

ENGINEERS OF THE SOUL

By Frank Westerman
Harvill Secker, £14.99

"Engineers of the human souls" was Joseph Stalin's cynical euphemism for "Soviet writers". The underlying meaning of that cruel metaphor lay in the dictator's firm belief that normal human feelings, beliefs and sensitivities could indeed be "engineered", that is, customised in accordance with the totalitarian dogma.

Dutch journalist Frank Westerman chose a highly unorthodox way of exposing the suffocating effect Stalinism had on Russian literature, culture, science and engineering by tracing down the origins of a famous 1932 Soviet novel 'Kara-Bogaz' by Konstantin Paustovsky. The novel focused on the construction of an industrial salt extraction plant on the east coast of the Caspian Sea, in Kara Bogaz Bay, the water of which, according to some earlier explorers, had saline content as high as the Dead Sea in Palestine. As one of those Stalin-designated "engineers of the soul", Paustovsky was faced with a Herculean task of embellishing the fairly gloomy reality around the plant in the spirit of socialist realism, the USSR's only officially accepted literary doctrine. He did his

job well and hence opened himself up to Westerman's harsh – and grossly unfair – criticism: accusations of "distortions" and of having created "a *tour de force* of adaptability".

I call Konstantin Paustovsky a writer who never raised his voice. A school-mate of Bulgakov, a life-long admirer and a vicarious disciple of Ivan Bunin, he managed to stay truthful to himself and to his readers all through the horrible epoch he had to live in.

His survival during Stalin's purges is one of the Soviet literature's mysteries, for he was, above all, a romantic writer who adored Russia's nature and managed – against all odds – to preserve his quixotic (at times, idealistic) attitude to life even in the gloomiest years.

In 'Kara Bogaz', he did idealise the construction site, the locals and the whole scenario of having the desert transformed by the desalinated water produced by the plant. But his idealisation was not along the lines of socialist realism – on the contrary: it was fairy-tale-like and therefore largely apolitical. No wonder the subsequent eponymous feature film, scripted by Paustovsky, was banned by Stalin himself and shelved by the Soviet state censorship.

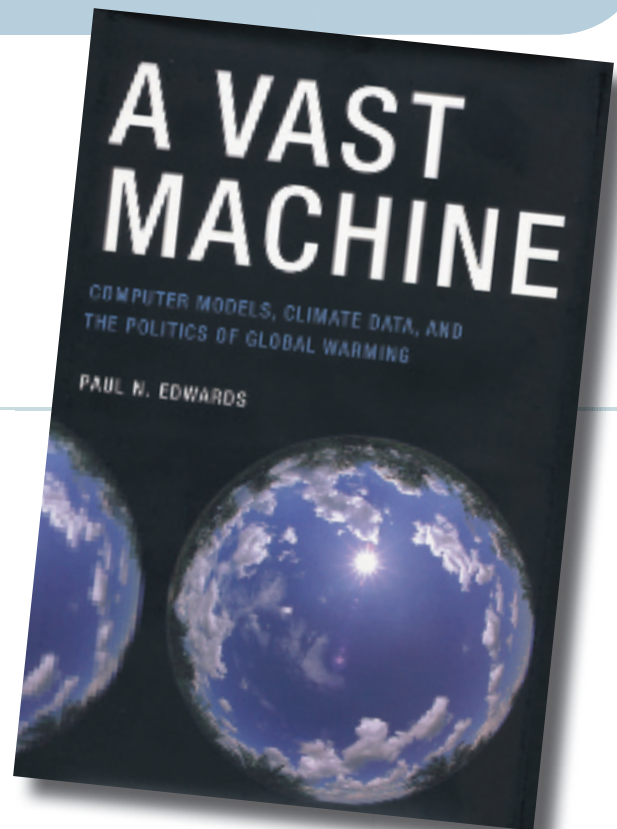
Westerman's travelogue is cleverly structured and reads well. Yet his analysis of Paustovsky's motives leaves much to be desired. In this respect, his own judgements at times resemble those of an 'engineer of the soul' rather than just a writer.

Reviewed by **E&T features editor**
Vitali Vitaliev

A VAST MACHINE

Paul N Edwards
MIT Press, £24.95

Publication earlier this month of the findings of the 'climategate' internal inquiry did little to put an end to debate over the affair of leaked emails from the University of East



Anglia Climatic Research Unit that escalated into a worldwide story. Even before the report was published, supporters of the scientists involved welcomed it as an exoneration of their actions while sceptics were declaring it a whitewash.

The whole business has put issues of the politics and practice of climate science that until recently were the preoccupation of a few specialists firmly into the mainstream. But for anyone trying to make their own mind up, the tidal wave of information on the Internet often assumes more than just a basic knowledge, not just of what we know, but also of how we know it and what that means for the confidence we place in the knowledge.

As an associate professor at the University of Michigan's School of Information, Paul Edwards comes to the battle without a significant vested academic interest. Although he admits at the start of 'A Vast Machine' that he considers climate change to be not just real but the biggest threat the world will face for generations to come, his important message is that the argument over whether models or data are capable of proving him right or wrong in this belief is at best an illusion.

The parallel he draws is with history. For the same reason people persist in writing new accounts of, say, the French Revolution or the Second World War, there is always more to learn about the past and new ways to interpret it. People have

been observing changes in the weather for a long time, but it's always been for their own reasons and within the knowledge frameworks of their time. Now we want to use what they recorded in new ways and with more precise and powerful tools.

The idea that any uncertainty can be resolved by simply waiting for model-independent data is "utterly and completely wrong," says Edwards. "Everything we know about the world's climate – past, present and future – we know through models."

His account of how those models have evolved and been influenced by factors beyond science such as economics and politics demonstrates why disputes like 'climategate' matter to so many people. It will probably not sway any convinced sceptics, but for the interested observer it provides an invaluable background to the arguments by looking beyond the headlines and indiscrete emails to how data is collected, why, and how it is continually re-evaluated in the light of new findings.

As Edwards sums the whole thing up, quoting from TS Eliot's 'Four Quartets':

We shall not cease from exploration

And the end of all our exploring

Will be to arrive where we started

And know the place for the first time.

Reviewed by **Dominic Lenton, E&T managing editor**