

The Context of Science in Society, 1859-1920

Year	Science	Music	Visual Art/Ballet/Writing	Political/Social	New Zealand
1859	Darwin - The Origin of Species; Alfred Wallace		Realism continues to develop; Courbet Millet John S Mill 'On Liberty' Dickens 'Great Expectations'	Mill's grwoing influence in economic-political circles	
1860	Thomas Huxley , Darwin's Bulldog, comment to Archbishop Wilberforce				Taranaki Maori wars begin; end 1869
1861	Pasteur - Germ theory	Wagner's Tannhauser scandal in Paris	George Elliot 'Silas Marner' John S Mill 'Utilitarianism'	President Lincoln elected USA American Civil War begins	
1862			Manet 'Déjeuner Sur L'Herbe' & nude 'Olympia' - caused quite a stir	Bismark Prime Minister of Prussia	
1863		Bizet 'Les Pecheurs de Perles'	Victor Hugo 'Les Miserables' Salon de Refuse; incl Manet, Courbet		Waikato Maori war begins, end 1864 NZ Settlement Act - authorised taking of Maori land Battle of Orakau First land confiscations under the Settlement Act
1864					NZ govt. takes full responsibility for Native Affairs Native Land Court established Wellington replaces Auckland as Capital
1865	Mendel discovers inheritance basis for future genetics	Schubert 'Unfinished' Symp		American Civil War ends	
1866			Dostoyevsky 'Crime and Punishment'		Te Kooti imprisoned
1867		Johann Strauss II 'The Blue Danube'	Karl Marx 'Das Kapital'	Dominion of Canada promulgated	First Maori MPs
1868					Various Treaty meetings
1869	Mendeleev ; Periodic Table of elements		Early impressionism; Monet, Renoir Sisley, Pissarro		
1870	Electricity begins to replace steam Steel industry thrives	Wagner 'Die Walkure'	Jules Verne 'Twenty Thousand Leagues Under the Sea'	Napolean III , Emporer 1852-1870 Franco-Prussian War - Defeat	
1871					
1872					
1873	Maxwell Theory of Electromagnetism	Tchaichovsky Symphony No. 2 Rimsky-Korsakov 'Ivan the Terrible' Verdi 'Requiem'	Degas 'Ballet Rehersal' Tolstoy 'Anna Karenina' 1873-77		
1874		Mussorgsky 'Pictures at an Exhibition' Tchaikovsky Piano Concerto No.1			
1875					
1876	Gibbs founded Thermodynamics			Accelerating European colonial expansion	
1877	Thomas Edison invented phonograph		Rodin 'The Age of Bronze' at the Salon		
1878					
1879					Universal Suffrage for all males over 21
1880	Panama Canal construction begins		Emil Zola 'Nana'	First Boer War, Transvaal	
1881					
1882		Tchaikovsky 1812 Overture Wagner 'Parsifal'			First Maori deputations to the Queen
1883	Krakatoa erupts		Nietzsche 'Thus Spoke Zarathustra' 1883 to 1885		
1884		Brahms Symphony No.3	Seurat (pointillism) Sunday Afternoon on the Island of La Grande Jatte Mark Twain 'Adventures of Hucklberry Finn'		
1885		Brahms Symphony No.4	Early Post-Impressionism; Van Gogh 'Potato Eaters' Degas 'The Spanish Dance' bronze Emil Zola 'The Masterpiece'		
1886	Tarawera erupts, June 10		Van Gogh moves to Paris - early Expressionism Gauguin 'Four Breton Women' Cezanne 'Mont Sainte-Victoire'		
1887	Michelson & Morley experiments				

Realism

Impressionism

Post Impressionism

European nations entering into one conflict after another

1888

1889 **Strauss** 'Don Juan'

1890

1891 **Mahler** Symphony No.1

1892

1893 **Dvorak** Symphony No.3 New World

1894 **Debussy** 'Prelude a Lapres-midi Dun Faune'

1895 **Rontgen** discovers X-rays

1896 **Becquerel** discovers radioactivity
Freud; 1st use of the term 'Psychoanalysis'

1897

1898 **Marie Curie** discovers Po & Ra, gives the name to 'radioactivity'

1899 **Elgar** 'Enigma Variations'
Schoenberg 'Transfigured Night'

1900 **Freud** 'The Interpretation of Dreams'

1901

1902 Singer **Caruso** makes 1st phonograph recording

1903

1904 **Puccini** 'Madame Butterliy'

1905 **Einstein** publishes 'Special Relativity'

1906 1st program of voice & music broadcast in USA
Mahler Symphony No.8

1907 **Rutherford** discovers isotope half-life

1908

1909 **Schonberg** atonal '3 Piano Pieces'

1910 **Jung** 'Symbols of Transformation'
R Vaughan Williams 'Sea Symphony'
Faure - Song Cycle'

1911 **Rutherford's** Nuclear Theory of Atom
Irving Berlin 'Alexander's Ragtime Band'

1912 **Wegener**; Theory of Continental Drift; generated considerable controversy
Ravel 'Daphnis et Chloe'

1913 **Bohr**; Model of the atom
Stravinsky 'The Rite of Spring' ballet score - Scandal in Paris

1914 **R Vaughan Williams** 'A London Symphony' overtones of looming conflict

1915

1916 **Einstein** 'General Relativity'

1917 **Prokofiev** 'Classical Symphony'

1918

1919 **Rutherford** splits the atom

1920 **Eddington**; Discovers fusion of H & He in stars
Holst 'The Planets'

Romantic

Van Gogh 'Starry Night over the Rhone', 'Café Terrace at Night'

Eiffel Tower completed

Hardy 'Tess of the Durbervilles'

Gauguin 'Spirit of the Dead Watching' (Tahiti)

Munch 'The Scream'

Dreyfus affair - wrongly accused of treason against France, sent to Devil's Island. **Zola** championed his cause

Impressionism

Picasso 'The Old Guitarist'

Matisse 'Woman with a Hat'

Derain 'London Bridge'

Picasso 'Les Demoiselles d'Avignon'

Matisse 'Red Room (Harmony in Red)'

Expressionism

Kandinsky 'Garden of Love II'

Duchamp 'Nude Descending a Staircase No.2'

Diaghilev produces 'The Rite of Spring' ballet; audience in uproar!

Balla 'Abstract Speed+Sound' Futurist

Duchamp begins 'The Bride Stripped Bare by Her Bachelors, Even (The Large Glass)'

Frances Hodgkins 'Belgian Refugees'

Mondrian 'Composition A' (de Stijl)

ism

Adolf Hitler born

Post Impressionism

2nd Boer War begins Oct. 11

Queen Victoria dies; **Edward VII** reigns

2nd Boer War ends 31 May; included troops from the 'Colonies'

1905 Revolution of Russia

Fauves

First territorial claims laid on Antarctica

Peary reaches the North Pole

Edward VII dies; **George V** reigns

Amundsen reaches the South Pole

Symbolism/Expressionism/Cubism/Art Nouveau

Futurism/De Stijl/ Dada

WWI begins July 28; social, political upheaval

Galipolli campaign begins April 25; ended Jan 9, 2016

October Revolution in Russia

USA joins WWI

WWI ends Nov 11

Soviet Republic named

Treaty of Versailles signed - Crippling German reparations

League of Nations founded

Hitler renames NAZI party

Britain establishes the Iraqi Regime

Continued European and American Imperial Expansion

First Maori congress **Kotahitanga**

Universal Suffrage for all women over 21;

Brunner Mine accident kills 65 miners

NZ claims Cook Islands

Commonwealth of Australia - NZ declines to join

NZ adopts the official flag

Dominion of New Zealand promulgated

NZ - 100,000 soldiers

18000 deaths

41000 casualties

Galipolli Campaign

Somme campaign

Messine campaign

Passchendale campaign

Tahupōtiki Wiremu Rātana founded Ratana movement

Women gain right to stand for Member of Parliament