



King's Research Portal

Document Version

Publisher's PDF, also known as Version of record

[Link to publication record in King's Research Portal](#)

Citation for published version (APA):

Edgerton, D. (2014). Doomed to failure? Wilson's 'white heat of the scientific revolution' and renewal of Britain. *British Politics Review*, 9 (3), 12-13.

Citing this paper

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

General rights

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Research Portal

Take down policy

If you believe that this document breaches copyright please contact librarypure@kcl.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.

Doomed to failure? Wilson's 'white heat of the scientific revolution' and renewal of Britain

By David Edgerton

'In all our plans for the future, we are re-defining and we are re-stating our Socialism in terms of the scientific revolution. But that revolution cannot become a reality unless we are prepared to make far-reaching changes in economic and social attitudes which permeate our whole system of society. The Britain that is going to be forged in the white heat of this revolution will be no place for restrictive practices or for outdated methods on either side of industry.'



David Edgerton is a Professor of Modern British History at King's College, London. One of Britain's leading historians, Edgerton has published a number of works over 20 years which challenge conventional analyses of science and technology.

The quote is from Harold Wilson's speech to the Labour Party conference on 1 October 1963. It was his first speech to conference since becoming party leader upon the death of Hugh Gaitskell. A year later he would find himself in 10 Downing Street. The 'white heat' speech came to be seen as the very essence of Wilson's ideological renewal: a brave new world where talent and hard work would be rewarded and where British society would break with old class barriers in a giant leap towards modernisation.

In the standard view Wilson distanced him from the traditional working-class collectivism of the left as well as attacking the traditionalism and inherited privileges of the right. His was a voice speaking to the rising middle class, in favour of rational organisation of society and progress through scientific improvement. Wilson's reputation as prime minister hinges to a large extent on whether he managed both to reorient the Labour Party towards this new middle class and whether he did manage to modernise the British economy.

The speech was much more interesting than this analysis suggests, though it is hard to see this. It is full of ludicrous analyses of the potential of technical change. In his speech Wilson claimed that 'the essence of modern automation is that it replaces the hitherto unique human

functions of memory and of judgment'; computers now commanded 'facilities of memory and of judgment far beyond the capacity of any human being or groups of human beings who have ever lived'. As a result, the 'programme-controlled machine tool line' could 'without the intervention of any human agency' produce a 'new set of machine tools in its own image'; they had acquired 'the faculty of unassisted reproduction'.

This argument was hardly original; rather it is a recurring one throughout a post-war era of technological change. Thus, rather than showing a particularly prescient political leader, it demonstrates that when it comes to those elusive and confusing notions of "science" and "technology", intelligent people spoke much the same nonsense they do today. Rubbishy techno-futurism encapsulated in brain-rotting clichés is still the way elites want us to think about these matters. It appeals to cynical politicians too – it suggests the past or present are no guide, we must move on, wipe our minds of what we know, ready for the brave new world of the future. In British politics techno-futurism has been the refuge of scoundrels. Wilson's speech was in part that of a cunning political operator, exploiting techno-futurism in just this way. It is why it has been recommended to more recent Labour leaders.



A new era? Wilson presented his case as one of political, social and industrial renewal.

But it also appeals because it is believed that Wilson put his finger on something vitally important that remains true today – that the British elite are speculators, financiers, aristocrats, hostile to the modern necessities of research, development, industrial modernisation. It is an argument that has been prevalent in criticism of Britain's economic decline from the Great War onwards, and it is a line that finds particular resonance on the left. From this perspective, class constrains talent; inherited privilege and outdated British institutions are a break on progress and social justice all at once, not least by restricting research and development (R&D).

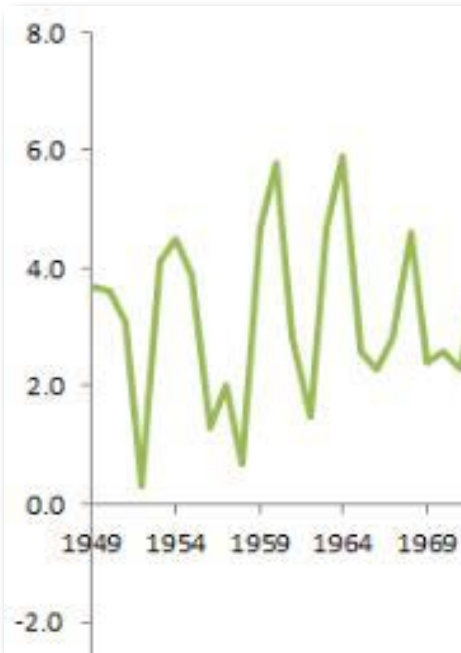
It is a position that could easily yield a conclusion that if Wilson failed to deliver, it was because the policies he adopted were simply not up to the task. Supporting research and development, waxing ecstatic about computers, expanding scientific education was never going to be enough.

But Wilson knew very well what the scientific intellectuals and other propagandists did not wish to be frank about: that the British state was by far the world's biggest investor in research and development other than the US and the USSR. He wanted to redirect this effort: as he put it, Labour would be 'mobilising Britain's scientific wealth for the task of creating, not the means of human destruction, but the munitions of peace'.

Yes, he wanted more scientists, and endorsed the myth there were not enough, but he campaigned against the so-called independent, so-called British, so-called deterrent and the overemployment of scientists on 'prestige' military projects that never got off the drawing board. In other words he wanted to reform the British state, not by putting science and technology into it, but by redirecting its already massive technical effort, most of which was tied up in over-inflated British warfare state.

The 'white heat' speech also embraced another radical policy – hostility to the common market. Many Labour people were hostile to the rampant consumerism of the affluent society, and supportive of the poor of the world, particularly in the Commonwealth. Wilson pressed these buttons hard. What was needed, he said, was an 'increase in Britain's productive power', not 'some new gimmick or additive to some consumer product' which television adverts would 'tell us all to buy a little more of' when 'we did not even know we wanted [it] in the first place'. Here is, clearly, a break from the easy idealisation of increased consumption that had characterised the long 1950s.

It was very nice, Wilson said, to do research on colour television and bigger and better washing machines to sell in Dusseldorf, but instead 'we should be mass producing simple ploughs and tractors', and researching 'one or two horsepower steam engines, because that is what the world needs'. The scientific departments of the new



Stop-go-economy. Growth rates in Britain during the 1950s and 60s, based on numbers from the Office for National Statistics.

universities should be working on plant breeding, fertiliser, animal husbandry for the poor world, which should be supplied with transport equipment by otherwise redundant railway workshops.

How did the promises fare? Wilson was to shed most of the commitments above: the US Polaris missiles were bought and put into semi-British submarines; Britain sought entry to the Common Market once more, and there was no mass production of steam ploughs for the poor of the Commonwealth. But there were important novelties in research policy, the most important and the least understood being the use of military-style procurement for civil projects under a new and vast industry, energy and

defence procurement ministry called the Ministry of Technology. Wilson was long committed to creating such a ministry, and it was no gimmick. But the ministry quickly realised that the problem with the British economy was not the lack of R&D, or scientists, but something else, perhaps investment, or management. In other words, it realised that the techno-declivist theses that helped launch it were untenable. In other words, key theses which Wilson espoused, and many analysts then and now espouse, were, the government realised, wrong.

The 'white heat' was not a failed attempt to insert technocracy into British politics; it was rather an only partially successful attempt to redirect an existing technocratic state. On that score, the Wilson government met with a broad set of challenges that should not be reduced to inherited institutions and class but encompassed issues such as the dynamic between public and private sector and Britain's position in the world.

Alas, the speech is remembered, worse, celebrated, for its banalities and not its substance, and what Labour learned in office was consigned to the deep darkness where the truth about research policy is hidden. 'White heat' has become one of those pernicious clichés like the 'two cultures'. Where 'white heat' denotes government-inspired industrial modernisation, the 'two cultures' depict a counter-productive emphasis on the arts rather than natural sciences in British higher education. Both are clichés that have corrupted our understanding of the operation of knowledge and power in modern Britain. We need to stop using them and begin, at long last, to think freely from them.