China’s rapid economic growth over the past two decades has made it one of the world’s largest economies and an export powerhouse that has caused alarm from Asia to Europe to the US. The reason for this alarm is simple: by rapidly turning economic success into political clout, China is poised to become a 21st-century superpower.

A large part of China’s development is being predicated on science and technology. Last year, its 15-year “Medium to Long-term Plan for the Development of Science and Technology”, or MLP, called for 60 per cent of economic growth to be based on science and technology by 2020. To get there, investment in research and development must grow to 900 billion yuan ($115 billion), boosting the proportion of GDP spent on research from today’s 1.3 per cent to 2.5 per cent. What’s more, the MLP calls for the country’s reliance on foreign technology to fall from more than 50 per cent to below 30 per cent by 2020.

China is already no slouch at science: with more than a million scientists and engineers devoted to research and development, it ranks second only to the US – and is about to overtake it in the number of doctoral degrees China confers. When it comes to international publications China ranks fifth, above France, Italy and Canada.

Even so, this next great leap forward has its sceptics. Despite its remarkable economic development so far, and the nationalistic pride many Chinese take in it, the ability of China to sustain its growth is increasingly being questioned in Chinese policy circles and by foreign observers who take the trouble to look beneath the surface.

Will Hutton is one such. In The Writing on the Wall, Hutton, head of the UK think tank the Work Foundation and author of the bestselling The State We’re In, gives us the political economist’s take. And while he by no means gives science and technology centre stage, he does have an important argument to make about China’s relation to them.

Hutton reviews some of the best thinking about China’s superpower ambitions and capabilities, and concludes, with the sceptics, that the problems looming are so great that only profound institutional change will spare China a series of debilitating economic, environmental, social and political crises. He doesn’t stop there, though, Hutton also seeks to understand an emerging China in the context of a western world facing its own challenges of lost institutional effectiveness and incoherent values.

This is a very ambitious agenda, and, in spite of his often keen insights, Hutton’s success is mixed. The organisation of the book itself is a bit odd. The first half is devoted to China, the second to the US (plus a few passing references to the UK), with ruminations on political philosophy sandwiched in between.

In the China half, Hutton takes us on a quick tour through 3000 years of Chinese history, highlighting big questions such as why did the west modernise and not China? He introduces us to the achievements and debacles of Chinese socialism after 1949, and reviews the accomplishments and continuing dilemmas of the post-1978 reform era.

Then the focus of the book changes to an exploration of the strengths of western society and how many of these are now being lost. The message is that the west has nothing to fear from China if it can rediscover the sources of its own cultural and institutional vitality, and help China emulate them. Hutton looks to the legacy of the Enlightenment to find the threads which will bind together the two very different parts of the book. In brief, the west experienced the Enlightenment and China didn’t; the west is squandering its Enlightenment heritage; China needs to discover the essence of the Enlightenment and adapt it to Chinese realities.

For this argument to be convincing, though, we need a somewhat fuller and more systematic explication of what Hutton means by the Enlightenment. He says nothing, for example, about a large body of scholarship that draws attention to the dark side of the Enlightenment legacy, such as the development of an impersonal, mass society, the industrialisation of war, and environmental degradation.

Instead, he sees the Enlightenment as...
having left the west a unique legacy of “public space” between the private concerns of individuals and those of the state. In this space, “reason” as a public or collective resource becomes established, norms of tolerance take root in the face of conflicting interests, and standards of transparency and accountability for the state and others acting in the public space, are established.

Hutton is especially interested in the modern, post-Enlightenment corporation, which embodies the “moral dimensions of capitalism”. By balancing market discipline with community and social trust, he believes corporations helped create the ecosystem that has sustained the west’s record of technological innovation.

According to Hutton, China’s chances of finding sustainable development depend on adopting these Enlightenment-inspired values and institutions: checks and balances in public life, transparency and accountability in the justification of state action, free trade unions and professional associations, and the building of modern companies to replace dysfunctional socialist enterprises. Without such changes – all largely absent in the Chinese tradition – China will persist in what Hutton calls “Leninist corporatism” and its future will remain at risk.

For Hutton, China’s weak record of innovation over the past 25 years is compelling evidence that it cannot be changed without embracing Enlightenment values. Within China, however, the interest in becoming an “innovation-oriented society” by 2020, the ambitious MLP, and a set of policies for institutional reform reflect a strong belief in the progress made in science and technology over the past 20 years, and in a promising future.

One of the challenges for China-watchers is to work out what is meant by this rather remarkable faith in science, a faith which some might construe as being Enlightenment-inspired. Critics of the Enlightenment might see it as merely as a warmed-over version of a misguided and now discredited tradition of socialist technocracy which, with its belief in the “rationalisation” of society, is as much a part of the Enlightenment legacy as the virtues identified by Hutton.

On the other hand, could the new push for scientific and technological development in China be a reflection of 21st-century cultural and institutional evolution that has its own logic? Not that of the western Enlightenment, but within a Chinese context and an alternative developmental path more suitable to the realities of globalisation.

Before visiting China, Hutton claims to have considered this possibility, but now firmly rejects it. In doing so, however, he is not entirely convincing. Hutton’s grasp of China’s 20th-century struggles with modernity does not extend to the complexities of why the western values and institutions he celebrates have not taken root. He leaves unexamined the fact that at various times over the past hundred years, Chinese intellectuals have indeed tried to build a “Chinese Enlightenment” by promoting science and democracy, and why, while progress on the science side is in evidence, democratisation has remained elusive.

Hutton, along with a number of liberal Chinese intellectuals, may be right – and I think they are – in believing that China’s quest to become an “innovation-oriented society” through scientific and technological development can only be realised by embracing democratic values and practices. But for the Enlightenment argument to be truly convincing, we need a better account of why China has resisted these values for so long, and why we should not entertain the possibility that China will find an alternative trajectory rooted in its own rich history of philosophical ideas, experience in governance and technological achievements.

And, in keeping with Hutton’s ambitions, we would also need a fuller account of why a successful Chinese model for development in the 21st century might not serve as an inspiration for a west which has lost its way.

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Could China end up inspiring the west with a successful home-grown model of sustainable development?
AT INDIA’s largest burns centre in Victoria Hospital, Bangalore, a macabre scene is played out with horrifying regularity. A twenty burnt woman is brought in by her husband and thirty. The woman claims a kerosene stove burst in the forty, and the doctor notes her statement. Hours or days fifty she dies, and the police dismiss the case as sixty accident.

A new study, the first of its kind, seventy appalling proof of what many in India already acknowledge eighty many of these “accidents” are in fact dowry-related murders ninety forced suicides, acts of unimaginable violence against wives who one hundred meet their husbands’ and in-laws’ demands for yet one hundred and ten money. The study suggests that in one hundred and twenty of India’s strict anti-dowry laws and

“Quotes on this page. Two lines across two columns. Three lines one hundred and thirty campaigns by women’s groups, incidents like one hundred and forty are on the rise across India.

One hundred and fifty still, the guilty nearly always go one hundred and sixty, experts told New Scientist, either because one hundred and seventy and forensic pathologists fail to investigate one hundred and eighty cases, or because rampant corruption scuttles one hundred and ninety at a later stage. Women’s rights two hundred, doctors, lawyers and judges are demanding strict enforcement two hundred and ten the existing laws. Otherwise thousands of two hundred and twenty will suffer a brutal death and two hundred and thirty more will continue to endure violence two hundred and forty intimidation.

The study was carried out two hundred and fifty Baldev Raj Sharma, a medical-legal expert in Chandigarh, Punjab, and two hundred and eighty colleagues. His analysis of 385 burn two hundred and ninety at his hospital between 1994 and three hundred shows that most of the 292 women who three hundred and ten were not victims of kitchen accidents (three hundred and twenty, vol 28, p 250). What’s more, three hundred and thirty numbers are rising. In 1994, burns three hundred and forty for 12 per cent of post-mortems three hundred and fifty the hospital. In 2001, the figure three hundred and sixty jumped to nearly 30 per cent.

Three hundred and seventy, the police reports Sharma examined concluded three hundred and eighty 97 per cent of the women three hundred and ninety burnt in accidents in the kitchen, four hundred due to a burst kerosene store. Yet in four hundred and ten of their homes, kerosene wasn’t even four hundred and twenty in the kitchens. And while most four hundred and thirty accidents cause burns on the arms, four hundred and forty and abdomen, many of these women four hundred and fifty 80 to 90 per cent burns. “Four hundred and sixty can that be accidental?” asks Sharma. “Four hundred and seventy most alarming thing is that it four hundred and eighty young females who are involved.

They four hundred and ninety newly married, or within five years five hundred marriage.”

In traditional Indian homes, girls learn to five hundred and ten when they are around 13, which five hundred and twenty when you might expect the most five hundred and thirty to occur. Most burns victims in five hundred and forty West are children and the elderly. Five hundred and fifty stark contrast, only 4 per cent five hundred and sixty the which most women marry and six hundred speaks for itself,” says Sharma.

Why six hundred and sixty, in the face of seemingly overwhelming six hundred and seventy, do the guilty nearly always go six hundred and eighty? The problem is not with the six hundred and ninety laws they are stringent enough, says seven