Futures Studies Timeline

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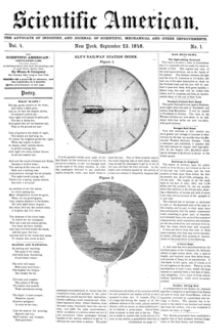
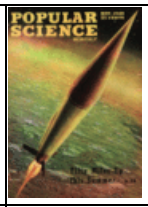
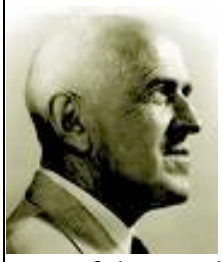
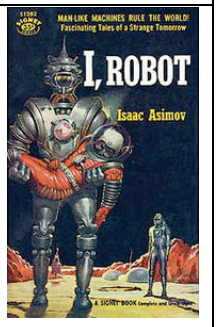
Early times	**T**he roots of futures thinking – the imaging in human minds of the future – can be traced back to the beginnings of human societies. The formalized study of futures came much later, but it can be said that the most advanced civilizations tended to project their thinking and utilize basic methods of planning and foresight. Greek philosopher Plato developed the concept of an ideal society with perfect justice in "The Republic," and his vision inspired millions of thinkers to imagine the future.
1516	**T**homas More publishes "Utopia," based on Plato's "Republic," a future society in which poverty and misery. "Utopia" is a combination of "eu," meaning good, and "topos," meaning place – it can also be translated as "no place." Some readers chose to see More's imaginary society as a working blueprint for the future; some say More was writing a satire revealing England's problems. At any rate since More's story was published, "utopias" have come to be seen as positive futures in which all people's needs are met with happiness and fulfillment. Buckminster Fuller (photo at right) later (in the 1940s to '80s) proposed a sort of technological utopianism and set out to create designs for cars and houses that might help lead to such a utopia. 
1845	 **S**cientific American begins publishing articles about research and its futures implications. It began as a one-page newsletter that concentrated on inventions for which people were getting U.S. Patent Office applications – "new inventions, scientific principles, and curious works." It is the oldest continuously published magazine in the U.S. While it is an interdisciplinary publication, there are literally hundreds if not thousands of discipline-specific journals in all fields that include some futures articles.
1848	**T**he Communist Manifesto, by Karl Marx and Friedrich Engels, outlines the Communist League's purposes and programs, suggesting a working-class revolution to overthrow the upper class and develop, through planning and shared governance and resources, a classless society. It has been called one of the most influential political documents and also one of the most harmful. Vladimir Lenin led the October Revolution of 1917 in Russia, Joseph Stalin rose to power and millions were killed in famines, the gulags (prisons), and the Great Purge.
1860s and 1870s	 **F**rench writer Jules Verne publishes a series of futuristic novels with incredible foresight, capturing the fancy of people and fostering interest in the future. He wrote about space, air, and underwater transport before means of traveling this way had been invented. "From the Earth to the Moon" and "Twenty Thousand Leagues Under the Sea" were two of many such tales.

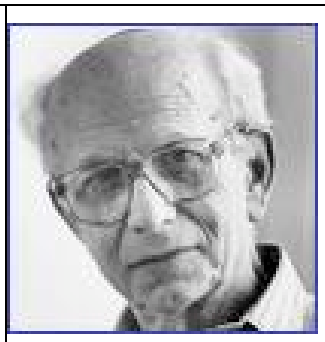
1872	 **T**he American monthly magazine Popular Science is founded, carrying articles about the future of science and technology aimed at the general reader. It has carried on solidly over time, giving a broad audience images of what the future might bring and influencing futures thinking. It now has 7 million readers.
1893	**A**s part of the 1893 World's Columbian Exposition, 74 prominent Americans write essays about their expectations for the year 1993. They predict air travel and elevated trains but fail to foresee the automobile. Many of the predictions are now laughable, but if you think it's easy guessing 100 years out, give it a try!
1901	**H.G.** Wells writes "Anticipations of the Reaction of Mechanical and Scientific Progress Upon Human Life and Thought" for the British magazine The Fortnightly Review; he proposed a "science of the future." Wells also wrote futuristic novels, including "The Time Machine" and "The War of the Worlds." 
Early 1900s And WWI	**I**n the years just before, during and after World War I, mobilization efforts led to futures thinking in institutional structures all over Europe. In addition, the October Revolution of communists in Russia in 1917 led to the establishment of the planning group Gosplan (1921), which developed a system of five-year (1928) and 10-year plans first for Russia and later for the Soviet Union. When the fascists came to power in Italy from 1922 to 1943, they pursued images of future national power, territorial expansion, and centralized control over all resources.
1921	**Y**evgeny Zamyatin, a Russian, wrote the first dystopian novel. An influence on "1984" and "Brave New World," it shows a future in which the world is one nation, the One State, populated by people who are numbered instead of named, whose "devil" is "I" and whose "god" is "We." At the end, the leader stops a revolution by lobotomizing the narrator, D-503, and all the other numbered souls. John Stuart Mill appears to have been the first to use the term "dystopia," in 1868.
1929	 **P**resident Hoover appoints a Research Committee on Social Trends, headed by William F. Ogburn. It produced the report "Recent Social Trends in the United States" in 1933. Ogburn used past statistics to chart trends and then projected them to the future. His theory emphasized the role of technologies/inventions. He co-founded the Society for the Study of Technology; he is a founder of technology assessment, one of the standard approaches to futures research.
1929 to 1939	**T**he Great Depression in the U.S. inspires the government under President Franklin D. Roosevelt to undertake a social engineering plan that includes Social Security and the development of the Tennessee Valley. Responses to this national emergency are now seen as key to modern futures studies. Officials analyzed the past and current situations, projected the future with no intervention, described alternative futures and likely outcomes, and selected and implemented policies based on the findings, aiming to the future. 

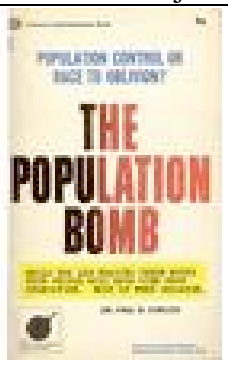
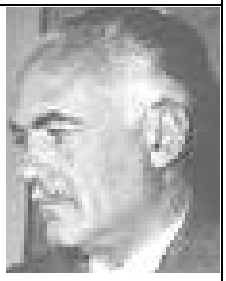
1933 to 1943 and WW II	 **N**azi Germany created a unified, mobilized society in which the energy of the people was focused on collective goals, creating a new social order (excluding and even eliminating certain sectors of society). The first four-year plan was announced in 1933; the Goering Plan in 1936 was comprehensive, including wage and production controls and even control over working conditions. World War II forced most leaders all over the globe to make long-range and short-range plans. After the war, national planning blossomed everywhere. Capitalists and communists delved into forecasting work as they never had before, incorporating futures thinking in the decision-making process.
1939	**T**he New York World's Fair used the theme "The World of Tomorrow" and it showcased the latest images of the likely future, making a significant impression on the 25 million visitors who attended it. People waited for hours in line to see the "Futurama," then enjoyed just a 10-minute ride past this model of the future U.S., which included 500,000 individually designed houses and 50,000 cars in an introduction of the idea of a network of superhighways to connect the nation. The fair also hosted the first World Science Fiction Convention.
1942	 **B**iochemist and science-fiction writer Isaac Asimov wrote "The Three Laws of Robotics" in his short story "Runaround": A robot may not injure a human being; a robot must obey orders except when they conflict with the first law; a robot must protect its own existence as long as it does not conflict with the first or second law. He originated the word "robotics," his futuristic work was the basis for the later film "I, Robot," and he was a prolific science writer in addition to being one of the most influential science-fiction writers of the 20th century. 
1943	 **M**acy Conferences on Cybernetics begin. The meetings of systems thinkers from all disciplines were held from 1943 through 1954 and worked from the basis of Claude Shannon's information theory (he is pictured at left), Warren McCulloch's work on neural information processing, John von Neumann's binary systems work and the cybernetics paradigm made public through the writing of Norbert Wiener (left). Systems theorists study communications, control, and regulatory feedback in living organisms, machines, and in other networks, such as organizations. 
1940s to '60s	**A**fter the end of WWII, about 120 new nation-states were created from the former colonial territories of European nations and the U.S. This nearly tripled the number of world nation-states and increased interrelationships and potential subgroups of coalitions, complicating policy and planning and adding more layers to futures equations and allowing new leaders to postulate new futures.

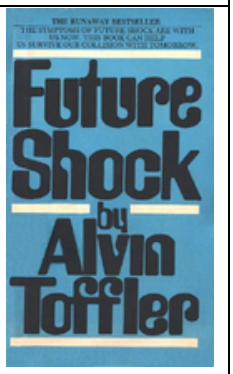
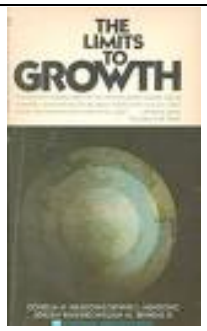
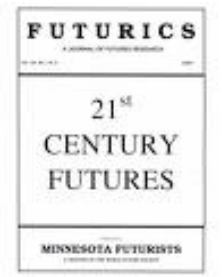
1946	**RAND** was created – an acronym standing for Research AND Development as a think tank by the Army Air Corps and the Douglas Aircraft Company. It produces written reports, the first concentrating on the future of military technology. By 1970, it was turning out non-military studies, including reports on the potential benefits of stroke-detection centers and more effective urban hospitals. Over the years, RAND researchers developed a great deal of the futures studies methodologies used today, including the Delphi technique, computer simulations. It now has 1,600 employees in many U.S. and international locations.
1955	**T**he Society for General Systems Research is founded (Stanford, Center for Advanced Study) – it changed its name to International Society for the Systems Sciences in 1988. (http://www.isss.org/) Understanding systems science (often referred to as cybernetics) is important to understanding how futures might unfold. This group looks at the practical application of systems methodologies to problem-solving – how living and automated networks function. **Founders of the Society for General Systems Research:**  Ludwig von Bertalanffy · Kenneth Boulding · Ralph Gerard · James Grier Miller · Anatol Rapoport
	Philip K. Dick writes "Autofac," a science-fiction short story that introduces the idea of self-replicating machines. Dick, the author of the story that inspired the film "Blade Runner" is considered to be one of the most prescient science-fiction futurists. His alternate universes and mind-jogging future scenarios raise issues.
1956	**K**enneth Boulding publishes "The Image: Knowledge in Life and Society." The economist and systems scientist writes that all knowledge is a series of images and since each individual image is built as a result of all past experiences of the possessor, knowledge is organic, growing and evolving. He says growth of knowledge brings order out of chaos. He was a member of Soc. for Gen. Systems Research. Futures researchers use this idea of "the image" in understanding how people see the future unfolding.
1959	**R**ichard Feynman, Nobel-winning physicist, envisions nanotechnology in his seminal talk "There's Plenty of Room at the Bottom."
1960s	 **D**ouglas Engelbart, founder of Stanford Research Institute's Augmentation Research Center, develops a technology futures theory and the original versions of many computer-human interface elements that came into use decades later, including bit-mapped displays, collaboration software, hypertext, and the computer "mouse." He was an outspoken advocate over the next 40-plus years for the use of human-computer networks in solving the world's problems. His philosophy is best expressed in the 1962 research report "Augmenting Human Intellect: A Conceptual Framework."

	Theodore J. Gordon and Olaf Helmer collaborate to develop the Delphi method of futures studies. It involves getting a group of experts to share their images of the future over several rounds of individual questioning that allow them to refine their answers. Gordon and Helmber did their initial Delphi work for RAND, analyzing the future of technological breakthroughs. It was a milestone in the development of futures studies and helped focus and galvanize the futures movement. The two men later founded the Institute for the Future in 1968, looking to forecast trends five to 50 years in the future. Unlike other such organizations, IFTF doesn't do military research, consulting for other organizations. 
1960	 **F**rench economist, journalist, and philosopher Bertrand de Jouvenel and his wife Helene found the Association Internationale de Futuribles, which still functions today. In France, the word for futures studies is "futuribles." AIF eventually begins to publish the futures studies journal Futuribles: Analyse, Prevision, Prospective.
	Herman Kahn, a military theorist who worked at RAND, publishes "On Thermonuclear War," using systems theory and game theory to make predictions about it and asking Americans to consider the aftermath of World Wars III through VIII, which might take place at various times in the future. Kahn left RAND and founded the Hudson Institute with Max Singer and Oscar Rubenstein the next year, and by 1970 it had become a leading futures-research center with 130 full and part-time consultants. 
1961	**D**utch sociologist Fred L. Polak's "The Image of the Future: Volume I Enlightening the Past, Orienting the Present, Forecasting the Future" and "Volume II Iconoclasm of the Images of the Future, Demolition of Culture" are translated to English. He devoted his life to the future of man and society, and this was his major work. He says the future images on which a society draws affect the future direction the society will take, contributing to its rise and/or fall. He says today's society must "reawaken" its "starving social imagination."
1962	 **M**arshall McLuhan writes "The Gutenberg Galaxy" – about the impact of phonetic writing and print in transforming Western and world cultures, including an anticipation of the impact and power of the Internet. A pioneering look at how comm. technology changes cognitive organization. He saw mostly negative future ramifications of the "global village" he expected it to bring and predicted in this book, "As our senses have gone outside us, Big Brother goes inside." He also wrote, "There can only be disaster arising from unawareness of the causalities and effects inherent in our technologies."

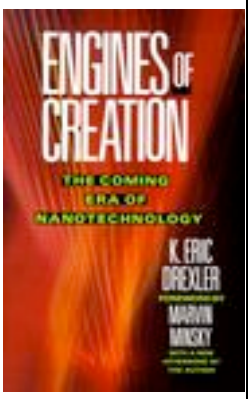
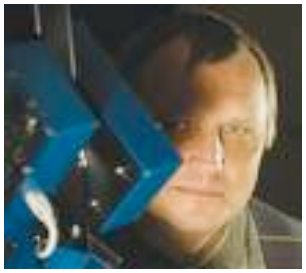
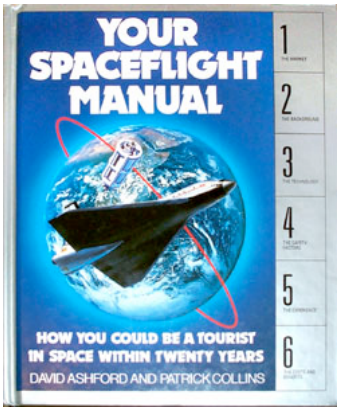
	Rachel Carson's book "The Silent Spring" raises questions about the influences of chemical changes introduced by humans to ecosystems and brings dawning of ecological awareness. Her work had a significant impact in inspiring environmental futures studies and the environmental movement in the industrial world. 
	 **P**rolific science-fiction writer and inventor Arthur C. Clarke, considered one of the top three sci-fi writers of the century (along with Isaac Asimov and Robert A. Heinlein), publishes the non-fiction work "Profiles of the Future," a collection of his essays on the future. Clarke was the originator of the idea of a "space elevator" that could deliver people and materials to an orbiting space station, making space shuttles obsolete. He also was one of the first to propose the idea of geostationary satellites as telecommunications relays (1945). He wrote the book "2001: A Space Odyssey" while collaborating with director Stanley Kubrick on the film of the same name in the 1960s. It is a futures fiction classic. Clarke's formulated three "laws" of prediction: 1) When a distinguished but elderly scientist states that something is possible, he is almost certainly right; when he states something is impossible, he is very probably wrong; 2) The only way of discovering the limits of the possible is to venture a little way past them into the impossible; 3) Any sufficiently advanced technology is indistinguishable from magic.
1963	**F**erdinand Lundberg, in his book "The Coming World Transformation," takes a historical materialist stance, with chapters on population, economics, government, education. It assumes uniform evolution and says there is no prospect of the rest of the world catching up industrially to the west in the next 150 years. He says religion will be superceded and nations will join together to form regional superstates for some law, etc. It is grounds for stirring debate.
	French futurist Bertrand de Jouvenel publishes the book "The Art of Conjecture," a key work at the time in the development of modern futures studies. It provided a rationale for futures thinking, expressing how and why futures studies are vital.
1964	**M**arshall McLuhan writes that we are driving into the future "looking into the rear view mirror." In "Understanding Media: The Extensions of Man."
	New York World's Fair – the second this century – hosted 51 million paid visits; about half saw Futurama II, which included a moon base and an underwater hotel.
1965 to 1973	**F**irst session of the Commission on the Year 2000, established by the American Academy of Arts and Sciences. It was to construct hypothetical futures and problems expected in the year 2000. Futurist Daniel Bell's report on this commission's work was published as "The Coming of Post-Industrial Society: A Venture in Social Forecasting" in 1973. The Commission's activities came at a turning point in the development of futures studies. The network of futures thinkers had become internationalized by the mid-'60s, and a significant amount of the futures work being done extended beyond military concerns. 

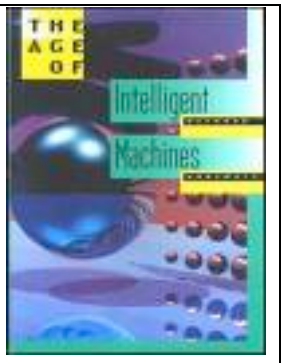
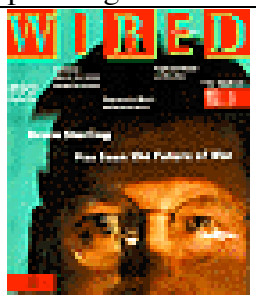
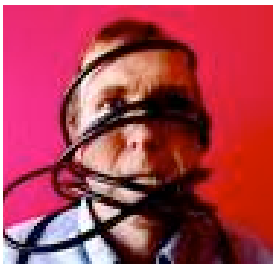
1966	 **H**ungarian-born Julius Thomas Fraser assembled the acclaimed series of interdisciplinary articles "The Voices of Time," and he oversaw 10 additional volumes of "The Study of Time" series through a group he founded, the International Society for the Study of Time. His work is a key influence on thinking about the nature of time. In some cultures and to some ways of thinking, we cannot assume the linear procession of past, present, future. There are varied definitions of "time" and how humans apparently "move through" it.
	James A. Dator teaches one of the first college-level futures courses at Virginia Tech, and Alvin Toffler teaches one at the New School for Social Research in New York. By 1973 there were several hundred individual courses somehow tied to futures studies being taught in various ways at U.S. and Canadian universities. The identification and study of potential future scenarios and the search for ways to influence their probability were becoming important social responsibilities.
	World Future Society founded by Edward Cornish, "The Futurist" and "Bulletin" begin publication. WFS is part professional society, part think tank, and part grassroots non-profit. Cornish went on to advise three U.S. presidents, and among his futures publications is "Futuring: The Exploration of the Future," 2005, one of the only futures textbooks ever published for general education. 
	 "**S**tar Trek" premieres on U.S. television, presenting to the masses a number of legitimate ethical and moral dilemmas likely to be faced in the future. The central trio of Kirk, Spock, and McCoy was modeled on classical mythological storytelling, but there was futures thinking applied to story lines and such concepts as teleportation and the construction of space vehicles that might reach "warp speed" are science-based. Product designs in the series are believed to have influenced the designs of many current technologies, including the tablet PC, cell phones, and PDAs. The original series spawned four additional live-action TV series, many films, novels, comics, video games and other materials.
1967	**T**he group that founded the World Futures Studies Federation emerged and began planning this year – it is a global network including researchers, teachers, scholars, policy analysts, activists, and others from 60 nations who work to promote futures education and research. The founding conference of the organization was held years later, in Paris in 1973. At it, the charter was ratified, and the official headquarters were established in France. The founding president was Bertrand de Jouvenel. WFSF has sporadic conferences every few years.

	First International Future Research Conference (70 participants from 12 nations), directed by Johan Galtung founder of the International Peace Research Institute in Oslo, Norway. Galtung is a futurist who works with the agenda of fostering world peace. He pointed out that most futures work up to now had been aimed to serve "military and related industrial goals," adding that the professional futurist war managers are people "capable of depriving humanity of any possible future." 
	 **H**arold Lasswell and Wendell Bell help found the Yale Collegium on the Future. A faculty group that fostered futures discussions with a farther reach, considering that both Lasswell and Bell have been leaders in the futures studies movement. Bell (in photo at left) also began teaching the first Yale course with "futures" at its center this year.
1968	"**F**utures: The Journal of Forecasting and Planning" begins publication in UK. This international journal is published six times a year.
	 **P**aul R. Ehrlich publishes "The Population Bomb." It predicts disaster due to the "population explosion," projecting mass famine in less-developed nations and the starvation of "hundreds of millions of people." This type of scenario is called "Malthusian" in reference to Rev. Thomas Malthusian's 1798 essay predicting catastrophic population growth that would outstrip agricultural growth unless it was controlled. Unlike Malthus, Ehrlich saw no solution to the problem, however thanks to ag-science developments food production grew. Starvation has been a problem, but not in the epic proportions Ehrlich posited. His theory did influence and help shape futures policies for some time.
	The Club of Rome is founded by Italian industrialist Aurelio Peccei (at right) and Alexander King, the director for Science, Technology and Education at the Organization for Economic Cooperation and Development, to study future political issues. The goal was to alert the world to what they termed the "global *problematique*," a cluster of interrelated world problems including hunger, environmental degradation, violence, overpopulation, and the alienation of the working classes. 
1969	**J**ohn McHale publishes "The Future of the Future" – he served as director of the Center for Integrative Studies at SUNY-Binghamton from 1968-78. Brit McHale's first field of study was the Pop Art movement of the 1960s, he created "Op Art," and most of Pop Art concepts were first articulated by him. He created a think tank at Binghamton and developed a futurist philosophy.
1970	**A**merican Anthropological Association begins its series of Futuristics Sessions, 1970-1974; Magorah Maruyama and Arthur Harkins are co-chairs.

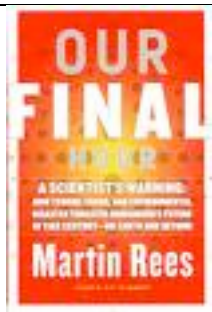
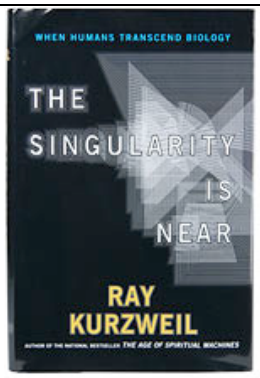
	April 22 is the first celebration of Earth Day and National Environmental Protection and Environmental Impact Assessment Act. Sen. Gaylord Nelson and his staff originated the idea for the effort, but it was a groundswell of college students on campuses all over the U.S. who made it a big day, boosted by a Sunday New York Times article that ran months before, the 20 million organizers basically organized the event themselves. 
	 **A**lvin Toffler's "Future Shock" is published and becomes a best-seller that draws the public to recognize futures possibilities. It was an extension of an article he had written for Playboy magazine. The concept of "future shock" – too much change in a short period – resembles the later idea of a technological singularity. Previous to this book, revered scientist Thomas Kuhn had proposed the idea of a technological "paradigm shift" to come in the years ahead – this was a likely influence for Toffler. The book argues that massive change as we moved away from an industrial society to an information society would overwhelm people, and he said new social problems were an early symptom. He also coined the phrase "information overload." His analysis of this continues in his later books "The Third Wave" and "Powershift." 
1971	**F**irst World General Assembly, World Future Society in Washington, D.C. A gathering of researchers, social scientists, business consultants, teachers and others who consider themselves to be futurists. 
1972	 **T**he Club of Rome publishes "Limits to Growth," which sells 30 million copies in 30 translations and predicts that economic growth cannot continue indefinitely because of limited resources, especially oil. It echoes some of the concerns of Thomas Malthus in his 1798 "An Essay on the Principle of Population." "Limits" used Jay Forrester's (MIT) system-dynamics perspective and projected that unless changes are made in the next century the death rate will rise, population will decline, and human life will become shorter and more brutish. The future, it says, depends on what we do with this information. A second volume titled "Limits to Growth: The 30-Year Update" was published in 2004.
1976	**F**uturics begins publication. This quarterly journal of futures research – one of the longest running in print – is published by the Minnesota Futurists, the first chapter of the World Future Society. It is an international, refereed journal. 

	 **T**he Future Survey, printed by the World Future Society, begins publication. It is considered by futurists as one of the most useful publications ever - a monthly 8-page review of futures literature from more than a thousand sources, with a cross-referenced annual. It allows people to keep up on the futures work being done across all disciplines.
1977	**T**he Institute for Alternative Futures is founded by Clement Bezold, James Dator, and Alvin Toffler as a non-profit research and educational organization. It and its for-profit subsidiary, Alternative Futures Associates, aid organizations and individuals to work to create preferred futures.
1978	**M**agorah Maruyama and Arthur Harkins, eds., "Cultures of the Future," 28 pieces, including some classic articles, mostly looking at futures studies from the anthropologist's perspective.
	Jib Fowles, ed., "Handbook of Futures Research," consisted of 41 essays by leaders in the field of futures studies; topics included history, methods, forecasts and prospects for the future of futures research.
1980	**A**nthropologist and futurist R.B. Textor publishes "A Handbook on Ethnographic Futures Research" 3rd edition. In it, he outlines the Ethnographic Futures Research method, which involves interviewing people to capture details about their images of the future.
	Alvin Toffler's book "The Third Wave" is released.
	The Global Conference on the Future, in Toronto, sponsored by the World Future Society and the Canadian Association for Futures Studies, draws 5,000 participants from 30 nations.
1982	**F**uturist John Naisbitt's "Megatrends: Ten New Directions Transforming Our Lives" becomes a mainstream bestseller. And he and Toffler are now the two futurists best known to the general public in the U.S., thanks to the massive promotion of their best-selling books and their radio and television appearances in support of them. 
1983	**CONTACT** conferences begin – meeting of nation's foremost scientists, science fiction writers and artists to exchange ideas, explore possibilities and stimulate new perspectives about humanity's future.
1984	**T**he Santa Fe Institute is founded by eight scientists (mostly from Los Alamos National Laboratory) to take an interdisciplinary look at "complexity science," the study of networks (economies, ant hills, human nervous systems) that are different but the same in regard to general structures. SFI's research has led to efforts to create new futures through inventive work such as experiments in the 1980s and 1990s in creating artificial life that models real ecosystems and organisms. The work really looks at complex systems, and it overlaps with the ideas behind cybernetics and even ties to chaos theory and catastrophe theory in

	regard to the fact that scientists are working to find commonalities and detect predictable patterns in networked interactions.
1985	**F**utures Research Quarterly replaces the World Future Society Bulletin.
1986	**K.** Eric Drexler publishes "Engines of Creation." This seminal nanotechnology book brought form and a fresh look to famous physicist Richard Feynman's concept that "There's Plenty of Room at the Bottom." Drexler's book predicts molecular manufacturing for large-scale fabrication, promotes space exploration, and contains his statement that uncontrollable, self-replicating machines of the future might possibly produce what is now called the "grey-goo scenario." With this book, Drexler founded the first group for preparing the world for the ethical questions tied to nanotechnology; he asked the publisher to include an address for the Foresight Institute, a group that did not yet exist. It began when the book was released. Drexler is no longer directly tied to the group, which is now called the Foresight Nanotech Institute. Since then the Center for Responsible Nanotechnology and the Center on Nanotechnology and Society are among the similar groups of nano-future concern that have been formed. 
1988	 **C**arnegie Mellon Robotics Professor Hans Moravec publishes "Mind Children." In this and his other books, including "Robot: Mere Machine to Transcendent Mind," he predicts that accelerating technology will likely allow the development of robots much more intelligent than humans by around 2030 to 2050. At some point in their development, he says, these robots, are not likely to need humans.
1989	**F**uturist John L. Petersen founds The Arlington Institute, a non-profit research consultancy that specializes in influencing rapid, positive change in a world of accelerating choices.
1990	**A**lvin Toffler's book "Powershift" is released.
	David Ashford and Patrick Collins write "Your Spaceflight Manual," a non-fiction look at the future space-tourism industry. It analyzes safety, costs and benefits, and the potential market for space tours, also including designs for space vehicles and stations to support such an industry. The book includes a timeline with predictions that outline the development of space tourism by applying the lessons learned in the development of human flight up to this point. It predicted that the first space tourist would fly in 2000, which was true when multimillionaire Dennis Tito paid for a trip on a Soyuz spacecraft. 

	 **R**ay Kurzweil's "The Age of Intelligent Machines" is published. It was the scientist/inventor's first book, and it won the Most Outstanding Computer Science Book of 1990, awarded by the Association of American Publishers. Kurzweil is in the National Inventors Hall of Fame for his work with speech and musical synthesis, font-scanning character recognition systems, reading technology, and medical simulation. He won the 1999 National Medal of Technology. His research has led him to be a well-informed technology futurist, and he believes the technological singularity may take place in only a few decades. www.kurzweilai.net is an incredible futures resource. 
1990s	**U**NESCO (United Nations Educational, Scientific and Cultural Organization) begins a futures "clearinghouse" and begins to publish futures-oriented documents, including UNESCO Future Scan.
1991	**F**utures studies has grown, as consulting firms and individual consultants are hired by government and industry. The World Future Society's 1991 Futures Research Directory includes 1,200 people who are professionally involved in futures work. Nearly all corporations now have a formalized system of long-term planning in-house or they outsource futures research to a consulting firm.
1993	 **W**ired magazine makes its debut in March. It reports on how technology is expected to effect culture, the economy, and politics. It's editorial stance was inspired by Canadian communications theorist Marshall McLuhan, who is considered the publication's "patron saint." It has been a rich source of futures articles, and while it often seems to embrace techno-utopianism it also carries the points of view of various tech critics. Two of its most famous and often-quoted contributors from its initial years were John Perry Barlow and Nicholas Negroponte, both advocates of the positive future impact of an open internet.
1995	**W**ired magazine editor Kevin Kelly publishes "Out of Control: The New Biology of Machines, Social Systems and the Economic World." He explains how self-sustaining systems (from living wetlands to computerized simulations) mean to the future. He posits that as we make machines and institutions more complex we have to make them more biological to manage them. He sees the blending of biology into the future of technology hardware and software. He says, "in order to harvest the organic power of our machines, we have to … relinquish some control." This was one of three books to inspire the actors in the film series "The Matrix." The others were: Jean Baudrillard's "Simulacra and Simulation," "Introducing Evolutionary Psychology" by Dylan Evans. 

	 **T**ed Kaczynski's 35,000-word essay "Industrial Society and Its Future" is published in the New York Times and Washington Post. (It is also known as the "Unabomber Manifesto.") It is the work of a futurist who became so concerned about the future that he decided that violence was the only way to draw attention to the serious issues that lie ahead. He is the most famous anti-technology anarchist of modern times. He protested in anonymity for years, killing three and wounding 29 in an 18-year mail-bombing campaign that finally ended when the newspapers printed his essay and his brother recognized his writing style. He was sentenced to life in prison with no parole.
1996	**Y**ale University Futurist Wendell Bell publishes the futures studies classics "The Foundations of Futures Studies" Volumes I and II. These are used primarily in graduate schools and by futures professionals; they include a detailed explanation of the reasons futures studies are vital, a history of futures studies, an outline of methodologies. The pair of books went into a second printing with a new preface in 2005. Bell says futurists try to illuminate "possible futures, probable futures and preferred futures." 
1998	**D**avid Brin predicts in his book "The Transparent Society" that privacy will disappear as low-cost surveillance, communication, and database technology erode and eventually make it vanish. He argues that this can be good if the surveillance is equal for all and the public has the same access to everyone's data as the government and industry do. In later studies, many technology experts predict that the upper classes will find ways to keep a veil of privacy drawn over their personal activities and over government and some elite industries while the general public will be exposed.
1999	**R**ay Kurzweil publishes "The Age of Spiritual Machines: When Computers Exceed Human Intelligence," a bestselling continuation of his study of the likely interlacing futures of humans and machines as technological change accelerates and humans evolve.
2000	 "**F**irst Shot in Artilect War Fired," a debate in Zurich between Hugo de Garis, an AI scientist and supporter of building artificially intelligent life forms (artilects), and Kevin Warwick, a professor of cybernetics who believes it is too dangerous to create such devices, regarding the future domination of earth by intelligent machines. De Garis has projected that there may be a "gigadeath war – billions of dead" between Terrans (those against highly developed AL and AI) and Cosmists (those who support the building and proliferation of artificial life forms even though they could likely replace and completely displace humans).

	"**W**ill Spiritual Robots Replace Humanity by 2100?" – this symposium at Stanford featured futurist Ray Kurzweil, roboticist Hans Moravec and Sun Microsystems co-founder Bill Joy, and it kicked off a debate about the possibilities of a positive or a negative technological future. Joy writes the much-talked-about essay "Why the Future Doesn't Need Us" for Wired magazine, arguing that technological advances are threatening humanity and requesting more ethical debate and deep thought about the potential futures ahead. 
2001	**tt30**, an anticipatory-thinking think tank for people around the age of 30 is started by the Club of Rome. (http://www.clubofrome.org/tt30/index.php)
2002	**P**aul Raskin publishes the 99-page essay "Great Transition: The Promise and Lure of Times Ahead," predicting three scenarios: conventional worlds, barbarization, great transitions – hoping for a sustainable future in the latter form.
2003	**B**ritish Physicist Sir Martin Rees publishes "Our Final Hour: A Scientist's Warning: How Terror, Error, and Environmental Disaster Threaten Humankind's Future in This Century – On Earth and Beyond." He says the Earth and human survival are under great threat from the effects of modern technology, discussing the range of risks and estimating that the probability of extinction before 2100 AD is around 50 percent, based on the potential for a purposeful or accidental release of destructive technology (i.e. nanotechnology or terrorist violence). He says human expansion into space is the way to minimize or overcome these issues, and he advocates control over worldwide scientific research.  
2005	 **R**ay Kurzweil publishes the massive futures studies book "The Singularity is Near: When Humans Transcend Biology." In it, he says technology is progressing toward a singularity at an exponential rate and that humans can and will take positive advantage, and our technology will not overcome and replace us but instead will be utilized to improve and extend our lives, possibly forever. He explains how nanobots will be able to repair and replace any part of the body that wears out.
2006	**J**ames Lovelock publishes "Revenge of Gaia: Why the Earth is Fighting Back and How We Can Save Humanity," stating we are past the time for sustainable development and proposing a sustainable retreat from a coming "climate storm."
	E.O. Wilson writes "The Creation: An Appeal to Save Life on Earth." The famed entomologist and humanist thinker appeals to leaders of science and religion to unite to understand how all living things are made of fragile, intricate webs. Refutes the idea that humans can recreate these complex systems.