

Marcia Esteves Agostinho, D.Sc. is lecturer and researcher at Pontifical Catholic University of Rio de Janeiro, the Department of Industrial Engineering. Formerly, she was a visiting researcher at the Department of Manufacturing Engineering of the University of Nottingham, UK. For a decade, she has been studying organizational implications of Complexity Theory, with special interest in organizational forms that support individual autonomy and reflexiveness in social systems - in particular, business organizations. Her newest book, *'Complexidade e Organizações: em Busca da Gestão Autônoma'*, was published in Portuguese by Editora Atlas (2003).

Peter Allen, Professor is Head of the Complex Systems Management Centre in the School of Management at Cranfield University. He is also Co-ordinator of the ESRC Priority Network in Complex and Dynamic Processes. His research is directed towards the application of the new ideas concerning evolutionary complex systems to real world problems. He has a Ph.D. in Theoretical Physics, was a Royal Society European Research Fellow 1970-71 and a Senior Research Fellow at the Université Libre de Bruxelles from 1972-1987, where he worked on the theory of complex systems with the Nobel Laureate, Ilya Prigogine. Professor Allen has worked for 25 years on the mathematical modelling of change and innovation in urban, social, economic, financial and ecological systems, and the development of integrated systems models. He has written and edited several books and published well over 150 articles in a range of fields including ecology, social science, urban and regional science, economics, systems theory, and physics. He has been a consultant to the Canadian Fishing Industry, Elf Aquitaine, the United Nations University, the European Commission and the Asian Development Bank. He has managed a number of large European and UK research contracts.

Urooj Amjad is a Research Officer at the London School of Economics Complexity Group. Her research interests include complexity, organizations, water management, and the Middle East. She is also pursuing doctoral research at the School of Oriental and African Studies, Department of Geography on Public Private Partnerships in the Water Sector as Complex Adaptive Systems: implementing policy changes amid evolving organizational goals and roles.

James Baldwin graduated from the University of Hull in 1999 with a first class honours degree in Psychology. He was subsequently awarded a scholarship from the University of Sheffield to research the sustainability of complex systems, with a particular emphasis of manufacturing in South Yorkshire. This has led to research in the classifications of industrial organisations and networks of organisations, and an ESRC (UK) Fellowship for 1 year. James is also serving on the Editorial Board of the new international scientific referee journal 'Progress in Industrial Ecology'. Other research interests include industrial ecology, management uncertainty, management systems, and the psychological processes involved in productive (entrepreneurship) and counterproductive behaviours in the workplace. He has written several papers for publication as well as presenting at national and international workshops/conferences.

Guy Bullen is Head of Planning and Strategic Performance Management for BT Global Services' Networks. His responsibilities include building the Capex investment profile, writing the networks business plan, monitoring performance against plan, providing key networks information to the analyst community, and leading on Quality and Benchmarking. Previously he was Head of Quality in BT Europe, and previous to that, Manager of Data and Internet Services for BT in Europe. He has an MA in French and Phonetics from Cambridge University, and an MSc in Telecoms Business with University College London. He is currently studying for an Engineering Doctorate at University College London.

Julian Burton is a strategic artist and facilitator. He has worked in organisations for several years creating Big Pictures, large colourful watercolour paintings that capture the story or journey of an organisation in symbols and metaphors. These are at the core of a process he has developed called Visual Dialogue that helps to transform organisations one conversation at a time. It has been used successfully by clients such as BT, Barclays, and the Prudential. Visual Dialogue is a process which gathers different perspectives and unifies them into a shared picture. This creates a talking point that focuses a group's attention on crucial issues and challenges. It is something concrete that people can gather round and discuss, and which provokes lively and animated conversations. The process creates new shared meanings by encouraging people to speak in a more grounded, specific and honest way about their issues and aspirations at work. This naturally promotes the sharing of experience which is the key to developing the better working relationships that lead to improving performance. Julian has also worked with the L.S.E. Complexity Group for five years, creating pictures in many meetings and workshops to help people grasp complexity ideas more easily. His Visual Dialogue process is based on complexity principles, which for him means that as the locus of change in organisations is the conversation, visual media are an effective way to influence the way we talk, thereby creating space for emergence and self-organisation. Before working as a strategic artist, Julian worked as web designer at the Wall Street Journal. He started his career after getting an honours degree at Middlesex university in Scientific Illustration, by doing Two years with VSO in Bhutan as book illustrator. After that he was inspired to become a mountain landscape painter with exhibitions in London, New York, Delhi and Copenhagen.

Alfredo Capote has been a professor of Mathematics and Computer Science at the Universidad Iberoamericana, the Instituto Tecnológico y de Estudios Superiores de Monterrey Campus Monterrey, and the Universidad Autónoma de Nuevo León. During the period from 1991 to 1993 he was the director and general manager of corporate accounts for IBM's Latin-American division. He is a member of the Campus Ciudad de México ITESM Council, Vice-president of COPARMEX, member of the Mexican Foundation of Quality (FUNDAMECA) and member of the Mexican National Institute of Finance Executives (IMEF). In March 1995 he became President and General Manager for IBM-Mexico and in August 2000 he was named

vice-president of Strategic Initiatives for IBM Latin-America and Director of the Electronic Business Research Center of the Tecnológico de Monterrey.

John L. Casti joined the Santa Fe Institute, New Mexico as a resident researcher, in 1992. Prior to that he was one of the first research staff members of IIASA in Vienna, and worked on problems of systems modelling and applied systems analysis. Dr. Casti's current research interests centre on the use of large-scale microsimulation to study the properties of complex adaptive systems such as stock markets, the business world and road-traffic networks. In particular he is building 'silicon surrogates' to investigate the behaviour of the world's insurance industry and that of a large supermarket chain. He is also involved in making a bridge between the 'impossibility' results of Turing, Gödel and Chaitin in mathematics and questions in physics, biology and economics. His many publications include the award-winning *'Alternate Realities: Mathematical Models of Nature and Man'* Wiley 1989, *'Complexification'* Harper Collins NY 1994, *'Would-Be Worlds'* Wiley NY 1997, and *'Paradigms Regained'* Morrow NY 2000.

Gilberto Teixeira de Castro, M.Sc. is a senior executive of American Beverage Co. (AMBEV), currently in charge of building an industrial plant in Peru. A production engineer by university degree, he has more than 10 years experience in project as well as in operations management. During his career, he has developed a distinctive managerial approach that stimulates teamwork at the same time as it supports individuals' autonomy. Because of the congruence between his practice and the theory about complex adaptive systems, he has written some articles, in collaboration with Marcia Agostinho, in which organizational issues are discussed through the lens of complexity.

Paul Cilliers is professor of Philosophy at the University of Stellenbosch in South Africa. He also has a degree in Electronic Engineering and worked as an engineer for more than a decade. He teaches Cultural Philosophy and Philosophy of Science. His research is focused on the philosophical implications of complexity theory. He is the author of *'Complexity and Postmodernism'* Routledge 1998.

Peter A. Corning, Ph.D is Director of the Institute for the Study of Complex Systems (ISCS) in Palo Alto, California. He formerly taught in the Human Biology Program and Political Science Department at Stanford University, and served as a senior partner in a management-consulting firm. Dr. Corning is also a member of several scientific organizations and a past president of the International Society for the Systems Sciences. He has previously published over 150 articles and book chapters, as well as four books. His newest trade book *'Nature's Magic: Synergy in Evolution and the Fate of Humankind'* was published by Cambridge University Press (2003). He is currently preparing a new book on *'Beyond Capitalism and Socialism: The Biological Basis of Social Justice'*.

Usha Dasari earned her M.B.A. and M.Sc. degrees at Southern New Hampshire University where she is currently Lecturer in International Business and a candidate for the D.Phil degree. A prize winning athlete and classical Indian dancer, Mrs. Dasari was also among the first group of women selected as pilots for the Indian Air Force. She currently teaches corporate strategy and international marketing as well as serving as the departmental coordinator for database systems management and computational modeling. Her research interests and publications include international trade and investment theory, comparative market entry strategy, the evolutionary dynamics of technological change and knowledge-intensive industry analyses. Along with Dr. Massood Samii, she is currently directing the manuscript and peer review process for the 2003 Northeast Regional Conference of the Academy of International Business.

Lois Estabrook is an Account Manager with OSRAM SYLVANIA, *Inc* - Automotive Lighting. She holds a B.A. from Colgate University and a MS in International Business from Southern New Hampshire University. The focus of her work is the implications of personality on global business and social dynamics. Lois' other interests include music, gardening and keeping up with the activities of her husband and two grown children.

Philip Vos Fellman is a graduate of the California Institute of the Arts, the Yale School of Management and Cornell University. He holds a B.F.A. in music, an M.A. in philosophy, an M.B.A. in Finance, and an M.A. and D.Phil in International Relations. Dr. Fellman is Professor of International Business Strategy at Southern New Hampshire University, Manchester, U.S.A., where he teaches graduate courses in corporate strategy, international business, applied mathematics, and chaos and complexity theory. His primary fields of research and publication are the modeling of complex dynamical systems, the effects of path-dependent lock-in on corporate governance structures and the application of statistical physics to economics and finance. Dr. Fellman also retains an active interest in the arts and has published a number of writings in the arts and literature.

Peter Fryer is a management consultant who specialises in the subject of learning organizations and complex adaptive systems, in particular, their application to businesses of all kinds. Such organisations have included Pfizer, the Industrial Society, DfES, and Glasgow Caledonian University as well as a wide range of smaller entities. He was the Chief Executive of Humberside Training and Enterprise Council until TECs were abolished in 2001. As the TEC Chief Executive he was able to practice what he preached by taking out the traditional business process such as, plans, hierarchy charts, budgets, managers, rules, job descriptions etc. Introducing in their place, fuzzy policies, paperless 360 appraisals, self managed teams, serious thinking sessions and much, much more – all based on the principles of self responsibility, trust and giving oceans of support. He has been working with the London School of Economics (LSE) for several years now, initially as a member of a project that looked

at the relationship between complex adaptive systems and organisational form and more recently as an advisor to a new EPSRC-funded LSE project. He has written a number of articles on complexity. Over the years he has given a wide range of presentations on the subject of complexity in the workplace based on his experiences as one of the few people who has actual experience of running an organisation using complexity theory.

Tim Gough is an architect with an ongoing interest in post-Heidegger studies. He is currently director of AWA Architects, Safety in Design and the Construction Industry Council, and teaches at Kingston University School of Architecture and Birkbeck College.

Kate Hopkinson, trained as a psychologist, is now Director of Inner Skills Consultancy Ltd, a company she set up in 1995, concerned with enhancing creativity and innovation – in their widest and deepest sense – in organisations. She has been attached to the Complexity Research Programme at LSE for several years, with the role of Business Liaison for the programme. She is currently involved with the ICoSS project, and has been working with Rolls Royce Marine, among others, on the inner skills of their senior executives. As well as 20 years experience in management consultancy, Kate has been CEO of a not-for-profit organisation, and served for 6 years on the board of Saferworld, an NGO concerned with international security issues. Present and past clients include The Prudential, Nat West Bank, Total Oil, Legal & General Venture Fund, BBC, Airbus, British Gas, BT, Sainsburys, Lloyd's TSB, The Merchants Group, International Masters Publishers, London Development Agency, National Consumer Council, the NHS, the Police, Amnesty International, UNICEF, and The Children's Society.

Roland Kupers is currently Vice President Strategy for Shell's LNG global business, based in London. A theoretical physicist by university training, Roland spent the first 11 years of his career with AT&T in the Netherlands and in Italy, holding different management positions. His last assignment was as Regional Managing Director for Northern Europe. The period with AT&T coincided with a tremendous transformation of the telecommunications industry, both as a business and in its societal impact. In 1998, Roland left AT&T for a yearlong sabbatical. Its main theme was the study of complexity, particularly as a new approach to organizational and societal change, resulting in a series of lectures and publications. Subsequently he joined Shell and held a number of positions including Vice President Sustainable Development for the Group. Roland is a Dutch national and married to a designer. His travels have made him fluent in five languages as well as given him an appreciation and a passion for the dilemmas of sustainability, business and complexity.

Simon Marvin, Professor is a Co-director of SURF and the United Utilities Chair of Sustainable Urban and Regional Development. Simon's research trajectory has built a

detailed understanding of the changing relations between cities, regions and infrastructure networks in a period of rapid technological change, environmental concern and institutional restructuring. With funding support from two UK research councils he has developed a specialist knowledge of how the reconfiguration of water, waste, energy, telecommunications and transportation networks re-shapes relations with users and places in contemporary cities and regions. Simon's most recent work has focused upon the implications of e-commerce for urban planning and sustainability. He has increasingly shifted towards the development of a more prospective approach to understanding urban and regional change, especially through the development of new techniques for envisioning and simulating future development trajectories. Simon is part of an OECD network examining new approaches to territorial foresight.

Irene McAra-McWilliam is Professor and head of the Department of Interaction Design at the Royal College of Art. Prior to this, she was Director of Design Research at Philips Design in the Netherlands. Since 1995 she has acted as a consultant for the European Commission in defining future visionary research directions, and is a member of the EC Working Group on Ambient Intelligence. She coordinated EC research theme, Connected Community, for which she initiated and led the award-winning project, Living Memory. Her central interest is the relationship between social change and the design of new technologies.

Will Medd, Ph.D. is a Research Fellow at SURF bringing an interest in the complex and changing inter-connections that configure contemporary processes of governance. More specifically, Will is working with international partners from Germany, Denmark, Greece, Bulgaria and Hungary on an EU funded project looking at the emergence of 'new intermediaries' in the water sector. He is also developing research exploring the governance processes involved in 'building resilience', in particular examining the implications for city-regional relations of the UK's resilience programme. He has published on complexity theory, methodology, and partnership working.

Eve Mitleton-Kelly is Director and founder of the Complexity Research Programme at the London School of Economics, UK; Visiting Professor at the Open University; Coordinator of Links with Industry & Government in the European Network of Excellence, Exystence; Executive Director of SOL-UK (London), the London group of the global network 'Society for Organisational Learning'. The focus of her research has been the strategy process in the business and information systems domains, with over 90 companies in the UK and USA. Her recent work has concentrated on the implications of the theories of complexity for IT legacy systems, organisational learning and the emergence of organisational forms and has developed a methodology for identifying conditions that enable and constrain those processes, using the principles of complexity. She has written on complex social systems and on the application of the theory in practice and is editing a book on complexity and

organisations with 14 international authors, 'Complex Systems and Evolutionary Perspectives on Organisations: the Application of Complexity Theory to Organisations', Elsevier, 2003, ISBN No: 0-08-043957-8. EMK's chapter outlines 10 principles of complexity and enabling infrastructures.

Barbara A. Misztal is Professor of Sociology at Leicester University. She worked at the Institute of Philosophy and Sociology of the Polish Academy of Sciences (Warsaw) and Griffith University, Australia. She is the author of *Theories of Social Remembering* (Open University Press, 2003), *Informality. Social Theory and Contemporary Practice* (Routledge 2000), *Trust in Modern Society* (Polity, 1996), as well as co-editor of *Action on AIDS*, Greenwood Press 1990.

Sheila Moorcroft, a Partner in Business Futures, is a futures research consultant with more than 20 years experience identifying and interpreting the cumulative signals of emerging trends in the business environment. Her particular interests are the implications of social change especially for new technologies / new product development and the development of the knowledge economy. She helps clients in a wide variety of sectors - including finance, telecomms, auto industry, waste management local government and consumer protection - be more aware of and responsive to the impacts of change and to develop appropriate strategies in response to them. Previously, she was a Director at Applied Futures and spent ten years at SRI International (Stanford Research Institute) providing strategic research services to clients worldwide. Recent publications include a regular *futures column* for the Gurteen Knowledge Newsletter, *Scenarios – a practical tool for survival* (intelligence in industry, No. 4, 2001) *From orchestration to jamming* (intelligence in industry No.1 2001).

Sevasti-Melissa Nolas is a full-time Research Officer with the Complexity Research Programme at the London School of Economics and has been working on the Group's ICoSS (Integration of Complex Social Systems) project for the last year. She is also pursuing doctoral research in the Department of Social Psychology in the area of community action, community organization, stories and multimedia.

Justus Oguntuase is a doctoral candidate in International Business at Southern New Hampshire University. He holds several certifications in business software and applications, a Diploma in Computer Science from University of Lagos, a B.S. Accounting from the Federal Polytechnic, and M.Sc. in International Business from Southern New Hampshire University. Mr. Oguntuase's principal areas of research are in non-linear and quantum computing, chaos theory and complexity science with a particular focus on research in chaos and complexity in supply chain management. Born in the rustic countryside of Western Nigeria, with an early life experience of farming, fishing and hunting, Justus developed an early fascination with complexity from his youthful observations of phenomena as diverse as the intricate patterns of African ecosystems to the chaotic road traffic of Lagos. Justus'

professional life spans the fields of Management Information Systems, Finance, Accounting, Auditing, Business Consulting and Project Management. Having worked in several positions with Ernst and Young, he currently manages Enterprise Resource Planning and Business to Business Systems for *Converge*, a global electronic exchange based in Massachusetts. Justus is a member of the Project Management Institute, the Institute of Administration Accountants, The Nigerian Institute of Personnel Management, The Nigerian Institute of Management, the Computer Association of Nigeria and several other professional associations.

Terry Stock is Director of Human Resources, Rolls-Royce Marine. Terry obtained a BSc degree from Birmingham University and an MSc from Imperial College, London, and is a Fellow of the Institute of Personnel and Development, and a Chartered Secretary. He has 20 years' of broad international experience in Human Resources, and has held the senior HR position in two UK listed companies – Johnson Matthey plc and Cookson Group plc. Terry joined Rolls-Royce in December 2000 as Director of HR – Marine. Aged 44 and married to Lora, they have a four-year old son, Alfred, and a two-year old daughter, Emily. Terry and Lora are keen and experienced scuba divers. Terry's other interests include cricket, soccer, theatre and cinema.

Frances Storr is an organisational psychologist with seventeen years experience of applying psychology in organisations. She currently works for Sheppard Moscow, a consultancy specialising in organisational development and Frances's area of expertise is in developing organisational culture. In Humberside Training and Enterprise Council (TEC) she had a lead role in applying complexity theory to the development of the culture. Frances is the architect of the paperless, face to face 360 degree appraisal process which is based on complexity principles and is rapidly gaining recognition as an organisational development tool as well as a powerful individual feedback process. The process was originally developed at Humberside TEC and has now been applied in seven other organisations of various sizes and from different sectors. Her current clients include the World Bank, first direct, Scottish Courage and The Earls Court and Olympia Group.

Mark Strathern is a Research Fellow with the Complex Systems Management Centre. He is part of the team on the Nexus project to understand and model sustainability in complex socio-economic networks. He is also involved with the modelling and teaching of sustainability within the EU fishing industries, and is a collaborator with the Tyndall Centre working on formal and mathematical methods for use in the climate change policy arena. Mark has worked for over a decade at Cranfield modelling complex systems, particularly complex socio-economic systems. Amongst other projects he has been involved in the modelling of financial trading systems, banking, the effects of climate change, Senegal and the water quality in the Rhone valley. He also has an ongoing interest in object oriented software development for concurrent and distributed systems. Before joining Cranfield Mark worked for a number of years as a consultant in Information Systems, and has also

held positions in accountancy and marketing. Mark has a degree in mathematics and has an ongoing PhD in modeling adaptability.

Roxana Wright holds an M.B.A. and an M.Sc. in International Business and is a candidate for the degree of Doctor of Business Administration (D.B.A.) in International Business at Southern New Hampshire University in Manchester, New Hampshire, USA, where she is also Lecturer in International Business. She currently teaches courses in international business and accounting in the graduate, undergraduate, and continuing education programs. Mrs. Wright is a licensed accountant and has corporate experience in accountancy and information technology in both Romania and the United Kingdom. Prior to becoming a candidate for the doctoral degree, she taught accounting at Plymouth State University in Plymouth, New Hampshire. Mrs. Wright's areas of research include the application of path-dependence and increasing returns to technology replacement and corporate governance, and the application of non-equilibrium economics to the problems of knowledge based industries and institutions in a globalized knowledge economy. Mrs. Wright has been an active participant in a number of national and international conferences on economics, modeling, corporate governance and international business. Her work includes papers presented at the Association for Japanese Business Studies, the Academy of International Business, the North American Association for Computation in the Social and Organizational Sciences and a number of other conferences (ASBBS, SAM, AJBS). Her current research focuses on statistical principles of evolutionary theory and the evolutionary dynamics of competition in modeling the behavior of businesses, complex adaptive landscapes and technological diffusion. Mrs. Wright's recent work also applies techniques of network analysis and non-linear dynamical systems modeling to the problems of identifying and destabilizing international terrorist networks.