

ENVIRONMENTAL HISTORY

Dam Controversy

Bill Luckin

The English Lake District holds a cherished place in the affections of huge numbers of national and international visitors. As much a cultural and literary construct as a pocket-sized region of unparalleled natural beauty, it epitomizes what is thought to comprise the unchanging in an ever more technological age. All the more so for northwestern Britons. The Lakes are located within an hour and a half's drive from the cradle of mercantile and industrial capitalism, centered on the great cities of Liverpool and Manchester, and the cluster of large and medium-size satellite communities that have rendered the region the most densely populated and motorway-ridden part of the United Kingdom. Britain, and particularly England—and even more so what Victorians christened the “new industrial districts”—have had good reason to protect indisputably nonurban space.

The alternative might have been an ever-expanding factory culture, or, later, as has too often been the case, burgeoning suburban fill-in between chunks of postindustrial wreckage. In a majority of the key northwestern centers themselves, the contemporary tasks of regeneration and greening have not been fully confronted. The Lake District, north Wales, and the Yorkshire Dales offer sanctuary. But too little attention has been given to large-scale investment in the public sphere and the regeneration of postindustrial communities that reproduce social, economic, and cultural inequality. As Bill Bryson memorably and glumly reported, “I arrived in Liverpool and they were having a litter festival” (1). Much remains to be done, but under the newly elected government, the watchword will be a reduction in public expenditure. The future looks unpromising.

Problems were different 150 years ago, although then, as now, complex variants of the town-country issue loomed large. These form one of the threads of

Harriet Ritvo's *The Dawn of Green*, a penetrating microstudy that mixes environmental, scientific, urban, and political history. Ritvo (a historian at the Massachusetts Institute of Technology) chronicles water-starved, late-19th-century Manchester's determination to convert tiny Thirlmere—north of imposing Windermere, south of gloriously mysterious Derwentwater—into the world's largest reservoir. In the massive “shock city” of early industrialism itself, urgent action was pondered and planned

by a progressive, though financially canny, council; a long-serving and dynamic town clerk; a clear-sighted Waterworks Committee; and a nationally eminent though controversial engineer, John Bateman. Not surprisingly, environmentally motivated opponents of the scheme were inspired by the spirit of William Wordsworth. Would-be revolutionary turned intensely conservative poet laureate, Wordsworth had protested the incursion of the railway into the sleepy market town of Keswick. Drunken day-trippers, he claimed, would devastate lake, fell, and forest. They should stay at home, sustain their own communities, and devote sparse spare time to self-education and moral improvement. The great poet and his bohemian-aesthete friends and relations—an in-turned and sexually and

morally troubled lot—played a key role in inventing the exclusive and excluding idea of elite landscape heritage in the Lakes.

Heaven knows what they would have made of the conversion of rugged little Thirlmere into a low-walled and mock-castellated memorial to Manchester's unstoppable industrial development and (even more galling to the city's urban rivals, who believed they too had a claim on Lakeland water) overweening sense of civic self-importance. Protesters believed (although this may have been a rural legend) that in a solemn act of nature-affirming romantic togetherness, Wordsworth and his group had carved their names on a rock near the south end of Thirlmere itself.

“Philistine” and utilitarian Manchester wasn't to be outdone. After the laying of the foundation stone for the reservoir's embankment in 1890, the mayor, the Waterworks Committee, and all other members of the council commemorated themselves with a notice board stylistically identical to those that warned Victorians what they could and couldn't do in public parks. (Ritvo's photograph of this plaque conveys the curious deadness of Thirlmere compared with the magical aliveness of the smaller, wilder Lakes.)

The opposition had been divided. Wordsworth's successors, notably the aging Thomas Carlyle and the splenetic and at times half-mad John Ruskin, railed against the project, but in a style that indicated they had failed to understand the main points at issue. Landowners took a different line and held out for the highest price per acre that Manchester could be persuaded to pay. Naturalists worried about the fate of trout, grayling, pike, and char. But cash-strapped baronets, embarrassed by regional depression during the final 30 years of the 19th century, bowed to the inevitable (although, again, at a more than acceptable price). Farmers haggled over rights of way, then gave in when the money was right. The motley Thirlmere Defence Association lacked the singularity of purpose and activist energy that stymies or gains invaluable concessions from powerful public authorities when major and socially destabilizing utility, housing, or industrial projects come on line.

“The dawn of green environmentalism”? In

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Manchester, Thirlmere, and
Modern Environmentalism
by Harriet Ritvo
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Dammed waters. Photochrom print of Helvellyn and Thirlmere, Lake District, from the 1890s.

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one sense, yes. The affluent and socially powerful did very nicely, thank you. Idealistic protectors of “nature,” heritage, and the status quo made little impact. By the later 20th century, Lakeland would be confronted by an altogether more serious problem: how could this pocket-sized paradise survive incessant tourist overkill? Perhaps Wordsworth hadn’t been entirely wrong about Keswick.

References

1. B. Bryson, *Notes from a Small Island* (Doubleday, London, 1995).

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ENERGY RESOURCES

Oil Peak or Panic?

David Lloyd Greene

Peak oil, a serious issue, is not about running out of oil. It is about rates: the rates of oil discovery and production, the rate at which demand grows, and the rate of technological change. The oil peakers’ contribution to understanding the world oil situation can be summed up as follows: rates matter as much or more than quantities, and geology matters as much or more than economics and technology. It is easy to caricature the oil peakers’ assessment as a mechanistic calculation about using up a fixed resource. It is also easy to caricature their opponents’ view as blind faith that markets and technology will overcome all problems. One of the things that makes Steven Gorelick’s *Oil*

Panic and the Global Crisis well worth reading is that he does neither. It is a book serious students of the world oil market should read, not because Gorelick has all the answers but because his account is well reasoned, well informed, and argued honestly, with respect for responsible opposing viewpoints.

Proponents of peak oil are sometimes referred to as “pessimists,” other times as “geologists.” Opponents are often called “optimists” or “economists.” Gorelick (a hydrogeologist at Stanford University) is clearly in the optimists’ camp, but not entirely.

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To keep the oil flowing. Floating rigs allow drilling and production in deeper waters.

This can be inferred by examining the table of contents: He devotes 26 pages to “The Historical Resource Depletion Debate,” whereas he gives 107 pages to “Counter-Arguments to Imminent Global Oil Depletion.” In the latter chapter, he provides ample historical evidence that despite the finiteness of global mineral resources, they tend either to become less scarce over time or to become obsolete. Declining rates of new oil discovery have been offset by an increasing ability to find more oil in existing reservoirs and to recover a greater fraction of the oil in place.

The vast majority of the counter-arguments countering oil peaking are well supported. But in my opinion, Gorelick is too dismissive of M. King Hubbert’s achievement. He characterizes as “not very accurate” Hubbert’s 1956 prediction of a 1965 peak in oil production in the coterminous United States because the peak did not occur until 1970. In 1956, U.S. oil production had been on a generally increasing path for over half a century. Given this trend, Hubbert’s prediction has to be judged substantially correct (which is not the case for his prediction of a global peak). It remains essentially correct despite the fact that his estimate of the total resource endowment was low, despite dramatic progress in the technology of finding and producing oil, despite far higher oil prices, and despite the discoveries of important new oil fields. Perhaps the prediction was a lucky guess, but I think there’s more than luck involved. It just isn’t feasible to continue increasing the rate at which conventional oil is produced until the last drop is pumped. Therefore, there must be a turning point.

But what is oil anyway? And what is a resource? Not surprisingly, much of the

argument over oil depletion is a result of how these terms are defined. Oil peakers focus on conventional oil. But, as Gorelick points out, there are relatively large quantities of unconventional fossil resources that can be converted to liquid hydrocarbon fuels at costs the world’s economy has demonstrated that it is willing to pay. Some of the costs cited in the book are overly optimistic: for example, petroleum from U.S. oil shale at \$22 to \$38 per barrel. Yet, the point is correct and well substantiated.

Nonetheless, expanding unconventional oil production won’t be easy and is probably undesirable. Energy companies find the development of unconventional resources a risky proposition for three reasons: high capital investment requirements, higher greenhouse gas emissions than conventional petroleum, and uncertainty about future oil prices. At what rate could or should the world expand production from unconventional sources?

Gorelick points out that oil production has already peaked in many regions of the world: “The U.S. is the largest oil-producing nation that has experienced peak oil production, but other countries have also followed a pattern of decline.... British Petroleum reports that there are at least 25 countries producing oil below their peak values by 20 percent or more.”

Given this, it is disappointing that the book does not explore in greater detail the implications for world oil supply of the growing number of declining regions. The International Energy Agency has studied this subject in depth and predicted not a peak but a plateau in non-Organization of the Petroleum Exporting Countries (OPEC) production, right about now. Not very different projections have been produced by ExxonMobil. A plateau in non-OPEC production implies increasing dependence on OPEC, a massive transition to high-carbon unconventional fossil resources, higher and more volatile oil prices, a transition to electricity or hydrogen guided by public policy, or a combination of the above. The timing, extent, and intensity of oil peaking will probably strongly influence whether the transitions are relatively easy or painful. *Oil Panic* demonstrates convincingly that in the long run there will be more oil and replacements for oil. But as John Maynard Keynes observed, “In the long run, we are all dead.” The transition from oil matters, and we need to understand it better.

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