

Soviet dissidents (1)

He who would dissident be

Why do so many Soviet scientists become dissidents and refusniks? Vera Rich considers the question

ONE of the paradoxes of contemporary Soviet 'opposition', whether it comes from dissidents proper, who campaign for improvement of the system from within, or from the Jewish refusniks, whose only wish regarding the Soviet Union is to leave it for Israel, is the presence of large numbers of those who might be expected to benefit most from the *status quo*—scientists. In a culture which bases its whole economic policy on the "implementation of the scientific technological revolution" and which, with its total state control of all resources, can allot virtually unlimited funds to a favoured research project, the position of a scientist, one might feel, is surely such as to ensure all the fringe benefits which Soviet society affords its elite—access to privileged shops, better housing, Black Sea holidays, and the like. Yet, by the kind of paradox which characterises so much of Russian history, it is partly this privileged position that has led to the development of dissidence among scientists.

The story begins back in the late 1940s when Stalin, having 'abolished' Mendelian genetics throughout the Soviet Union, and replaced it with the peculiar notions associated with the name of Lysenko, turned his attention to modern physics. Since the basic tenets of relativity theory and quantum mechanics seemed, in the opinion of certain favoured theoreticians, contrary to Marxism-Leninism, Stalin aimed to confine physics research to what was congruous with Newtonian mechanics. But a small group of physicists, notably Kurchatov, Kapitsa and Vavilov, managed to convince him that without modern physics he could expect neither nuclear power, nor, and this was the clinching argument, a nuclear arsenal. Modern physics was accordingly permitted to continue, although, until Stalin's death, textbooks were liable to contain face-saving clauses to the effect, for example, that the second law of thermodynamics was "a local phenomenon in this part of the universe"

Having protected their own discipline from destruction, it was perhaps natural that physicists should come to the aid of their less-fortunate scientific brethren, the harassed geneticists, in their fight to re-establish genetics as a valid field of research. Lev Tumerman, a physicist working on the luminescence of organic molecules, was instrumental in arranging the first

seminar on chromosomes, held in the Lebedev Physics Institute during the late 1950s, while in 1959, Timofeev-Resovskii gave his first genetics lecture in Kapitsa's Institute. And in the great debate of 1964, which finally crushed the attempted resurgence of Lysenkoism and re-established genetics as a branch of Soviet science (although it did not receive 'priority' funding for another 10 years), certain physicists, notably Andrei Sakharov, played a significant role.

From the defence of a single scientific discipline to a deep involvement with human rights as a whole is, however, a great step to take. But a number of factors in Soviet society established a climate for dissent. The phenomenon of *samizdat*—'do-it-yourself' publishing and distribution, to sidestep official censorship—reaches far back into the 19th and 18th centuries, and it received a new impetus with the mushrooming availability of typewriters and, on occasion, photocopiers. The education reforms of 1958 which, in effect, made Russian virtually the only language of higher education and academic life, produced great discontent among the non-Russian republics of the Union, notably Ukraine and the Baltic States. The highly anti-Israeli attitude of the Soviet media at the time of the Six-Day War for the first time impressed upon Jewish intellectuals an awareness that Israel was not merely a paper creation (on the lines of the Soviet 'Jewish homeland' of Biribidjan). Israel at last came to be seen as a viable alternative society where Soviet Jews might live and work unhampered by the many disabilities which (*de facto*, and in contradiction to the Soviet constitution) are still the lot of those with "Jewish nationality" stamped in their internal Soviet passport.

But *samizdat* was, originally, the province only of the more daring creative writers, while the problems of minority nationalities had always been endemic to the multinational Russian empire. And except in a few cases, such as the promising Ukrainian school of cybernetics, little was lost to Soviet research when the language of instruction and publication was officially changed—a scientist, after all, must expect to read and, on occasion, to publish, papers in languages other than his own. Why then this great participation by the scientists in the human rights movement and dissidence?



Kronid Lyubarsky, 5-year sentence

Andrei Sakharov, the acknowledged leader of scientific dissidence, has given his own account. Though he originally viewed nuclear balance as an important factor of world peace, he subsequently began, as early as 1958, to agitate for the cessation of nuclear testing. The reason for the switch was clear. He became convinced that no further benefits could be gained from such tests, believing that the sole outcome would be nothing more than an increase in the natural level of genetic hazard. The fundamental change of attitude undergone by Sakharov by the early 1960s led to his concern about the 'criminal nature' not only of the tests but of the whole concept of nuclear weaponry. Beset with a sense of helplessness he devoted an ever-increasing amount of time first to *samizdat* writings (the 1968 monograph *Thoughts on Progress, Coexistence, and Intellectual Freedom*, and the *Second Manifesto* of 1970), and later to appeals on behalf of fellow dissidents threatened or imprisoned for their views and activities.

There is no doubt that Sakharov's personal charisma became a major factor in drawing together the little group who formed his illicit 'human rights' movement, and its subsequent off-shoots—the Moscow branch of Amnesty International and the 'Helsinki monitoring' group. Among Sakharov's associates are such leading lights as the physicists Valentin Turchin and Andrei Tverdokhlebov, the mathematician Valerii Chalidze, and the biologist Sergei Kovalev.

But what of the many others who did not at first have any personal contact with the great names of the dissident world? Some general trends may be distinguished. First, many students turn originally to science not so much from a personal preference for the subject as such, nor from hopes of a prestige job, but because science offers the hope of academic freedom, so

patently absent from the humanities which are dominated by the hard-and-fast requirements of Marxist-Leninist ideology. This expectation may remain unfulfilled—Soviet medical students are often disillusioned with psychiatry and psychology lectures based on Pavlovian behaviourism and a rigid definition of what constitutes 'normality'. Moreover, even in the absence of such specific disillusionment, the Soviet scientific establishment itself produces an atmosphere of frustration.

Travel to conferences abroad (or even, in some cases, within the Soviet Union) is frequently blocked by barriers of officialdom open only to the favoured few. Foreign publications cannot be obtained on subscription and are often inaccessible in libraries except to those with special security clearance.

The classic story of frustration recounted in *The Medvedev Papers* is by no means unique. The Soviet system makes no allowance for serendipity—a frequent complaint from young researchers is: "They expected me to order all the equipment and reagents before I started, but if I'd known exactly what I wanted, I wouldn't have needed to do the experiment"; or, "The official supply system is useless. You can only get on if your laboratory has a good 'fixer' who can arrange a swap with someone who has what you need." (This latter difficulty leads to deliberate over-ordering and the development of a system of polygonal bartering, involving several laboratories at a time.)

Such frustrations may eventually lead scientists to work more actively for human rights, even at the cost of a secure career. Vladimir Bukovskii, a biology student expelled from Moscow University for his dissident views, became the first prominent campaigner to focus world attention on the misuse of psychiatry by a regime aiming to equate dissidence with insanity. At the very least the frustration which so motivated Bukovskii may lead to a state of mind describable as "passive dissidence", creating a ready readership for available *samizdat* material. It should be remembered, of course, that even the temporary possession of *samizdat* material is a serious offence. Biologist Nina Strokata-Karavan'ska, for example, served a four year sentence for possession, and is still exiled from her native Ukraine. Similarly, Sergei Kovalev, another biologist, is serving a 7-year sentence in a strict regime camp. (Kovalev, a member of the Moscow Amnesty group was curiously charged with possession of the illegal *Chronicle of the Lithuanian Catholic Church*, although he is neither a Lithuanian, nor, so far as is known, a Catholic). Even greater penalties can be involved. Astrophysicist Kronid Lyubarskii, is not only serving a five year sentence—

moves are now afoot to deprive him of his academic degree.

For a Jewish scientist, however, discontent typically results in an application to emigrate to Israel. (As a convenient one-way ticket out of the Soviet Union, this opportunity is occasionally afforded to troublesome non-Jews, such as Leonid Plyushch, the Ukrainian mathematician.) But emigration is by no means an easy option. Successful applicants often indicate that the obstacles placed in their way actually intensify their Jewish consciousness, so that Israel becomes a positive permanent goal rather than merely the only available sanctuary. Once an application is placed, a whole chain of sanctions are imposed. Job dismissal is virtually automatic—with a consequent long-term loss of access to all professional publications and loss of contact with new specialist developments. (It was in an attempt to maintain at least some semblance of scientific life that Aleksandr Voronel founded the famous Sunday seminars). The authorities can throw up a whole battery of reasons for refusing exit visas. These include military service (often invoked in the case of over-age invalids, such as Mark Azbel, Voronel's successor as leader of the Sunday seminars); security restrictions (even in fields where the Soviet Union is not noticeably ahead of, or even abreast with, developments elsewhere); and the notorious 'education tax' (waived since the Nixon visit to Moscow, but never actually revoked) which required the payment of an extortionate sum, allegedly equal to the estimated cost of an applicant's university and post-graduate studies.

Reprisals may extend to relatives. Metallurgist Evgenii Reinberg was expelled from the Communist Party, and subsequently from his academic post, when his son applied for a visa. Endocrinologist Mikhail Shtern, now serving an 8-year sentence for "accepting bribes", was actually told that the accusation was made "in connection with your family's desire to emigrate". And, of course, dismissal from one's job involves the constant threat of arrest for 'parasitism', or being without visible means of support, a threat directed particularly often, it appears, at the members of Azbel's seminar.

Needless to say, a *refusnik* scientist shares the same disabilities as a dissident where international conferences are concerned. The recent absence of Benor Gurfel from the European meeting of the Econometrics Society in Helsinki, and of Academician Veniamin Levich from the Annual Meeting of the International Society of Electrochemical Scientists in Zurich, are cases in point.

'Active' dissidents and *refusniks* con-

stitute, however, only a small part of the Soviet scientific community—indeed, a main campaigning point for *refusniks* is that, since they are by no means irreplaceable, the Soviet Union can well afford to let them go. (Thus, such vocal and embarrassing dissidents, as Chalidze, Zhores Medvedev, and mathematician Aleksandr Esenin-Volpin, have been forced into exile.) So what of the bulk of the scientific community?

The overwhelming majority of scientists, it may be said, seem to find relief from discontent and frustration in 'inside emigration'—a complete absorption with work (although even that is a kind of dissent, since, according to *Pravda*, "a scientist's first duty is to be a patriot", with all that patriotism demands in voluntary community service and attendance at meetings and hortatory or celebratory rallies). The silent majority is, as everywhere, completely silent. Nevertheless, the scientific establishment still preserves some vestiges of independence from the State. The Academy of Sciences is the only remaining body in the Soviet Union to exercise the right of elections by secret ballot without official intervention (though it must be admitted that its current President, Aleksandrov, was nominated by the Party, before being duly elected). In spite of periodic press campaigns against Academician Andrei Sakharov, and in spite of the *refusnik* status of Corresponding-Academician Levich, the Academy has not, so far, expelled either. A two-thirds majority is needed for expulsion, and the lack of action so far indicates a degree of uncertainty as to how far dissidence, or fellow-feeling for dissidents, might spread.

In this situation of frustration, it is small wonder that so many appeals, whether from dissidents or *refusniks*, call upon the world scientific community to take some action on behalf of harassed Soviet colleagues. The appeals are wide-ranging. Scientists in the non-communist world may be urged to plead for clemency for victimised Soviet scientists on trial. They may be urged to press for reviews of particularly harsh verdicts against those already convicted. Or they may simply be asked to request visas for specialists wishing to attend international conferences. A recent statement from the US Committee of Concerned Scientists stressed that these actions are more than gestures of common humanity towards distressed colleagues. When a scientist is for any reason prevented from working, the research he might have done is "irrevocably lost to science"; the fate of dissident and *refusnik* scientists affects not only Soviet science, but also the whole worldwide scientific community. □