

Postpone the nuclear waste decision

April 2 2012

Although nuclear waste has been produced for a long time, there is still no good way to discard the highly toxic material, which remains hazardous for up to 130 000 years. In his new book titled Nuclear Waste Management and Legitimacy. Nihilism and Responsibility, Mats Andrén, professor in History of Ideas and Science at the University of Gothenburg, discusses the nuclear waste issue from a humanistic perspective.

The nuclear waste debate is usually focused on technology. Yet in order to better understand and discuss the problem, the issue should be viewed from a humanistic perspective where societal aspects are considered. We need a better conceptual framework, says Andrén, who addresses the issue of legitimacy in his book.

'Legitimacy is a very central concept when it comes to nuclear <u>waste</u> <u>management</u>. Lack of legitimacy has stopped many plans to store nuclear waste for example below the ocean floor, in the bedrock or in space, due to resistance and uncertainties regarding the plans,' he says. He argues that inability to establish legitimacy is one explanation to why political decisions regarding a solution to the problem are lacking.

His book proceeds from the policy considerations, cultural understanding and ethical concerns currently associated with nuclear waste management. It examines some of the underlying, often hidden, ideas involved and explores the conceptual framework focused on legitimacy and responsibility and applying it to the nuclear waste issue, with a particular emphasis on analysing and discussing deep geological



disposal.

In Sweden, the plan is to store the waste in the bedrock 450 metres below the surface. In his book, Andrén discusses what it really means to bury nuclear waste for thousands of year. He writes that we could learn from the past: What is buried usually comes to light one day, with the belief that it might be valuable in some way. In a future energy-scarce world, nuclear waste might be dug up and used as a resource – despite the radiation.

'Picture a very energy-hungry world where nobody knows how to handle nuclear waste. Let's say we stop using nuclear power in 100 years, and somebody digs it up 500 years later. How do we know that the necessary knowledge about how to manage the waste is passed on to future generations? Or maybe archaeologists will dig it up in say 2000 years in response to some indication that the rock is hiding.

Mats Andrén believes that it would be better to store the waste above ground, where it can be safely monitored, and postpone the storage decision for another couple of decades.

'Maybe we'll use nuclear power for another 40-100 years. I argue that the storage decision can wait and that we should focus on evaluating the options and on gaining more knowledge in the meantime.'

The book <u>Nuclear Waste</u> Management and <u>Legitimacy</u>. Nihilism and Responsibility will start selling on 14 March.

Provided by University of Gothenburg

Citation: Postpone the nuclear waste decision (2012, April 2) retrieved 19 April 2024 from https://phys.org/news/2012-04-postpone-nuclear-decision.html



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