

Letters to Thinkers: Further Thoughts on Lateral Thinking by *Edward de Bono* (Penguin, Harmondsworth, 1988), paper, \$16.95, ISBN 0-14-022806-3

In this book Edward de Bono continues his drive to make people think about how they think. He presents a large collection of problems and explains the methodologies that could be used to solve them. His style is very similar to that used in his other books in that he makes the reader think about how he would solve a problem, and then shows him a better way to solve it.

The author also seeks to have readers accurately review their own strategies in this book. He develops a segment he calls "the thinking place". This section is intended to act as a forum or mental gymnasium in which readers are encouraged to think in certain ways in an attempt to develop their thinking skills. He also seeks to put forward methods of thinking and problem solving that are simple, and therefore usable.

He is very successful in all of these areas. The reader is unlikely to finish the book without having to review the way in which he thinks. Further, the reader should have developed a certain set of skills and methods for solving problems. These methods are so simple that they can immediately be applied to a large number of areas.

The book is certainly worth the read. It is quite light reading due to de Bono's creative and entertaining style. However, it deserves steady concentration at some points if the maximum benefits are to be gained.

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The Calculus of International Communications by *Meheroo Jussawalla and Chee-Wah Cheah* (Libraries Unlimited, Littleton, Colorado, 1987) pp. xiv + 159, ISBN 0-87287-503-2

This book carries as subtitle, *A Study in the Political Economy of Transborder Data Flows*, which well outlines the content. By data flows the authors mean information that is fed into, or results from, any given economic activity. When these flows involve the use of computers and the flows move across national frontiers, they apply the expression 'transborder data flows' (TBDF). International communications are almost exclusively represented by these recent forms of information transfer with a major focus on the trade aspects. The book is described as a contribution to the discussion about TBDF in an economic perspective; even so, the definitions seem unnecessarily restrictive and therefore cause certain problems which will be mentioned below.

In the first part of their study, the authors set out to establish the technological and institutional setting for the trade represented by transborder data flows. Special attention is paid to the history of TBDF, including an analysis of relevant issues as they move from specific concerns about privacy protection to wider politico-economic issues in international trade and in international relations generally. In the second part, the authors tackle the task of charting new

directions for economic analysis. This is done through the application of selected concepts and models in economics for the analysis of privacy protection and associated regulation. This leads to consideration of an economic perspective on the choice of regulatory forms, in general terms and for TBDF specifically. Part III is intended to cover the prospects for data trade and includes an attempt at delineating an economic model and a welfare criterion for trade policy co-ordination and negotiation in this field.

The authors acknowledge a certain wariness about overtaxing traditional economic analysis in its application to such an unconventional subject matter as transborder data flows. They even mention difficulties in finding an economic theme 'on which we might incorporate TBDF within the corpus of economics writ large' (p. xiii). Indeed, transborder data flow is tricky business, from many angles. Even though the authors have not avoided all traps for the unwary, one is grateful for their effort to foster research and analysis in a field that certainly needs it. In order to give national policy and international negotiation a firmer conceptual base, it is important to advance understanding in a field that is becoming an increasingly significant feature of international communications, thus more and more politically sensitive while remaining theoretically murky.

Transborder data flows clearly fall within what is categorised as the service sector, which in classical economics was described as parasitic and still appears, at least sometimes, as a rubbish tip of theory: anything that is not a commodity is a service, which therefore comes to encompass activities stretching from haircuts to international banking. Wisely, the authors have resisted the temptation to enter the doctrinal disputes about tertiary and quaternary economic sectors; there are enough problems in sorting out the nature and role of TBDF as part of the service sector, however located in overall schemes.

Information 'occupies a slum dwelling in the town of economics'.¹ This often quoted sally by the economist George Stigler, even after 25 years, still seems appropriate in the case of TBDF: Jussawalla and Cheah are at pains to stress the surprising lack of either suitable theoretical constructs or valid statistics (balance of payment accounts on trade in services cannot be disaggregated to show the TBDF part). The authors also express misgivings about the capacity of the present international institutional system to deal with TBDF issues that cut across traditional categories and established organisational structures. In fact, there is for this area no international organisation or forum with an overall mandate and the required universal membership. Responsibilities are scattered and overlapping, sometimes competing. The authors show great, somewhat rash, impatience with the slow pace of the international community in moving towards negotiation in TBDF issues through organisations with primary responsibility in the trade area, such as GATT (General Agreement on Tariffs and Trade). However, their conclusions and forecasts seem somewhat hasty in view of the subsequent agreement to include trade in services, thus including TBDF, in the (GATT sponsored) new Uruguay round of international trade negotiations. Accurate forecasting is difficult. It was not foreseen that the failure to reach agreement at the mid-term review meeting in Montreal in December 1988 would be due not to disagreement between industrialised and developing countries on tertiary service sector issues, but to the controversy between the USA and the EEC on primary sector agricultural issues.

The authors also make their analysis of international politics and institutions go off at a tangent through their surprising but repeated references to 'supranational' organisations. In such directly relevant disciplines as international

relations theory and international law, a crucial feature of the current international scene is precisely the absence of supranational institutions. This makes it more difficult than necessary for the authors to see certain aspects of the current mismatch between institutions and actual behaviour. Significant is the increasing linkage between national and international practices, policies and decision-making which is particularly pronounced in recent areas of international concern, such as the environment, outer space, ocean management, communications and information. The difficulties involved in managing this interlinkage seem to be one reason for the lack of coherence, the contradictory, sometimes almost schizoid behaviour of concerned actors, such as transnational companies and governments in the field of TBDF, which the authors do not catch. The transnational companies clamour for the least possible government 'interference' and simultaneously for government intervention in favour of extension of proprietary rights; governments perch uneasily between perceived advantages of free flow, manageable levels of interdependence and the need for regulated order.

Sometimes the book seems better in intention than in execution. There are apposite and tantalising references to cultural norms, to vulnerability, risk and the increase in international imbalances through TBDF, to the need both for free flow and for government intervention. But they are not adequately followed up. Some of these issues are indeed fitting subjects for economic analysis; others fall outside an economic framework and rather show the need for a truly interdisciplinary approach. To come to grips with transborder data flow issues, economics *per se* is not enough; not would a purely institutional or legal analysis be sufficient. It is in this perspective that the discussion of privacy concerns is not up to the mark since the economic analysis is not put in context: privacy protection is based on human rights which are not even mentioned in the book. The avoidance of any reference to the human rights dimension of privacy protection as a context to the economic analysis poses the specific problem of making difficult, if not impossible, an adequate discussion of a central issue: the common interest reconciling fundamental and competing values, such as privacy and free flow of information. A purely economic analysis as proposed by the authors will not by itself do the trick. The 'rationality' of economic theory and the legal universe of discourse are not only different and sometimes competing: one is not reducible to the other.

To some extent the difficulties of coming to grips with certain TBDF issues seem to depend on the narrow definition given to the concept of TBDF by the authors. To my mind they unnecessarily limit themselves by linking the concept of TBDF to data flows related to economic activities so narrowly conceived that these flows appear only in the commercial sector. It leaves out of discussion at least two major categories of transborder data flows, both of them, in principle, non-traded. On one side of the commercial data flows are those of a scientific nature that are not marketed enough though they might have economic importance. Such data flows include, for example, the traditionally free (non-commercial) world-wide exchange of meteorological information within the international institutional framework that has been developed for this purpose. In the present situation of environmental and ecological crises, the scientific dimension of TBDF will become increasingly important.

On the other side is government use of TBDF in which the military role is crucial. The word 'military' is barely mentioned in the book, so slight is the attention paid to the single largest force in the development and use of modern

communications and information technology systems. Therefore, sweeping statements to the effect that demand for communication services is a function of economic variables and nothing else give an erroneous impression by excluding the military and its influence on the market through large-scale subsidies and support for research and development. The authors also maintain silence on another point which, to my mind, is as important as it is sensitive: the impact of political decisions for the control of technology and information flows. The famous Dresser case, which involved a French subsidiary of the US company Dresser, showed that it was enough to implement sanctions by preventing access to the parent company's computer in Pittsburg. Obviously, such events will, beyond economics, influence attitudes concerning domestic independent capacity and the vulnerability of free flow of information.

It is sometimes difficult to guess for which readership this book is intended. It is, of course, reassuring to know that the authors have undertaken their task "with much of the aplomb of trained economists" (p. xiii). Sometimes, though, the aplomb seems to get out of hand. There are passages that make interesting *non-sequiturs*. There are appealing, somewhat surrealistic, mixed metaphors ("the development of TBDF issues has floundered on the rock of indistinct lines of demarcation", p. 28). There are some startling contradictions. The authors state that while esoteric reference to technical matters are maintained, every effort has been made to present the main arguments in a manner that would not try the patience of readers unfamiliar with economics. What then is such a reader supposed to make of statements such as: "the model can be conveniently estimated via the use of polychotomous probit regression procedures" without any explanation of these terms (p.177)? Finally, it would be helpful if writers on information questions, including me, would be more rigorous in distinguishing between data, information, and knowledge.

REFERENCE

1. G.J. Stigler, 'The economics of information', *Journal of Political Economy*, 69, 2, 1961, pp. 213-25.

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The Information Society by David Lyon

(Polity Press, Cambridge, UK, 1988) pp. x + 196, ISBN 0-7456-0260-6

David Lyon introduces his analysis of the concept of 'information society' by stressing the interaction between technological change and social evolution. He argues that the literature on Information Technology and Society has too often emphasised the costs and benefits of technology-shaped potential futures without paying enough attention to the social origins of technological development. The belief that a new 'kind' of society will emerge exaggerates both the neutrality