

for replacement would undermine economies, curtail environmental investment, and produce a catastrophe more sudden and more certain than those he mentions. All sources of energy, at scale, have considerable environmental challenges.

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Book on Sakharov raises issues

We are disappointed that PHYSICS TODAY would publish an alleged book review (July 2016, page 61) by Alexei Kojevnikov of *Andrei Sakharov: The Conscience of Humanity*, which was edited by us and includes papers presented at a conference in December 2014. Kojevnikov's piece was not a review of the book at all, but an exposition of his own flawed personal interpretation of Sakharov's life and views. Worse, the reviewer slurs the book's essays by maintaining, falsely, that they use Sakharov's views on human rights to justify recent wars. Kojevnikov misrepresents both the essays and Sakharov's own ideas and the ways in which they continually evolved. He did not provide a single citation from the essays to support his description. The editors of PHYSICS TODAY were remiss in trusting—but not verifying—his outrageous claims.

An accurate statement of Sakharov's views can be gained by reading his own writing. One example is his "Open Letter to Anatoly Aleksandrov, President of the USSR Academy of Sciences," which reads in part,

I am convinced that the prevention of thermonuclear war is our most important problem and must take absolute priority over all other issues. The resolution of that problem involves politics, economics, the creation of interna-

tional trust among open societies, the unconditional observance of fundamental civil and political rights, and disarmament.

Disarmament, especially nuclear disarmament, is mankind's most important task.¹

Reference

1. A. Babyonyshev, ed., *On Sakharov*, G. Daniels, trans., Vintage Books (1982), p. 213.

Sidney D. Drell

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[Editor's note: With sadness we inform our readers that Sidney Drell died on 21 December 2016.]



The July 2016 issue of PHYSICS TODAY contains Alexei Kojevnikov's review of the book *Andrei Sakharov: The Conscience of Humanity*, edited by Sidney Drell and George Shultz. The subject of the book and the editors are familiar to readers of PHYSICS TODAY, and therefore the review attracts attention. However, the reaction it evokes is mainly bewilderment and disappointment. Any review will contain its author's opinion, which can be positive or negative. However, the reader anticipates that a review will offer at least some information about the book's contents. In that respect, the "review" by Kojevnikov is anything but. The only thing that one finds out about the actual book is that it contains contributions from 11 authors.

We are not exaggerating. Kojevnikov's "review" is not a review at all. The entirety of the remaining text is filled by the reviewer's expounding on his own rather dubious concept of Sakharov's value system, and it ends with the criticism that the book does not reflect Kojevnikov's concept. His treatment of Sakharov's political and moral philosophy is highly questionable and, in our view, distorts Sakharov's position. It certainly fails to reflect the degree to which Sakharov's worldview continuously evolved.

We also believe Kojevnikov is wrong in trying to portray the morality and actions of the USSR during the Cold War as better, or at least not worse, than the

morality and actions of its Western adversaries.

Apart from the fact that Kojevnikov's writing does not belong in the Books section since it provides literally zero information about the actual book, we find it unfortunate and regrettable that PHYSICS TODAY has furnished publication space to such poor treatment of the philosophy espoused by one of the most respected and admired scientists and humanists of the 20th century.

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► **Kojevnikov replies:** My understandably disappointed respondents have not addressed the main criticism formulated in my review, namely that many contributors to *Andrei Sakharov: The Conscience of Humanity* cited Sakharov's moral authority only to advance ideas and agendas that fundamentally contradict his humanitarian values. Here are some examples from the book: Retired general Jim Mattis invoked Sakharov while extolling the morality of the US military's continuing engagement in the Middle East. Retired admiral James Ellis Jr, who commanded the 1999 NATO attack on Yugoslavia, used human rights as a justification for that and subsequent wars. He also suggested that a preemptive strike can "be viewed as an ethical imperative" against possible nuclear proliferation. Theranos CEO Elizabeth Holmes referred to Sakharov and human rights as the basis of her own work, which the media has since exposed as fraudulent corruption of science by commercialization.

In contrast, Sakharov stood up against the high-level scientific frauds, hawkish politicians, and trigger-happy generals of his time. He resolutely opposed warmongering and preventive strikes, championed human rights as the basis for peace and reconciliation of ideological tensions but not for war, and criticized as "flagrant crimes against humanity" the superpowers' military interventions in other countries, such as Vietnam and Afghanistan.

In today's world, the misuse of

human rights arguments for violent ends has become widespread, and I felt obliged to remind readers that it contradicts Sakharov's worldview. The letters call my summary "flawed," "dubious," and "questionable" but were not able to specify a single idea of Sakharov's that I got wrong. I trusted his own writings rather than wishful misinterpretations by some later biographers, and although there was no space for long quotations, I did indicate how Sakharov's ideas developed over time. The true legacy of the great humanist is absolutely incompatible with hawkish and neoconservative agendas and must not be used for such purposes.

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Society, politics, and the realm of physics

I was amazed to read the editorial about Brexit in the August 2016 issue of PHYSICS TODAY (page 8). I always feel uncomfortable when PHYSICS TODAY strays into the realm of politics. I understand that it is sometimes necessary, but UK immigration policy? I really don't care about the editor's opinion in this area. But I do object strongly to his assertion that Brexit was fueled by "ugly anti-immigration sentiment." I do not believe that is true. My reading is that the vote was motivated by the British people's dislike of the unelected, anti-democratic bureaucracy that runs the European Union.

I see nothing ugly about that. Moreover, I see nothing ugly about people wanting to control the immigration policy of the country of which they are citizens. So, Mr. Editor, stick to physics. We probably agree on that.

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► **Day replies:** Robert Orr's belief that immigration was not the biggest reason leave voters favored Brexit is supported by an opinion poll conducted soon after the referendum.¹ Almost half of leave

voters cited sovereignty as their main concern. But immigration came in second; it was the main concern of one-third of leave voters. What's more, the UK Home Office reported a surge in racially or religiously motivated hate crimes in the month after the vote.² Hate crimes also rose in the US after the election of Donald Trump as president.³

As for sticking to physics, this magazine has never done that. Our mission remains to report on physics, on the impact of physics on the wider world, and on the wider world's impact on physics. The Brexit vote will affect physicists, so PHYSICS TODAY covered it. (See "Brexit vote rattles UK and European scientists," June 2016, PHYSICS TODAY online.)

It's also part of PHYSICS TODAY's mission to serve as a forum for the exchange of ideas—which is why I welcome Orr's letter.

References

1. Lord Ashcroft Polls, 24 June 2016, <http://lordashcroftpolls.com/2016/06/how-the-united-kingdom-voted-and-why>.
2. M. Weaver, *Guardian*, "Hate crimes soared after EU referendum, Home Office figures confirm," 13 October 2016.
3. M. Eversley, *USA Today*, "Post-election spate of hate crimes worse than post-9/11, experts say," 12 November 2016.

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Making a name with Chinese characters

In the obituary for Moo-Young Han (PHYSICS TODAY, November 2016, page 70), we listed the transcription of his name into Chinese as 韓武榮, which is the common usage in Chinese scientific literature. In Korean and Japanese journals, however, it is transcribed as 韓茂榮.

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