

The History of Evolutionary Psychiatry

{ Hannah Sheftel

- ⌘ Key figures in 20th century UK
- ⌘ Factors that affected the development of Evolutionary Theory in Psychiatry in the UK in the 20th Century

⌘ It is only toward the end of the 20th century that the study of the evolutionary component of mental processes began emerging as a scientific discipline.

Evolutionary Psychiatry

- ⌘ People and issues who were active in the 20th Century only
 - ⌘ Includes people from other countries who wrote in British Journals and collaborated with British figures
- ⌘ People who affected the development of the subject

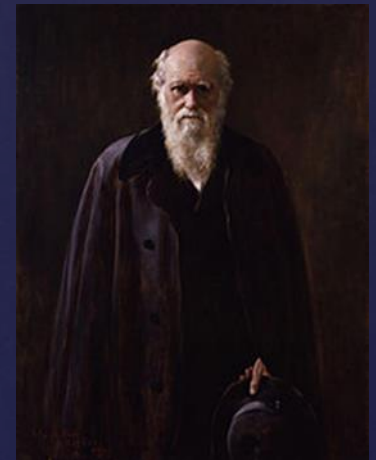
Missing People

- ⌘ The association with eugenics
- ⌘ The factionalisation of work in mental health
- ⌘ The transition from psychoanalysis to biological psychiatry
- ⌘ Limitations of evidence
- ⌘ Ethical controversies
- ⌘ Sociobiology, anti-psychiatry and anti-evolution

Key Factors

- ⌘ 1809-1882
- ⌘ Developed the theory of natural selection and continuity between animals and humans both physically and mentally
- ⌘ Author of
 - ⌘ On the Origin of Species
 - ⌘ The descent of Man
 - ⌘ Expression of Emotions in Man and Animals
- ⌘ Believed psychiatric patients, like young children, were able to experience pure emotions because they could not filter or control them

Charles Darwin



⌘ *Pain or suffering of any kind, if long continued, causes depression and lessens power of action: yet it is well adapted to make a creature guard itself against any great or sudden evil.*

⌘ *In the future I see open fields for far more important researches. Psychology will be securely based on the foundation already well laid by Mr Herbert Spencer, that of the necessary acquirement of each mental power and capacity by gradation. Much light will be thrown on the origin of man and his history."*

Darwin on mental illness

- ⌘ 1744-1829
- ⌘ Argued for a natural tendency for species to progress towards a higher form and believed in the inheritance of acquired characteristics
- ⌘ Lamarckianism was finally discarded in the Modern Synthesis of evolutionary theory
- ⌘ Inheritance of acquired traits

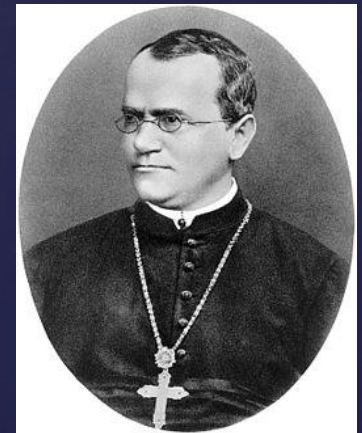
Jean-Baptiste Lamarck

- ⌘ 1820-1903
- ⌘ Wrote *Principles in Psychology* in 1855, almost 5 years before the publication of *Origins*
- ⌘ Lamarckian and degenerationist
- ⌘ Praised for introducing evolutionary biology into psychology
- ⌘ Hierarchical development applied to the human mind as well as the body.
- ⌘ Evolutionary process as one that moved from homogeneity and simplicity towards complex heterogeneity

Herbert Spencer

- ⌘ 1822-1884
- ⌘ Father of modern genetics
- ⌘ Developed the laws of Mendelian Inheritance
- ⌘ The importance of his work not fully recognised until the 20th century
- ⌘ Incorporated into Modern Synthesis

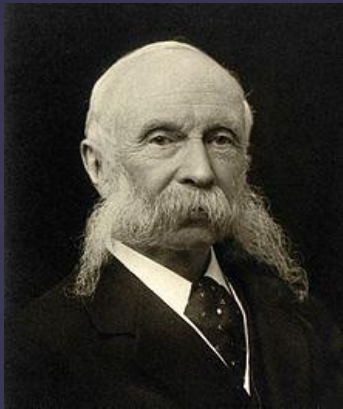
Gregor Mendel



- ⌘ 1835-1918
- ⌘ Psychiatrist: worked to persuade the GMC to include mental illness in the medical curriculum
- ⌘ His lectures were studied by Darwin when he was researching for *Expressions*
- ⌘ Lamarckian: he believed in degeneration theory but advocated against it being used in a “meaningless” way

Henry Maudsley





- ⌘ 1840-1938
- ⌘ Psychiatrist
- ⌘ Member of the Edinburgh Phrenology Society
- ⌘ Correspondent with Darwin
- ⌘ Collaborated with Darwin on *Expression of Emotions*
- ⌘ Degenerationist
- ⌘ Expressed concerns that idiots, imbeciles and criminals continued to have children commenting that he felt society was running short of the right sort of babies
- ⌘ Crichton-Browne also suggested that the cortical centres of the brain the most highly evolved were the first to suffer from insanity

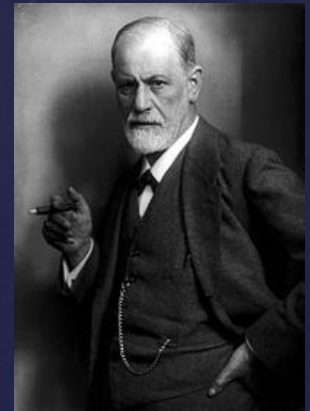
James Crichton-Browne

- ‡ 1856-1926
- ‡ Dementia Praecox
- ‡ 1908: *On the Question of Degeneration*
- ‡ Linked the rise in the popularity of eugenics to the rapidly increasing number of people suffering from mental illness who were confined to institutional care
- ‡ Life-experiences such as alcohol misuse and syphilis infection can affect developing germ cells and impinge on future generations

Emil Kraepelin

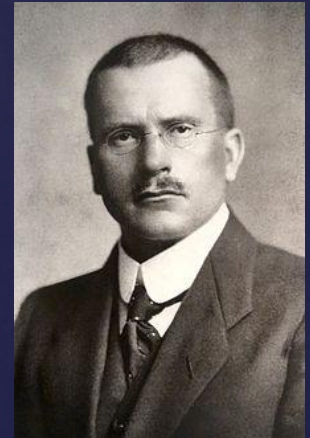
- ⌘ 1856-1939
- ⌘ Neurologist and father of psychoanalysis
- ⌘ Drew inspiration from the work of Charles Darwin which explained behaviour in evolutionary terms
- ⌘ Initially believed physiology and evolution determined behaviour.
- ⌘ Tried to use evolutionary theory in order to lend his own theories credibility
- ⌘ Based many of his evolutionary ideas on sexuality in the ice-age
- ⌘ Influenced by Lamarck, Spencer and Haeckel.
- ⌘ Degenerationist

Sigmund Freud



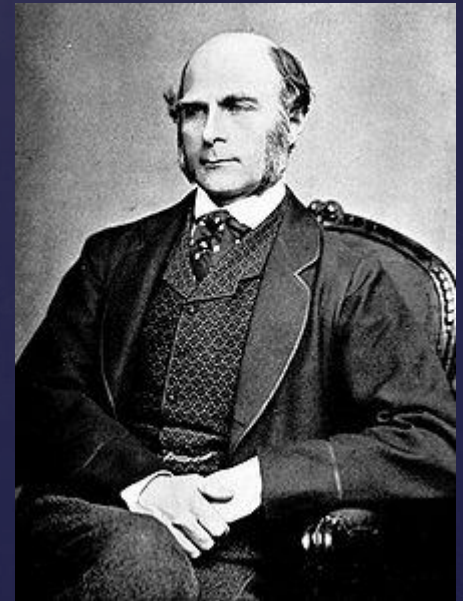
- ‡ 1875-1961
- ‡ Psychiatrist and psychoanalyst
- ‡ Interest in evolutionary psychology
- ‡ Ideas are now felt to mesh well with some versions of modern day understandings of natural selection and evolution
- ‡ Formulation of archetypes and the collective unconscious mingles psychoanalytic and evolutionary concepts
- ‡ By the 1920s both Jung and Freud had abandoned their early links with evolutionary theory

Carl Jung



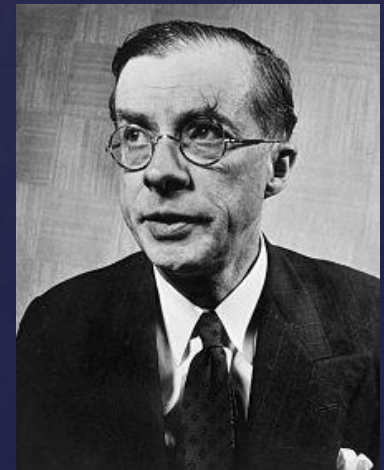
- ⌘ 1882-1911
- ⌘ Polymath-psychologist, eugenicist and proto-geneticist
- ⌘ Wrote *Hereditary Genius*
- ⌘ Coined the terms “eugenics” and “nature vs nurture”
- ⌘ Founded psychometrics and differential psychology
- ⌘ Rejected Lamarckian ideas

Francis Galton



- ⌘ 1887-1975
- ⌘ Evolutionary biologist, eugenicist
- ⌘ Evolution by small steps rather than jumps
- ⌘ Modern Synthesis: separating Darwinian theory from social Darwinism, Lamarckianism and degenerationism
- ⌘ Synthesis of genetic and population ideas
- ⌘ Encouraged Bowlby to consider ethology in the field of psychoanalysis
- ⌘ Identified race as a social rather than a genetic construct after WW2
- ⌘ Genetics of Schizophrenia
- ⌘ Argued for voluntary sterilisation and the use of birth control

Julian Huxley



- ‡ 1890-1962
- ‡ Evolutionary biologist, eugenicist and geneticist
- ‡ One of the three principal founders of population genetics
- ‡ Fishers Runaway-the evolution of exaggerated male ornamentation through sex selection as a result of female preference
- ‡ Part of the Eugenics Society which campaigned for the right to have voluntary sterilisation on eugenic grounds
- ‡ He worked to combine Mendelian and Darwinian theory.

Ronald Fisher



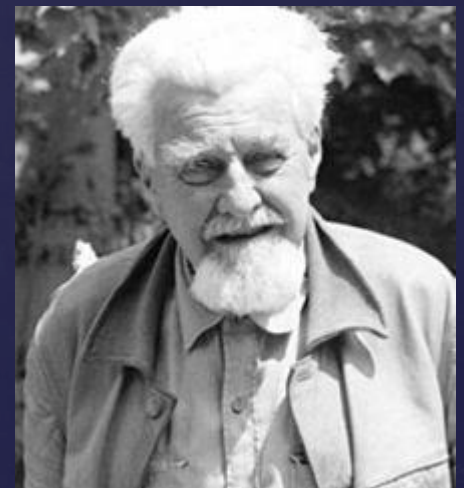
- ⌘ 1904-2005
- ⌘ Biologist
- ⌘ His work led to the modern synthesis of Mendellian Genetics, systematics and Darwinian evolution
- ⌘ Genetics of Schizophrenia with Julian Huxley
- ⌘ Eugenicist
- ⌘ *Schizophrenia as a Genetic Morphism* 1964

Ernst Mayr



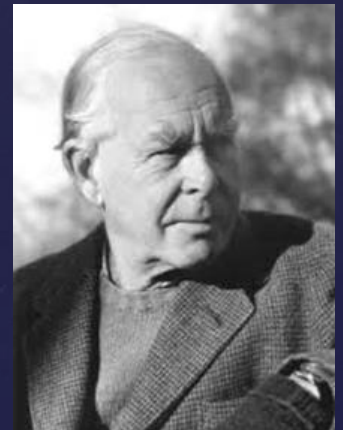
- ‡ 1903-1989
- ‡ Zoologist, ethologist and ornithologist
- ‡ Studied instinctive behaviour in animals
- ‡ Worked with Tinbergen
- ‡ Frequently cited in psychological textbooks
- ‡ Member of the Nazi party during WW2

Konrad Lorenz



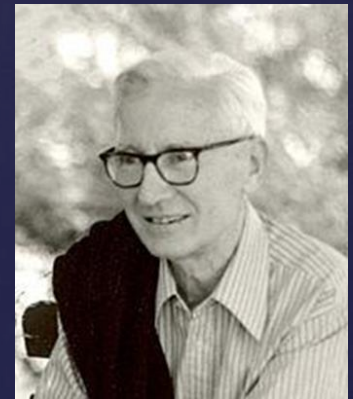
- ⌘ 1907-1990
- ⌘ Psychologist, psychiatrist, psychoanalysis
- ⌘ Attachment theory
- ⌘ Theories regarding the existence of a species specific bias to forming attachment as well as individual difference as part of attachment theory
- ⌘ Emphasised the importance of evolutionary thinking when looking at human development
- ⌘ EEA-environment of evolutionary adaptation

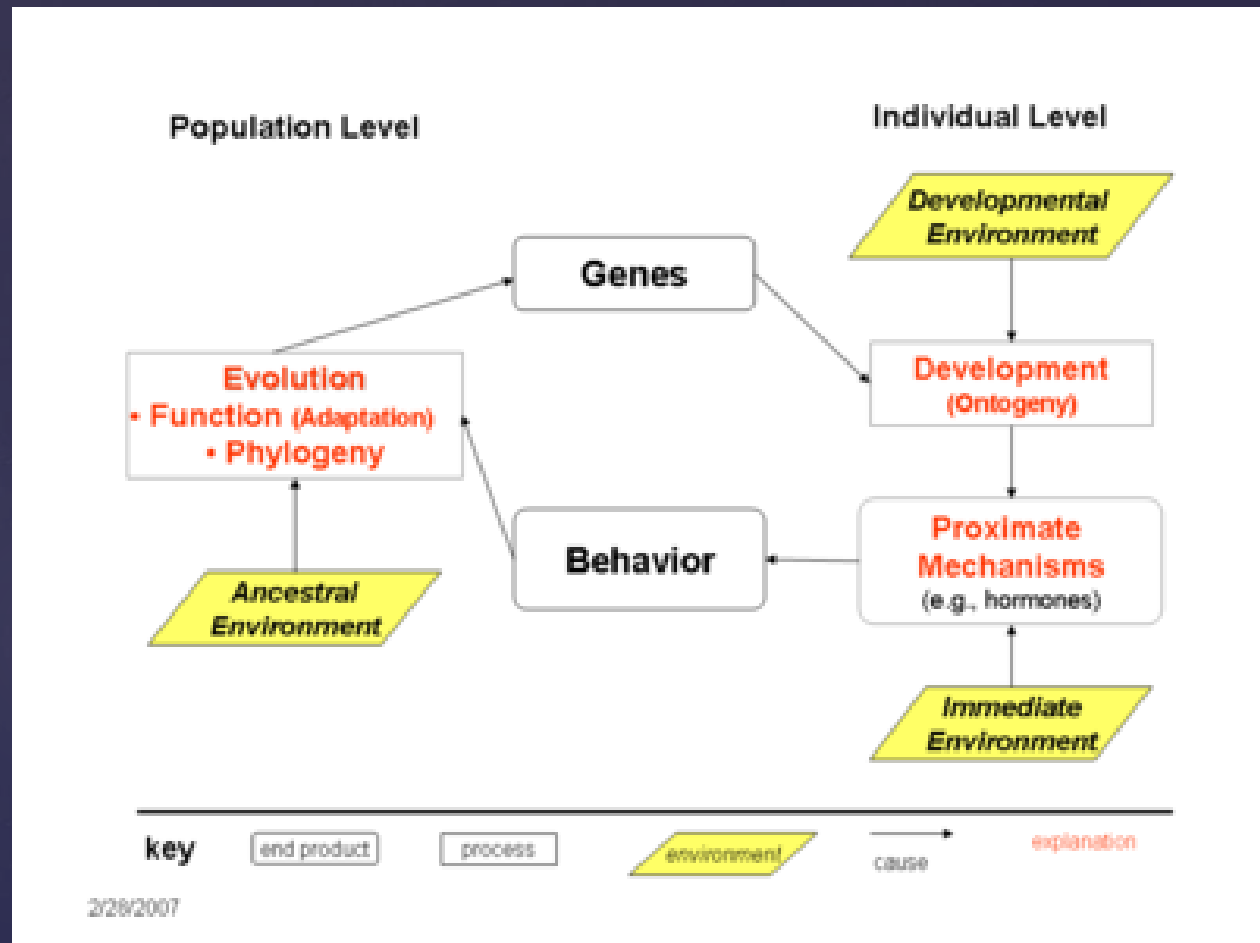
John Bowlby



- ↳ 1907-1988
- ↳ Biologist and ethologist
- ↳ Won the Nobel Prize in Physiology and Medicine in 1973 along with Karl von Frisch and Konrad Lorenz for their work on individual and social behaviour and patterns in animals
- ↳ 4 questions of animal behaviour
 - ⌘ Causation (mechanism)
 - ⌘ Development (ontogeny)
 - ⌘ Function (adaptation)
 - ⌘ Evolution (phylogeny)
- ↳ Autism controversy: refrigerator mother

Niko Tinbergen





Tinbergen's model

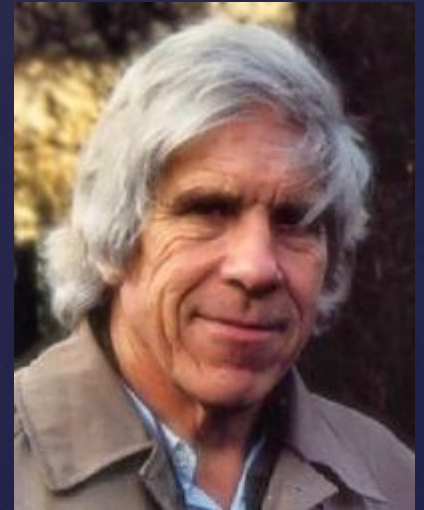
- ⌘ 1926-2010
- ⌘ Evolutionary biologist
- ⌘ Wrote *The Dawn of Darwinian Medicine*
- ⌘ Developed the theory of antagonistic pleiotropy to explain senescence
- ⌘ Development of the gene-centric view of evolution
- ⌘ 1960: wrote about the evolutionary principles of self-interest
- ⌘ One of the first to use the phrase Darwinian Medicine as a synonym for Evolutionary Medicine

George Williams



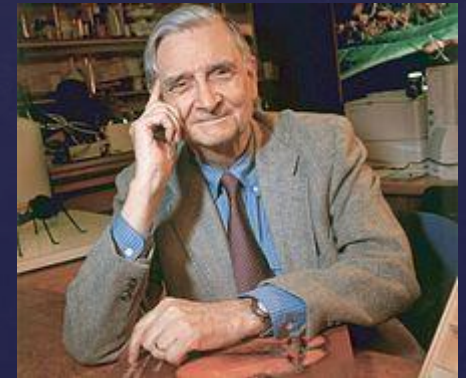
- ⌘ 1936-2000
- ⌘ Evolutionary biologist
- ⌘ Work on gene-centric evolution
- ⌘ Work on evolution of sex, spite and social behaviour
- ⌘ 1964 theory on Kin Selection explained the evolutionary basis for altruistic behaviour
- 1960s argued that group selection would be an extremely weak evolutionary force

William D Hamilton



- ⌘ b. 1929
- ⌘ Biologist
- ⌘ Expert on ants- research on social behaviour which is then applied to humans
- ⌘ Ethological sociobiology
- ⌘ Argues that the human mind is shaped as much by genetic inheritance as by culture
- ⌘ Sociobiology claimed to represent a synthesis of ethology, population and cellular biology, neurophysiology, behavioural ecology and comparative psychology.

E O Wilson



- ⌘ 1967 : *The Dominance of Hierarchy and the Evolution of Mental Illness* in the Lancet
- ⌘ One of the key works in the development of evolutionary theory in psychiatry.
- ⌘ Mental disorders including schizophrenia and depression were adaptive mechanisms that helped our ancestors cope with group hierarchies

Jonathan Price

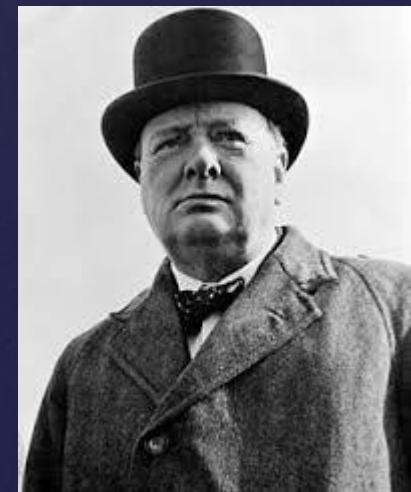
Nazism

- ⌘ Forced sterilisation of people viewed as mentally and physically unfit in 1930s and 1940s
- ⌘ Estimated 4000,000 people between 1934 and 1937
- ⌘ Positive eugenics of encouraging Aryan women to have children

Britain

- ⌘ Many prominent members pre-WWI including Winston Churchill
- ⌘ The 1913 Mental Deficiency Act proposed the mass segregation of the "feeble minded" from the rest of society
- ⌘ Compulsory sterilisation legislation never passed

Eugenics



- ⌘ Opponents have confused the two
- ⌘ Increasing unacceptability of eugenics in the 2nd half of the 20th century led to the stigmatisation and rejection of any scientific movement that had the appearance of promoting or resurrecting eugenic ideas including Evolutionary Psychiatry.
- ⌘ Creationists blame Darwin's theories on the rise of eugenics and the evils associated with it

Eugenicists and Evolutionary Psychiatry

- ⌘ Divisions between different ideological groups within Psychiatry
- ⌘ Hostility towards alternative theoretical models and the formation of a unifying model
- ⌘ Evolutionary Psychiatry both entirely biological and not biological enough

Factionalisation of Mental Health

- ⌘ Evolutionary Psychiatry link to origins of Psychoanalysis
- ⌘ Declined in popularity from 1920s
- ⌘ Psychiatric genetics in the middle of the century criticised as lacking scientific rigour and linked back to the eugenics movement.

Psychoanalysis vs Biological Psychiatry

- ⌘ First clinicians in the children's department conceived of the treatments within an evolutionary framework with a particular focus on instinct theory
- ⌘ By the end of the 1920s the focus shifted towards the classification of disorders.
- ⌘ Psychoanalysis began to be used on younger children and was simplified. Therapy began to centre round the idea of learned behaviour rather than instinct and social psychiatry began to dominate.
- ⌘ As a result increasingly less time was devoted to studying conditions as individual to the patient and to explain those conditions through evolutionary development

Maudsley Hospital

- ⌘ Overstatement of evidence in genetics of schizophrenia
- ⌘ Just so stories
- ⌘ Little evidence to support sociobiology work with regards to humans

Limitation of Evidence

- ⌘ Emergence of Ethology, Sociobiology and Evolutionary Psychiatry from 1960s onwards
- ⌘ Significant opposition to the idea of using evolutionary theory in this context
- ⌘ Criticism: sexist and racist and justified repression.
- ⌘ Attacked by both creationists and scientists.
- ⌘ Many of its most fervent critics came from the realms of the social scientists: hostile to the incorporation of biological thinking into their work
- ⌘ Ethical controversies associated with the use of evolutionary theory in the understanding of human behaviour such as the Refrigerator Mother

Ethical controversies and Sociobiology

- ⌘ Lady Ashley: on the subject of humans being descended from apes: "Let's hope it's not true; but if it is true, let's hope that it does not become widely known."
- ⌘ WWII highlighted the need for social control and antipsychiatry, in contrast, promoted self-discovery.
- ⌘ Szasz linked psychiatric abuses to its role in social psychiatry.
- ⌘ In 1965 Jurgen Ruesch based a rationale for social psychiatry on evolutionary principles but this helped to contribute to psychiatry's negative reputation and led to the rejection of evolutionary theory as a tool to understand psychiatric disorders.
- ⌘ In the 1970s questions were being raised about the value of treating behaviours perceived as disorders

Anti-Evolution and Anti-Psychiatry

⌘ For further information on this topic please follow the link below to access a copy of my dissertation:

<https://sites.google.com/site/hrbsheftel/home/evolutionary-psychiatry>

Any Questions?