Information and the Crisis Economy *by Herbert I. Schiller*
(Ablex, Norwood, 1984), pp. xv + 133, ISBN 0-89391-278-6.

Herbert Schiller's bleak vision of a world remodelled by information technologies contrasts markedly with conventional wisdom. Proponents of the information age present a view of a liberated world in which individuals can exercise their democratic rights. Schiller presents a contrasting view. In Schiller's world, governments and the private sector work hand in hand in an attempt to rescue a world plagued by inflation, unemployment and recession. But in doing so they create a world where national and individual autonomy disappears, where legitimate discourse is impossible and where the rights of nation states are sacrificed for the needs of transnational corporations.

Schiller's view of a world out of control is reinforced by the stock market crash of October 1987. The analyses of the crash which blame its severity on computerised programmed selling orders could become additional examples in support of Schiller's thesis. Schiller would say that the information technologies harnessed by the large corporations sacrificed international economic stability for the immediate interests of the corporations.

But is there a way out? Can the international webs of information technology be used for humane ends? Must information technologies only serve the needs of the large corporations? Schiller sees some glimmers of hope. He notes that his ideal of 'democratic communication' has rarely, if ever existed, in any political formation. He suggests that the emergence of over one hundred nations since the last world war offers some hope. While the voices of the emerging nations are small in comparison with the major powers, he feels that concerted political action could lead to a change in the balance of power. He also suggests that popular theatre, video and other fringe media activities could lead to a revitalisation of human communication. But when these relatively minor developments are compared with Schiller's overall analysis, one is left with little hope.

It is difficult to assess this work. Schiller does not argue a case in a conventional sense. Rather, he presents a case based on example. In the end the reader is overwhelmed by the weight of evidence and not by the force of argument. The book will be read and appreciated by those who share Schiller's vision of the world. But for those who require a more conventional argument *Information and the Crisis Economy* will provide less satisfaction.

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Technical Progress and Soviet Economic Development *by Ronald Amann and Julian Cooper (eds.)*
(Basil Blackwell, Oxford, 1986), pp. 214, ISBN D-631-14572-9.

Soviet technological performance, for sometime, has preoccupied both the academicians as well as policy-makers in the East as well as in the West. This preoccupation is basically substantiated by the role the Soviet economy plays, and could play, in the world economy and in world politics. It also reflects the

importance attached to Soviet experience in explaining the behaviour of other Soviet-type economies, particularly its East European allies.

Amann and Cooper belong to the classics in this area and their last two books provide impressive insights into the subject.[1] This new book is a collection of nine papers, originally prepared for the symposium on Soviet science and technology, held in Autumn 1984 at Birmingham University (UK) under the joint auspices of the Centre for Russian and East European Studies (CREES) and the Department of Extramural Studies.

All studies contained in the volume consider one of two major themes: first, actual Soviet technological performance and second, factors improving the country's current performance. Thus the book is not so much concerned with Soviet economic development, as the title would suggest, nor with the relationship between technical progress and economic development in this country. It simply seeks to assess how well the Soviet economy deals with technical change and what options are open for the Soviet policy-makers to improve the current state of affairs in this area.

The first issue comes under scrutiny in the first five papers of the book. The discussion is opened by Amann in his "Technical Progress and Soviet Economic Development: Setting the Scene". Using both aggregated and disaggregated indicators of technical progress he comes to the conclusion that during the last 20 years or so there has been a clear slow down in the overall rate of technical change of the Soviet economy. The blame is, according to Amann, with systemic influences, i.e. with the existing institutional arrangements prevailing in the Soviet Union. This may well be the truth and Amann is absolutely right in pointing out to various systemic deficiencies bearing upon technical progress in the Soviet state.

What he however fails to clarify is why exactly these systemic deficiencies came to influence the rate of technical change more significantly than before, particularly given that the institutional framework in the Soviet Union has, over the last 40 years, practically remained unaltered. To my mind, therefore, referring the recent slow down in Soviet technical progress or, more generally, the rate of economic development, basically to systemic features is insufficient and a much broader spectrum of factors should be addressed. This is however what Amann fails to recognise. The weakness of his argument becomes particularly well exposed in the context of the following papers, and especially those by Paul Snell, Anthony Rimmington, Malcolm R. Hill and Richard McKay.

Paul Snell's contribution, "Soviet Microprocessors and Micro-computers" presents a rather positive and optimistic review of Soviet accomplishments in this area which, after all, kept pace with the developments in the West, relying practically on its own technological potential and some bits of technology acquired in the West. As a matter of fact his findings are not so much revisionistic, as the editors try to convince the readers, and are to a large extent consistent with these of S.E. Goodman — a leading Western specialist on Soviet electronic industry.[2]

The paper by A. Rimmington, "Soviet Biotechnology: The Case of Single Cell Protein" gives an account, again, of a rather successful development of Soviet biotechnology industry which has taken place in the last two decades. Relying on vast empirical material the author provides us with an in-depth analysis of the course of development in this field, explaining it largely by non-systemic factors: supply, demand, prices, organisational arrangements, etc. I

have to admit that Rimmington's study represents the best part of the book, due to its topical nature as well as the quality of the analysis.

Snell's and Rimmington's contributions challenging Amann's belief on the role of systemic factors in Soviet technical progress are well supplemented by the study on "Soviet Product Quality, State Standards and Technical Change" offered by Malcolm R. Hill and Richard McKay and by Julian Cooper's "The Civilian Production of the Soviet Defence Industry". Both studies deal with systemic elements and both of them provide positive assessment as to their impact on Soviet technical progress. Cooper, in the first study of this kind of which I am aware, proves that the Soviet defence industry does make a substantial contribution to Soviet industry and cannot be regarded exclusively as a drag on the civilian economy, which is a standard assumption of most of the Soviet studies.

Hill and McKay on the other hand indicate that Soviet state standards, at least in the area under investigation (machine tools and asynchronous squirrel cage electric motors), are largely equivalent to British counterparts and thus set high level demands on Soviet manufacturers. Thus the two studies seem to indicate, what Amann has forgotten to tell us, that systemic elements may also play a positive role in stimulating technical progress in the Soviet economy and allow it to achieve something which would be impossible otherwise.[3]

The second part of the book discusses possible ways and means for the improvement of Soviet technological performance. Three distinct dimensions of the phenomena come under review. Gary K. Bertsch concentrates his attention on the role of Western technology transfer, Vladimir Sobel makes an attempt to investigate intra-Comecon technology flows and David A. Dyker considers possible systemic reforms in the Soviet Union under Gorbachev. These three contributions jointly present a rather pessimistic view of the possible course of action in the Soviet Union and this is exactly what Daniel L. Bond forecasts in his concluding paper 'Prospects for the Soviet economy'.

Bertsch seems to be rather sceptical on possibilities of expanding West-East technology transfer. His scepticism finds its justification both in the intensified actions by the US to strengthen the Cocom network as well as in Soviet caution, especially after the Polish lesson.

Sobell, in turn, is not ready to give any substantial credit to intra-Comecon technological co-operation and thus predicts no real impact of this co-operation on Soviet technological performance. Dyker on the other hand tends to see recent Soviet reform attempts as rather minor brushing up of peripherals and not the restructuring of the mainframe.

These views, written only a couple of years ago, seem to be quite obsolete in the light of recent developments. First, Soviet reforms go much deeper than anybody expected and no one knows really what is the final frontier there. Second, intra-Comecon co-operation recently underwent substantial changes and its member states demonstrate an unknown, so far, determination to upgrade quality and improve effectiveness. One should not underestimate it by any chance. Third, there are also important new trends in East-West technology transfer and specially the newly opened possibility for East-West direct equity capital linkages. It is the first time in the history of the Socialist system that these possibilities are being so widely considered.[4]

The book by Amann and Cooper is addressed to a broad audience of all those who are interested in the Soviet economy, and particularly in Soviet technological developments. It does not offer the same depth of analysis as their previous

two books on the subject but instead it gives a more concise review of current dilemmas faced by Soviet technology policy-makers and assesses possible courses of action. It also raises some completely new issues left aside by the past investigations such as the role of the state standards, defence — civilian industry linkages and the contribution of intra-CMEA co-operation to technical progress in the Soviet Union. For these reasons I think the book is most suitable for readers that look for some general introduction to the topic, and less suitable for those more demanding. It offers what typical production of the 'Birmingham school' usually contains: very good micro-analysis and less convincing macro-explanations.

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