

Osler's gravest prognosis: Extinction

Charles S. Bryan, MD, MACP, FRCP; Devin M. Kellis

Dr. Bryan (AOA, University of South Carolina School of Medicine, 1992) is Heyward Gibbes Distinguished Professor Emeritus of Internal Medicine at the University of South Carolina, Columbia, SC.

Mr. Kellis is an MD-PhD candidate concentrating in neuroscience at the University of South Carolina, Columbia, SC.

In the previous article, Dr. Jeffrey Fisher recalls how, in 1884, William Osler (1849–1919) reported rising antisemitism in Germany.¹ Were Osler alive at the time of this writing, the Israel-Hamas and Russo-Ukrainian wars with their nuclear overtones would sadden but not surprise him. During his last public lecture, given at Oxford to the Classical Association on May 16, 1919, in the aftermath of World War I, he addressed the implications of increasingly destructive weapons for the future of humankind. He asked whether science “can rule without invoking ruin” and asserted the need for “a very different civilization or there will be no civilization at all.”^{2,3} We revisit Osler’s concerns in the context of growing recognition of the possibility of human extinction within the near future.⁴⁻⁶

Osler’s outwardly sunny optimism masked disquietude about the dark side of human nature. At least five of his addresses between 1894 and 1919 contain two themes: whether science will ultimately prove a force for good rather than evil and the human propensity to subordinate reason to emotion in matters of vital importance.

In 1894 at the University of Pennsylvania, he spoke on “The Leaven of Science.”⁷ He rejoiced that science “has done much, and will do more, to alleviate the unhappy condition in which so many millions of our fellow-creatures live,” and suggested that science “leavens in some slight degree the whole social fabric.” Yet, “Passion rules the world, and rules alone.”⁷

In 1904 at Harvard, he pointed out that while

scientific advances “may make us feel that Reason is King,” we remain “under the dominion of our emotions, and our deeds are the outcome of passion and prejudice....”⁸

In 1910 at the University of Edinburgh, he celebrated beneficent science, notably medical science, as “man’s redemption of man” while conceding that malevolence toward fellow humans is “written in blood on every page of history.”⁹

In 1915 at the University of Leeds, as the Battle of Loos raged across the English Channel, he called science “the best friend war ever had,” making “slaughter possible on a scale never dreamt of before.” He lamented, “We are still in the childhood of civilisation [sic] and are “hindered by passions and practices, strong as animal instincts....”¹⁰

Finally, in 1919 at Oxford, he observed how “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” and how the war “changed me into an ordinary barbarian.”² Among the British war dead was Osler’s son, Second Lieutenant Edward Revere Osler (1895–1917). Striving to end on an upbeat note, Osler evoked Hippocrates:

There is a sentence in the writings of the Father of Medicine upon which all commentators have lingered... the love of humanity associated with the love of his craft! —*philanthropia* and *philotechnia*—the joy of working joined in each one to a true love of his brother. Memorable sentence indeed! in which for the first time was coined the magic word *philanthropy*, and conveying the subtle suggestion that perhaps in this combination the longings of humanity may find their solution, and Wisdom—*philosophia*—at last be justified of her children.²

These were the last sentences Osler published during his lifetime, his valediction to humanity.

Osler's gravest prognosis: Extinction



Clockwise from upper left: William and Grace Revere Osler with their son, Edward "Revere" Osler (1895-1917), at Oxford in 1909; Revere in uniform, 1915; Revere with trout in June 1917, on his last visit home, about two months before he was killed by an artillery shell in WWI; Revere's temporary grave marker in the Dozinghem Military Cemetery, Vlieteren, Belgium. Osler Library of the History of Medicine, McGill University

Philanthropia, philotechnia, and philosophia

Philanthropia, *philotechnia*, and *philosophia* loosely translate to “love of humankind,” “love of science and technology,” and “love of wisdom,” respectively. Physicians, we suggest, could advance the cause of postponing human extinction by practicing and promoting these qualities as existential virtues.¹¹

Medicine at its best, Osler suggested, promotes a sense of oneness of humankind, opposing fictive constructs that divide us socially and politically. He made this clear in an 1897 address to the British Medical Association:

Distinctions of race, nationality, colour, and creed are unknown within the portals of the temple of Æsculapius. Dare we dream that this harmony and cohesion so rapidly developing in medicine, obliterating the strongest lines of division, knowing no tie of loyalty, but loyalty to truth—dare we hope, I say, that in the wider range of human affairs a similar solidarity may ultimately be reached?¹²

Osler expressed love of humankind mainly through small, frequent acts of kindness.¹³ A medical student remarked that Osler’s motto seemed to be, “Do the kind thing and do it first.”¹⁴ He was also curious about people. Faith T. Fitzgerald (1943–2021) (AQA, University of California School of Medicine, 1969) a longtime member of *The Pharos* Editorial Board, correlated medical students’ curiosity with humanistic qualities as judged by their preceptors.¹⁵ A colleague wrote of Osler, “It was from his humanity, his extraordinary interest in his fellows, that all his other powers seemed to flow.”¹⁶

These traits—transcendence of nationality, skin color, and creed; frequent small acts of kindness; and interest in people—shine in letters Osler wrote his wife and others from Egypt in 1911, his only significant exposure to Arabic-speaking Islamic people. He called Islam “a great religion;” he marveled at “the Musselman at prayer” as a “magnificent tribute to the majesty and immanence of the one God;” and he quipped from Cairo, “I have... decided to become a Mahomedan after seeing the big mosque here—in its simplicity and grandeur.”¹⁷

Osler often quoted the memorable line from “Abou Ben Adhem,” a poem by Leigh Hunt, “Write me as one who loves his fellow men.”¹⁸ One colleague described how Osler, “like Abou-ben-Adhem, loved his

fellow man despite faults and frailties toward which he was always willing to turn a blind eye or a deaf ear.”¹⁹ Another called Osler “the Abou ben Adhem of my spirit.”¹⁹

The term *philotechnia* derives from the Greek word *technê*, from which Sir Thomas Browne (1605–1682), whom Osler considered his “lifelong mentor,” coined the term “technology.”²⁰ Few Greek terms incite more debate among philosophers and classicists than does *technê*.^{21–26} During the Greek Enlightenment of the fifth and fourth centuries BCE, *technê* status mattered to both the Hippocratic school on Cos and the Platonic Academy in Athens for the same reason: to establish hegemony over competitors, since anyone could practice medicine, and anyone could claim to teach virtue (*arete*) and wisdom (*sophia*).

Osler used a key passage from Plato’s *Gorgias* as an epigraph for his 1892 textbook, *The Principles and Practice of Medicine*. The passage reads, “And I said of medicine, that this is an art which considers the constitution of the patient, and has principles and reasons in each case.”²⁷

Plato took Hippocratic medicine as the model for a *technê* as opposed to a “knack” (*empeiria*) such as rhetoric. He established three criteria for a *technê*: specific knowledge (*epistême*) of the subject matter as opposed to opinion or belief; the ability to provide and defend a reasoned account of the subject matter; and orientation toward a “good” that promotes human flourishing.²⁴ However, despite mentioning *technê* in one or another of its forms 675 times in his dialogues, Plato never gave a satisfactory unifying definition of this term.²² “Technology” remains a surprisingly slippery concept,²⁸ and our problem is whether it—however defined—will ultimately shorten or prolong our survival as a species.

In a 1905 address to the Canadian Medical Association, Osler opined, “the profession of medicine is distinguished from all others by its *singular beneficence* [the italics are in the original].”^{29,30} Images from the Russo-Ukrainian and Israel-Hamas wars, of health care workers toiling amidst raining missiles and rubble, cry out for the need for “goodness” requirements for dual-use technologies (technologies that can serve both military and civilian purposes).^{31–33}

Osler confessed that he “never mastered philosophy” because “cheerfulness was always breaking in.”³⁴

Osler's gravest prognosis: Extinction

He was conversant with Plato and Aristotle, whom he called “the great idealist” and “the great realist,” respectively. He stands accused of ignoring some of the more recent philosophers such as Adam Smith, Immanuel Kant, and Søren Kierkegaard.³⁵ That said, it is unclear whether classical philosophy has much to contribute to the project of postponing human extinction.³⁶ Nascent movements within philosophy include “antihumanism,” which asserts Earth would be better off without us, and “transhumanism,” whereby new forms of intelligent life would replace *Homo sapiens*.³⁷⁻³⁹ These movements aside, should we define “the good” as survival and flourishing of the human species, the preservation of sentient life forms, or the maximization of individual freedom?

“A very different civilization...or no civilization at all”

Osler began his 1896 address to the American Medical Association by stating that humankind’s three great enemies are “fever, famine, and war.” He recited 19th-century progress against the first two enemies and quoted scripture (Isaiah 2:4) regarding the third:

It will be in another democracy, in another century, perhaps far distant, that the race will realize the earnest longing of the son of Amos [*sic*; the prophet Isaiah was the son of Amoz, not Amos] that “nation shall not lift up sword against nation, neither shall they learn war any more....In some development of socialism, something that will widen patriotism beyond the bounds of nationalism, may rest the desire of the race in this matter; but the evil is rooted and grounded in the abyss of human passion, and war with all its horrors is likely to long burden the earth.⁴⁰

Postponing human extinction will surely require enforceable global political solutions, as Osler recognized. He called nationalism “the great curse of humanity.”²⁹

We could update Isaiah’s swords-to-plowshares metaphor by diverting global military spending into collaborative efforts to rid Earth’s atmosphere of greenhouse gases.⁴¹ We could then address other existential risks such as stockpiles of nuclear weapons, biologic and chemical weapons of mass destruction, uncontrolled artificial intelligence, and hazardous uses of gene editing.

Our species urgently needs paradigm shifts whereby *philanthropia* extends to planetary health, *philotechnia*

insists on beneficent use of science and technology, and *philosophia* defines “the good” as perpetuation of higher life forms on Earth, not just happiness for presently living individuals.

Contributing to the postponement of human extinction should, we suggest, be included among the goals of medicine.

References

1. Osler W. Letters from Berlin. *Canada Medical and Surgical Journal* 1884; 12(12): 721–728.
2. Osler W. The old humanities and the new science. *BMJ* 1919; 2(3053): 1–7.
3. Bryan CS. The centenary of ‘The Old Humanities and the New Science,’ the last public address of Sir William Osler (1849–1919). *J Med Biogr* 2019; 27(4): 197–204.
4. Ord T. *The Precipice: Existential Risk and the Future of Humanity*. New York: Hachette Books; 2020.
5. Beard SJ, Rees M, Richards C, Rios Rojas C, eds. *The Era of Global Risks: An Introduction to Existential Risk Studies*. Cambridge, UK: Open Book Publishers; 2023.
6. Torres ÉP. *Human Extinction. A History of the Science and Ethics of Annihilation*. New York: Routledge; 2024.
7. Osler W. The leaven of science. In Osler W. *Aequanimitas With other Addresses to Medical Students, Nurses and Practitioners of Medicine*. Third edition, Philadelphia: P. Blakiston’s Son & Co., Inc.; 1932: 74–75.
8. Osler W. *Science and Immortality*. Boston: Houghton, Mifflin and Company; 1904.
9. Osler W. *Man’s Redemption of Man*. New York: Paul B. Hoeber; 1913.
10. Osler W. Science and War. *Lancet* 1915; 186(4806) 795–801.
11. McMullin I. *Existential Flourishing: A Phenomenology of the Virtues*. New York: Cambridge University Press; 2018.
12. Osler W. British medicine in Greater Britain. In Osler W. *Aequanimitas With other Addresses to Medical Students, Nurses and Practitioners of Medicine*. Third edition, Philadelphia: P. Blakiston’s Son & Co., Inc.; 1932: 161–188.
13. Bryan CS. The making of *Encyclopedia Osleriana*. *Trans Am Clin Climatol Assoc* 2020; 131: 335–355.
14. Emerson CP. Reminiscences of Sir William Osler. In [Abbott ME, ed.] *Bulletin No. IX of the International Association of Medical Museums and Journal of Technical Methods. Sir William Osler Memorial Number. Appreciations and Reminiscences*. Montreal: Privately printed; 1926: 294–303.
15. Fitzgerald FT. Curiosity. *Ann Intern Med* 1999; 130(1): 70–72.
16. Adami JG. Sir William Osler: The last days. In [Abbott ME, ed.] *Bulletin No. IX of the International Association of Medical Museums and Journal of Technical Methods. Sir William Osler Memorial Number. Appreciations and Reminiscences*. Montreal: Privately printed; 1926: 80–87.
17. Longo LD, Teigen PM, eds. “Dearest G ... Yours WO.” William Osler’s from Egypt to Grace Revere Osler. *Osler Library Studies in*

- the History of Medicine, Number 7. Montreal: Osler Library, McGill University, and the American Osler Society; 2002: 16, 35, 90.
18. Hunt L. Abou Ben Adhem. <https://www.poetryfoundation.org/poems/44433/abou-ben-adhem>.
 19. Bryan CS. "Abou Ben Adhem," by Leigh Hunt, one of William Osler's favorite poems. In Bryan CS, ed. *Sir William Osler: An Encyclopedia*. Novato, California: Norman Publishing/HistoryofScience.com; 2020: 5–6.
 20. Lion A, Gunderman RB. The physician as neologist: Sir Thomas Browne. *The Pharos of Alpha Omega Alpha Honor Medical Society* 2022 (winter): 24–30.
 21. Mille HW. V. *Techné* and discovery in *On Ancient Medicine*. *Trans Am Philol Soc* 1955; 86: 51–62.
 22. Roochnik D. *Of Art and Wisdom: Plato's Understanding of Techné*. University Park, Pennsylvania: Pennsylvania State University Press; 1998: 253.
 23. Hofmann B. Medicine as *Techné*—A perspective from antiquity. *Journal of Medicine and Philosophy* 2003; 28(4): 403–425.
 24. Levin SB. *Plato's Rivalry with Medicine: A Struggle and its Dissolution*. New York: Oxford University Press; 2014: 1–141.
 25. Hulme Kozey E. The good-directedness of status of rhetoric in the Platonic dialogues. *Apeiron* 2019; 52(3): 223–244.
 26. Johansen TK, ed. *Productive Knowledge in Ancient Philosophy: The Concept of Techné*. Cambridge: Cambridge University Press; 2021.
 27. Osler W. *The Principles and Practice of Medicine*. New York: D. Appleton and Company; 1892: vi.
 28. Schatzberg E. *Technology: Critical History of a Concept*. Chicago: University of Chicago Press; 2018.
 29. Osler W. Chauvinism in medicine. In Osler W. *Aequanimitas With other Addresses to Medical Students, Nurses and Practitioners of Medicine*. Third edition, Philadelphia: P. Blakiston's Son & Co., Inc.; 1932: 263–289.
 30. Bryan CS, Podolsky SH. Sir William Osler (1849–1919)—The uses of history and the "singular beneficence" of medicine. *N Engl J Med* 2019; 381 (23): 2194–2196.
 31. Miller S, Selgelid MJ. Ethical and philosophical consideration of the dual-use dilemma in the biological sciences. *Sci Eng Ethics* 2007; 13: 523–580.
 32. Rappert B, Selgelid MJ. *On the Dual Uses of Science and Ethics: Principles, Practices, and Prospects*. Canberra: Australian National University Press; 2013.
 33. Harris ED, ed. *Governance of Dual-Use Technologies: Theory and Practice*. Cambridge, Massachusetts: American Academy of Arts & Sciences; 2016.
 34. Edelstein L. William Osler's philosophy. *Bull Hist Med* 1946; 20(2): 270–293.
 35. Fiddes P. *The Myth of William Osler. A Re-Examination of the Legacies of a Medical Legend*. London: Austin Macauley; 2021.
 36. Dufresne T. *The Democracy of Suffering: Life on the Edge of Catastrophe, Philosophy in the Anthropocene*. Montreal: McGill-Queen's University Press; 2019.
 37. Harari YN. *Homo Deus: A Brief History of Tomorrow*. New York: Harper/HarperCollins; 2017.
 38. Moynihan T. Internal contradictions: omnicide. Chapter 5 in Moynihan T. *X-Risk: How Humanity Discovered Its Own Extinction*. Falmouth UK: Urbanomic; 2020: 257–340.
 39. Kirsch A. *The Revolt against Humanity: Imagining a Future Without Us*. New York: Columbia Global Reports; 2023.
 40. Osler W. The study of the fevers of the South. *JAMA*. 1896; 26(21): 999–1004.
 41. Khadka B. Disarmament is vital for climate change and health. *BMJ*. 2024; 384; q144.

Dr. Bryan's E-mail address is cboslerian@gmail.