tion of the cloying, but once attractive, hypothesis that the close similarity between the specificities of enzyme induction and enzyme function must mean that the mechanism of induction involves combination between the inducer and a receptor molecule consisting at least of a modified version of the enzyme, if not the enzyme itself. But the essential point to be grasped was that the relationship is functional, not chemical. Once Monod had discarded the false implications of the specificity similarities, he was free to

Strategies of dissent

Vera Rich

To Build a Castle: My Life as a Dissenter. By Vladimir Bukovsky. Pp.352. (André Deutsch: London, 1978.) £7.50.

IN 1961, Vladimir Bukovsky was a biology student in Moscow. Today he is a biology student in Cambridge. To Build a Castle relates the history of the intervening years, which, with a few brief intervals of relative freedom, were spent in the prisons and psychiatric hospitals of the USSR.

This period spans the rise of dissent and opposition in the USSR. One curious feature of the dissent movement is that, at least in Russia proper, scientists played a major role, and at the beginning, the leading role. (In the non-Russian republics, such as Lithuania and Ukraine, other factors such as national aspirations make the picture more complex.) At one end of the dissent spectrum, leading scientists could defy the regimé from a position of strength, knowing that the state needed their expertise; at the other, it was among the students of the natural sciences that latent doubts began to take a more concrete form-total ideological conformity and committment being ensured in the humanities and social sciences by the preliminary screening of University entrants.

Bukovsky's book outlines how such doubts could grow and crystallise in a student living in the immediate post-Stalin era. After his expulsion from the University in 1961, we follow him through the long routine of arrests and incarcerations. This book is not, however, just another set of labour-camp memoirs. The Castle of the title is an imaginary which **Bukovsky** one. constructed in his mind patiently through long years in prison and psychiatric ward, as a means of

postulate the true nature of the receptor, characterise and define the *lac* repressor and discover the phenomenon of allostery.

Thus, almost more than from the actual discoveries themselves, we can benefit from studying the way he used his mind. And that is one of the chief reasons why this collection of masterpieces is so valuable. \Box

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therapy and self-protection against the grim reality which surrounded him.

Accordingly, the main interest in the book is to be found in what may be called the strategies of dissent. Nowadays, it is taken for granted that any civil rights protest is essentially a demand that what is guaranteed by the constitution should be implemented in fact. Zhores Medvedev, the geneticist, for example, waged a major campaign against Soviet censorship on the grounds that "Secrecy of correspondence is guaranteed by law". Bukovsky relates how this procedure was first developed in the late 1960s and how, when Alexander Yesenin-Volpin, the mathematician, first urged it, many budding dissidents were sceptical of its potential value-a scepticism which, as Bukovsky describes, has been refuted over and over again in the past decade.

Most fascinating, however, are the dealing with Bukovsky's chapters experiences of mental hospitals, for here we have the first-hand background to the reports which Bukovsky, in a brief spell of freedom, managed to transmit to the West. These reports for the first time drew attention to the new Soviet theory that political discontent equals mental disorder. Here too is the practical experience of psychiatric examinations and medical "commissions", which led Bukovsky, in collaboration with psychiatrist Semeon Gluzman, who is still serving a sevenyear sentence in a labour camp, to write their famous samizdat, Manual of Psychiatry for Dissidents. This is a slim but detailed handbook of how to behave under interrogation, with some pungent analyses of the main psychological types of interrogator likely to be encountered, and the best strategies for circumventing and frustrating them. In a book of the stature of To Build a Castle, it is regrettable that space could not have been found to include the 'Manual of Psychiatry' as an appendix-this is, however, one of the few faults one can find with an otherwise excellent work.

Vera Rich is Nature's regular correspondent on Soviet and East European affairs.

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