

resistance served to convince Stalin of the need for even more ruthless purging. But by late 1938, when people were not only sending letters of protest against the blood-letting but were even passing out leaflets on the street, the stalinist leadership realized that it was time to call a halt to the terror. Khlevniuk's new evidence about resistance from below effectively invalidates the view of a society terrorized into submission.

Why did Stalin embark on the purges? For what purpose were those rivers of blood shed? In Khlevniuk's view, Stalin was trying to solve real problems and achieve concrete political and economic aims. Above all, he wanted to strengthen his political position as sole leader by dealing a death blow to the party elite. That this was Stalin's objective is clear from Khlevniuk's description of the February-March 1937 Central Committee plenum and his account of how Stalin turned against his long-time bolshevik colleague, Minister of Heavy Industry Sergo Ordzhonikidze, who committed suicide in February 1937 as a result of Stalin's persecution. Although these episodes are well known to historians, Khlevniuk has used archival sources to provide many new details, thus giving us a much fuller picture of what really happened.

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Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939–1956. By David Holloway. New Haven: Yale University Press, 1994. xvi, 464 pp. Index. Photos. Hard bound.

Writing about the Soviet nuclear project is like walking on a swamp. With most primary documents still unavailable, only relatively few pieces of information are really solid; most rest on ambiguous sources: propagandistic accounts, memoirs, banquet speeches, oral interviews, etc. David Holloway has undertaken the difficult task of collecting and separating the realistic sources from those that are rhetorical and deceptive. The result is a very convincing historical narrative, rich in factual detail but careful enough to be sometimes constrained in interpretation. A comparably comprehensive and balanced analysis of available sources does not yet exist in Russian; and, although new information continues to surface that might change our view of events, for the foreseeable future Holloway's study will remain the most reliable reference on the topic.

The book starts with a review of the pre-war progress of Soviet nuclear physics, which closely followed developments in Europe and America but occasionally produced novel results largely unnoticed in the west. Like their foreign colleagues, Soviet physicists reacted to the prospect of military and peaceful utilizations of atomic energy with a mixture of enthusiasm and scepticism. Unlike in the west, however, in 1941 Soviet physicists abandoned purely academic nuclear research for more realistic, applied projects.

Several documents declassified and published in 1992 reveal the role of the Soviet intelligence in influencing the 1943 political decision to establish a secret research institute. Not until Hiroshima, however, was the commitment made to a large military-industrial project. The first Soviet bomb of 1949 was developed from a description of the American plutonium bomb provided by Klaus Fuchs; more original engineering developments were realized shortly thereafter. Holloway points out, however, that another factor was more important than access to scientific data in determining the Soviet drive towards the atomic bomb: the breaking of the American monopoly over supplies of uranium ore and the industrial production of plutonium. The quest for the hydrogen bomb shows quite another pattern: it started from different and independent ideas and proceeded so closely that both the US and the USSR could claim leadership. Mutual monitoring of radioactive debris may have contributed to the convergence of basic principles at later stages, but there is as yet insufficient information to determine how much.

This book also discusses the relationship between science and politics under Sta-

lin, but here it follows existing stereotypes rather than challenging them. Having stated that the system was well suited to concentrate resources and effort in a country devastated by war, Holloway merely states that repression was widely used and that politicians did not trust scientists. He might have elucidated how competition, criticism and independent evaluation were ensured despite great compartmentalization and secrecy, and how politicians were able to choose between claims of rivaling scientists. A popular legend is that the bomb saved Soviet physicists from an ideological pogrom similar to that perpetrated on biologists. There is no evidence, however, that the bomb was important to the Secretariat's decision to cancel the March 1949 ideological discussion of physics, nor that Stalin or Beria were involved.

The chapters on the diplomatic and political aspects of the bomb are interesting and insightful. Holloway concludes that Stalin did not consider the bomb a decisive military weapon, but feared that it would influence post-war settlements. Although the strategic situation was very asymmetrical the Soviets were determined to show that they were not intimidated and would not yield to atomic diplomacy, perceived in the west as stubbornness. Even with nuclear weapons, the USSR continued to be economically, militarily and geographically much less viable than the US. The USSR pretended to be stronger than it really was and sought advantage in the cold war, but avoided direct military conflict with its stronger adversary. Though not completely unreasonable, this bluff proved to be draining in the long run. But to accept this interpretation evokes the question: how does one interpret the American posture of believing in Soviet might and threat?

One has to agree with Holloway and Andrei Sakharov that changes in American attitude would not have persuaded Stalin to abstain from acquiring nuclear weapons. Yet the question remains open for me whether the dialogue could have become more reasonable. Were the two different political systems destined to misread each others' logic and goals, or could they avoid that deceptive and self-deceptive play of confrontation which was called the cold war?

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Istoriia grazhdanskoi voiny v literature russkogo zarubezh'ia. By A.I. Ushakov. Moscow: Rossiia molodaia, 1993. 144 pp.

Stalin i Ordzhonikidze: Konflikty v Politbiuro v 30-e gody. By O.V. Khlevniuk. Moscow: Rossiia molodaia, 1993. 142 pp.

Obshchestvo i reformy 1945–1964. By E.Iu. Zubkova. Moscow: Rossiia molodaia, 1993. 198 pp.

Doklady k konferentsii. Rossiiskaia imperiia, SSSR, Rossiiskaia Federatsiia: Istoriia odnoi strany? Preryvnost' i nepreryvnost' v otechestvennoi istorii XX veka. By V.P. Buldakov, V.A. Mau, A.S. Tsipko. Moscow: Rossiia molodaia, 1993. 128 pp.

The four books under review here belong to the series *Pervaia monografiia*, sponsored by the Assotsiatsiia issledovatelei rossiiskogo obshchestva XX veka and under the general editorship of G.A. Bordiugov. The quality of scholarship is generally very high and no historian of Russia and the Soviet Union should miss this series.

Ushakov's survey of the literature on the Russian civil war published abroad is a very important reference work for Russian historians who have until recently been deprived of access to the literature. Ushakov covers all major works (by Denikin, Vrangel', Krasnov, Mel'gunov, etc.) and appends a detailed bibliography (including many works in western languages). Ushakov has also included brief yet interesting biographies of key figures, including S.P. Postnikov, the administrator of the famous Prague archive. This book may be less useful to western historians but Ushakov refers to a number of archival *fonds* which have until recently been off limits to them.

Khlevniuk's excellent book is a product of fine scholarship based on a perusal of archival documents. His subject is one of the well known yet little documented cases