

# Historical Reflections on the 'Two Cultures' Controversy (1959-1962)

Bob Clarke, January 2021

In May 1959, the scientist and novelist C P Snow delivered a lecture in Cambridge, entitled '*The Two Cultures*' – ostensibly they were the Sciences and the Humanities. He argued for a great expansion of scientific education in Britain, but he also deplored the lack of mutual understanding between the '*Two Cultures*'. In February 1962 the Cambridge literary scholar F R Leavis responded to Snow via another Cambridge lecture in which he attacked Snow ferociously in terms that most commentators found shocking. As both lectures were published, the controversy became very well-known across the English-speaking world. Through this talk we will attempt to understand the controversy within a broader historical context, delving back as far as 1798. We will see that '*Science vs. The Humanities*' is not the only *Cultural Polarity* that is being addressed in this debate. In our discussion we can reflect on how the individual issues that separately exercised Snow and Leavis retain their relevance today.

## 1. C P Snow and F R Leavis on the 'Two Cultures'.

- **C P Snow** (1905 – 1980) delivered his **Rede Lecture** at Cambridge University in May 1959: '*The Two Cultures*'.
- **F R Leavis** (1895 – 1978) responded in February 1962 in the **Richmond Lecture** at Downing College, Cambridge: '*Two Cultures? The Significance of C P Snow*'. For him Snow represented a dominant reductive instrumentalist, culture that he deplored, and he was horrified that Snow's lecture was being set as an essay topic in schools. In his talk Leavis attacked Snow in explicit *ad hominem* remarks that, once published, shocked most of his readers.
- To understand the separate issues here it is fruitful to place them into a historical context.

## 2. A Broader Historical Context

- Already in 1950, **Leavis** had noticed *Two Essays* written by **John Stuart Mill** (1806-1873) in the years 1838-40. They were on **Jeremy Bentham** (1748-1832) and **Samuel Taylor Coleridge** (1772-1834). Leavis re-published them together in a book '*Mill on Bentham and Coleridge*' with his own editorial content, advocating it as essential reading for Cambridge undergraduates. Mill: '... the two men are each other's "completing counterpart"' We can say that they represent **Utilitarianism** and **Romanticism** respectively.
- **Bentham** was the great advocate of **Utilitarianism**. After his death & **The Great Reform Act** (1832) the reformed parliament took up Utilitarian policies, e.g. *The Poor Law Amendment Act* of 1834 established so-called 'Victorian' Workhouses which were decried by Liberals, Socialists and Romantics as inhuman in many ways.
- **Romanticism** was a reaction against the social deprivations of **Industrial Revolution** and the **Reductive Scientific Rationalization of Nature** promoted by the 'Newtonian' mechanistic physics of the day.
- It stood against *Mechanism*, *Instrumental Reason* and crass *Utilitarian* ways of treating people as *Units*.
- **John Keats** (1795-1821) *Lamia* (1819): '*Philosophy will clip an angel's wings ... Newton unweaves the rainbow ...*'. **William Blake** (1757-1827): the '*Dark Satanic Mills*' in '*Jerusalem*' the preface to '*Milton a Poem*' (1810). "*Art is the Tree of Life. Science is the Tree of Death*" from Blake's *Laocoön* image (1820).
- **Philosophy and Ethics**: Two major systems of ethics emerged from the 18<sup>th</sup> C Enlightenment: one was **Utilitarianism** and the other was **Kantian Deontology** which emphasised human dignity and respect. **Coleridge** travelled to Germany in 1798-9 specifically to study the writings of German poets, Romantics and of **Immanuel Kant** (1724-1804). Among the writings he studied was the *Naturphilosophie* of **Friedrich Schelling** (1775-1854). Coleridge adopted ideas from both Kant and Schelling in his own philosophy. Until his death in 1834 Coleridge's served as a **major conduit** of German Philosophical and Romantic Ideas into Britain.
- **Romantic Science**: It is a mistake to see all of Romanticism as "anti-Science" - **Humphry Davy** (1778-1829), the great chemist, was a friend of Coleridge. Davy was himself a **poet in the Romantic style**. **Coleridge** and **Davy** saw **Chemistry** as *more fundamental than Reductionist Mechanistic Physics*. It dealt with the live forces of nature, not dead atoms – it was a *Romantic Science*.

- Coleridge joined *The British Association for the Advancement of Science* (BAAS). At the 1833 BAAS meeting, Coleridge was involved in the very coining of the word 'Scientist'.
- **Thus**, the issue in the first half of the 19<sup>th</sup> Century is **not Snow's** 'Science and the Humanities' – it is rather the issue that Leavis is concerned with: the enhancing or belittling of our moral concepts of the human condition.
- The choice: respect for *human dignity, creativity, moral values*, vs. *reductionism, mechanism, instrumental reasoning, Humean & Benthamite over-simplistic models of the human psyche & 'crass Benthamite technocratic Utilitarianism'*. Leavis took Snow as a representative of, or rather an unthinking product of, the latter.

### 3. Ongoing 19th Century Critique

- **J S Mill** (1806-1873) recast Utilitarianism (1861), attempting to make it less harsh.
- **Charles Dickens' 'Hard Times'** (1854) is his critical commentary on Bentham's Utilitarianism. It is the only novel by Dickens that is covered in Leavis' major work of literary criticism 'The Great Tradition' (1948).
- **Augustus Welby Pugin** (1812-1852) 'Contrasts' (1836): 'Contrasted Residences for the Poor': *Romantic Gothic Christian Monasteries/Alms-houses vs. Utilitarian Panopticon Workhouses!*
- **John Ruskin** (1819-1900), *The Stones of Venice* (1851-3): in contemporary Classical architecture *Creativity* had been stolen from the craftsmen. See also 'Unto this Last' (1862): 'There is no Wealth but Life'.

### 4. The Later 19<sup>th</sup> Century.

- Not really until about 1860s-70s can we talk about a distinction or a real conflict between the *Sciences* and the *Humanities*. It is only then that a substantial Scientific profession is established.
- **Darwin's 'Origin of Species'** in 1859 accelerated this divide. By the 1880s, **Thomas Henry Huxley** (1825-1895), was a leading anthropologist and comparative anatomist. He became known as '**Darwin's Bulldog**' for his public support for Darwin and was a major voice supporting the development of *Scientific Education* in Britain.
- In a series of public lectures **T H Huxley** and **Matthew Arnold** (1822-1888), the poet, cultural critic and inspector of schools, engaged in discussions on the nature of '**Culture**' and the role of science in relation to it. They were actually close friends but found themselves disagreeing publicly on the *Role of Science in Culture!*
- In 1867-9 **Arnold** had written 'Culture and Anarchy'. 'Culture' was 'the best that has been known and said in the world'. 'Culture [...] is a study of perfection'. For Arnold, culture was concerned solely with the humanities.
- **Huxley** promoted the rights of the Science over Humanities. Arnold argued that one must cultivate the critical spirit through literature and the arts. He saw Sciences as part of Civilization but not as part of a Culture that can allow human beings to know themselves better. Huxley believed that a national commitment to science was an urgent need for the bettering of the human lot.
- **Matthew Arnold** in his poem *Dover Beach* invoked the '**Sea of Faith**' (1867). He regrets the ongoing loss of Faith. The *Sea of Faith* is ebbing! In the 19<sup>th</sup> Century these debates often pitched faith against forms of Atheism, but note that **Thomas Huxley** was **Agnostic**. In fact, it was he who actually coined the term '**Agnostic**'.

### 5. Into the 20<sup>th</sup> Century

- In Britain, sadly, attacks on religion become frankly **Scientistic**: e.g. **John Tyndall** 1874 - his lecture at BAAS in Belfast was an 'attack on organized religion in the name of science' (from Bragg's BBC 'Culture' podcast).
- **H G Wells** (1866-1946) studied with **Huxley**. 'From 1890s his writings are manifestos [for science]' (Shaffer)!
- **Wells** invented the *Samurai* in his SF novel 'A Modern Utopia' (1905): a scientific ruling elite. Wells thought that science would eventually marginalise other forms of knowledge.
- **Snow** and **Wells** (40 years difference in age) were friends & met often in Cambridge (see Afanasyava, 2002). Snow took on board much of Wells' position on Science in the 1930s, but by 1959 in the '**Cold War**', science was already being funded as never before! Was there an element of *disingenuity* in his arguments?
- **Leavis's** Anti-Snow Argument in 1962: the dominant Utilitarian political and technical ethos in our society ignores & overrides humanity. It de-humanises us! The material well-being it can give us is to be welcomed, but it is not the be-all and end-all of human existence! What really matters for us is being ignored by the body politic. The

Utilitarian, Instrumentalist arm of our Western Polity has achieved *Hegemony* - it is the *Dominant Discourse*. We are no longer *Human Beings* or even *Individuals* or *Persons* in this society, we are *Statistical Units* or *Consumers*.

- He sees Snow as a 'portent' of this malaise. "What for – what ultimately for? What do men live by?" he asks!
- **Harold Wilson's** government in 1964 set up the *Ministry of Technology*. Snow became Lord Snow & second-in-command, promoting the '*White Heat of Technological Revolution*'. But Snow also attempted a '*Two Cultures*' reconciliation: he managed to set up of *Science Studies* and *Liberal Studies* courses in Science faculties.
- The **Robbins Report** (1963) advocated new Universities and the conversion of Technical Colleges to Universities - in general (to Leavis's horror) *without Humanities* and *English Departments*!!
- The 1960s were a *Scientistic* time, but *Postmodern* disillusionment later set in. It is more difficult for scientists to obtain funding today than in the 1960s. Everything must have Impact! How do the Humanities show 'Impact'?

## 6. Into the 21<sup>st</sup> Century

- We have had ministers questioning the 'Utility' of History. UWE proposed the closure of its Philosophy Dept!
- We have seen that Leavis was not alone in his reaction: cries from the heart from the Humanities communities have been perennial since the Enlightenment.
- Nevertheless, mutual understanding between the '*Two Cultures*' is probably better today than in the 1960s. Good quality Science programs on the TV, good popular Science books, e.g. from **Carlo Rovelli**. See also **Tom Stoppard's 'Arcadia'** - a play that treats the '*Two Cultures*' divide in a comic way, whilst helping to heal it.
- Today many voices urge us to return to '**Enlightenment Values**'. But which? Compare **Steven Pinker's** and **Susan Neiman's** concepts of *Enlightenment*: Utility-inspired vs. Kant-inspired?

## References

### Key References:

**C P Snow**, '*The Two Cultures*', with an *Introduction* by **Stefan Collini**, (Cambridge, 1998, reprinted 2019)

**F R Leavis**, '*Two Cultures?, The Significance of C P Snow*', with an *Introduction* by **Stefan Collini**, (Cambridge, 2013)

**John Stuart Mill**, with an *Introduction* by **F R Leavis** '*Mill on Bentham and Coleridge*', (1950, now Cambridge, 2012)

**Matthew Arnold**, '*Culture and Anarchy*', essays in *Cornhill Magazine* 1867-8: <http://public-library.uk/ebooks/25/79.pdf>

**Thomas Henry Huxley**, '*Science and Culture*' (1880) <https://sourcebooks.fordham.edu/mod/1880huxley-scicult.asp>

**Lionel Trilling**, '*Science, literature & culture: A comment on the Leavis–Snow controversy*'. *Commentary*, June 1962, pp 461–477.

**Melvyn Bragg + Guests**, *The Value of Culture*, BBC Radio 4 Podcast Series, 31 Dec 12 – 4 Jan 13, esp. '*The Two Cultures*', 2<sup>nd</sup> Jan 13 (online - downloadable from BBC).

### Utilitarianism:

**J Bentham**, '*An Introduction to the Principles of Morals and Legislation*' (1789), '*The Constitutional Code*' (1830-1841).

**Paul Roach**, '*Bentham's Utilitarianism in Victorian England*', from [Bentham's Utilitarianism in Victorian England \(tripod.com\)](http://Bentham's Utilitarianism in Victorian England (tripod.com))

**Utilitarianism**: *Stanford Encyclopedia of Philosophy*, <https://plato.stanford.edu/entries/utilitarianism-history/>

**The Workhouses Website**: <http://www.workhouses.org.uk/>

**Poor Law Amendment Act of 1834**: see, e.g. Wiki. [https://en.wikipedia.org/wiki/Poor\\_Law\\_Amendment\\_Act\\_1834](https://en.wikipedia.org/wiki/Poor_Law_Amendment_Act_1834)

**M A Crowther**, '*The Workhouse*', *Proceedings of the British Academy*, **78**, pp. 183-194, 1992.

### Romanticism:

**Humphry Davy**: '*A Discourse, Introductory to a Course of Lectures*', delivered in the Royal Institution, 21st Jan 1802, <http://knarf.english.upenn.edu/Davy/davy2dis.html>

**Vinod Lakshmiopathy**, '*Kant and the Turn to Romanticism*', *Kritike* **3**, No. 2 (December 2009) pp. 90-102.

**Andrew Cunningham & Nicholas Jardine** (Eds.), '*Romanticism and the Sciences*', (CUP 1990).

**Mike Jay**, *The Atmosphere of Heaven: The Unnatural Experiments of Dr Beddoes and His Sons of Genius*, (Yale University Press, 2009). (On Thomas Beddoes' *Pneumatic Institution* in Bristol where Coleridge & Davy met).

**David Knight**, *Humphry Davy: Science and Power*, (Oxford: Blackwell, 1992).

**Richard Holmes**, *The Age of Wonder*, (London: Harpenden, 2008).

**Richard Holmes**, 'Humphry Davy and the Chemical Moment', *Clinical Chemistry*, **57**:11, (2011).

**Trevor H Levere**, *Poetry Realized in Nature - Samuel Taylor Coleridge and Early Nineteenth-Century Science*, (Cambridge, 1981).

### Early 19<sup>th</sup> Century (mostly pre-1859):

**John Stuart Mill**, with an Introduction by **F R Leavis** *Mill on Bentham and Coleridge*, (Cambridge, 2012), originally (London: Chatto & Windus, 1950), see also **George P. Landow**, 'Bentham and Coleridge: Seminal Minds' on *The Victorian Web* (online).

**Charles Dickens**, *Hard Times*, (1854). Recent edition with an 'Analytic Note' by **F R Leavis** (Penguin English Library).

**A W Pugin**, *Contrasts*, (1836 & 1841, recent reprint: Cambridge 2015).

**John Ruskin**, *The Stones of Venice*, (1851 – 1853); *Unto this Last* (1862) (on the *Wikisource* website).

### Later 19<sup>th</sup> Century:

**Matthew Arnold**, *Culture and Anarchy* (1867-8), (Oxford World Classics, 2009), <http://public-library.uk/ebooks/25/79.pdf>

**Matthew Arnold**, 'Science and Literature', The 1882 Rede Lecture, Cambridge, <https://mathcs.clarku.edu/huxley/comm/19th/Arnold.html>

**Thomas Henry Huxley**, 'Science and Culture' a lecture delivered in 1880 at the opening of Mason College, Birmingham (now U of Birmingham), Modern History Sourcebook, Fordham University <https://sourcebooks.fordham.edu/mod/1880huxley-scicult.asp>

**Matthew Arnold** and **Thomas Henry Huxley**, **David A. Roos** (ed), 'Two Speeches at the Royal Academy, 1881 and 1883', *Modern Philology*, (U Chicago Press), Vol. **74**, No. 3 pp. 316-324, Feb, 1977.

### 20<sup>th</sup> Century:

**H G Wells**, *A Modern Utopia*, (1905).

**C P Snow**, *The Two Cultures*, with Introduction by **Stefan Collini**, (Cambridge, 1998, reprinted 2019)

**F R Leavis**, *Two Cultures?, The Significance of C P Snow*, with Introduction by **Stefan Collini**, (Cambridge, 2013)

**Lionel Trilling**, 'Science, literature & culture ... on the Leavis-Snow controversy'. *Commentary*, June 1962, pp 461-477, (online).

**Nina Afanasyeva**, 'C.P. Snow and H.G. Wells', *The Wellsian*, **25**, pp. 52-58, 2002.

**Michael Bell**, 'F.R. Leavis', (London : Routledge, 1988)

**Don Cupitt**, *The Sea of Faith*, (BBC, 1984).

**Tom Stoppard**, *Arcadia*, (1993, recent edition: London, Faber and Faber, 2009) See esp. pg. 83.

### 21<sup>st</sup> Century:

**Susan Neiman**, *Moral Clarity*, (London, Bodley Head, 2009) and *Why Grow Up?*, (London, Penguin, 2014).

**Steven Pinker**, *The Better Angels of our Nature*, (Penguin, 2011) and *Enlightenment Now*, (Penguin, 2018)

**John Gray**: 'Steven Pinker is wrong about violence and war', *The Guardian*, 15<sup>th</sup> March 2015. (Downloadable).

**Terry Eagleton**, *Culture*, (Yale University Press, 2016).

**Steve Fuller**, Humanities Forum lecture at UMBC, 'Snow, Two Cultures and the Science War', October 2009, on YouTube, <https://www.youtube.com/watch?v=XVZgNfDQR2A> (University of Maryland, Baltimore County).

**Stefan Collini**, *The Lionel Trilling Seminar*, Columbia University, "What, Ultimately, for?" Trilling, Leavis, and the Limits of Cultural Criticism', Tuesday, April 23, 2013, on YouTube: [https://www.youtube.com/watch?v=kFi\\_bizk-MI](https://www.youtube.com/watch?v=kFi_bizk-MI)

**Melvyn Bragg + Guests**, *The Value of Culture*, BBC Radio 4 Podcast Series, 31 Dec 12 – 4 Jan 13, esp. 'The Two Cultures', 2<sup>nd</sup> Jan 13 (online - downloadable from BBC).