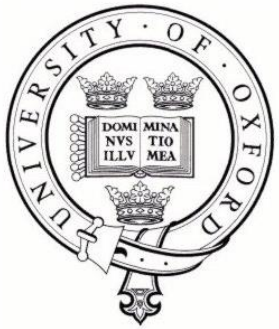


SOCIOLOGICAL THEORY

Michaelmas 2025

Dr Michael Biggs

Theoretical Perspectives

8. Functionalism and cultural evolution

http://users.ox.ac.uk/~sfos0060/SociologicalTheory.shtml

Functionalist explanation

- **f**unctionalist: explain something by its *beneficial consequences*
  - heart's function is to circulate blood (William Harvey, 17th century)
  - taboo against eating certain foods e.g. while pregnant—due to food poisoning (Henrich 2016)
    - 'I maintain that the food which is forbidden by the Law is unwholesome' (Maimonides, 12C)
- **F**unctionalism: 'to provide a satisfactory explanation of social life we need to show how the phenomena which are its substance come together to place society in harmony with itself and with the outside world' (Durkheim 1895)
  - inequality is functional for society (Davis and Moore 1945)—like biological explanation at the level of the species
  - reforms are functional for the system of oppression, e.g. welfare state, sexual liberation, racial desegregation *(lecture 7)*

Problems

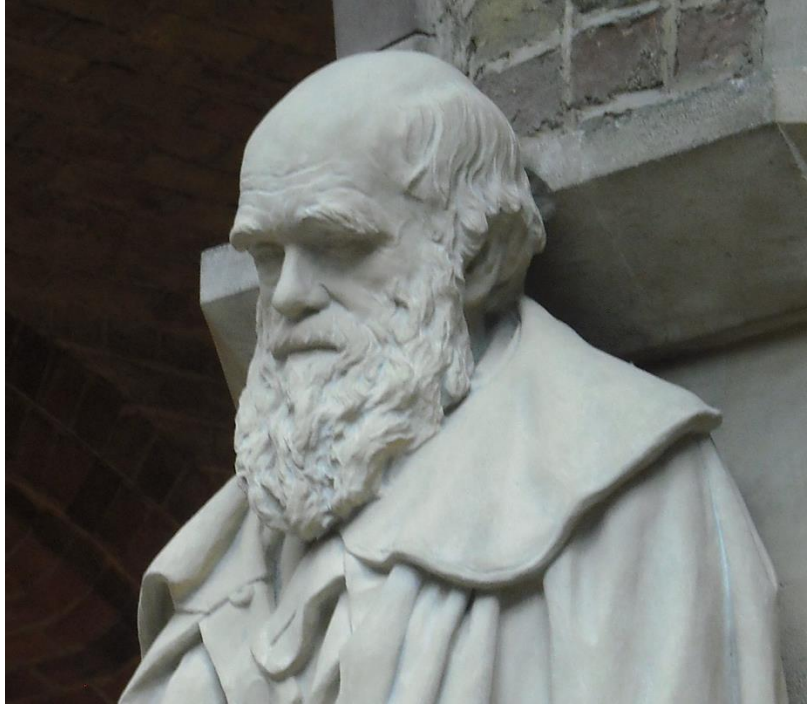
1. Tautology: how can *beneficial* be defined? what functions are really necessary for societies (or social systems)?
2. Mechanism: how do consequences become *causes*? what is the feedback mechanism?

Providing a feedback mechanism

- Why do democratically elected politicians pursue policies favourable to capitalists? (Block 1977)
  - politicians depend on economic growth, for tax revenue and for public support
  - capitalists will decide not to invest if unfavourable policies are implemented—or even if atmosphere is uncongenial (Keynes 1936)
  - feedback mechanism does not require collective action or class consciousness: unintended consequences of individual decisions

Functionalism can also be justified by evolution …

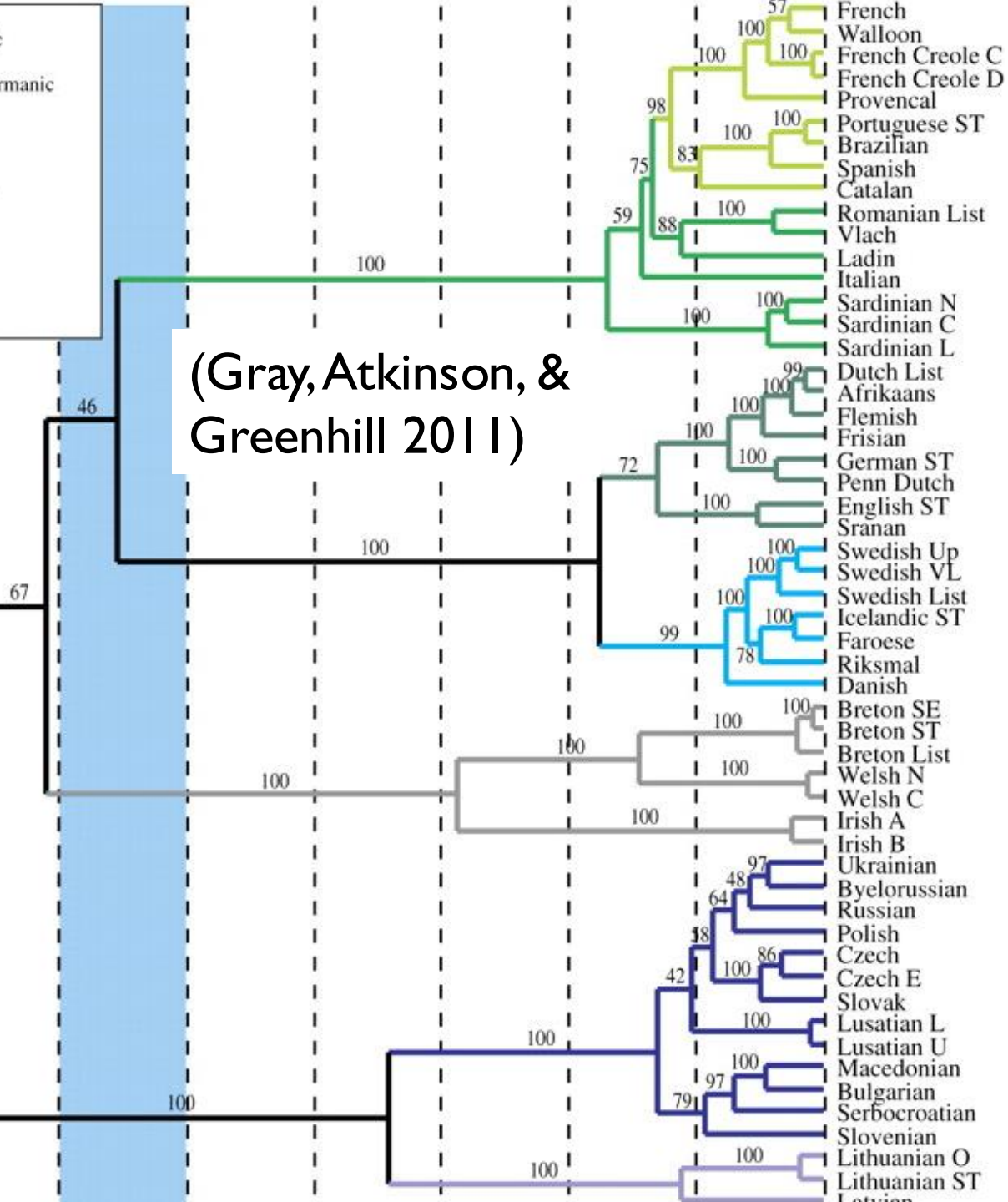
Darwin's natural selection



Three elements:

- variation—genetic mutation, blind with respect to fitness
- heritability—genes
- differential replication—genes making the fittest organisms are most likely to be replicated

- Can we find a similar 'evolution of culture' (Pitt Rivers 1875)?
  - cultural evolution ≠ evolutionary psychology
    - coevolution (Durham 1991), e.g. lactase persistence evolved several times



Phylogeny first illustrated by language (18C)

- ‘The formation of different languages and of distinct species, and the proofs that both have been developed through a gradual process, are curiously the same’ (Darwin 1871)

Heritability

1. Children inherit parents' culture as well as genes …

   but also inherit from others—genetic and cultural lineages diverge

   - drive to imitate
   - biased transmission (Richerson & Boyd 2005)
     - content-based: rational belief formation *(lecture 1)*
       - evolution emphasizes trial and error
     - frequency; similarity; prestige; age
2. Macro-social units persist over time
   - states, firms, religions
   - organizations recruit individuals and inculcate culture

Selection: reproduction and extinction of people

- Fertility
  - U.S. conservative religions grow more by higher fertility than by recruitment (e.g. Hout, Greeley, & Wild 2003)
- Rate of extinction in pre-state societies in Papua New Guinea: 1/10 social groups (defined by warfare) per generation
  - 500–1000 years minimum for trait to spread by differential replication of societies (Richerson & Boyd 2005)

Moriori

Chatham Islands, from 13th/14thC

- abolish lethal combat and cannibalism
- enjoined by ancestor after bloodshed

In 1835, 500 Maori arrive from Wellington in ship

- claim ownership of land and people, kill two

Council of 1000 Moriori men

- younger: prohibition only applies to us, must fight
- older chiefs: moral imperative; following law is source of *mana*
- decide to share land with invaders

As Moriori return home, 300 killed and eaten; others enslaved

- last full descendant died 1933

Portrait of a Moriori.
TE KARAKA NGA MUNANGA PAWA.

Evolution favouring cooperation

What happens when individual interest diverges from group?

- ‘a tribe including many members who, from possessing in a high degree the spirit of patriotism, fidelity, obedience, courage and sympathy, were always ready to give aid to each other and to sacrifice themselves for the common good, would be victorious over most other tribes’ (Darwin 1871)
  - but every individual has an incentive to defect! (Hobbes)
- Some institutions and values promote cooperation—could they be subject to group selection (Richerson et al. 2016)?
  - between-group variation / total variation
    much higher for culture than genes
    - group benefit / individual cost required is not too high

Functionalist account of religion (Wilson 2002)

- Rise of Christianity (Stark 1996)
  - Roman cities are chaotic and deadly
  - Christians help each other during epidemics

    (i) they are more likely to survive—natural selection

    (ii) pagans are impressed and thus convert
- 19C U.S. communes (Sosis & Bressler 2003)
  - secular 3x more likely to dissolve
  - religious impose more costs e.g. celibacy

Religion as ‘virus of the mind’ (Dawkins 1993)

- ideas that incite action that (i) harms the (genetic) interests of the individual, but (ii) replicates the ideas
- religious martyrdom

—contrast value-rationality [lecture 3]!

Georges du Mesnil de La Tour
St Sebastien Attended by St Irene
(1634-43)

Institutions cultivating selection

- Capitalism
  - firms compete with each other for customers and investment
- Science (Hull 1988)
  - harnesses self-interest of individual scientists: desire for credit, awarded through citation
  - balances heritability (need to cite predecessors) and variation (reward given for primacy); ensure publication of results

- scientific ideas
  - variation not undirected but intentionality insufficient
  - replicated through teaching and citation
  - via scientists, interact with reality (their environment); the best proliferate, the worst go extinct
    - no one tries to disprove their own ideas; falsification happens because competing scientists have an interest in defeating their rivals

Selection processes are *inefficient* but *effective*

Problems

- How to measure ‘adaptedness’?
  - inherent superiority: Arabic numerals and 0 facilitate calculation (Jablonka & Lamb 2005)
  - technology depends on other factors, e.g. extinction of Norse in Greenland (Dugmore et al. 2012)
- Difficult to find equivalents of genes (Aunger ed. 2000; Jablonka & Lamb 2005)
  - meme: unit of information in the brain (Dawkins 1982)
  - behaviour or idea?
  - how many memes to define Christianity?

Summary

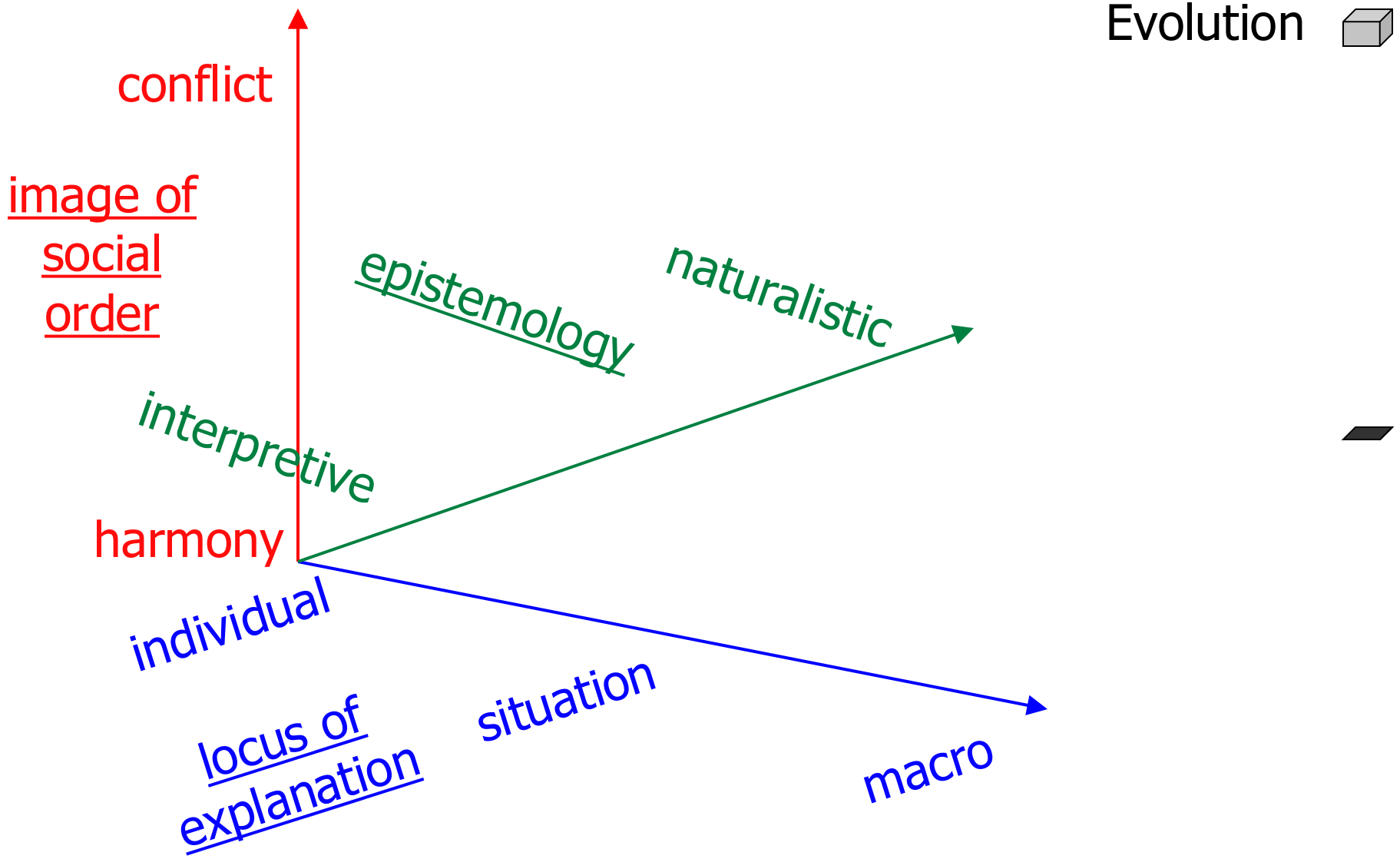
- Evolution can justify functionalism
- Differential replication of culture by (i) adoption, including migration, (ii) reproduction and extinction of people
- Technology (economic and military) is easier to analyze than values and institutions (cooperation among individuals)
- Evolution is harnessed by institutions like science

Virtues:

- 'population thinking' (Richerson & Boyd 2005)—**variation** not just mean/'ideal type'
- phylogenetic or 'tree thinking' (Gray, Atkinson, & Greenhill 2011)
- returns to big questions like religion and long-term historical change

Sociological Problems (Hilary Term)

1. Micro and macro (Dr Lynn Schneider)
2. Collective groups: ethnicity, nationality, and race (Dr Kasimir Dederichs)
3. Strategic interactions, games, and trust (Dr Ozan Aksoy)
4. Governmentality and totalitarianism (Dr Colin Mills)
5. Norms (Dr Ozan Aksoy)
6. Collective action (Dr Jonathan Lusthaus)
7. Gender(Dr Colin Mills)
8. Violence and protection (Dr Jonathan Lusthaus)


Evolution
conflict
image of social order
epistemology
naturalistic
interpretive
harmony
individual
locus of explanation
situation
macro

Questions

- ‘An important function of social institutions in societies such as Britain or France or the USA is to maintain white supremacy.’ Do you agree?
- Is it sufficient to explain an institution in terms of its function?
- Can functionalist explanations used in biology be imported into the social sciences?
- Are social norms always functional for solving problems of collective action?
- Do societies ‘evolve’?
- Are there any features of modern societies that could be considered evolutionary ‘adaptations’?
- Can ‘memes’ explain anything?
- How do theories of cultural evolution explain the existence of diverse cultures?

Charles Darwin, *The Descent of Man, and Selection in Relation to Sex* (1871)
A. Lane Fox [Pitt Rivers], 'On the Evolution of Culture', *Notices of the Proceedings ... of the Royal Institution of Great Britain ...* 7 (1875)
Andrew J. Dugmore et al., 'Cultural Adaptation, Compounding Vulnerabilities and Conjunctures in Norse Greenland', *Proceedings of the National Academy of Sciences*, 109 (2012)
William H. Durham, *Coevolution: Genes, Culture, and Human Diversity* (1991)
Rodney Stark, *The Rise of Christianity* (1996)
David Sloan Wilson, *Darwin's Cathedral* (2002)
Russell D. Gray, Quentin D. Atkinson, & Simon J. Greenhill, 'Language evolution and human history: what a difference a date makes', *Proceedings of the Royal Society B: Biological Sciences* (2011)
Peter J. Richerson & Robert Boyd, *Not By Genes Alone: How Culture Transformed Human Evolution* (2005)
Peter Richerson et al., 'Cultural Group Selection Plays an Essential Role in Explaining Human Cooperation: A Sketch of the Evidence', *Behavioural and Brain Sciences* 39 (2016)
Michael Hout, Andrew Greeley, and Melissa J. Wilde, 'The Demographic Imperative in Religious Change in the United States'. *AJS* 107 (2001)
Michael King, *Moriori: A People Rediscovered* (2000)
David L. Hull, *Science as a Process: An Evolutionary Account of the Social and Conceptual Development of Science* (1988)
David L. Hull, *Science and Selection: Essays on Biological Evolution and the Philosophy of Science* (2001)
Joseph Fracchia & R. C. Lewontin, 'Does Culture Evolve?', *History and Theory* (1999)
Eva Jablonka & Marion J. Lamb, *Evolution in Four Dimensions* (2005)
Richard Dawkins, *The Extended Phenotype: The Long Reach of the Gene* (1982)
Richard Dawkins, 'Viruses of the Mind', Bo Dahlbohm (ed.), *Dennett and His Critics: Demystifying Mind* (1993)
Alex Mesoudi, Andrew Whiten, & Kevin L. Laland, 'Towards a Unified Science of Cultural Evolution', *Behavioral and Brain Sciences* 29 (2006)
Joseph Henrich, *The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter* (2016)