Waldemar Duscha: Technologietransfer in die Volksrepublik China durch Wirtschaftskooperation. (Mitteilungen des Instituts für Asienkunde, 162). Hamburg: Institut für Asienkunde, 1987. 307 pages, DM 28.–

After carefully reading the book entitled "Technology Transfer to PR China through Economic Co-operation" one might well ask why the author has not named his work "Economic Co-operation through Technology Transfer to PR China".

It is true that Technology Transfer (TT) has become a favourite word in headlines dealing with China-business. Everybody, however, uses the term "TT" according to his own understanding without considering how Chinese authorities use this magic expression. In the last three years a minimum consensus seems to have developed in China as regards the term "TT". It is understood to refer to the introduction of technology with knowledge and know-how in the context of a project for the sake of economic co-operation. Besides compensation trade, barter trade, buy-back agreements as well as joint-ventures, technology transfer (including personnel training and know-how for operation and maintenance as well as a blueprint of the technological construction plans) serves as an instrument of economic co-operation, since normal free trading methods do not seem to be appropriate for developing business co-operation between China and the developed world.

For the Chinese government "joint-venture" seems to be the most appropriate way of adopting and adapting technologies from the developed countries. For the industrialised countries technology transfer to China could also be a suitable form of economic co-operation, – a long term economic co-operation – provided the necessary conditions exist.

The author has described in detail the efforts the Chinese government has made to provide the necessary conditions for economic co-operation via technology transfer. He analyses the new foreign trade system as well as the bank and credit system in China (Part II). There is no objection to emphasising the joint-venture as a means of technology transfer (Part III). However, nothing has been written about the way technology transfer to China is to be realised through joint-ventures and why the Chinese government favours joint-ventures for transferring technology from the developed countries.

In this context the statement "das zentrale Ziel "Modernisierung" seitens der chinesischen Wirtschaftsführung wurde nicht durch "Unterziele" oder Strategien präzisiert und abgegrenzt" (p. 2) must be corrected. In "The White Book No. 1 on Science and Technology Policy (1986)" and "Technology Transfer to China – A Comprehensive Guide (1987)", subgoals or strategies of Chinese technology policy are clearly formulated.

It is difficult to understand why the author also stresses the importance of Special Economic Zones (SEZ) in the context of technology transfer to China. Technology transfer takes place mainly in key industries of key cities such as Shanghai and Tienjin, hardly in SEZ, at least so far. The reasons are obvious: in SEZ, there are neither sufficient technological capacities, capabilities nor facilities, nor infrastructure to adopt and adapt technologies from the industrialised countries. More than 80% of investors in SEZ are businessmen from Hong Kong, Singapore or Taiwan. Investments are mostly concentrated in service sectors or manufacturing products without technological significance.

It is true that the Chinese government intends to make SEZ more attractive for realising technology transfer programmes. A university and technology park have been set up in Shenzhen. But the implementation of industrial development could not be successfully carried out. Critical voices blame the influence of Hong Kong businessmen in Shenzhen. It would be reasonable to analyse technology centers of coastal cities like Shanghai and Tienjin, instead of SEZ.

When dealing with the topic of technology transfer it is necessary to analyse the co-operation between China and Japan, the role of overseas Chinese in technology acquisition, the institutional capabilities of absorbing new technology, the structure of the decision-making process between foreign trade authorities and concerned users as well as the ministerial bureaucracy.

During the last 10 years a certain amount of technology transfer to China has, indeed, taken place. The main contribution of technology transfer to China is, however, realised through non-business activities: personnel exchange, joint research projects and so on. Certainly, for the sake of mutual advantage, technology transfer should be carried out as business objective in the context of economic co-operation. Barriers to "TT" are to be found not only on the Chinese side. For political and economic reasons the developed world also has fundamental problems with technology transfer to China.

The statement that "for the foreign companies technology transfer means the key to entering the Chinese internal market" (p. 238) is basically correct. The author fails, however, to discuss how to achieve this. It is, therefore, better to call the book "Economic Conditions for Technology Transfer" and the next interesting research project should be "Economic Co-operation through Technology Transfer in Form of Joint-Venture".

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