Biographies

Robert Adrian (CDN/A)

born 1935. His installations, graphics, sculptures and telecommunications projects have been featured at the Biennale in Venice (1980, 1986), as well as the Biennale in Sydney, numerous other international exhibitions, and one-man shows in Europe and North America. Adrian X is represented in the collections of museums around the world, and has completed a number of large-scale projects in public spaces. Since 1979, he has also been involved in the theory and practice of art employing new communications technologies.

John Arquilla (USA)

is a professor of defense analysis at the United States Naval Postgraduate School, and a senior consultant to the RAND Corporation. He has authored or edited five books on a variety of topics in military and security affairs, and published over a dozen articles in leading academic journals. He holds a doctorate in international relations from Stanford University, and is best known for his collaborative work on the information revolution with David Ronfeldt, which began with "Cyberwar is Coming!"

Ute Bernhardt (D)

born 1962, studied philosophy, computer science and psychology at the University of Bonn. She worked in the German National Information Science Research Center from 1984-1990 and, since 1990, has been managing director and member of the board of the non-profit organisation Forum Informatiker für Frieden und gesellschaftliche Verantwortung (FIfF)–the German counterpart of CPSR–where she also acts as editor on books and for a journal on computers and society. Her work is centered around the social and political impacts of Information Technology, especially computers and the military, as well as responsible use, privacy and computers in the workplace. In this context, she worked on a technology assessment study for the EU Parliament.

Manuel DeLanda (USA)

is the author of two philosophy books, "War in the Age of Intelligent Machines" (1991) and "A Thousand Years of Nonlinear History" (1997), and of many philosophical essays published in various journals. He teaches a seminar at Columbia University on "Theories of Self-Organization and Urban History", and lectures around the world on the philosophy of science and technology.

Kunda Dixit (Nepal)

is a Nepali journalist who is the Director of The Panos Institute South Asia in Kathmandu, Nepal. He used to be the Asia-Pacific Regional Editor of Inter Press Service and is author of the book *Dateline Earth: Journalism As If the Planet Mattered*.

Timothy Druckrey (USA)

is an independent curator, critic and writer concerned with issues of history, representation, and technology. He lectures internationally on the social impact of digital media, the transformation of representation, and communication in interactive and networked

environments. He co-organized the international symposium "Ideologies of Technology" at the Dia Center of the Arts (and co-edited the book available from Bay Press: *Culture on the Brink: Ideologies of Technology*) and co-curated the exhibition iterations "The New Image" at the International Center of Photography and edited the book published by MIT Press. He is currently writing a study of the relationships between technology and photography called *Photography, Technology and Representation* (forthcoming from Manchester University Press), and edited *Electronic Culture: Technology and Visual Representation* (Aperture) collecting essays on the social impact of digital technology. He is also the editor for a forthcoming MIT Press series tentatively entitled *Electronic Culture: History, Theory and Practice.*

Doyne Farmer (USA)

is Senior Scientist at Prediction Company, which specializes in the application of nonlinear forecasting methods to financial markets. Prior to this he studied physics at Stanford University and the University of California at Santa Cruz, where he was a member of the Dynamical Systems Collective. While in graduate school, as part of Eudaemonic Enterprises he participated in the design and construction of the first wearable digital computers, for the purpose of making clandestine physically-based predictions of the game of roulette. From 1981 to 1991 he worked at Los Alamos National Laboratory, where he was an Oppenheimer Fellow with the Center for Nonlinear Studies, and the founder of the Complex Systems Group in the Theoretical Division. He has published more than fifty papers in the fields of chaos and complex systems, including contributions to problems in dynamical systems theory, fractals, time series modeling, theoretical immunology, neurophysiology, and the origin of life.

Paul Garrin (USA)

works as a media artist and has been collaborating with Nam June Paik for a long time. His documentation of the "Tompkins Square Riot" 1988 in New York City is known as the spark which ignited the "camcorder revolution". He has been Artist-in-Residence at the Berlin Videofest in 1990 and has been awarded several highly recognized prizes.

Michael Geyer (D)

is professor of contemporary history at the University of Chicago. His main interests are modern military history, conceptual problems of globalization, the theory and practice of Human Rights with special reference to the law of war and traumatic human rights abuses, and the philosophy of history in an information age. The most relevant publications are "German Strategy in the Age of Machine Warfare, 1914-1945," in P. Paret, ed., *Makers of Modern Strategy*, 2nd ed. (Princeton: Princeton University Press, 1986): 527-597; "Eine Kriegsgeschichte, die vom Tod spricht", in: *Mittelweg* 36.4 (April/Mai 1994): 57-77; "Kurze Rede über die Zukunft der Vergangenheit im Cyberspace," in: *Comparativ* 6.2 (1996): 128-139.

Chris Hables Gray (USA)

is an associate professor of computer science and of the cultural studies of science and technology at the University of Great Falls in Great Falls, Montana, USA. He is the author of Cyborg Citizen (Routledge, 1999) and Postmodern War (Guilford/Routledge 1997) and was the primary editor of The Cyborg Handbook (Routledge 1995). Prof. Gray has been an Eisenhower Fellow (Czech Republic), NASA History Fellow, and a Fellow at the Oregon

State Center for the Humanities. Beyond academia he also writes science and detective fictions, gardens fanatically, honors the earth, plays soccer and coaches his two sons in the sport, and tries to practice anarchist-feminist politics. For more information: http://www.ugf.edu/CompSci/Cgray/istpg.htm

Friedrich Kittler (D)

Prof. Dr. phil., born 1943; studied German and French Literatures and Philosophy at the University of Freiburg/Breisgau, from 1987 to 1993 professor of German Literature at the Ruhr University, Bochum; since 1993 professor of Media History and Aesthetics at the Humboldt University, Berlin. Books: *Aufschreibesysteme 1800/1900*, München 1985, 3. Aufl. 1995 (translated 1990 under the title *Discourse Networks 1800/1900*, Stanford University Press); *Grammophone Film Typewriter*, Berlin 1986; *Dichter Mutter Kind*, München 1991; *Draculas Vermächtnis. Technische Schriften*, Leipzig 1993.

Geert Lovink (NL)

born in 1959, studied political science at the University of Amsterdam. Member of Adilkno, the Foundation for the Advancement of Illegal Knowledge, a free association of media-related intellectuals (Agentur Bilwet auf Deutsch). He is both media theorist and activist and cofounder of "The Digital City", the Amsterdam-based Freenet, and "Press Now", the Dutch support campaign for independant media in Former Yugoslavia. He has been involved in Amsterdam-based internet content providers "desk.nl" (culture/arts) and "contrast.org" (politics) and a cultural ambassador for "de Waag", the Society for Old and New Media. He co-organized the The Next Five Minutes, a series of international conferences on public access and media activism (Amsterdam, 1993/96/99), Metaforum I/II/III' (Budapest, 1994-6), Interface 3 (Hamburg, 1995) on the culture of computer networks, Next Five Minutes II and moderated the (net) symposium of Ars Electronica 96 on "Memesis". He was the project coordinator, together with Thorsten Schilling and Pit Schultz of the "Hybrid WorkSpace", which took place during the Documenta X (1997) in Kassel. In the spring of 1995, together with Pit Schultz, he founded the international "nettime" circle which is promoting net criticism (www.desk.nl/~nettime). Nettime is both a mailinglist, a series of gatherings (The Beauty and the East, Ljubljana, 1997) and also appears in paper (Netzkritik, Edition ID-Archiv, Berlin, 1997 and ZKP 1-4). Among his publications are Adilkno's Empire of Images (Amsterdam 1985), Cracking the Movement (Amsterdam, 1990, Berlin, 1991, New York, 1994) on the squatter movement in Amsterdam, Hoer zu oder Stirb (Berlin 1992) on free radio, Medien Archiv (Amsterdam 1992, Mannheim 1993, New York 1998), Der Datendandy (Amsterdam/Mannheim 1994) and Elektronische Einsamkeit (Köln 1997) All texts in Dutch, German and English are available at: http://thing.desk.nl/bilwet.

Mathias Müller von Blumencron (D)

is correspondent for the German news magazine Der SPIEGEL in the US. He is covering economies and lives in Washington DC.

Igor Nicolaevich Panarin (RU)

doctor of political sciences, professor of the Faculty of National Security of the Russian Academy, in state service to the President of the Russian Federation.

Birgit Richard (D)

born 1962, studied art, history and philosophy at the universities of Essen and Fernuni Hagen; member of the scholary staff in the Department of Art and Design of the University of Essen; doctoral dissertqtion: "Death Images in Art and Contemporary Juvenile Subcultures". Since 1998 University Professor for New Media at the Johann Wolfgang von Goethe University in Frankfur am Main, Institute for Art Pedagogy, Department of Art and Classical Philology; fields of specialization: new media, aesthetics of everyday life (in particular, contemporary youth cultures, youth culture archive in FFM), life and death of artificially-generated forms of life.

Selected publications: "Todesbilder. Kunst Subkultur Medien", Munich 1995. "Riskante Bilder" (co-editor), Munich 1996. "Icons. Localizer 1.3.", Berlin 1998. "Die Hüllen des Selbst. Mode als ästhetisch-medialer Komplex", in: "Kunstform International", Band 141 (editor), Ruppichteroth 1998.

Patrice Riemens (MC)

born 1950, Net/culture activist. He is currently based at the Society for Old and New Media (Amsterdam), and is associate fellow with the Institute for Development Research at the University of Amsterdam.

David Ronfeldt (USA)

Ph.D., Political Science, 1971, Stanford University, is a senior social scientist in the International Studies Group at RAND. After working for many years as a specialist on U.S.-Latin American security issues, he now works mainly on issues relating to the global information revolution. Lately, his work has focused on ideas about information-age conflict. He is also doing research to build a framework about the major forms of organization that underlie the long-range evolution of societies.

Publications include: "Cyberocracy Is Coming" (1992); "Cyberwar Is Coming!" (co-authored with John Arquilla, 1993); "Tribes, Institutions, Markets, Networks: A Framework About Societal Evolution" (1996); "The Advent of Netwar" (co-authored with John Arquilla, 1996); and a co-edited book titled "In Athena's Camp: Preparing for Conflict in the Information Age" (1997).

RTMARK (USA)

has channelled funds from donors to workers for sabotage of corporate products, and for intelligent subversion in general, since 1991. Among our better known past projects are the Barbie Liberation Organization's GI Joe(tm)/Barbie(tm) work, Deconstructing Beck(tm), and the SimCopter(tm) hack. As the primary clearinghouse for such actions, RTMARK acts also as an alternative, non-corporate public space on the Web.

Douglas Rushkoff (USA)

is an author and media theorist. His books, including *Cyberia*, *Media Virus*, *Children of Chaos*, and the novel *Ecstasy Club*, have been translated into twelve languages. Rushkoff speaks optimistically about the direction of global, youth, and media culture to university and professional audiences around the world. He writes a column about the political and social aspects of new technology that appears in *The Guardian* of London, *The Age, Telepolis, The Toronto Globe*, and many other newspapers. He lives in New York, and watches lots of TV.

Ernst Schmiederer (A)

is journalist and lives in Brooklyn/New York.

Georg Schöfbänker (A).

Studied psychology, journalism, philosophy, ethnology, German language and literature, and political science in Salzburg and Vienna; 1987, Ph.D. in psychology from the University of Salzburg. 1987-93, research projects at the University of Salzburg's Senate Institute for Political Science, focusing mainly on public policy issues including nuclear policy and the history of nuclear weapons, risk analysis, arms control, and nuclear proliferation. While conducting research commissioned by the Federal Ministry of Science and Research, he served as an assistant at the University of Salzburg's Senate Institute for Political Science. Research field work abroad, particularly in historical archives in Washington, DC. Active as political advisor and consultant in questions of nuclear weapons and proliferation. 1993-95, research project on new information and communication technologies commissioned by the Federal Ministry of Science group for Internet communication. 1996-98, scholar on the staff of the Austrian Center for the Study of Peace and Conflict Solution in Schlaining, with particular emphasis on arms control, international relations, nuclear proliferation, nuclear and military policies. Consultant and political advisor on scientific issues.

Georg Schöfbenker (A)

studied psychology, journalism, philosophy, ethnology, German language and literature, and political science in Salzburg and Vienna; 1987, Ph.D. in psychology from the University of Salzburg. 1987-93, research projects at the University of Salzburg's Senate Institute for Political Science, focusing mainly on public policy issues including nuclear policy and the history of nuclear weapons, risk analysis, arms control, and nuclear proliferation. While conducting research commissioned by the Federal Ministry of Science and Research, he served as an assistant at the University of Salzburg's Senate Institute for Political Science. Research field work abroad, particularly in histroical archives in Washington, DC. Active as politeal advisor and consultant in questions of nuclear weapons and proliferation. 1993-95, research project on new information and communication technologies commissioned by the Federal Ministry of Science for Internet communication. 1996-98, scholar on the staff of the Austrian Center for the Study of Peace and Conflict Solution in Schlaining, with particular emphasis on arms control, international relations, nuclear proliferation, nuclear and military policies. Consultant and policial advisor on scientific issues.

Shen Weiguang (PRC)

born in 1959, currently holds a position in the Finance Committee of the National People's Congress. Futurologist and infowar specialist. First publications in 1979. In 1985, Shen was the first to formulate the term "information warfare" (Chinese: *xinxi zhan*). In 1987, China's leading military publication, *Jiefangjun bao* ("Newspaper of the People's Liberation Army"), published his article *Xinxizhan de jueqi* ("The Harbingers of Information Warfare"). Shen's book *Xinxi zhan* ("Information Warfare") was published in 1990. In 1992, he first formulated the term "war of thinking" and published a book so titled with the People's Press (Beijing). *Xin zhanzhenglun* ("A New Theory of Warfare") appeared in 1997.

George J. Stein (USA)

is a member of the faculty of the USAF Air War College and is the Chairman of the Department of Future Conflict Studies. Dr. Stein received his MA from Penn State, his Ph.D. from Indiana University and before joining the Air War College in 1991, taught in the School of Interdisciplinary Studies, Miami University, Oxford Ohio for fifteen years. Dr. Stein's teaching and research interests include European security, classical Chinese strategic thought, and future conflict studies. His most recent book is "US Information Warfare" published by Jane's. Dr. Stein was awarded the "Meritorious Civilian Service" medal in 1995 for his research work for the USAF Chief-of-Staff study "Space Cast 2020" and again in 1997 for leading the information warfare research team for the USAF Chief-of-Staff study "Air Force 2025."

Gerfried Stocker (A)

born 1964, is graduate of the Institute for Telecommunication Engineering and Electronics in Graz. Since 1990, he has been working as an independent artist. In 1991, he founded x-space, a team for the realization of interdisciplinary projects. In this framework numerous installations and performance projects have been carried out in the field of interaction, robotics and telecommunication. Stocker was also responsible for the concept of various radio and network projects and the organization of the worldwide radio and network project Horizontal Radio. Since 1995 Stocker has been the artistic director of the Ars Electronica Festival and the managing director of the Ars Electronica Center.

Paul Virilio (F)

born in 1932. After studying architecture in Paris, in 1963 he became founding President of the "Architecture Principe" group and editor of the group's review. He has been Professor of architecture at the Ecole Spéciale d'Architecture in Paris since 1968, and became its Director of Studies in 1973. The same year he was nominated director of the "L'Espace Critique" series by the publishers Galilée of Paris. In 1975 he became Director General of the Ecole Spéciale d'Architecture and in 1989 Chairman of the Board. In 1975 he co-ordinated the "Bunker Archeologie" exhibition at the Musee des Arts Décoratifs in Paris. In 1989 he was nominated director of a teaching programme at the Collège International de Philosophie in Paris, under the presidency of Jacques Derrida. He became a member of the High Commitee for the Housing of the Disadvantaged in 1992.

Publications include: *The Art of the Motor*, University of Minnesota Press, 1995; *Bunker Archeology*, Princeton Architectural Press, October 1994; *The Vision Machine*, British Film Institute and Indiana University Press, 1994; *Aesthetics of disappearance*, Ed. Autonomedia, 1989; *Popular Defense and Ecological Struggles*, Semiotext(e) 1978; *Lost Dimension*, Ed. Autonomedia; *Speed and Politics*, Ed. Autonomedia; *War and cinema*, Ed. Autonomedia; *Pure War* Paul Virilio & Sylvere Lotringer, AK Press.

Wieland Wagner (D)

is correspondent for the news magazine Der SPIEGEL and lives in Tokyo.

Wei Jincheng (PRC)

member of the People's Liberation Army. Numerous publications on the subject of information warfare.

Michael Wilson (GB)

is an infrastructural warfare field operations professional with over 15 years' experience. He is Managing Partner of the 7Pillars Partners, where he and the firm's staff consult on matters of defensive and offensive IWAR operations, and intelligence for multinationals and sovereigns in Europe, Asia, and the Middle East. A number of his papers are available through the firm's website at http://www.7pillars.com/. His written, public work has won prominent acclaim; for his "innovative, creative, and significant contribution to understanding information warfare," Mr. Wilson won the 1996-1997 Sun Tzu Art of War Award from the School of Information Warfare, Institute for National Strategic Studies, U.S. National Defense University; he received a 1998 Distinguished OSINT Professional award from the U.S. G2I open source community.