

Emergence of Modern Thought

The late 19th and early 20th century gave birth to modern European thought. The Enlightenment provided a heritage of rationalism, toleration, cosmopolitanism, and appreciation of science. Romanticism provided an emphasis on imagination and feeling, national identity, and the autonomy of the artist. These two strands of thought, Enlightenment and Romantic, would become woven into a new fabric. By 1900, Christianity had experienced the most severe intellectual attack in its history and the view of the physical world that had prevailed since Newton had undergone major changes. The role of humankind and the value of rationality were questioned, as well.

In the second half of the 19th century a new reading public emerged that was much larger than ever before. From the 1860s onward, European nations embraced state-financed public education with the goal of reducing the rate of illiteracy. The result was the emergence of a larger franchise than ever before that was immersed in a print culture that reached more people than ever before. Both liberals and conservatives supported state-financed public education as a means to educating the newly enfranchised voters and enabling the working-class to become productive members of society. A guiding assumption of the expansion of public education was the Enlightenment faith in rationalism. The new education system, the new literate population, and the new print culture permitted a monumental popularization of knowledge.

Science and Naturalism

The Newtonian, mechanical worldview prevailed for much of the 19th century, and science continued to establish itself as the model for all human knowledge. The French philosopher Auguste Comte developed a philosophy of human intellectual development that culminated in the use of science. He argued in *The Positive Philosophy* that human thought had developed in three stages: theology, philosophy, and science. Comte believed that positive (scientific) laws of social behavior could be discovered in the same manner as laws of nature. He is regarded as the father of sociology. Essentially, Comte argued that genuine knowledge must resemble scientific knowledge. Writers such as Thomas Henry Huxley spoke of a religion of science that would explain all of nature without resorting to supernatural explanations. They promoted science in society and advocated for government support of scientific research.

In 1859 Charles Darwin published *The Origin of Species*, which formulated the principle of natural selection to explain how species had evolved over time. Darwin did not formulate the concept of evolution, which had been discussed for a long time prior to his own work. What Darwin did explain was *how* evolution could occur rather than propose the idea *that* it could. Using the ideas of Malthus on overpopulation, Darwin contended that more living organisms come into existence than can survive. Natural selection explains how some organisms live long enough to propagate, while others do not. The principle itself was naturalistic and mechanistic. The operation of natural selection required no guidance or direction. What Darwin could not explain were the variations within species. After 1900, Gregor Mendel's work on heredity explained the variations.

Darwin's theory was revolutionary because it seemed to remove the idea of purpose from the natural world. The principle of natural selection seemed to operate according to chance. Evolution by means of natural selection seemed to contradict the Biblical narrative of Genesis, and also challenged the Deistic argument for the existence of a Creator from the design of the universe. The entire notion that the physical world is fixed and unchanging, either because God created it how it currently is or because it operates like a machine, was effectively undermined.

The natural world was now seen as a realm of flux and change. The possibility that the natural world had changed over time led people to question whether or not morality had also changed over time.

In 1871, Charles Darwin published *The Descent of Man*, which applied the principle of evolution by means of natural selection to human beings. He argued that humankind's moral nature, religious sentiments, and physical frame had developed naturalistically in response to the requirements of survival. According to Darwin, neither the origin nor the character of humankind required the existence of a God for their explanation. By the end of the 19th century scientists had generally accepted the theory of evolution, *but not Darwin's mechanism of natural selection, which had no empirical explanation*. The scientific consensus on natural selection emerged in the 1920s when Darwin's theory was *confirmed by the discoveries of modern genetics*. Ironically, just as the scientific consensus on Darwin's theories was developing, cultural and religious opposition to Darwin's theories emerged within the United States. The rise of Christian fundamentalism and its promotion of Biblical literalism during the 1920s gave birth to the anti-evolution phenomenon that still sets the United States apart from Europe.

The dominant role of science in the late 19th century spilled over into social thought and ethics. Philosophers began to model their theories of ethics on science. For example, some began to apply the concept of the struggle for survival to human social relationships. Herbert Spencer, a British philosopher, advocated an ethical theory based on evolutionary theory. Spencer, who glorified individualism, believed that human society progressed through competition and that individual struggle was an ethical imperative. The concept was used to justify the refusal to give aid to the poor and the aggressive domination of colonial peoples. The general term used to describe such evolutionary ethics was Social Darwinism. Thomas Henry Huxley publicly opposed the ethics of Spencer by arguing that the physical process of evolution was at odds with the process of human ethical development. The apparent struggle within nature held no ethical implications for society except to demonstrate how human beings should *not* behave.

Assault on Christianity

The intellectual attack on Christianity arose on the grounds of its historical credibility, its scientific accuracy, and its pronounced morality. In 1835, David Friedrich Strauss published *The Life of Jesus*, which questioned whether the Bible provided any genuine historical evidence about Jesus. Scholars began to study the Bible as a historical and literary text, and they insisted that human authors within a specific cultural context had written the books of the Bible. Thus, the Bible was not an inspired work and not universally applicable. *Such questioning of the historical nature of the Bible caused more literate Christians to lose their faith than any other single cause*. The advances of science during the 18th century had been reconciled with traditional faith in popular works such as William Paley's *Natural Theology*, but the advances of biology and geology during the 19th century completely challenged existing beliefs about the age of the Earth and the development of the physical landscape. Naturalistic explanations were being provided for what seemed like everything. The renewed Biblical scholarship also re-examined the character of the Old Testament God, who seemed quite cruel and unpredictable, within the context of liberal values of toleration and rationality. Philosophers such as Friedrich Nietzsche portrayed Christianity as a religion of sheep that glorified human weakness over human strength. Such intellectual skepticism only influenced the highly educated segment of society, but the result was that Christianity gradually lost much of its intellectual respectability.

The primary conflict between the state and the church during the last half of the 19th century was the expansion of public education. In Great Britain, the government had previously given grants

to religious schools, but after the Education Act of 1870 the government began to finance non-religious schools. The Education Act of 1902 provided state support for both religious and non-religious schools, but imposed the same educational standards on religious schools, which sometimes caused controversy. In France, the Ferry Laws of the 1880s gradually replaced religious instruction in the public schools with civic instruction. Priests were no longer permitted to teach in public schools and the number of non-religious schools increased rapidly. In Germany, Bismarck made primary education a function of the state, which completely secularized education.

The main reason that Bismarck pursued such a policy was the influence of the Catholic Church in Germany. Bismarck feared that the Catholic Church would divide the political unity of Germany and attempted to eliminate the influence of Catholic clergy within society. Bismarck's policy towards the Catholic Church is referred to as *Kulturkampf*, or "cultural struggle," and it was largely a failure. In 1864, Pope Pius IX issued the *Syllabus of Errors*, which launched a Catholic counteroffensive against liberalism in thought and politics. He set the Catholic Church squarely against contemporary science, philosophy, and politics. In 1869, Pope Pius IX summoned the First Vatican Council, which promulgated the dogma of the infallibility of the Pope when speaking officially on matters of faith and morals. Pius IX died in 1878 and was succeeded by Leo XIII who sought to accommodate Catholic doctrine to the modern age in order to address social questions. *Rerum Novarum* (1891) defended private property, religious education, a living wage for workers, and the right to unionize. Marxism was criticized, but so was *laissez-faire* capitalism. Thus, Catholics began to participate actively in social and political movements.

20th Century Frame of Mind

The last two decades of the 19th century and the first decade of the 20th century challenged the existing presuppositions of science, rationalism, liberalism, and morality. In 1883, Ernst Mach published *The Science of Mechanics*, in which he urged scientists to consider their concepts descriptive not of the physical world itself, but of the sensations experienced by the observer. Henri Poincaré argued that concepts and theories of scientists be regarded as hypothetical constructs of the human mind rather than as descriptions of the true state of nature. By WWI, few scientists believed that they could portray the "truth" about physical reality. Rather, they saw themselves as setting forth useful hypothetical or symbolic models of nature.

In 1895 Wilhelm Roentgen discovered X-rays, a form of energy that penetrated various opaque materials. In 1896 Henri Becquerel discovered that uranium emitted a similar form of energy. In 1897 J.J. Thomson formulated the theory of the electron and the interior of the atom became a new area for human exploration. In 1900 Max Planck formulated the quantum theory of energy, which viewed energy as a series of discrete quantities rather than a continuous stream. In 1905 Albert Einstein published his first paper on relativity in which he argued that time and space exist not separately, but rather as a combined continuum. In 1927 Werner Heisenberg set forth the famous uncertainty principle, according to which the behavior of subatomic particles is a matter of statistical probability rather than of exactly determinable cause and effect. The complexity of 20th century science resulted in the inability of writers to popularize science for the public. Yet, the advances of science would affect the daily life of people more than at any previous time in human history. Scientists succeeded in gaining financial support from both government and private investors by linking scientific advancements to economic growth, military security, and health. As an intellectual activity, science has affected the modern world more than any other discipline.

Literature and Realism

The realist and naturalist writers brought scientific objectivity and observation to their work. They portrayed the hypocrisy, brutality, and dullness of middle-class life and society. Realist novelists portrayed the dark, degraded, and dirty side of life. An earlier generation of realists such as Charles Dickens and Honore de Balzac had portrayed the cruelty of industrial life and of a society based wholly on money, but their work contained hope that a better world was possible through Christian values or an appreciation for humanity. Late 19th century realists examined the dreary side of life without being certain whether a better life was possible. They portrayed human beings as subject to irrational passions, materialistic determinism, and the pressures of the environment like any other animal. Gustave Flaubert and Emile Zola were the two most influential realist novelists. Henrik Ibsen and George Bernard Shaw were the two most influential realist playwrights. These writers considered it the duty of the artist to portray reality as it actually existed without romantic illusions. They hoped to destroy social and moral illusions and to compel the public to face reality. Few of the realists proposed any solutions to the problems that they portrayed in their work. They often left their readers unable to sustain old values and uncertain about where to find new ones.

Modernism

Modernism was a multifaceted movement that influenced all of the arts. *Modernism was not particularly concerned with social or political issues, but instead focused on aesthetics and beauty.* The modernists pursued new forms of art, experimenting as much as possible with the medium and attempting to combine disparate elements of a variety of art forms. The modernists were most concerned about the immediate aesthetic experience of a work of art. The chief proponents of modernism in England were the members of the Bloomsbury Group, which included the writer Virginia Woolf and the economist John Maynard Keynes. One thing that united the modernists within the Bloomsbury Group was the rejection of the repressive sexual morality of Victorian society. Marcel Proust, Thomas Mann, and James Joyce were modernist novelists who used the stream-of-consciousness technique and redefined the structure of the novel. Modernism in literature arose before WWI and flourished in the disillusioned period following the war.

Revolt Against Reason

Philosophers in the second half of the 19th century began to question the adequacy of rational thinking to address the human situation. The German philosopher Friedrich Nietzsche attacked Christianity, democracy, nationalism, rationality, science, and progress. He sought less to change values than to probe the sources of values in the human mind. He was interested in both removing the masks that society wears and discovering how human beings made such masks to begin with. Nietzsche argued that the non-rational aspects of human nature were as important and noble as the rational characteristics. Nietzsche insisted that to limit human activity to strictly rational behavior was to impoverish human life and experience. Nietzsche studied morality from a historicist standpoint, meaning that he sought to discover the social and psychological *sources* of the *judgment* of good and evil rather than what *is* good and evil. For Nietzsche, morality was a human convention that had no independent existence apart from humankind. Thus, humans should live life-affirming values rather than life-denying values.

Sigmund Freud, an Austrian psychologist, formulated a theory of infantile sexuality, which implied that human beings were sexual creatures from birth through adulthood. His theory was derived from observations he made of patients with neurotic symptoms. Freud also insisted that

the seemingly irrational content of dreams must have a reasonable, scientific explanation. He concluded that dreams allow unconscious wishes, desires, and drives (perhaps of a sexual nature) that had been excluded from everyday conscious life and experience to enjoy freer play in the mind. Freud argued that the mind represses certain desires and that unconscious drives contribute to conscious behavior. He related his theory of dreams to his theory of infantile sexuality in *The Interpretation of Dreams*.

Freud developed a new model of the internal organization of the mind, according to which the mind is an arena of struggle and conflict among the id, ego, and superego. The id consists of amoral, irrational, driving instincts, while the superego embodies the moral norms and expectations imposed on the individual by society and culture. The ego mediates between the id and the superego. Freud's focus on unconscious desires and imagination reflects the influence of Romanticism, while his belief that society should live according to a rational understanding of the world and the individual reflects the influence of the Enlightenment. Freud did not believe that individuals should indulge any desire they have, and seek to not repress anything. He did, however, view religion as a harmful illusion and was pessimistic about the fate of Western civilization.

Politics

Liberals and socialists assumed that individuals would vote according to their reason and that human society could be improved through education.

Max Weber, a German sociologist, regarded the emergence of rationalism as the major development of human history. The rise of scientific knowledge and the bureaucratization of society fundamentally altered the basic features of European life. Weber argued that bureaucracy was now the source of self-worth and self-image for individuals as they occupied a specific role within a larger organization. He disagreed with Marx, therefore, that the development of capitalism would lead to increased class struggle. Rather, the rational and bureaucratic organization of society would provide new forms of social identity that individuals would find meaningful rather than alienating. He disagreed with Marx about how society changes, as well. He insisted that ideas rather than economic factors could fundamentally change society. His famous essay, *The Protestant Ethic and the Spirit of Capitalism* (1905) insisted that Puritanism's doctrine of the elect is what propelled capitalist development because individuals pursued worldly success to assure themselves that they were part of the elect.

Social theorists were abandoning the liberal emphasis on the individual and rationality by examining the behavior of crowds, mobs, and the collective. Gustave LeBon, Emile Durkheim, and Georges Sorel argued that crowds were not motivated by rationality, but by shared ideals.

Racial theorists used biology and scientific thinking to explain European superiority by classifying groups according to race. Advocates of racial "science" claimed to have a materialistic basis for their arguments that Europe was superior to less civilized parts of the world. Gobineau, a French diplomat, argued that Europeans had unwisely intermarried with other races and that such activity had resulted in the degeneration of the original white Aryan race. Anthropologists and explorers began to apply Darwin's theories to racial "science" by insisting that inequality between races was due to natural selection. Chamberlain, an English racial theorist, argued that biological determinism, or genetics, could lead to the improvement of the human race, or even the development of a superior race. Chamberlain's work emphasized anti-Semitism within racial theory and he blamed the Jews for the degeneration of European society and culture.

Racial theory also influenced nationalism, which had previously been a liberal view to develop distinct national literatures and redraw political boundaries based on ethnicity. Racial theory redefined nationalism to view the “nation” in racial terms. The new nationalism was hostile to both liberalism and socialism. The idea of nationality, tied to race, was used to overcome differences in class and religion. The nation ultimately began to replace religion in the minds of the citizens.

Religious anti-Semitism had existed from the Middle Ages, but since the French Revolution the Jewish population within Europe had gradually received political equality. The racial theory of the late 19th century resulted in a renewed political and racial anti-Semitism. Conservative parties throughout Europe used anti-Semitism to gain support. According to racial theory, the Jews were a danger because of their blood even if they adopted specific cultural practices shared by the national community (Jews can never become “French”). In 1896, the Zionist Movement was launched by Theodor Herzl to found a separate Jewish state. Herzl questioned whether liberalism was capable of guaranteeing the individual rights to the Jewish community that it insisted should be guaranteed to everyone. Herzl appealed specifically to the poorer Jews in the slums of the cities.

European geologists, anthropologists, and astronomers traveled all over the world to continue scientific work. European governments used the technological and scientific advancement of their region to justify the governing of less economically developed regions of the world. Europeans who ascribed to racial theory explained their scientific superiority and right to govern others based on racial superiority.

The influence of biology and psychology resulted in many stereotypical views towards females to remain unchanged. Male scientists argued that women were nurturers prone to overwhelming and destructive feelings. Biological science being done by men tended to reinforce the traditional view of women as creatures weaker and less rational than men. Male scientists and doctors believed that women should not discuss reproduction or other sexual matters. Social theorists, anthropologists, and psychologists all argued that the child-rearing role of women resulted in a social position inferior to men. Intellectuals favored expanded education for women, but traditional views of female inferiority remained unchanged.