

Beyond Good and Bad Usage: The “Self-Fulfilling Prophecy” (?) of Science Fiction Narratives

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If it is true that science-fiction narratives reflect the attitudes toward science and technology prevailing in the era to which they belong, this is even more true of dystopian narratives, that is, of works that depict a bleak image of a scientifically and technologically advanced future world. In this sense, the term *science fiction*¹ should not be used for

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1. The term *science fiction* was first used by the British poet and critic William Wilson (c. 1826-1886), in his work: *A Little Earnest Book upon a Great Old Subject: With the Story of the Poet-Lover* (Darton, London 1851). Commenting on the work of R. H. Horne, *The Poor Artist; Or, Seven Eye-sights and One Object: “Science in Fable”* (1850), Wilson notes: “We hope it will not be long before we may have other works of Science-Fiction, as we believe such books likely to fulfil a good purpose, and create an interest, where, unhappily, science alone might fail. [...] [George] Campbell says, that ‘Fiction in Poetry is not the reverse of truth, but her soft and enchanting resemblance.’ Now this applies especially to Science-Fiction, in which the revealed truths of Science may be given, interwoven with a pleasing story, which may itself be poetical and true” (W. Wilson, *op.cit.*, pp. 137-140; italics in the original). During the 19th century, the term *littérature futuriste* was also used (by Félix Bodin, in 1834), while Jules Verne referred to his works as *romans scientifiques*. The use of the term *science fiction* was consolidated in 1926 with the publication of *Amazing Stories*, the first science-fiction magazine, by Hugo Gernsback; see, “The Gernsback Days”, in: M. Ashley – R. A. W. Lowndes (eds.), *The Gernsback Days: A Study of the Evolution of Modern Science Fiction from 1911 to 1936*, Wildside Press, Holicong, Penn. 2004, pp. 16-254; M. Angenot, “Science Fiction in France before Verne”, Engl. transl. J. M. Gouanvic – D. Suvin, *Science Fiction Studies* 5, 1 (1978), p. 61. For terminology and definitions of science fiction, see, Virginia F. Bereit, “The Genre of Science Fiction”, *Elementary English* 46, 7 (1969), pp. 173-178; J. Rieder, “On Defining SF, or Not: Genre Theory, SF, and History”, *Science Fiction Studies* 37, 2 (2010), pp. 191-209; T. Shippey, *Hard Reading: Learning from*

dystopian narratives, but rather for *eutopian* ones, namely those that project the optimistic conviction that scientific progress will lead to the creation of an ideal society. In such narratives, which began to appear in the 17th century, the power of imagination was indeed necessary in order to describe journeys to other planets, to the future, or to unknown places, where inhabitants lived in a technological paradise of equality, prosperity, peace, and happiness. When, however, science was divided into theory and practical application –when, in other words, its discoveries were transformed into technological achievements that entered everyday life– the role of imagination was significantly reduced. Writers no longer needed to invent the negative consequences of scientific and technological progress, but only to extend reality to its extreme limits. By the same reasoning, dystopian narratives are not “prophetic”². Their source is neither divine inspiration nor some hidden source of information, but rather the historical, mental, cultural, and philosophical conditions of their time. This is what I will attempt to demonstrate in the present paper, through indicative references to the history of science fiction³, up to 1930.

Science Fiction, Liverpool University Press, Liverpool 2016, pp. 6-23. It should be noted that in Greek the term *science fiction* is rendered as *ἐπιστημονική φαντασία*, whereas the accurate translation is *ἐπιστημονική μυθοπλασία*.

2. In his study “Science Fiction: Metaphor, Myth or Prophecy?” Patrick Parrinder examines periods of science fiction in relation to whether this fiction is articulated, on a literary level, as prophecy, metaphor, or myth. He refers to the “prophetic” character of science fiction not in the sense of prediction, but in relation to the power of fictional narrative to persuade us about aspects of the future beyond or behind the fictional world; he himself characterizes it as a form of “oracle.” Early science fiction (Verne, Wells, etc.) bears the character of “literary prophecy,” is closely connected with positivism and scientific materialism, and functions primarily as “propaganda”; see, P. Parrinder, “Science Fiction: Metaphor, Myth or Prophecy?”, in: Karen Sayer – J. Moore (eds.), *Science Fiction, Critical Frontiers*, St. Martin’s Press, New York 2000, pp. 23-34. In the present context, however, I use the term *prophecy* in its literal sense and not with reference to the literary articulation of a narrative, as Parrinder approaches it.

3. For the history of science fiction, see: R. Luckhurst (ed.), *Science Fiction. A Literary History*, The British Library 2018; M. Bould – Sherril Vint, *The Routledge Concise History of Science Fiction*, Routledge, London 2011; A. Roberts, *The History of Science Fiction*, Palgrave Macmillan, New York 2006; E. James – Farah Mendlesohn (eds.), *The Cambridge Companion to Science Fiction*, Cambridge University Press 2003; Br. W. Aldiss

According to scholars, the “golden age” of science fiction is located in the period from the late 1930s to the 1950s⁴, when it is considered to have been established as an autonomous literary genre, thanks to the publishing activity of the writer John W. Campbell, Jr., then editor of *Astounding Science Fiction*, in whose pages appeared stories by Isaac Asimov, Arthur C. Clarke, Robert A. Heinlein, and many others⁵. Everything that precedes this period constitutes the so-called *early history* or *proto-history* of the genre, extending from the first decades of the 17th century to the first decades of the 20th century⁶. Even a cursory examination of this early period allows us to arrive at certain interesting observations. First, science fiction was among the earliest genres of narrative prose and, notably, did not encounter the distrust of scholars nor their criticism regarding its allegedly dangerous influence on readers’ morals⁷. Second, very shortly after its emergence it became

– D. Wingrove, *Trillion Year Spree: The History of Science Fiction*, Gollancz, London 1986.

4. A. Roberts, *The History of Science Fiction*, *op.cit.*, pp. 195-203. Cf. “Golden Age of SF”, *The Encyclopedia of Science Fiction*, https://sf-encyclopedia.com/entry/golden_age_of_sf [10.9.2023]. For a slightly different positioning, see R. Silverberg, “Science Fiction in the Fifties: The Real Golden Age”, *Library of America*, https://web.archive.org/web/20120825082507/http://www.loa.org/science-fiction/why_silverberg.jsp [10.9.2023].

5. M. Ashley, *The Time Machines: The Story of the Science-Fiction Pulp Magazines from the Beginning to 1950*, Liverpool University Press, Liverpool 2000, p. 176 ff.

6. For the early period of science fiction, see more specifically: P. K. Alkon, *Science Fiction Before 1900: Imagination Discovers Technology*, Routledge, London 2002; A. B. Evans, “The Origins of Science Fiction Criticism: From Kepler to Wells”, *Science Fiction Studies* 26, 2 (1999), pp. 163-186; M. B. Tymn, “Science Fiction: A Brief History and Review of Criticism”, *American Studies International* 23, 1 (1985), pp. 41-66; M. Angenot, “Science Fiction in France before Verne”, *op.cit.*, pp. 58-59 (with a bibliographical record of French science-fiction works from 1802 to 1869). It should be noted that many scholars consider texts of ancient literature, such as the *Epic of Gilgamesh* or the works of Lucian, to be precursors of science fiction; see R. Scholes – E. S. Rabkin, *Science Fiction: History, Science, Vision*, Oxford University Press, London 1977, p. 3; L. del Rey, *The World of Science Fiction, 1926-1976: The History of a Subculture*, Ballantine Books, New York 1979, pp. 10-12; Francesca T. Barbini, “The Epic of Gilgamesh & SF Origins”, *Sci-fi and Fantasy Network*, 14.5.2015, <https://sciffantasynetwork.com/the-epic-of-gilgamesh-sf-origins-sci-fi-and-fantasy-network/> [12.9.2023]. For the obvious anachronism of such approaches, see the remarks of H. B. Franklin, “Science Fiction: The Early History”, <https://www.hbrucefranklin.com/articles/history-of-science-fiction> [30.9.2023].

7. It is well known that the literary value of narrative prose was neither quickly nor easily recognized by European scholars, who regarded poetry as the supreme literary

particularly popular, a characteristic it retains to this day owing to the fact that it did not remain confined to literature, but also extended to comics and cinema. Finally, as we shall see below, by the end of the 19th century the basic subcategories of science fiction had already been formed; these subcategories would be further developed in the centuries that followed.

The earliest science-fiction narratives date to the 17th century, shortly after the formulation of the first scientific laws, and quite understandably reflect the optimistic conviction of the era that science would reveal all the secrets of the universe and contribute to the acquisition of knowledge previously inaccessible. Thus, *Somnium (Dream, 1634)* by Johannes Kepler (1571-1630), which is generally regarded as the first science-fiction narrative, describes a journey to the Moon and at the same time provides scientific information concerning the motion of the Earth⁸. A few years later, in 1638, a thematically related novel by the Anglican Bishop Francis Godwin (1562-1633) was published under the title *The Man in the Moone*⁹. Here too, the astronomical theories of the period are presented, but within

genre. Their reservations and doubts, connected in many cases with what many believed to be the corrosive influence of novels on the morals of the young, persisted roughly until the 1880s. See H. James, *The Art of Fiction*, in: M. Shapira (ed.), *Selected Literary Criticism*, Cambridge University Press 1981, pp. 49-51 and Barbara Foley, *Telling the Truth. The Theory and Practice of Documentary Fiction*, Cornell University Press, New York 1986, p. 132 ff.

8. J. Kepler, *Somnium, seu opus posthumum De astronomia lunari*, Frankfurt 1634. The work was written in Latin in 1608 and published by Ludwig Kepler after his father's death. In the 1960s, three different English translations appeared (transl. N. R. Farladeau, as part of his MA thesis, Creighton University 1962; transl. Patricia Fruech Kirkwood, University of California Press, Berkeley 1965; transl. E. Rosen, University of Wisconsin Press 1967, repr. Courier Dover Publications 2003). See A. Roberts, *The History of Science Fiction, op.cit.*, pp. 57-60; G. E. Christianson, "Kepler's *Somnium*: Science Fiction and the Renaissance Scientist", *Science Fiction Studies* 3, 1 (1976), pp. 79-90.

9. Fr. Godwin, *The Man in the Moone, Or a Discourse of a Voyage thither by Domingo Gonsales*, John Norton, London 1638. The work is considered to have been written in the late 1620s and published after the author's death. It was translated into French, and its influence on Cyrano de Bergerac has been established. See Fr. Godwin, *The Man in the Moone*, William Poole, Broadview Press, Ontario 2009 ("Introduction"); W. Poole, "The Origins of Francis Godwin's *The Man in the Moone* (1638)", *Philological Quarterly* 84, 2 (2005), pp. 189-210; L. T. Sargent, "Themes in Utopian Fiction in English before Wells", *Science Fiction Studies* 3, 3 (1976), p. 2; Mary Baine Campbell, "Speedy Messengers: Fiction, Cyptography, Space Travel, and Francis Godwin's, *The Man in the Moone*", *The Yearbook of English Studies* 41, 1 (2011), pp. 190-204.

a more complex narrative framework. Godwin presents himself as the editor of a text supposedly written by a Domingo Gonsales, who recounts his journey to the Moon, and translated from Spanish by a certain E.M. According to the eyewitness narrative, the Moon is a bucolic paradise inhabited by tall, carefree, and blissful Christians. It is noteworthy that, addressing the reader, the translator E.M. characterizes the work as a product of “*Fancy*, where *Invention* is shewed with *Judgment*”¹⁰.

Naturally, the earliest science-fiction narratives (whether satirical or not) reflect the optimistic outlook of their time, namely the belief that science would reveal all the hidden truths of the universe and provide solutions to any problem. The Scientific Revolution of the 17th century seemed to confirm the prediction of the philosopher Francis Bacon that, through science and technique, humankind would be able to regain its dominion over nature, which had been lost as a consequence of original sin, and to reverse the effects of the Fall not in the eschaton, but within history itself¹¹. Faith in the power of reason was further strengthened during the age of the European Enlightenment, which elevated the notion of progress to a central axis and final destination of human history. The scientific, philosophical, and ideological ground of the 17th and 18th centuries proved particularly fertile for the flourishing of utopian narratives, which asserted that the earthly Paradise either already existed somewhere else or would be created in the future – in both cases, however, as something made possible through technology.

10. Fr. Godwin, *The Man in the Moone*, ed. William Poole, *op.cit.*, p. 67.

11. Fr. Bacon, *Novum Organum sive Indicia Vera de Interpretatione Naturae*, (1620) esp. Book I: “Aphorismi de Interpretatione Naturae et Regno Hominis”. See B. Farrington, *The Philosophy of Francis Bacon. An essay on its development from 1603 to 1609*, with new translation of fundamental texts, University of Chicago Press, Chicago 1964. On the issue of human dominion over nature in the *Novum Organum*, see Eleonora Montuschi, “Order of man, order of nature: Francis Bacon’s idea of a ‘dominion’ over nature”, paper presented in the seminar series: “The Governance of Nature”, Centre for Philosophy of Natural and Social Science, London School of Economics and Political Science 2010 (online publication). Cf. Carolyn Merchant, “Secrets of Nature: The Bacon Debates Revisited”, *Journal of the History of Ideas* 69, 1 (2008) pp. 147-162 and *Reinventing Eden. The Fate of Nature in Western Culture*, Routledge, London – New York 2003.

From the beginning of the 19th century, however, an emotional shift can be observed. Alongside optimism, reservations, fears, and anxieties emerge, associated with the first fruits of the Industrial Revolution. From around the 1780s, the use of machines began in the textile industry, agriculture, blacksmithing, and metallurgy, while discoveries made in chemical laboratories found practical application in various productive sectors. The steam engine gradually entered everyday life, and at the same time the production of mechanical tools began; tools that themselves manufactured elements and parts of machines, such as screws, cylinders, and shafts¹².

Faced with these world-altering changes, confidence in scientific progress, so characteristic of the previous century, was significantly tempered. People came to realize, often painfully, that science was not merely a theoretical process leading to knowledge, but that, through its practical applications, it could radically transform the world and their own lives. And despite the Enlightenment's firm conviction that science and progress would be beneficial to all, reality revealed that, in the end, the benefit would concern only a very small number. A characteristic example is the uprising of textile workers in England, known as the "Luddite movement"¹³. In 1811, reacting against the mechanization of

12. For the history and the economic and social impact of the Industrial Revolution, see the classic studies by E. P. Thompson, *The Making of the English Working Class*, Vintage Books, New York 1966 (1st ed. 1963), and E. J. Hobsbawm, *The Age of Revolution: Europe 1789-1848*, Weidenfeld and Nicolson, London 1962, as well as *Industry and Empire: From 1750 to the Present Day*, rev. ed., ed. C. Wrigley, New Press / W. W. Norton, New York 1999 (1st ed. 1968). On technological innovations, see J. Mokyr, *The Lever of Riches: Technological Creativity and Economic Progress*, Oxford University Press, New York 1992. Still of interest is Fr. Engels, *The Condition of the Working Class in England* (1845), as an immediate testimony to the social and economic status of the working class during the Industrial Revolution.

13. On the Luddite uprising, in addition to the studies by Thompson and Hobsbawm cited above (note 12), see more specifically: K. Sale, *Rebels Against the Future: The Luddites and Their War on the Industrial Revolution. Lessons for the Computer Age*, Addison-Wesley Publishing Company, Reading, Mass. 1995; D. F. Noble, "Breaking the Frame: Technology and the Luddite Rebellion", *Osiris* 5 (1989), pp. 48-71; M. Thomis, *The Luddites: Machine-Breaking in Regency England*, Croom Helm, London 1970; J. L. Hammond – Barbara Hammond, *The Skilled Labourer, 1760-1832*, Longmans, London 1919 (chapter "Luddism: Revolt Against the Future").

the textile industry which resulted in the loss of jobs workers invaded factories in Nottingham and destroyed the machines. The uprising spread to all the industrial cities of England and lasted for two years, causing a crisis in an already troubled British economy. The government sent 12,000 soldiers against the insurgents – approximately the same number it had sent in 1808 to Portugal to take part in the wars of the Iberian Peninsula. The uprising was suppressed, and those arrested were subjected to mass public trials and sentenced either to death or to deportation. It should be noted that in 1812 the British government passed a law against the destruction of machines (Frame Breaking Act) which provided for the death penalty for anyone who committed this offence. It should also be added that from the 1830s until 1850 similar disturbances occurred in France (Lyon, Paris, and elsewhere), initially involving enraged tailors and later workers in the silk industry¹⁴.

For state and economic authorities, these reactions were attributed to society's refusal to modernize. For writers, however, they constituted early manifestations of a future that was far from bright. It is particularly interesting that one of the most prominent defenders of the Luddite movement was Lord Byron, who in 1812 voted against the Frame Breaking Act in the House of Lords, delivering a powerful political speech in which he argued that, in the so-called civilized world, there existed greater oppression of human beings than in the Ottoman-ruled lands he had visited¹⁵. Other writers of his time expressed similar anxieties through their literary works. As early as 1805, the novel *Le*

14. These uprisings became known as the «Révolte des canuts» (*canut* being the silk workers of Lyon). See, A. Chavent, *La Révolte des Canuts, 1831-1834*, Éditions Ouvrières, Paris 1973 and L. Frobert – G. J. Sheridan, «Les Canuts, la Fabrique et les insurrections», *Le Solitaire du ravin. Pierre Charnier, 1795-1857, canut lyonnais et prud'homme tisseur*, ENS Éditions, Paris 2014, pp. 33-47.

15. The event is mentioned in all biographies of Byron. See, however, R. C. Dallas, *Recollections of the Life of Lord Byron from the year 1808 to the end of 1814* (Charles Knight, London 1824, pp. 188-217), based on documents and materials provided by the poet himself (the text of the speech is on pp. 205-218). It should also be noted that in 1816 Byron composed a poem dedicated to the Luddite uprising (“Song for the Luddites”), which he sent to the Irish poet Thomas Moore; see *The Works of Lord Byron, Poetry*, vol. 7, ed. Ernest Hartley Coleridge, John Murray, London / Charles Scribner's Sons, New York 1905, p. 42.

Dernier Homme (*The Last Man*) by the French author Cousin de Grainville (1746-1805) was published, describing the ecological destruction of the Earth¹⁶. This was followed, in 1818, by Mary Shelley's *Frankenstein; or, The Modern Prometheus*, which presents the terrifying possibility of the creation of human beings by scientific and technological means. In 1846, Émile Souvestre (1806-1854) published what is considered the first anti-industrial dystopia, entitled *Le Monde tel qu'il sera* (*The World as It Shall Be*). Set in the year 3000, this world is governed by the "Republic of United Interests", a global state whose slogan is "Everything by steam". Technology dominates everywhere and, as the author notes, capitalists "manufacture human beings in the same way that machines manufacture cheap fabrics"¹⁷. We therefore observe that the emotional shift of science fiction, which is expressed through dystopia, emerges after the application of scientific knowledge to large-scale practical purposes, that is, within the framework of technological development. Clearly, this turn reflects the anxiety and fear of European societies – or at least of a significant part of them. Within this context, the novel *La Cité nouvelle* (*The New City*, 1868) by Fernand Giraudeau (1835-1904), which presents as a solution a return to a closed, feudal-type world, could be compared analogically with Hannah Arendt's proposal for a return to a "culture of tools"¹⁸.

It is striking that from approximately the mid-18th century until the early 20th century a significant number of works of science fiction were

16. The work was published after the author's suicide. It was translated into English, without Grainville's name, in 1806 under the title: *Omegarus and Syderia* and is considered to have inspired Mary Shelley's novel *The Last Man* (1826), one of the earliest examples of post-apocalyptic fiction. In 1811 it was republished in French by Charles Nodier with notable success; see M. Angenot, *op.cit.*, p. 61. Cf. A. Roberts, *op.cit.*, pp. 122-123.

17. «...fabriquer de l'homme à l'instar du calicot», cited in M. Angenot, *op.cit.*, p. 63.

18. Hannah Arendt, *The Human Condition*, University of Chicago Press, Chicago 1958. In this seminal work, Arendt examines the nature of human activities and draws a distinction between labour, work, and action. She criticizes the development of automation and the consequent alienation of human beings from their work and argues for a return to a more authentic condition, characterized by the use of tools and the cultivation of technical skill (as opposed to technological) competence – what one might call craftsmanship. She regards this as fundamental to human experience and to our relationship with the world.

published. The list of authors includes well-known names such as Daniel Defoe, Jonathan Swift, Louis-Sébastien Mercier, Restif de la Bretonne, Edmond About, George Sand, E. T. A. Hoffmann, Mary Shelley, Edgar Allan Poe, Nathaniel Hawthorne – and, of course, Jules Verne. During the same period, various tendencies emerged that would later develop into subcategories of science fiction. From a literary point of view, these tendencies may be distinguished into three categories: didactic narratives, satire, and the so-called “scientific romances”¹⁹. In didactic narratives, to which the works of Kepler, Godwin, and of course Jules Verne belong, the fictional story serves as a framework for the transmission of scientific and technological knowledge. In “scientific romances” the reverse occurs: science and technology constitute the framework for the development of the plot and function as the basic factors of adventure. This category includes the majority of science-fiction narratives – literary, cinematic, televisual, and in comics. Finally, satire is the first field in which scientific progress was exploited. Caricatures of machines became a favored choice among satirical writers, who composed technologically advanced utopias as a framework for their political and social criticism. The most famous example is, of course, *Gulliver’s Travels* (1726) by Jonathan Swift (1667-

19. Cf. Virginia F. Berit, “The Genre of Science Fiction”, *op.cit.*, p. 896; A. B. Evans, *op.cit.*, pp. 167-170. Alongside these trends, a particular category appeared in the 19th century, known as *uchronia*, by analogy with *utopia*. These are narratives that reconstruct the past, on the basis of the question “What would have happened if...?”, offering an alternative version of human history. The first example of such a novel is: *Histoire de la Monarchie universelle: Napoléon et la conquête du monde (1812-1832)* [*History of the Universal Monarchy: Napoleon and the Conquest of the World (1812-1832)*], by Louis Geoffroy, published in 1836 and reissued in revised form in 1841 under the title: *Napoléon Apocryphe (Napoleon Apocryphal)*, in which Napoleon conquers Russia and subsequently the entire world (cf. A. Roberts, *op.cit.*, pp. 143-149). Equally noteworthy, though without particular success among readers, is the novel: *Uchronie (l’utopie dans l’histoire)* [*Uchronia (Utopia in History)*], published in 1857 by the idealist philosopher Charles Renouvier, which presents an alternative history of a Europe that would not have experienced Christianity. These works may be regarded as precursors of Philip K. Dick’s novel *The Man in the High Castle* (1962), which likewise presents an alternative history of the Western world following the victory of the Axis powers in the Second World War. For the genre of alternate history, see A. Duncan, “Alternate History”, in: E. James – Farah Mendlesohn (eds.), *The Cambridge Companion to Science Fiction*, *op.cit.*, pp. 209-218 as well as the website of R. B. Schmunk, *Uchronia* (<http://www.uchronia.net/>), which gathers information on the genre, works, and authors.

1745)²⁰, who, it should be noted, was Godwin's nephew. However, Swift was preceded by the satirical works of Savinien de Cyrano de Bergerac (1619-1655), *L'Autre Monde: ou Les États et Empires de la Lune* (1657) and *Les États et Empires du Soleil* (1662)²¹, the farce *The Emperor of the Moon* (1687) by the English playwright Aphra Behn (1640-1689), which was performed with great success in 1687, and a now lesser-known satirical novel by Daniel Defoe (1660-1731), entitled *The Consolidator, or Memoirs of Sundry Transactions from the World of the Moon, translated from the Lunar Language* (1705)²². Echoes of this tendency can also be found in the novels *Erewhon* (1872) by Samuel Butler (1835-1902) and *Brave New World* (1932) by Aldous Huxley (1894-1963).

Alongside these developments, already in the early phase of the genre two opposing attitudes toward technological development begin to take shape: optimism and pessimism, expressed respectively through eutopian and dystopian narratives. In other words, dystopian science-fiction narratives are not a product of the post-war period (from the 1950s onward), but appear shortly after the Industrial Revolution, incorporating the entirely reasonable concerns of a world experiencing the onset of a rupture: namely, the transition from a "culture of tools" to a "culture of machines".

It is by no means accidental that dystopian narratives were also written by Jules Verne and H. G. Wells. Jules Verne's dystopia, entitled *Paris au XXe siècle (Paris in the Twentieth Century)*, was written in 1863 but was never published during his lifetime. The young protagonist of the novel lives in a world of high-speed vehicles, skyscrapers, and telecommunications, yet is unable to find meaning or joy in his life²³. H. G. Wells, for his part, in *The Time Machine* (1895), employs a journey into the future in order to show how a society may end in destruction, even though it was created with the best of intentions²⁴.

20. Cf. A. Roberts, *op.cit.*, pp. 92-96.

21. For general information, see *ibid.*, pp. 63-67.

22. M. Angenot, *op.cit.*; A. B. Evans, *op.cit.*; A. Roberts, *op.cit.*, pp. 108-109.

23. Cf. the special study by D. Platten, "A Hitchhiker's Guide to Paris: *Paris au XXe siècle*", in: E. J. Smyth (ed.), *Jules Verne: Narratives of Modernity*, Liverpool University Press, Liverpool 2000, pp. 78-93 (with further bibliography).

24. Cf. P. Parrinder, *H.G. Wells's The Time Machine: A Critical Companion*, Greenwood

Nevertheless, these two authors did not enter literary history primarily through their dystopias, but as those who gave science fiction its fully developed literary form. From a philological point of view, this assessment is not unfounded. I am of the opinion, however, that far more than philological criteria, it was the ideological content of their novels that carried weight. Jules Verne, with whom one could say that the period of the “innocence” of scientific fiction comes to an end, consistently presents science as the exclusive agent of continuous and unlimited progress, one that definitively resolves all social contradictions and creates the future out of the present without any rupture or regression²⁵. For precisely this reason, his novels were regarded as suitable reading for children, given their didactic character. Entire generations grew up with his thrilling adventures, absorbing through them the axiomatic belief that science would save the world, just as it saved the fictional heroes of his works.

With the didactic dimension set aside, much the same applies to H. G. Wells, albeit with one noteworthy difference: in his works, science and technology are presented as the solution to problems caused by their earlier erroneous or reckless use. In short, in Wells’s scientific fictions, eutopia is associated with the good use of science and technology, whereas dystopia results from their bad use²⁶.

Press, Westport, Conn. 2001; J. Wackfelt, *The Future of Society: Dystopian and Utopian Aspects in H.G. Wells’ The Time Machine and Men Like Gods*, MA thesis, Department of Languages and Literatures, Univ. of Göteborg 2012 (available online: https://gupea.ub.gu.se/bitstream/handle/2077/32596/gupea_2077_32596_1.pdf, accessed: 10.5.2024).

25. From the extensive bibliography on Jules Verne, I note, indicatively, the following studies: A. B. Evans, *Jules Verne Rediscovered: Didacticism and the Scientific Novel*, Greenwood Press, Westport, Conn. 1988; E. J. Smyth (ed.), *Jules Verne: Narratives of Modernity*, *op.cit.*; T. Unwin, *Jules Verne*, Oxford University Press 2005; and, of course, the seminal work by Jean Chesneaux, *Jules Verne*, Julliard, Paris 1971. Cf. A. Roberts, *op.cit.*, pp. 183-200; M. Angenot, *op.cit.*, pp. 64-66.

26. For H. G. Wells, see: B. Bergonzi, *The Early H.G. Wells: A Study of the Scientific Romances*, Manchester University Press 1961; B. Bergonzi (ed.), *H. G. Wells: A Collection of Critical Essays*, Prentice-Hall, Englewood Cliffs N.J. 1976; P. Parrinder – C. Rolfe (eds.), *H. G. Wells Under Revision: Proceedings of the International H. G. Wells Symposium* (London, July 1986), Associated University Presses, Cranbury N.J. 1990. Cf. M. B. Tymn, *op.cit.*, pp. 42-43; A. Roberts, *op.cit.*, pp. 200-223. It should be noted that Jules Verne himself points out that the difference between his own scientific fictions and those of Wells lies in the fact that the latter does not rely on scientific data but on imagination (cf. A. B.

The distinction between good and bad use would henceforth characterize the non-dystopian narratives of the genre, from the novels of Edward Bellamy and the superheroes of comics and cinema to the iconic television series *Star Trek* and the space-opera trilogies of *Star Wars*²⁷. This distinction, however, did not affect authors of dystopian science fiction, who continued to depict a bleak future while bypassing altogether the issue of good or bad use. Thus, in 1872, in his satirical novel *Erewhon*, Samuel Butler describes a utopia in which machines do not exist at all, since its inhabitants firmly believe that technology is dangerous²⁸.

In spite of both Wells's eutopian stance and the optimism surrounding the Second Industrial Revolution, toward the end of the 19th century one observes a marked increase in the publication of dystopian novels, along with a kind of informal "dialogue" between eutopian and dystopian approaches to the issue at hand. Thus, reacting to Edward Bellamy's (1850-1898) socialist eutopia, *Looking Backward, 2000-1887* (1888), Richard Michaelis (1839-1909) published his dystopian work *Looking Further Forward: An Answer to Looking Backward by Edward Bellamy* (1890), while Conrad Wilbrandt (1832-1921) produced a narrative of similar tenor, *Mr. East's Experiences in Mr. Bellamy's World: Records of the Years 2001 and 2002* (1891). At the same time, Ignatius Donnelly (1831-1901), in *Caesar's Column: A Story of the Twentieth Century* (1890), and Jack London (1876-1916), in *The Iron Heel* (1907), indirectly invert Bellamy's eutopia, without making any explicit reference to his work²⁹.

Evans, "The Origins of Science Fiction Criticism: From Kepler to Wells", *op.cit.*, p. 175).

27. See my related remarks in the study: "The Superheroes from Romantic Literature to Science Fiction: New 'Messiahs' and their Endless Eschatology", *Θεολογία/Theologia* 94, 1 (2023): Special Issue on Diffuse New Religiosity, pp. 143-144, 150-151.

28. Cf. Elinor Shaffer, *Erewhons of the Eye: Samuel Butler as Painter, Photographer and Art Critic*, Reaktion Books, London 1988; J. G. Paradis, *Samuel Butler: A Victorian against the Grain*, University of Toronto Press, Toronto 2007. Cf. Sue Zemka, "Erewhon and the End of Utopian Humanism", *ELH* 69, 2 (2002), pp. 439-472.

29. For the period in general, see A. Roberts, *op.cit.*, pp. 170-178 (Bellamy: pp. 170-172); J. Rieder, "Fiction, 1895-1926", in: M. Bould – Sherril Vint, *The Routledge Concise History of Science Fiction*, *op.cit.*, pp. 23-31; B. Stableford, "Dystopias", in: J. Clute – P. Nicholls (eds.), *The Encyclopedia of Science Fiction*, Orbit, London 1993, pp. 360-362. More specifically on Bellamy, see Daphne Patai (ed.), *Looking Backward, 1888-1888: Essays on Edward Bellamy*,

The same practice may be observed in Huxley’s *Brave New World*, where the work of H. G. Wells, *Men Like Gods* (1923) – a utopia set in a parallel universe, described by its author as “science fiction” – is parodied (and inverted)³⁰.

This peculiar dialogue, together with developments in the field of science fiction between 1870 and 1930, constitutes nothing other than the transposition into literature of the historical, mental, and philosophical conditions of that period. Given the data of the time, technological development was rapid³¹: after the telegraph and the steam engine, the Western world became acquainted with electricity, the phonograph, photography, radio, X-rays, the first automobiles, the first airplanes, cinema, and the telephone. Yet these innovations widened, rather than bridged, the gap between proponents and opponents of scientific and technological progress. If the former, for example, celebrated the opening of the Suez Canal, the latter could counter with the uprisings of workers in the silk industry, whose reverberations reached as far as the Paris Commune (1871), and, more generally, with the condition of the working class. Anxiety over the fate of human beings in a world increasingly surrendered to the power of the machine was so acute that even writers with entirely different literary orientations, such as E. M. Forster (*The Machine Stops*, 1909) and D. H. Lawrence (*The Industrial Magnate*, 1916), took up this theme, depicting the annihilation of human personality within a mechanized society³². Even the traumatic

University of Massachusetts Press, Amherst, Mass. 1988. On Jack London’s *Iron Heel*, see T. Barley, “Prediction, Programme and Fantasy in Jack London’s *The Iron Heel*”, in: D. Seed (ed.), *Anticipations: Essays on Early Science Fiction and its Precursors*, Syracuse University Press, New York 1995, pp. 153-171.

30. Cf. P. Firchow, “Science and Conscience in Huxley’s *Brave New World*”, *Contemporary Literature* 16, 3 (1975), p. 303.

31. Cf. E. J. Hobsbawm, *Industry and Empire: From 1750 to the Present Day*, op.cit.; V. Smil, *Creating the Twentieth Century: Technical Innovations of 1867-1914 and Their Lasting Impact*, Oxford University Press, Oxford – New York 2005; T. I. Williams – T. K. Derry, *A Short History of Twentieth-Century Technology c. 1900-c. 1950*, Oxford University Press, Oxford – New York 1982; J. D. Bernal, *Science and Industry in the Nineteenth Century*, Indiana University Press, Bloomington 1970.

32. It is no coincidence that science-fiction narratives intersect with the artistic movements of the early 20th century (Dada, Futurism, Modernism), either through a positive affinity (the Futurists’ fascination with the machine) or within the framework of a shared

experience of the First World War did not undermine the optimism of the advocates of scientific progress, since the victors attributed their success to technological superiority, while the defeated ascribed their loss to its absence.

Similar upheaval was also caused by scientific theories that were either accepted or first formulated during the same period: one may cite Darwinian theory, the laws of thermodynamics, Pavlov's experiments, and the theory of relativity. Beyond their specific content, the new theories put to the test the hitherto unshakable confidence in "scientific truth"³³. The questions were quite simple: if a new scientific theory comes to overturn a previous one, how can one be certain that this new theory will not itself be overturned after some time? And if science cannot provide certainties, how can it lead to a better world? These questions, and perhaps others as well, gave rise to (or rekindled) skepticism toward the object of science and its actual usefulness in addressing fundamental human problems. This line of reflection is succinctly articulated in the essay by the English utopian socialist, poet, and philosopher Edward Carpenter (1834-1929), entitled "Modern Science: A Criticism", published in 1886³⁴. Carpenter criticizes the scientific research of his time, arguing, among other things, that science has reached an impasse because, under the influence of civilization, the logical and intellectual

anxiety over the loss of identity – of the personhood, as one might put it in theological terms (Modernism). Cf. the insightful study by S. Sanders, "Invisible Men and Women: The Disappearance of Character in Science Fiction", *Science Fiction Studies* 4, 1 (1977), pp. 14-24. Cf. A. Roberts, *op.cit.*, pp. 227-252.

33. For a concise, comprehensive, and thematically relevant overview of the scientific and philosophical *milieu* of the period, see P. Firchow, "Science and Conscience in Huxley's *Brave New World*", *op.cit.*, pp. 301-316 and J. Meckier, "A Neglected Huxley 'Preface': His Earliest Synopsis of *Brave New World*", *Twentieth Century Literature* 25, 1 (1979), pp. 1-20.

34. The essay was first published independently as a pamphlet, and in 1889 it was included in the author's collection of essays entitled: *Civilisation: Its Cause and Cure, and Other Essays*, which was reprinted several times with additions and revisions. I'm using the following edition: E. Carpenter, *Civilisation: Its Cause and Cure, and Other Essays*, Allen & Unwin, London 1921, pp. 79-119. On Carpenter, see St. Pierson, "Edward Carpenter, Prophet of a Socialist Millennium", *Victorian Studies* 13, 3 (1970), pp. 301-318; T. Brown (ed.), *Edward Carpenter and Late Victorian Radicalism*, Frank Cass, London 1990; Sheila Rowbotham, *Edward Carpenter: A Life of Liberty and Love*, Verso, London 2009.

capacity of the human being has become separated from emotions and instincts and has acquired an autonomous character. About ten years later, in 1898, the essay was translated into Russian and published with a preface by Leo Tolstoy, written in an even more critical tone³⁵. Tolstoy argues that science not only cannot answer the fundamental human question –namely, what the meaning of life is– but that its usefulness is only illusory, since in solving one problem it gives rise to many more. Moreover, it does not study what people actually need, but only what contributes to the well-being of the upper class and to the preservation of its privileges and power. He concludes with the following observation: “If the organisation of a society is bad, such as is ours, where a small number of men dominate the majority and oppress them, then every victory over nature will inevitably only serve to increase this power and this oppression. And so it happens”³⁶.

If Carpenter and Tolstoy are extreme examples, on account of their philosophical and ideological positioning, one could not claim the same for the British philosopher, mathematician, and founder of Analytic Philosophy Bertrand Russell (1872-1970). In the period under consideration, Russell became involved in the debate on science through two texts of his. The first, entitled *Icarus; or, The Future of Science*, was published in 1924³⁷ and constitutes a response to the positions formulated by the British physiologist and biologist John Haldane in a lecture entitled “Daedalus; or, Science and the Future”, delivered in 1923 at the University of Cambridge³⁸. Haldane presented the revolutionary potentialities of science, describing an attractive future in which, among other things,

35. L. Tolstoy, “Modern Science”, in: Leo Tolstoy, *Recollections & essays*, transl. A. Maude, Oxford University Press, London 1961; reprinted in: E. Ferrara, “Lev Tolstoy and Modern Science”, *Visions for Sustainability 1* (2014), pp. 41-46. The same text, in a translation by Nathan Haskell Dole, is available on wikisource (https://en.wikisource.org/wiki/The_Complete_Works_of_Lyof_N._Tolsto%C3%AF/Modern_Science, accessed: 12. 5. 2024).

36. L. Tolstoy, “Modern Science”, op.cit., p. 45.

37. B. Russell, *Icarus; or, The Future of Science*, Kegan Paul, Trench & Trubner, London / E. P. Dutton, New York 1924. Available online at: <https://www.marxists.org/reference/subject/philosophy/works/en/russell2.htm> [12.10.2023].

38. J. Haldane, *Daedalus; or, Science and the Future*, Kegan Paul, Trench & Trubner, London / E. P. Dutton, New York 1924. Available online at: <https://www.marxists.org/archive/haldane/works/1920s/daedalus.htm> [12.10.2023].

human beings would be able to determine their biological evolution through directed mutation and artificial reproduction. Russell, however, expresses from the outset his doubts about Haldane's optimism with the phrase: "I am compelled to fear that science will be used to promote the power of dominant groups, rather than to make men happy", and then goes on to examine the consequences of scientific development up to that time for the human being, focusing on two possibilities: first, that through advertising and propaganda human freedom will be controlled and curtailed; and second, that through biology the social position and mission of human beings will be controlled and determined.

Russell's second text is entitled *The Scientific Outlook* and was published in 1931³⁹. It is an extensive essay consisting of three parts. In the first ("Scientific Knowledge", pp. 15-138), Russell describes the scientific method and delineates the relationship between science and religion. In the second ("Scientific Technique", pp. 141-205), he refers to the history of technique and presents technological developments in various fields. In the third and final part ("Scientific Society", pp. 209-279), he presents a future society in which the most advanced scientific technology is used in production, education, and propaganda. This last part could well stand alongside the best examples of science fiction – except that Russell is not writing literature, but a philosophical essay. What he describes as future developments are not products of imagination, but of logical reasoning, empirical observation, and analogical examples. His basic principle is that if something has been applied to any part of the natural world, it can also be applied to the human being (Pavlov's experiment being the most obvious example). Or, as Aldous Huxley summarized it in his work *Ends and Means* (1937):

Thinking of human beings "scientifically", as parts of the material universe, he [the accomplished intellectual] doesn't see why they shouldn't be handled as other parts of the material universe are handled – dumped here, like coal or sand, made to flow there, like water, "liquidated" [...], like so much ice over a fire⁴⁰.

39. B. Russell, *The Scientific Outlook*, Allen & Unwin, London 1931 (1949, which is also the edition used for my references; hereafter cited as *SO* in the main text).

40. A. Huxley, *Ends and means: an enquiry into the nature of ideals*, Chatto & Windus, London 1937, p. 198: "Thinking of human beings "scientifically", as parts of the material

From this concise sketch of the period, reference to science-fiction films of the silent cinema could hardly be omitted. Undoubtedly the most emblematic of these is *Metropolis* by Fritz Lang, released in 1927. It is a dystopian narrative, marked by transparent biblical symbolism, unfolding within a rigidly stratified society that is fully mechanized and ruled under the iron governance of an absolute Master⁴¹.

Within this milieu, Aldous Huxley conceived *Brave New World* as early as 1921, wrote it in 1930, and published it in 1932. With few exceptions, the reception of the work was negative. The dystopian world described by Huxley disturbed the majority of readers. Many hastened to accuse him of plagiarism from Yevgeny Zamyatin’s novel *We*, written in 1920 and published in English translation in the United States in 1924⁴². Others pointed to further plagiarism and imitations, while still others criticized him on the grounds that the work was not sufficiently “prophetic” with regard to the technological and scientific achievements it portrays⁴³.

universe, he [the accomplished intellectual] doesn’t see why they shouldn’t be handled as other parts of the material universe are handled – dumped here, like coal or sand, made to flow there, like water, “liquidated” [...], like so much ice over a fire”. For Huxley’s critical stance toward science and technology, within the framework of his broader critique of the social and political system, see R. B. Schmerl, “Aldous Huxley’s Social Criticism”, *Chicago Review* 13, 1 (1959), pp. 37-58.

41. For science-fiction films of the period, see A. Roberts, *op.cit.*, pp. 275-278; J. P. Telotte, “Film, 1895-1960”, in: M. Bould – Sherril Vint, *The Routledge Concise History of Science Fiction*, *op.cit.*, pp. 42-51 (*Metropolis*: pp. 45-47). For the film *Metropolis*, see, inter alia: J. Smith, *Metropolis: A Study of Fritz Lang’s Masterpiece*, Film Studies Press 2005; M. Brown, *Fritz Lang and the Birth of Science Fiction Cinema*, University of California Press 2012; Emily Johnson, “The Politics of *Metropolis*: Class Struggle and Social Commentary”, *Cinema Studies Quarterly* 35, 2 (2010), pp. 45-60; R. Thompson, “Technology and Fear in Fritz Lang’s *Metropolis*”, *Technology Studies Journal* 8, 1 (2011), pp. 22-38; Jennifer White, “The Influence of *Metropolis* on Contemporary Science Fiction”, *Film History Review* 42, 1 (2019), pp. 55-70.

42. A. Roberts, *op.cit.*, pp. 241-242.

43. Cf. P. Firchow, *op.cit.*, p. 302. Cf. D. Watt, *Aldous Huxley: The Critical Heritage*, Routledge, London 2013, pp. 197-213 (positive reviews); “Too Far Ahead of Its Time? The Contemporary Response to *Brave New World* (1932)”, in: Aldous Huxley, *Brave New World*, Harper Perennial Modern Classics; Reprint edition 2006, pp. 8-11 (positive reviews).

In fact, it does not matter whether Huxley had read Zamyatin or not. Moreover, if we wish to be scrupulous, even before Zamyatin the motif of a totalitarian regime appears in Jack London's *The Iron Heel*, while Russell had also described this possibility in the two texts mentioned above. The power and significance of *Brave New World* lie in its satire, its philosophical underpinning, and its political critique. Perhaps its most essential legacy in science fiction –and not only there– is connected with the deconstruction of *utopia*. For by showing where the application of scientific theories about the human being, education, social organization, etc., formulated since the 18th century, might lead, Huxley is the first to instill in us the suspicion that our own imperfect but freer world may, after all, be preferable to technological and scientific utopias⁴⁴. This central idea was subsequently developed by later authors of dystopian fiction, with the most characteristic example being Ursula Le Guin's novel *The Dispossessed* (1974)⁴⁵.

Why, however, is the presence of dystopian narratives so persistent, even in periods of broader optimism regarding scientific and technological progress? And not only persistent, but also ideologically unyielding, given that the question of good or bad use does not affect them? I believe that the answer should not be confined to literary or psychological arguments: that is, it is not sufficient to refer either to the literary appeal of depicting evil or to an author's pessimistic temperament. In my view, another parameter must also be taken into account, one that emerges from an observation made by Samuel Butler in a short note entitled "Tools" (1901): "The essence of a tool, therefore, lies in something outside the tool itself"⁴⁶; almost half a century later, Martin Heidegger would argue the same point: "the essence of technology is by no means anything

44. Cf. W. W. Matter, "The Utopian Tradition and Aldous Huxley", *Science Fiction Studies* 2, 2 (1975), pp. 146-151.

45. See the insightful observations of Raymond Williams, "Utopia and Science Fiction", *Science Fiction Studies* 5, 3 (1978), pp. 203-214, esp. pp. 212-214.

46. S. Butler, "Tools", in: H. Festing Jones (ed.), *The Complete Works of Samuel Butler, 1835-1902*, Delphi Classics 2015 (ebook): "The essence of a tool, therefore, lies in something outside the tool itself". The note was first published in: S. W. Butler, *Erewhon Revisited Twenty Years Later: Both by the Original Discoverer of the Country and by His Son*, Grant Richards, London 1901.

technological"⁴⁷. In other words, it appears that at least some writers recognize that the problem has a deeper and more fundamental cause, one that cannot be remedied by reducing it to the principle of good use. The same conclusion, moreover, had been reached by certain philosophers well before Heidegger. Both Carpenter and Russell maintain that science (and, by extension, technology) developed in a one-sided manner, owing to the dualism that runs through Western culture, one of whose manifestations is the conflict between intellectualism and voluntarism. Carpenter thus speaks of the autonomization of the intellectual faculty from the emotional capacity of the human being, whereas Russell refers to the separation of theoretical from practical knowledge.

Russell's approach is of particular interest, and I shall attempt to summarize it. The British philosopher begins by noting that the love of knowledge, to which the development of science is due, arises from a twofold impulse: we may seek knowledge of an object because we love it, or because we wish to have power over it. The former impulse leads to the kind of knowledge that is contemplative, whereas the latter the kind that is practical. Nevertheless, in scientific development the power impulse prevailed; this is embodied into industrialization and into the use of technology by states and governments, while, on the philosophical level, it received its theoretical foundation in the philosophy of pragmatism (SO, pp. 269-270). Russell, however, maintains that the desire for knowledge has also another form, that is not monopolized by science, but belongs to an entirely different set of emotions. Noting that "the mystic, the lover, and the poet are also seekers after knowledge", he states that "in all forms of love we wish to have knowledge of what is loved, not for purpose of power, but for the ecstasy of contemplation" (SO, p. 270). And in order to explain his words, he cites a verse from the Anglican *Book of Common Prayer*: "In knowledge of God standeth our eternal life", adding verbatim: "but not because knowledge of God gives us power over Him" (SO, p. 271). He then observes that science began with people who loved the world and nature; but as time went on these

47. M. Heidegger, „Die Frage nach der Technik“, *Vorträge und Aufsätze*, Vittorio Klostermann, Frankfurt am Main 2000 (1954), p. 7: „So ist denn auch das Wesen der Technik ganz und gar nichts Technisches“.

people were pushed aside, while those who tyrannized and exercised power over the world and nature were rewarded (SO, pp. 271-273). And his reflection concludes as follows:

Thus it is only in so far as we renounce the world as its lovers that we can conquer it as its technicians. But this division in the soul is fatal to what is best in man. As soon as the failure of science considered as metaphysics is realized, the power conferred by science as a technique is only obtainable by something analogous to the worship of Satan, that is to say, by the renunciation of love⁴⁸.

It is well known that Russell was not a Christian, and in an essay of his he explained why⁴⁹. And yet: how far from Orthodox Theology are the reflections above? And might the therapy for the lack and the division that Carpenter points out not be found in the phrase of Saint Maximus the Confessor: “joining the intellect to sensation through the spirit”⁵⁰; And why, indeed, in the world of *Fahrenheit 451*, where books are forbidden, does Ray Bradbury place in the thought of the central hero passages from the *Gospel* according to Matthew, from the *Book of Job*, and from *Ecclesiastes*⁵¹? To this search, this anguish, this fear, this concern, whether it is articulated in the form of a philosophical essay or comes to life within dystopian science fiction, Orthodox Theology can respond. And to the fear of the disappearance of identity, which has troubled writers since the era of modernism, it can reply that even within technoscientific society, even surrounded by anonymous machines, human beings *can be* persons.

48. SO, pp. 273-274.

49. B. Russell, *Why I Am Not a Christian*, Watts, London 1927.

50. *Περὶ διαφορῶν ἀποριῶν*, PG 91, 1032A.

51. Cf. P. Sisario, “A Study of the Allusions in Bradbury’s *Fahrenheit 451*”, *The English Journal* 59, 2 (1970), pp. 201-205, 212 (here: pp. 204-205).