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## About the Authors

**Radostina Anguelova**

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Studied Pedagogy and PhD programme on Psychology at the Sofia University. Specialisations on cognitive psychology, consultative psychology and solution oriented therapy. Work experience as pedagogue-psychologist at the prison. Since 1991 assistant professor and lecturer at the Department of Psychology at SW University in Blagoevgrad and NB University at Sofia on topics of experimental psychology and decision-making. From February to November 2000 she was Fellow of the Institute for Advanced Studies on Science, Technology and Society, Graz. Main fields of activity: Understanding, Decision-making and Problemsolving (in cognitive, social and consultative aspects), psychological aspects of management of human resources and vocational psychodiagnostics.

Project Abstract

*Decision Making, Professional Choice and Motivation upon Entrance at University Considering an Emphasis on a Comparative Analysis between Austria and Bulgaria*

The main purpose of my project is to explore career choice of engineering beginners that includes to find out the main socio-psychological reasons influencing the motivation for choosing engineering as a career upon entrance at University as well as the process of choice and decision-making models using in this process. The complexity of the problem requires research carried out on several levels with simultaneous experiments on different samples. The influence of FIT programme on the decision-making structures will be tested separately on another level.

To realize the main goal of the research two kind of experimental methods are constructed: a questionnaire comprising structured and unstructured questions designed to elicit data on the subjects' reasons and motivation for choosing engineering as a profession and an interview designed to elicit information regarding the process of career choice and decision-making structures involved in it.

For understanding the motivational background of career choice and its cultural determination I intent to do a comparative analysis between Austrian and Bulgarian samples. That comparative analysis would be very helpful for finding out some special features of the career decision-making process and for its connection to social requirements. The results would give opportunities to construct programmes, by which would be possible to influence the vocational choice of young people in concordance to social needs. They also would help in determining the composition of engineering choice as well as personnel values and employment outlook.

**Daniel Barben**

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Born: 10th June 1961, Zurich (Switzerland). Academic education in the fields of Sociology, Psychology, Political Science and Philosophy at the Free University of Berlin (Dipl.-Soz./Diploma-Sociology, 1989); doctoral degree from the University of Potsdam, Economic and Social Sciences Department (Dr. rer. pol., 1995). Research and teaching activities at the Social Science Research Centre Berlin (WZB), the Technical University Berlin, the Free University of Berlin and the University of Bielefeld. From May to September 2000 he was Fellow of the Institute for Advanced Studies on Science, Technology and Society, Graz. Current research project ("Habilitation" research, funded by the German Science

Foundation (DFG) from October 2000).

#### Project Abstract

*The Generation and Shaping of Biotechnology: The Neo-liberal Configuration of Functions and Forms of Technological Regimes in a Comparative Perspective (USA-Germany/EU)*

Since the mid-1970s, biotechnology has been established as a strategic technology of the future. The innovation, regulation, and enculturation of biotechnology has become an important and controversial area in influencing the future paths of science and technology as well as of society. At the same time, neo-liberalism has experienced an upturn and – despite competing with opposing tendencies – has become hegemonic. The relationship between the developments in biotechnology and neo-liberalism remains significantly under-researched. This project addresses this void in the research by investigating the dynamics and coherence of the different dimensions of an emerging technological regime within an integral frame of analysis. The functions, forms, and conflicts of this regime are reconstructed with regard to innovation, risk management, patenting, bioethics, biodiversity, and acceptance policy. By comparing national, supra-national, and international levels technological and institutional developments can be understood as particularly specific and part of global economic and political transformations.

#### **Eva Estók**

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Studied Economics at the Budapest University of Economics, Faculties of foreign trade and strategy of multinational firms and at Ecole de Hautes Etudes Commerciales: Faculty of European Economics, graduated in 1996. From 1997 till 1999 Eva Estók

worked as an organization development consultant for Andersen Consulting, since 1999 she is admitted to the PhD programme at the Budapest University of Technology, Department of Innovation Management and History of Technology: History of Science, Technology and Engineering. From April to September 2000 she was Fellow of the Institute for Advanced Studies on Science, Technology and Society, Graz. Main fields of interest: innovation, evolutionary economics, knowledge management, history of technology, social constructivism.

#### Project Abstract

##### *Innovation and Technology Policy within Economic Growth*

The objective of my project is to provide the criteria for an evolutionary economic model that meets values and expectations of society and ecology, i.e. that ensures suitable communication, activity and evaluation channels and forums to put into reality these values and expectations. For this I would like to define the basic elements, basic conditions, environment, motivations and interactions.

My research has three main parts: definition of the evolutionary economic model, definition of techno-economic paradigm within this model, and the definition and incorporation of models best reflecting emergence and change of social and ecological values.

During the analysis of the part of evolutionary economics, I would like to examine economic models from the aspect of dynamism (neoclassical economics, Marshall, Veblen, Schumpeter), I would analyse the issue of business cycles, then I introduce the evolutionary thought and its adaptation in economics. To define techno-economic paradigm, I start from the model of technologic paradigm developed by Dosi, then I revise the history and role of innovation and technology in economic theories and practice.

Further on, I would like to expand this model with social values (social shaping of technology – socio-constructivist model) and with ecological values (Kemp). I use a theoretical approach and I try to provide these criteria through synthesis and historical review. (It is beyond my power and time to look for primary economic data so I would rely on data of the analysed works.)

### **Tatiana Leontieva**

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Tatiana Leontieva was born in Moscow in 1949. She graduated from Gubkin Moscow Technical University in 1971 and earned her PhD in applied physics from the Moscow Institute of Electronic Technology in 1979. She was employed as a researcher in electronics technology in the Russian defence industry and a technical-university lecturer in microelectronics. She published 23 research papers in applied physics and 2 text-books for technical universities. She is now working on development of programs aimed at providing support to unemployed and under-employed women scientists in Russia.

Some publications and conference papers on socio-economic issues by Tatiana Leontieva:

“Social Re-adaptation of Mature Women Scientists in Russia Made Redundant in the Course of Reforms in Russia: Overview of the Problem and Practical Work on Its Resolution”. International Conference “Women in Science, 2000”, Saint-Petersburg, Russia, June 2000.

“Professional Women in Science and Technology in Russia: 1991-2000”. International Conference on Equal Rights Practice at Technical Universities, Cottbus, December 1999.

“Women as Leaders of a New Russia”. 2nd European Feminist

Research Conference on Feminist Perspectives on Technology, Work and Ecology, Graz, Austria, July 1994.

“The Lost Generation: Mature Educated Women at Russian Research and Development and Production Facilities in Defence Industries”. *Women’s Studies International Forum*, vol. 17, no. 4, 1994.

### **Cristina Marcolin**

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1997: Degree in Political and International Sciences at the University of Trieste, Italy. 1998: collaboration with co-operatives belonging to the CTM “Cooperazione Terzo Mondo”, the Italian organisation working on a “Non Profit Basis” that imports and distributes into the country foodstuffs and handicraft products from the South. My duties concentrated on didactic activities at high schools, on staging exhibitions, and on internal promotion and development of external contacts. 1999: “Leonardo da Vinci” EU vocational training at Joanneum Research - Institute of Technology and Regional Policy, Graz, Austria. Major personal areas of activities: international and European projects, cross-border co-operation projects, project management, methodology and project development. From April to September 2000 she was Fellow of the Institute for Advanced Studies on Science, Technology and Society, Graz. Main field of interests: cooperation and development, international policy, sustainable technological development.

#### **Project Abstract**

*Technology Policy in the Austrian Development Aid System*

My research focuses on the Austrian programmes and policies for the developing countries, with special regard to technology

policy. The primary objective of this study is to survey and analyse best practice Austrian development programmes and projects for the developing countries in the field of technology policy. The study will therefore address project achievements, the appropriateness of project objectives to the given circumstances, and the factors that contributed to their success or failure.

The method will include an analysis of existing literature and an empirical research based on interviews with the actors involved in the design and the delivery of such programmes. The second parallel objective of this research is to study theoretically the concept of technology policy in developing studies, giving an overview of the technology debate of the past decade and on the role played by sustainability within the Appropriate Technology (AT) movement.

In view of the promotion of sustainable technology and with regard of the “priority countries” of the Austrian development aid system I will assess the “interactive” approach of their policy strategies with the projects and programmes transferring technology. Attention will be delivered firstly to the acquisition of technological capabilities, that are the skills (technical, managerial, and organisational) necessary for enterprises to set up a plant, utilise it efficiently, improve and expand it over time, and develop new products and processes. Secondly it will be surveyed how can those projects improve the general standard life level and provide poverty alleviation remarking the AT concept that technological development is ultimately a social process.

### **Alan Marshall**

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Alan Marshall has a Bachelor of Science with Honours in Biology, Environmental Studies and the History of Science from the

University of Wolverhampton, England, a Master of Philosophy in Environment and Development from Massey University, New Zealand, and a Doctor of Philosophy in Science, Technology and Society from the University of Wollongong, Australia. His main active research and writing interests revolve around the history and philosophy of images of nature and the history and philosophy of the American space program. Alan's articles on these subjects have appeared in various places including the *Journal of Applied Philosophy*, *Australasian Science*, *New Zealand Science Monthly*, *Space Policy*, *Studies in the History and Philosophy of Science*, and *Wild Earth*. From April to December 2000 he was Fellow of the Institute for Advanced Studies on Science, Technology and Society, Graz.

#### Project Abstract

*The Ecology-Economy Analogy. A History of the Transdisciplinary Use of the Concept of Self-organization in Ecology and Economics.*

The concept of self-organization, which describes how individual entities organize themselves from their environment through certain physical processes, has emerged from the discipline of cybernetics at regular intervals throughout the past fifty years. Nowadays, cyberneticists are convinced that the selforganization concept is relevant to ecological studies. Indeed, they say that ecosystems are prime examples of selforganizing phenomena (contrary to a lot of counter-evidence). Many cyberneticists are also convinced that Free Market economies are examples of selforganizing phenomena (again, contrary to a lot of counter-evidence) and that therefore Free Market economies echo the workings of ecosystems. Why they think this, and the way they shape their stories of selforganization to convince other people, is the main subject of investigation in this project.

### Michael Stockinger

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Michael Stockinger (Mag. phil.) was born in 1973, studied English and French Literature and Linguistics at the KF University Graz and is currently working on his research project “Technology and the Text – The Interplay of Information Technology and Contemporary Narrative” (with Alen Vitas). His article “Experiments on Living Matter or How to Save the Narrative from Extinction – The Unfinished Story of Jean Baudrillard's and Don DeLillo's Cultural Pathology” (based on his thesis) was published in: Elisabeth Kraus and Carolin Auer, eds., *Simulacrum America: The USA and the Popular Media*. Rochester, NY: Camden House, 2000. From April 2000 to March 2001 he was Fellow of the Institute for Advanced Studies on Science, Technology and Society, Graz. He is an actor and writer at the Theater im Bahnhof, Graz.

#### Project Abstract

*Technology and the Text: The Interplay of Information Technology and Contemporary Narrative (in cooperation with Alen Vitas)*

The central concern of the research project is to examine how contemporary information processing technology affects the established practices of storytelling in different media – how, in other words, technology has affected narrative structure in literature and cinema, and how it has led to the development of new narrative forms such as hyperfiction and hypermedia. At the same time, the project investigates the cultural implications of these narratives – how these narratives influence the cultural perception of technology, and how they contribute to the construction of technology as a cultural master narrative.

The first part of the project is devoted to the analysis of

cyberpunk SF – a recent (though shortlived) genre that is often seen as immediately inspired by information technology, and as almost exclusively devoted to problematizing its effects on society. The main interest of the project, however, lies in investigating the specific discourse of cyberpunk fiction – its narrative structure – which is marked by an excessive information density and a high-velocity narrative pace, often resulting in an impression of information overload. Since a narrative thus attempts to emulate – through its structure – the very technology that it describes, this discourse of overload (which, in the meantime, has spread beyond the genre of cyberpunk SF) would appear to have powerful consequences on the reception of a literary text: on the one hand, it can be seen as a mimetic device, faithfully representing the information society (and its shortcomings); on the other, it faces the argument that it is yet another superficial spectacle of that society, resisting interpretation and impeding critical thought.

The second part of the project investigates a different form of technological influence on narrative structure: the nexus of interactivity and narrative which we encounter in hyperfiction and in the postmodern novel. Regarding the former, it was information technology which has given rise to interactive literature (and other interactive media), in which the reader is free to determine the course of action – the reader thus becomes an active participant in the construction of the work. However, long before hyperfiction, a number of experimental postmodern novels have given up on conventional narrative structure, redefining themselves as complex information systems allowing for multiple readings – thus, although paper-bound, they require of their readers to become active participants in the construction of meaning. This seems to suggest that the conventional notion of ‘narrative’ – a story told by an author to an audience – needs to be redefined in

order to accommodate new forms of (technologically-enhanced) storytelling, where 'narrative' is often an interactive, collaborative process, and where 'text' – far from being limited to 'writing' – is increasingly understood as a multimedia event.

### Alen Vitas

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Alen Vitas (Mag. phil.) was born in Zagreb, Croatia, in 1972. He studied English and Media Studies at the Karl-Franzens University of Graz and graduated in 1998. He is currently working on his dissertation, entitled "Information and Complexity in Contemporary Science Fiction", and teaching a course on television and American culture at the Department of American Studies in Graz. Together with Michael Stockinger he is working on a research project named "Technology and the Text: The Interplay of Information Technology and Contemporary Narrative." His article "Warp 9 to Hyperreality – Information Overload and the End of the Space Age" was published in *Simulacrum America: The USA and the Popular Media*. (Eds. Elisabeth Kraus and Carolin Auer. Rochester, NY: Camden House, 2000.) From April 2000 to February 2001 he was Fellow of the Institute for Advanced Studies on Science, Technology and Society, Graz.

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