Human Adaptation to a Changing Socio-Economic Environment: transition to the openness

Andrejs Dreimanis
Environmental State Inspectorate of latvia
Rupniecibas 25, LV - 1877 Riga
Latvia

Abstract

Interdisciplinar cybernetic-systemic analysis of human adaptation to a novel socio-economic environment is proposed by considering the problem of human's harmonious involvement into a changed world being characterized by the openness of society and exhibiting a qualitatively distinguishing socio-economic and political order.

As key methodological approaches are chosen synergetics and the principle of requisite variety. Having specified the "environment" on the basis of C. Popper's and J. Eccle's concept of humans's three worlds, it is concluded that, according to the principle of requisite variety, the necessary condition of efficient will be predominance of the human inherent variety over the environmental variety.

The primary source of the rise of inherent self-variety - knowledge and information which are especially necessary for proper design of activities in the transition period, being characterized by elevated degree of uncertainty. Adaptation interrelations to information, uncertainty and self-organization are specified. It is emphasized : the basic principles of socio-economic systems in an open, market-type society-cooperation and competition - correspond to the key principles of self-organization in evolving systems. In view of the dual nature of the environment (being the adaptation target as well as the adapting subject), a problem of interrelation of active and passive adaptation emerges, thereby actualizing the roles of self-creativity, flexibility and predictability.

Trappl, Robert (ed.). *Cybernetics and Systems '96 Volume 2*, Vienna: Austrian Society for Cybernetic Studies, 1996, pp 652-657.