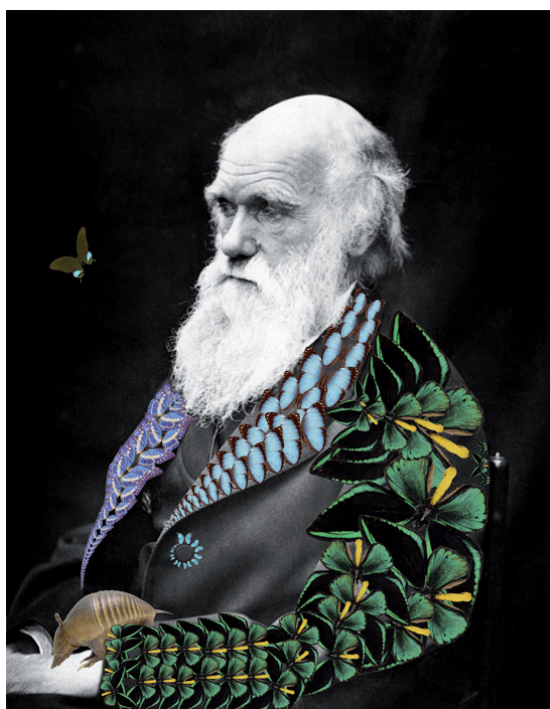


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Darwin, Evolution, Evolutionisms

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DARWIN, EVOLUTION, EVOLUTIONISMS: A SELECTIVE CHRONOLOGY (1809-2009)

- 1809 Birth of Charles Robert Darwin (1809-1882)
- 1809 *Philosophie zoologique* by Jean Baptiste Monet, chevalier de Lamarck (1744-1829)
- 1817 *Le règne animal distribué d'après son organisation, pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée* by Georges Cuvier (1769-1832)
- 1830 Debate between Georges Cuvier and Geoffroy Saint-Hilaire (1772-1844) at the *Academie des Sciences*
- 1830-1833 *Principles of Geology* by Charles Lyell (1797-1875)
- 1831-1836 Voyage of *H. M. S. Beagle*
- 1835 Charles Darwin visits the Galapagos Islands
- 1838 Charles Darwin conceived his theory of natural selection
- 1839 *Journal of Researches into the Geology and Natural History of the Various Countries Visited by H.M.S. Beagle* by Charles Darwin
- 1843 Richard Owen (1804-1892) establishes the distinction between homology and analogy
- 1844 *Vestiges of the Natural History of Creation* by Robert Chambers (1802-1871), published anonymously
- 1856 Discovery of Neanderthal remains in Germany
- 1858 Charles Darwin receives an unpublished essay from Alfred Russel Wallace (1823-1913) that proposes a theory of natural selection very similar to his
- 1858 Joint presentation of extracts of Charles Darwin's earlier writings on natural selection and Alfred Wallace's unpublished essay to the *Linnean Society of London* by Charles Lyell and Joseph Dalton Hooker (1817-1911)
- 1859 *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* by Charles Darwin
- 1860 The first translations of *The Origin of Species* are published
- 1860 Debate between Bishop Samuel Wilberforce (1805-1873) and Thomas Henry Huxley (1825-1895) at the *British Association for the Advancement of Science*
- 1861 Discovery of *Archaeopteryx lithographica* remains in Germany

- 1862 William Thomson, Lord Kelvin (1824-1907), estimated that the age of the Earth was between 20 million and 400 million years
- 1863 *Evidence as to Man's Place in Nature* by Thomas Henry Huxley
- 1864-1867 *Principles of Biology* by Herbert Spencer (1820-1903)
- 1866 Gregor Mendel (1822-1884) publishes his work on the inheritance in pea plants
- 1868 *The Variation of Animals and Plants Under Domestication* by Charles Darwin
- 1868 *Natürliche Schöpfungsgeschichte* by Ernst Hæckel (1834-1919)
- 1871 *The Descent of Man, and Selection in Relation to Sex* by Charles Darwin
- 1872 *The Expression of the Emotions in Man and Animals* by Charles Darwin
- 1872 Sixth edition of *The Origin of Species*
- 1876 *Darwiniana* by Asa Gray (1810-1888)
- 1882 Death of Charles Darwin
- 1883 Francis Galton (1822-1911) coins the term "Eugenics"
- 1885 August Weismann (1834-1914) presents the Continuity of the Germ-plasm Theory
- 1887 *The life and letters of Charles Darwin, including an autobiographical chapter* edited by Francis Darwin (1848-1925)
- 1889 Francis Galton presents the Law of Ancestral Heredity
- 1891 Discovery of Java Man by Marie Eugene Dubois (1858-1940)
- 1894 *Materials for the Study of Variation* by William Bateson (1861-1926)
- 1896 James Mark Baldwin (1861-1934) presents the "Baldwin Effect"
- 1897 William Thomson, Lord Kelvin, advances with a new estimate on the age of the Earth: between 20 and 40 million years
- 1900 Mendel's laws are independently "rediscovered" by Hugo de Vries (1848-1935), Carl Correns (1864-1933) and Erich von Tschermak (1871-1962)
- 1901-1903 *Die Mutationslehre* by Hugo de Vries
- 1902 *Mutual Aid: A Factor of Evolution* by Peter Kropotkin (1842-1921)
- 1903 Wilhelm Ludwig Johannsen (1857-1927) introduces the distinction between genotype and phenotype
- 1904 Nelson Ernest Rutherford (1871-1937), based on the new knowledge of radioactivity, discredits Lord Kelvin's reduced estimates on the age of the Earth
- 1908 Establishment of the Hardy-Weinberg law
- 1909 Centenary of Charles Darwin's birth and the 50th anniversary of the first publication of *The Origin of Species*. Cambridge is the main stage of the celebrations, gathering scientists and dignitaries from many different countries
- 1909 Constantin Mereschkowsky (1855-1921) introduces the concept of Symbiogenesis
- 1909 Discovery of the Burgess Shale by Charles Walcott (1850-1927)
- 1911 Lucien Cuénot (1866-1951) introduces the concept of Pre-adaptation
- 1912 Alfred Wegener (1880-1930) presents the Theory of Continental Drift
- 1912 Discovery of the Piltdown Man

- 1915 *The Mechanism of Mendelian Heredity* by Thomas Hunt Morgan (1866-1945), Alfred H. Sturtevant (1891-1970), Calvin B. Bridges (1889-1938) and Herman Joseph Muller (1890-1967)
- 1919 *The Physical Basis of Heredity* by Thomas Hunt Morgan
- 1924 *The Origin of Life* (in Russian) by Alexander Ivanovich Oparin (1894-1980)
- 1925 Discovery of the Taung Baby by Raymond Dart (1893-1988)
- 1925 Scopes Monkey Trial in Dayton, Tennessee
- 1929 *The Origin of Life* by John Burdon Sanderson Haldane (1892-1964)
- 1929 Trofim Lysenko (1898-1976) rejects the validity of Mendelian Genetics and of chromosome theory
- 1930 *The Genetical Theory of Natural Selection* by Ronald Aylmer Fisher (1890-1962)
- 1932 “The roles of mutation, inbreeding, crossbreeding, and selection in evolution” by Sewall Wright (1889-1988)
- 1932 *The Causes of Evolution* by J. B. S. Haldane
- 1937 *Genetics and the Origin of Species* by Theodosius Dobzhansky (1900-1975)
- 1940 *The Material Basis of Evolution* by Richard B. Goldschmidt (1878-1958)
- 1942 *Evolution: The Modern Synthesis* by Julian Huxley (1887-1975)
- 1942 *Systematics and the Origin of Species* by Ernst Mayr (1904-2005)
- 1944 *Tempo and Mode in Evolution* by George Gaylord Simpson (1902-1984)
- 1950 *Variation and Evolution in Plants* by George Ledyard Stebbins (1906-2000)
- 1953 Discovery of the double helix by James Watson (b. 1928) and Francis Crick (1916-2004)
- 1954 New estimates indicate that the Earth is 5 or 6 billion years old
- 1955 Henry Bernard D. Kettlewell’s (1907-1979) studies on predation in peppered moths demonstrated the effects of natural selection in the wild
- 1955 *Le phénomène humaine* by Pierre Teilhard de Chardin (1881-1955)
- 1959 Centenary of the *The Origin of Species* and the 150th anniversary of Charles Darwin’s birth. Chicago is the centre of the major celebrations, gathering scientists and dignitaries from around the world
- 1964 “The Genetical Evolution of Social Behaviour” by William Donald Hamilton (1936-2000)
- 1968 Motoo Kimura (1924-1994) proposes the Neutral Theory of Molecular Evolution
- 1972 “Punctuated Equilibria: An Alternative to Phyletic Gradualism” by Niles Eldredge (b. 1943) and Stephen Jay Gould (1941-2002)
- 1974 Discovery of Lucy by Donald Johanson (b. 1943)
- 1975 *Sociobiology: The New Synthesis* by Edward Osborne Wilson (b. 1929)
- 1975 Beginning of the Sociobiology Debate
- 1976 *The Selfish Gene* by Richard Dawkins
- 1978 *On Human Nature* by Edward O. Wilson

- 1981 Arkansas Creation Trial
- 1982 Centenary of Charles Darwin's death
- 1996 Pope John Paul II accepts evolution, with the exception of the human soul
- 2005 Dover Intelligent Design Trial
- 2009 Several events take place all around the world celebrating the 150th anniversary of *The Origin of Species* and the bicentenary of Charles Darwin's birth

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