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 evolutional 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
Charles Darwin

- 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
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
Jean-Baptiste Lamarck

- 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.
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
Henry Maudsley

- 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
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-Brown
Emil Kraepelin

- 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
Sigmund Freud

- 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
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
Francis Galton

- 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
Julian Huxley

- 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
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
Konrad Lorenz

- 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
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
Eugenics

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
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
Limitation of Evidence

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