do, and in the methodical performance of it" or advising "Banish the future; live only for the house and its allotted work," Osler is stating ideas elaborated more fully in such later essays as "The Master-Word in Medicine," "Aequanimitas" and "A Way of Life." The *Introductory Lecture* refers to such medical pioneers as Harvey, Hunter and Jenner, and contains quotations from Tennyson, Carlyle and Thomas Browne. But on the problem of the challenge modern science offers to traditional beliefs, Osler can only advise his students not to get too

---

<sup>17</sup>*Introductory Lecture*, p. 14.

<sup>18</sup>William Osler, "Rudolf Virchow: The Man and The Student," *Boston Medical Surgical Journal*, 125 (1891), 1-9.

<sup>19</sup>"The Master Word in Medicine," *Aequanimitas*, p. 359.



deeply involved. He obviously still accepted Carlyle's panacea for intellectual doubts — involvement in benevolent action.

Dr. William Osler spent the next nineteen years in the United States, first at the University of Pennsylvania in Philadelphia (1884-89) and then at the Johns Hopkins University Hospital in Baltimore (1890-1905). During this period he wrote the essays and speeches included in *Aequanimitas With Other Addresses* (1904, 1906) and all but three of those included in *An Alabama Student and Other Biographical Essays* (1908). These are selections, and of course omit all his professional writings: according to the *Bibliotheca Osleriana*, his *Collected Reprints* in 1906 contained 263 items, and this had increased to 324 by the time of his death.<sup>20</sup> In addition he wrote and published in 1892 his textbook, *The Principles and Practice of Medicine*. This he revised and republished at approximately three year intervals, alone up to the seventh edition, then with the assistance of Dr. Thomas McCrae for the eighth and ninth editions.

During this period in the United States Osler developed his distinctive prose style, well described by Paul Dumas:

L'écrivain ne sacrifia jamais aux maniérismes stylistiques de l'heure. Familier des Anciens, il donna toujours à sa prose une tournure classique. Ses phrases limpides et soulevées par un ample rythme exprimaient à merveille une pensée originale et généreuse. Elles se teintaient volontiers d'archaïsmes, sans jamais verser dans la pédanterie ni dans l'emphase, deux travers dont il avait horreur.<sup>21</sup>

His ideas, influenced by J. H. Newman, T. H. Huxley and Thomas Carlyle as well as by the classics and Sir Thomas Browne, were presented more fully. But if there was amplification, there was little alteration.<sup>22</sup> Here is Osler on progress, with the science of medicine as vanguard:

For countless generations the prophets and kings of humanity have desired to see the things which men have seen, and to hear the things which men have heard in the course of the

<sup>20</sup>*Bibliotheca Osleriana* (Montreal: McGill-Queens University Press, 1969), pp. 318-21.

<sup>21</sup>Paul Dumas, "William Osler et La Bibliotheca Osleriana," *L'Union Médicale Du Canada*, 100 (Mars, 1971), p. 541.

<sup>22</sup>I here differ from Ludwig Edelstein, who argues in "William Osler's Philosophy," *Bulletin of the History of Medicine*, 20 (1946), pp. 270-93 that Osler in this period was decisively influenced by William James.

wonderful nineteenth century. To the call of the watchers on the towers of progress there had been the one sad answer — the people sit in darkness and in the shadow of death. Politically, socially, and morally the race had improved, but for the unit, for the individual, there was little hope. Cold philosophy shed a glimmer of light on his path, religion in its various guises illumined his sad heart, but neither availed to lift the curse of suffering from the sin-begotten son of Adam. In the fulness of time, long expected, long delayed, at last Science emptied upon him from the horn of Amalthea blessings which cannot be enumerated, blessings which have made the century forever memorable; and which have followed each other with a rapidity so bewildering that we know not what next to expect. To us in the medical profession, who deal with this unit, and measure progress by the law of the greatest happiness to the greatest number, to us whose work is with the sick and suffering, the great boon of this wonderful century, with which no other can be compared, is the fact that the leaves of the tree of Science have been for the healing of the nations. Measure as we may the progress of the world — materially, in the advantages of steam, electricity, and other mechanical appliances; sociologically, in the great improvement in the conditions of life; intellectually, in the diffusion of education; morally, in a possibly higher standard of ethics — there is no one measure which can compare with the decrease of physical suffering in man, woman, and child when stricken by disease or accident. This is the one fact of supreme personal import to every one of us. This is the Promethean gift of the century to man.<sup>23</sup>

Osler's references to Darwin remain guarded. On the one hand, he praised Darwin for his research methods, which "combined a capacity for patient observation with philosophic vision,"<sup>24</sup> and he acknowledged the fact of the influence of the theory of evolution on all areas of thought. He was more concerned, however, with what of traditional Christian belief might be salvaged than with what must be dropped. This comes out clearly in his Harvard Ingersoll lecture of 1904, "Science and Immortality."<sup>25</sup>

In his Introduction, Osler sets aside any claim to infallibility on the subject of immortality, and instead sets out to examine the three attitudes to the question as they exist in the modern world. First are the Laodicean majority who accept the phases and forms of the

<sup>23</sup>"Medicine in the Nineteenth Century," *Aequanimitas*, pp. 219-20.

<sup>24</sup>"British Medicine in Greater Britain," *Aequanimitas*, p. 163.

<sup>25</sup>*Science and Immortality* (Cambridge: The Riverside Press, 1905). Cushing tells the story of how Osler was prevailed upon to give this lecture.

prevailing religion but "live practically uninfluenced by it, except in so far as it ministers to a wholesale dissonance between the inner and the outer life, and diffuses an atmosphere of general insincerity."<sup>26</sup> The second group, the Gallionians, are the scientists who have discarded faith. The third, the Teresians, are the few who "lay hold with the anchor of faith upon eternal life."<sup>27</sup> The three types are not described in a consistent tone; rather, Osler's attitude shifts, as if he were describing three unreconciled elements in his own personality.

In the first section, The Laodiceans, whether noting that "The natural man has only two primal passions, to get and to beget," commenting on the inability of the western mind to accept an infinity of adoring God as a desirable goal, or lamenting a loss of a sense of continuity with the dead — "Over our fathers immortality brooded like the day; we have consciously thrust it out of lives so full and busy that we have no time to make an enduring covenant with our dead" — there is a sense of loss, that comes out in the final "panoramic view of the ant-like life of man on this world":

Busy with domestic and personal duties, absorbed in civic and commercial pursuits, striving and straining for better or worse in state and national affairs, wrangling and fighting between the dwellers in the neighbouring ant-hills, — everywhere a sense of restless activity as the hungry generations tread each other down in their haste to the goal, but nowhere will you see any evidence of an overwhelming, dominant, absorbing passion regulating the life of man because he believes this world to be only the training-ground for another and a better one.<sup>28</sup>

If there is a nostalgia for a lost age of innocence in The Laodiceans, it is overlaid by a proud, stoical acceptance of a grim nature in The Gallionians. Here Osler notes that Science has "at least four points of contact with a belief in immortality." First:

The introduction of a new factor has modified the views of man's origin, of his place in nature, and, in consequence, of his destiny. The belief of our fathers may be expressed in the fewest possible words: "For as in Adam all die, even so in Christ shall all be made alive." Man was an *angelus sepultus* which had

---

<sup>26</sup>Science, p. 8.

<sup>27</sup>Science, p. 8.

<sup>28</sup>Science, p. 20. J. H. Newman in his *Apologia Pro Vita Sua* concluded a similar survey on a similar note: "the dreary hopeless irreligion, that condition of the whole race, so fearfully yet exactly described in the Apostle's words, 'having no hope and without God in the world'."

Forsook the courts of everlasting day,

And chose with us a darksome house of mortal clay.

Created in the image of God, "sufficient to have stood, though free to fall," he fell, and is an outlaw from his father's house, to which he is now privileged to return at the price of the Son of God. This is the Sunday story from orthodox pulpits, and it is what we teach to our children. On the other hand, to science man is the one far-off event towards which the whole creation has moved, the crowning glory of organic life, the end-product of a ceaseless evolution which has gone on for aeons, since in some early pelagian sea life first appeared, whence and how science knows not. The week-day story tells of man, not a degenerate descendent of the sons of the gods, but the heir of all the ages, with head erect and brow serene, confident in himself, confident in the future, as he pursues the gradual paths of an aspiring change.<sup>29</sup>

Osler notes that "the critical study of the bible" has helped to weaken the belief in revelation and bring about the change "from the days when faith was diversified with doubt, to the present days, when doubt is diversified with faith."

The second and third effects of science were to dispense with the idea of soul and to question the existence of spiritual beings. Fourthly, science has replaced the immortality of the spirit with "the morphological continuity of the germ plasm."<sup>30</sup> This last does not provide any individual consolation, for "Science minimizes to the vanishing-point the importance of the individual man" and only cares for the type. The rediscovery of Mendel's work on inheritance seemed, to Osler, to have removed the last possibility for a teleological explanation of individual differences. They could now be accounted for by the use of a mathematical formula. The inheritance of acquired characteristics, which was basic to any theory of evolutionary progress, was also ruled out. Osler was well aware of the significance of the new work on heredity — he calls attention to it in the preface to his *Modern Medicine* (1907-10),<sup>31</sup> and gave first place to an article by Dr. J. G. Adami, "Inheritance and Disease,"<sup>32</sup> explaining the significance of the mechanics of inheritance. But it put an end to the tenuous Victorian link between biological evolution and historical and moral progress.

---

<sup>29</sup>Science, pp. 23-23.

<sup>30</sup>Science, p. 31.

<sup>31</sup>"The Evolution of Internal Medicine," *Modern Medicine*, 7 Vols. (Philadelphia: Lea Bros., 1907-10), I, xv.

<sup>32</sup>*Modern Medicine*, I, 17-50.

The final part of Osler's lecture *Science and Immortality* deals with the Teresians. The use of St. Teresa's name to describe the class is significant, for Osler associates faith with the heart which is feminine, whereas reason is masculine. Osler makes clear that he does not believe science can meet man's emotional needs, and he apparently approaches Pascal's "Le coeur a ses raisons, que la raison ne connaît point;"<sup>33</sup> yet his final assertion is curious, appealing as it does to pagan authorities and justifying itself, not on the possibility of being true, but on man's emotional needs.

Some of you will wander through all phases, to come at last, I trust, to the opinion of Cicero, who had rather be mistaken with Plato than be in the right with those who deny altogether the life after death; and this is my own *confession fidei*.<sup>34</sup>

If *Science and Immortality* marks an end to the earlier optimistic views about progress, it also, in its inability to reconcile the head and the heart, makes a questioning about man as a rational being. The historian, needing an explanation for the loss of confidence in man's rationality that marked the early years of the 20th century, usually calls on Dr. Sigmund Freud. However, the collapse can only be understood when we see how frail the Victorian compromise was. The so-called apostle of reason in the nineteenth century was John Stuart Mill. Mill had adopted the utilitarian doctrines of his father and Jeremy Bentham and made them the instruments for attack on the various traditionalist and idealistic defences of the old ways. Because Mill appealed to the advanced liberals of his age, wrote with a clear, lucid style and spoke of reason with reverence as if it were sovereign, few commentators saw the significance of the fact that in his thought reason had an instrumental role and was the servant of the irrational, the pleasure-principle. Mill had jettisoned the philosophic tradition from Aristotle to Kant that had defined man as essentially rational. The loss was not noticed so long as a comfortable acceptance of the doctrine of evolutionary improvement made it possible to believe that the ideal of rational man had only been postponed, that in the future "higher" pleasures would be those of the intellect. The knowledge of the mechanics of heredity made it impossible to accept evolution as a paradigm of the education of the race. Now a growing number of

<sup>33</sup>Blaise Pascal, *Oeuvres Complètes*, ed. Jacques Chevalier (Bruges: Gallimard, 1954), p. 1221.

<sup>34</sup>*Modern Medicine*, 1, 43.

investigators into the emotional disorders that have always plagued man began to ask questions about the nature of the desires, the gratification of which brings pleasure. The gap between reason and pleasure (hardly perceptible in Mill, where reason rationalizes the apparently reasonable) became very obvious and coincided with a growing pessimism about the capacity for reason in man.

It is possible to sample the nature of the nervous debate about the nature of man by looking at some of the essays included in *Modern Medicine*, Vol. VII (1910), devoted to diseases of the nervous system. Here is a comment by Charles W. Burr on Neurasthenia, discussing two types of psychic treatment:

The newest form of psychotherapy consists in an appeal to the religious sense of the patient. No harm and much good may and does come from this when properly and conservatively used, but unwisely and emotionally employed, and to the exclusion of proper medical treatment, it must do harm. It sometimes leads to very serious results because there are certain people who need not stimulation of the religious sense, but sedation. Dabbling in psychology, the occult, and the mysterious has injured a great many people and made not a few insane. It is wiser and safer for physician and priest each to keep within his own sphere. Somewhat allied to religious psychotherapy, but advised by men of a very different kind, is the treatment founded on the theory that neurasthenia and hysteria are based on the sexual function, and that if a patient be induced to make a confession of errors and sins in the long ago, she will be helped by the confession and speedily recover. No good need be expected from such a theory nor from practice based on it.<sup>35</sup>

A more sympathetic treatment of the new theories, or at least those of Sigmund Freud, is found in Smith Ely Jelliffe's article on hysteria. He gives a sympathetic brief summary of Freud's view of the link between childhood sexuality and the later formation of complexes, then says:

It is premature to pass judgement on Freud's ideas. They have their warm advocates and bitter opponents — they suggest the psychical archeologist grubbing about in the fragments of old, crumbling, and mutilated memories with perhaps a tendency to romantic reconstruction.<sup>36</sup>

---

<sup>35</sup>*Modern Medicine*, VII, 737.

<sup>36</sup>*Modern Medicine*, VII, 818.

Jelliffe goes on to consider other theorists in the field, often with devastating effect. The essay ends with a consideration of the various treatments, and here Freud's analytical method is favoured. "In its rough form," Jelliffe notes, "it may be termed the 'talking it out' procedure in psychotherapy and the usefulness of the confessional in church practice is due, in large part, to the same principles."<sup>37</sup> Jelliffe approved because the aim of the technique, through catharsis, was re-education.

In revising his sections on Hysteria and Neurasthenia in his textbook, *The Principles and Practice of Medicine*, Osler turned to Jelliffe rather than Burr. In earlier editions, Osler had taken the view that hysteria resulted when children inheriting abnormally sensitive nervous organizations received a faulty education — too indulgent in childhood, too severe at puberty. "Sexual excess, particularly masturbation, is an important factor, both in girls and boys."<sup>38</sup> This was extensively revised. Jelliffe's sympathetic summary of Freud's treatment was quoted at length, and the comparison of the method to the confessional, "in which the sinner poured out his soul in the sympathetic ear of the priest," was used. Then follows a paragraph in which many of Osler's ideas find a focus:

The use of religious ideas and practices may be most helpful, and this has come into vogue in various forms, as Christian Science, Emmanualism, Mental Healing, etc. It is an old story. In all ages, and in all lands, the prayer of faith, to use the words of St. James, has healed the sick; and we must remember that amid the Aesculapian cult, the most elaborate and beautiful system of faith healing the world has seen, scientific medicine took its rise. As a profession, consciously or unconsciously, more often the latter, *faith* has been one of our most valuable assets, and Galen expressed a great truth when he said, "He cures most successfully in whom the people have the greatest confidence." It is in these cases of neurasthenia and psychasthenia, the weak brothers and the weak sisters, that the personal character of the physician comes into play, and once let him gain the confidence of the patient, he can work just the same sort of miracles as Our Lady of Lourdes or Ste. Anne de Beauré. Three elements are necessary: first, a strong personality in whom the individual has faith — Christ, Buddha, Aesculapius (in the days of Greece), one of the saints, or, what has served the turn of common humanity very well, a physician.

<sup>37</sup>*Modern Medicine*, VII, 865.

<sup>38</sup>William Osler, *The Principles and Practice of Medicine*, 4th ed., 1901, p. 1112.

Secondly, certain accessories — a shrine, a sanctuary, the services of a temple, or for us a hospital or its equivalent, with a skillful nurse. Thirdly, suggestion, either of the “only believe,” “feel it,” “will it” attitude of mind, which is the essence of every cult and creed, or of the active belief in the assurance of the physician that the precious boon of health is within reach.<sup>39</sup>

This was written in England, for in 1905 Osler left Johns Hopkins University to become Regius Professor of Medicine at Oxford, a position he held until his death in 1919. At Oxford he wrote some of his most interesting biographical essays, such as those on Thomas Browne, Robert Burton, Michael Servetus and Thomas Linacre, and continued to advocate better medical libraries. But only rarely did Osler again try to “mix the water of science with the oil of faith.”<sup>40</sup> One such instance is his address to the students at Edinburgh, 1910, “Man’s Redemption of Man.” It is a paean in praise of science, in particular the science of medicine, which has conquered nature and redeemed man from the slavery of disease and pain. The doubt and nostalgia of “Science and Immortality” have disappeared: instead, “It is not too much to say that Charles Darwin has so turned man right-about-face that, no longer looking back with regret upon a Paradise Lost, he feels already within the gates of a Paradise Regained.”<sup>41</sup> Science, by abolishing suffering, has brought “a new estimate of the value of man’s life!” The rhetoric of the following passage is interesting. In it medicine with its redemptive mission becomes Science, the bringer of the non-sectarian earthly utopia.

The human heart by which we live has been touched as with the wand of a Prospero. What availed the sceptred race! what the glory that was Greece, or the grandeur that was Rome! of what avail even has been the message of the gospel, while the people at large were haunted by fear and anxiety, stricken by the pestilence of the darkness and the sickness of the noon-day? The new socialism of Science with its definite mission cares not a rap for the theories of Karl Marx, of Ferdinald Lassalle, or of Henry George; still less for the dreams of Plato or of Sir Thomas More — or at least only so far as they help to realize the

<sup>39</sup>William Osler, *The Principles and Practice of Medicine*, 8th ed. (New York: Appleton, 1915), pp. 1115-1116. An earlier version of this paragraph appeared in “Medicine In the Nineteenth Century,” *Aequanimitas*, pp. 258-260.

<sup>40</sup>“The Master Word in Medicine,” *Aequanimitas*, p. 365.

<sup>41</sup>*The Student Life and Other Essays* (London: Constable, 1924), p. 58.



well-being of the citizen. Nor is there need to fear that in weighing the world in our balance we may drain the sap of its life, so long as we materialize in the service of man those eternal principles on which life rests — moral fervour, liberty and justice.<sup>42</sup>

In August of 1914 Osler was caught in one of Mankind's "attacks of race-mania."<sup>43</sup> Its effects upon his structure of ideals can be seen in two essays: *Science and War*, 1915,<sup>44</sup> and "The Old Humanities and the New Science," 1919.

Osler in the opening paragraph of *Science and War* states that he is not going to discuss the causes of the war, only "the influence of the new dispensation of science on the old practice of war."<sup>45</sup> As a preliminary comment he notes the large part war has played in man's history, and gives as explanation, "we are still in the childhood of civilization" — that is, not as far along the upward evolutionary path as his generation had thought. He next gives a brief picture of the 19th century to explain the basis for his generation's pious hope that men had outgrown war, and continues:

And some of us had indulged the fond hope that in the power man had gained over nature had arisen possibilities for intellectual and social development such as to control collectively his morals and emotions, so that the nations would not learn war any more. We were foolish enough to think that where Christianity had failed Science might succeed . . .<sup>46</sup>

Osler then returns to his argument that man, still close to his primitive origins has "like a beggar suddenly enriched" not been able to properly utilize the powers science has, over the last several generations, put at his disposal. He goes on to detail how science has increased man's capacity to slaughter, maim and disable; at sea, with the submarine and battleship; on land, with artillery, machine-guns, shrapnel, and gas; and in the air. Against this is set science's beneficial results, in the care of the wounded and sick and in the prevention of epidemics among soldiers. Osler then asks, "And

<sup>42</sup>*The Student Life*, pp. 69-70. Other essays of the time show the same unreserved optimistic transference: see for example Osler's "Forward" to the English translation of René Valléry-Radot's *Pasteur* (London: Constable, 1911).

<sup>43</sup>"Doctor and Nurse," *Aequanimitas*, p. 17.

<sup>44</sup>William Osler, *Science and War* (Oxford: Clarendon Press), 1915.

<sup>45</sup>*Science and War*, p. 3.

<sup>46</sup>*Science and War*, pp. 8-9.

what shall be our final judgement — for or against science?” and tells us the wounded soldier would vote for science, rightly. Osler then closes his address with a lament for the death of international science and a last tribute to Paul Ehrlich: “The brilliant labours of such a man transcend national limitations, and his name will go down to posterity with those of his countrymen, Virchow and Koch, as one of the creators of modern pathology.”<sup>47</sup>

It is an interesting essay because, although the nominal verdict is for science, the emotional balance is on the other side. Here, for example, is Osler’s description of the effects of shrapnel, in contrast to the clean wound of the rifle bullet.

The shrapnel and the hand-grenade tear, bruise, and break, lacerating flesh and joints, blowing away limbs or parts of the face or head, causing wounds not only terrible in themselves but certain to become infected with clothing and earth. Even the bones of a man’s comrade have been blown into him.<sup>48</sup>

All the examples of Science at the service of war illustrate an active malignancy, while the evidence for the benefits of science, improved treatment of the wounded and sick, appears remedial, palliative.

“The Old Humanities and the New Science” was an address delivered to the Classical Association at Oxford in May, 1919, about eight months before his death. He died of influenza in December, 1919 but his vitality had been undermined earlier, by the death of his only son Revere, at the Ypres salient, in August 1917.

In the address Osler makes the plea that a classical education include in its curriculum Greek and Latin scientific, as well as literary and historical, texts. The gap between Science and the Humanities can be bridged by linking them both securely to the human ideas of classical Greece, “the right to live, and the right to live healthy, happy lives.” As Osler notes,

The story of the free cities of Greece shows how a love of the higher and brighter things in life may thrive in a democracy. Whether such love may develop in a civilization based on a philosophy of force is the present problem of the western world.<sup>49</sup>

---

<sup>47</sup>*Science and War*, p. 38.

<sup>48</sup>*Science and War*, p. 20.

<sup>49</sup>“The Old Humanities and the New Science,” *A Way of Life and Selected Writings of Sir William Osler*, ed. G. L. Keynes (New York: Dover, 1958), p. 31.

Numbers of theorists and philosophers had drawn upon Darwin's evolutionary theory, with widely different conclusions. But all the philosophic children of the *Origin of Species* and *Descent of Man* had one point in common: virtue is illustrated by triumph. There is no heroic martyrology in the doctrine of evolution: what fails to survive — ideas, individuals, classes, races, nations — demonstrates unfitness for survival. Western post-Darwin thought is brutal: it is a "philosophy of force." Speaking of the effects of the Great War, Osler says:

Enough to say that war blasts the soul, and in this great conflict the finer sense of humanity has been shocked to paralysis by the helplessness of our civilization and the futility of our religion to stem a wave of primitive barbarism. Black as are the written and unwritten pages of history, the concentrated and prolonged martyrdom surpasses anything man has yet had to endure. What a shock to the proud and mealy-mouthed Victorian who had begun to trust that Love was creation's final law, forgetting that Egypt and Babylon are our contemporaries and of yesterday in comparison with the hundreds of thousands of years since the cave-dwellers left their records on walls and homes. In the mystic shadow of the Golden Bough, and swayed by the emotions of our savage ancestors, we stand aghast at the revelation of the depth and ferocity of primal passions which reveal the unchangeableness of human nature.<sup>50</sup>

With a loss of faith in the rationality of man and his willingness to use the forces Science puts at his disposal in the service of life, and with the doctrine of evolution no longer useable as an analogy for historical progress or individual self-betterment, what remains? How is Jerusalem to be rebuilt?

Two things are clear: there must be a very different civilization or there will be no civilization at all; and the other is that neither the old religion combined with the old learning, nor both with the new science, suffice to save a nation bent on self-destruction.<sup>51</sup>

Osler uses the German people, "for whom Luther lived and Huss died," to illustrate the latter point, for their contributions to classical

---

<sup>50</sup>A Way, p. 11

<sup>51</sup>A Way, p. 15.

scholarship, science and medicine were unexcelled. Their tragedy is the tragedy of western civilization, his civilization.

How then are we to regain a sense of the value of the individual life? Osler quotes Hippocrates, the Father of Medicine: philanthropia and philotechnia, "the joy of working joined in each one of a true love of his brother."<sup>52</sup> It is a muted, wistful, brave restatement of his early creed.

Osler died in December, 1919, "expectant though hesitant about the question of immortality."<sup>53</sup>

*Carleton University*

---

<sup>52</sup>A Way, p. 33.

<sup>53</sup>Alan Heuser, *Centenary Book of the Parish of St. John The Evangelist, Montreal, 1981-1961* (Montreal: Parish Office of the Church of St. John the Evangelist, 1961), p. 34.