

Biographies

Robert Adrian (CDN/A), born 1935, artist. 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.

Josephine Anstey (USA) is a virtual reality artist, writer, documentarian and video maker. She collaborated on the Multi Mega Book in the CAVE, which showed at Siggraph, Ars Electronica, ISEA, Art Futura, Imagina, MediARTEch, and won a Multimedia Grand Prix 97 Award from the Multi-Media Content Association of Japan. Her short story Dwayne Loves Johnny Coggio won the Chelsea Award for short fiction in 1996 (US). She has collaborated on a series of videos with video artist Julie Zando, which have shown internationally and won awards including the Best Narrative Video Award (Atlanta Film and Video Festival 1990), Best Experimental Video Award (Atlanta Film and Video Festival 1989). Many of the videos are in the permanent collection of the Museum of Modern Art, New York. Videos include, Uh Oh!, The Bus Stops Here, and Let's Play Prisoners.

Robin Bargar (USA) is a composer in acoustic and visual media. At the National Center for Supercomputing Applications he co-founded the Audio Development Group and directed the development of VSS, a sound synthesis software platform for sonification, composition and performance with computer graphics and virtual environments. His work has appeared in the computer music and graphics communities including SIGGRAPH Electronic Theater, MTV Liquid Television, ISEA, Imagina, ICMC and Bourges. Recognition includes PIXELINA and SACD Awards at Imagina, and an Academy Award Nomination for Best Short Animated Film. In his current appointment as Research Scientist at NCSA and the Beckman Institute, University of Illinois at Urbana-Champaign, Bargar directs the development of a multi-modal integration architecture for distributed virtual environments.

Hisham Bizri (Lebanon) is a visual artist who's been working as a filmmaker for the past 12 years. Hisham studied filmmaking at Boston, Harvard, and New York Universities under the direction of Vladamir Petric, Raul Ruiz, and Miklos Jancso. He later worked with Ruiz and Jancso on various film projects in Boston, New York, and Budapest, Hungary. Hisham's films and videos have been shown internationally, including the Louvre, France, South Korea, Canada, Egypt, Lebanon, Syria, New York, Washington D.C., Boston, San Francisco, Los Angeles, Chicago, etc. Hisham has also worked as a Creative Director for Orbit Communications Company, Rome, Italy (headquarters). Hisham's current work is in virtual environments, digital film, and computer animation at the Electronic Visualization Laboratory, where he is a Master of Fine Arts candidate.

Isabella Bordoni (I), born 1962. Poet, theatre director, performer. Co-founder in 1985 of Giardini Pensili (theater company and media lab). She presents her texts (poetry and fiction) in theater pieces, concerts and in telematic and networked projects. She wrote several hoerspiele – mostly performed live-produced by SFB, YLE, RNE, ORF and RAI and she made the media radio a powerful and flexible total machine. In 1987 she was artist-in-residence at the Djerassi Foundation, San Francisco.

Josephine Bosma (NL) started making radio programs in 1991 with Radio Patapoe in Amsterdam. From 1993 untill August 1996 her programs about art and new media became part of the VPRO radioshow "Het Paradijs". In January 1996 Josephine Bosma did the coordination of the radio part of Next5Minutes, a conference on tactical media. In March 1997 she organised a workshop on net.radio at V2, Rotterdam, together with Andreas Broeckmann. Since early 1997 Josephine Bosma works mostly as a journalist and writer. Articles and interviews have been published in Telepolis, Mute, Intelligent Agent and mailing lists like nettime. She is presently involved in organising a workshop for art and net.radio with Reni Hoffmueller, which will take place in Graz autumn 1998, plus in building an archive on the net for experimental radiowork from the Amsterdam free radiostations.

Andreas Broeckmann (D), born 1964, who currently lives in Berlin and Rotterdam, studied art history, sociology and media studies in Bochum/D, Berlin/D, and Norwich/UK. He received a PhD from the University of East Anglia, Norwich/UK, writing an extensive study about the use of portrait photography in the 19th-century human sciences (A Visual Economy of Individuals, 1995, unpublished). Since 1995 he has been working as a project manager at V2_Organisation, a Rotterdam-based centre for art and media technology, where he has co-curved programmes for the Dutch Electronic Art Festival and the Next5Minutes: Tactical Media conference. He is maintaining the V2_East/Syndicate mailing list on the internet which distributes information about electronic arts events among more than seventy artists, curators and institutions in most European countries, incl. many in Central and Eastern Europe. In his recent work he is developing ideas for a 'machinic' aesthetics of media art.

The Centre for Metahuman Exploration (USA) is a multidisciplinary research collective based at Carnegie

Mellon University. It combines communication technology, robotics, art, and mass media to manufacture avenues of expression between people. The objective is to examine and engage the aesthetic and cultural issues surrounding emerging technologies within an artistic framework. In keeping with the spirit of these technologies, the Centre articulates these issues in the public arena of interactivity.

Insook Choi (USA) is Composer-in-Residence at the National Center for Supercomputing Applications and Research Specialist in Human-Computer Intelligent Interaction at the Beckman Institute, University of Illinois. She has created numerous interdisciplinary projects across cognitive science, engineering, and music performance. Her compositions include instrumental ensemble, electro-acoustic and computer music, interactive performances involving various degrees of technology, and video. Ms. Choi's music has been performed and broadcast in Europe, Asia and the United States. She is frequently invited as a performer and a speaker in international conferences and festivals. Her research publications can be found across the disciplines of art, science, and engineering.

Călin Dan (RO/NL), born 1955. M.A. in Art History & Theory. Until 1994 he worked as a free lance art critic, curator, editor and teacher of art history. 1990 – co-founder of subREAL. Best known shows: The 2nd Istanbul Biennial – 1992; Venice Biennial, Aperto '93; Sao Paulo Biennial – 1994; "OSTranenie", Bauhaus Dessau – 1995; Neuer Berliner Kunstverein; "Manifesta", Kunsthal Rotterdam – 1996; "Beyond Belief", Museum of Contemporary Art, Chicago/Institute of Contemporary Art, Philadelphia – 1996–1997; Ludwig Forum für Internationale Kunst; SITE Santa Fe, Santa Fe, New Mexico –1997. Grants: J.P.Getty Fellowship for research in art history, 1993, Philip Morris Kunstförderung, 1996. Residencies: Künstlerhaus Bethanien, Berlin, 1995; Akademie Schloss Solitude, Stuttgart, 1997.

Discussion Group on the Virtual Self (I) was born in 1966 to develop theoretical reflection around the activity of the ARSLAB Committee of Turin. Selected productions: Document Cyberspace as a new site for a dialogic and creative alterity, presented to Cyberconf '97, Oslo, and to the conference "The shadow of the Net", Turin. Workshop: A psychoanalytic Approach to the Virtual Self" at the CSELT Conference: "Natura e Forma, Codici e Origini", 1997, Torino. The group is made up of: Donatella Bigoni, teacher; Margherita Cattera, teacher; Piero Gilardi, artist; Pierluigi Gregori, student; Bruna Piras, editor; Federica Russo, teacher; Elisabetta Tolosano, art critic.

Ricardo Dominguez (MEX/USA) is the Senior Editor of The Thing (www.thing.net). A Co-founder of The Electronic Disturbance Theater (www.nyu.edu/projects/wray/eed.html) with Stefan Wray, Brett Stalbaum and Carmin Karasic. He is also a former member of Critical Art Ensemble, a Fakeshop worker (www.fakeshop.com), has collaborated with Francesca da Rimini on Dollspace (www.thing.net/~dollyoko), and Diane Ludin on the Aphansis Project (www.thing.net/~diane).

Wolfgang Dorninger (A), born 1960, attended the Institute for Applied Arts in Vienna where he completed the Master Program for Visual Media Design. He is also a musician, playing in the groups Monochrome Bleu, Josef K. Noyce and Wipe Out. Dorninger has composed numerous musical works for film, theater and dance. He operates the Sonic Sound Studio in Linz.

ELECTRONIC ENSIGN (A) is a series of electronic projects initiated in 1997 by journalist/author Richard Brem. The series is designed as an online test of the journalistic possibilities offered by new media, and the individual projects are then presented together with traditional formats such as books, exhibitions, installations, etc. The chief focus is on interfaces of media technology and military technology, as well as classic avant-garde and popular culture. The presentations are made available in both German (<http://feldzeichen.at>) and English (<http://e-ensign.at>). Among the founding members are graphic artist Christine Zmölnig [A] and programmer Tobi Schäfer [G]. The production staff includes filmmaker/ essayist Theo Ligthart [NL].

Sidney Fels (USA) is artist at the ATR Media Integration & Communication Research Laboratories, Kyoto, Japan.

From Scratch (NZ): Philip Dadson Artist/composer/instrument builder for the group. A background in Sculpture and timebased arts. Founded From Scratch in 1974. Has toured widely solo and with group. Lives in Auckland with family, and teaches timebased arts at the Elam School of Fine Arts. Shane Currey Musician/performer/graphic designer. Studied Fine Arts and Music, Auckland University graduating in Design and Performance. Performed with People Who Hit Things. Percussionist with the Auckland Philharmonic Orchestra. Joined From Scratch 1995. Adrian Croucher Musician/performer, with a background in African hand-drumming groups. Recently completed a PhD in Engineering Science. Joined From Scratch 1996. Darryn Harkness Musician/performer, with a wide range of Auckland jazz and new music groups on percussion/vocals/guitar/bass. Member of Dead Flowers and Spacesuit. Joined From Scratch 1996.

Granular & Synthesis (A). Kurt Hentschläger (1960) and Ulf Langheinrich (1960) live in Vienna. They work together as Granular & Synthesis since 1991. For several years, they have been working on a unique project – experts in time, they dissect and manipulate fractions of seconds like so many fragments of a greater truth and

work them into vast visual and sound symphonies. Since 1992 Granular & Synthesis has been investigating the aesthetic potential of audiovisual re-synthesis. In the chain of a basic audio/video recording any single grain (containing the sonic information as well as its visual representation) is assumed to represent a truthful moment. These elements are simply media samples (scans) and available for un-limited copying into new patterns, with the aim of composing artificial assemblies and media structures. The real moment represented by the content of each grain is prominent and made aware to the viewer in its re-manipulation and displacement. It is this time based intervention that creates the drama.

Hideyuki Hashimoto (J), born 1965, graduated from Tokyo University in 1995. Since 1996 he is a student at International Academy of Media Arts and Sciences.

Christian Helbock (A), born in 1962. 1981–90 studied theater and philosophy in Vienna. 1991–94 experimental short films. Selected projects: 1993: Freund & Feind, Bürogemeinschaft Schottengasse, Vienna. 1995: Die Neuen, station 3, Vienna; Kunstseite, Vorarlberger Nachrichten; Source/Resource, Villa aller Art, Bludenz. 1996: K 1, Künstlerhaus Palais Thurn & Taxis, Bregenz; SG 96/4, Stadtinitiative Vienna. 1997: Editions of Art, Innsbruck; dX xD, Schaufenster Goethestraße 30, Kassel; Kaplan, Cult, Vienna. 1998: A 3, Künstlerhaus Palais Thurn & Taxis, Bregenz; Kunsttransfer, Diagonale, Graz.

Rupert Huber (A), born in 1967, composer, musician, studied music and electronic music, and has been active in the area of (electronic) music since 1982. 1988 Recognition Prize of the Province of Lower Austria, 1992 Patronage Prize "die ganze Woche," Culture Prize of the City of Baden. Guest of DAAD /Berlin 1997 (together with Sam Auinger).

Friedrich Kittler (D), born 1943, Prof. Dr. phil., 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 (1990 translated under the title Discourse Networks 1800/1900, Stanford University Press); Grammophon Film Typewriter, Berlin 1986; Dichter Mutter Kind, München 1991; Draculas Vermächtnis. Technische Schriften, Leipzig 1993.

Eric Kluitenberg (NL) is a teacher and freelance curator based in Amsterdam.

Tammy Knipp (USA) is a noted artist whose work combines traditional and electronic media. MBA degrees from the University of Maryland (Imaging and Digital Arts, 1996) and Washington University (Sculpture, 1987), she is currently an Assistant Professor of Art at the Schmidt College of Arts and Humanities, Florida Atlantic University. She has received numerous awards, including the Art Matters Foundation Fellowship (1996), the University Film and Video Association Carole Fielding Grant (1996) and the UMBC Graduate Merit Fellowship (1993–1994)

Hans Kropshofer (A), born in 1963. Studied at the Art Institute in Linz with Professor Gsöllpointner until 1994, and at the Academy of Art in Düsseldorf with Professor Megert. Talent Patronage Prize of the Province of Upper Austria, Art Patronage Grant of the City of Linz.

Kunstradio (A), created and directed by Heidi Grundmann, premiered in 1987 as a weekly radio program of the Austrian Broadcasting Corporation. Since its inception, Kunstradio has attempted to define radio art as a part of the art of communication. During the course of this undertaking, the effort has increasingly been made to also produce projects that are independent of the recording studio and which display a unique dialogical character. Kunstradio has gone on to introduce the principles of simultaneity and horizontality into the context of conventional broadcasting. Since 1995, beginning with Horizontal Radio, the range of production of radio art has also been extended into the Internet. Subsequent projects have included Rivers & Bridges and Recycling the Future presented in 1997.

Bernhard Loibner (A), sound freak and media artist, is a co-founder of the group ALL QUIET ON THE WESTERN FRONT (1987) and the ALL QUIET Label (1996). He studied Computer Engineering at the University of Technology and Sound Engineering at the University for Music and Performing Arts in Vienna. Loibner has been active in all forms of sound art including installations and numerous collaborative projects for radio, webcasts, live performances and recordings. His recent CDs include Hörsturz (with Robert Wölfl) and Personal Human (with Tom Sherman). In 1998 he formed Nerve Theory, a performance/recording collaborative, with Tom Sherman.

Geert Lovink (NL), born in 1959, studied political science at the University of Amsterdam. Member of Adilkno, a free association of media-related intellectuals. He is both media theorist and activist and co-founder of "The Digital City", the Amsterdam-based Freenet, and "Press Now", the Dutch support campaign for independent media in Former Yugoslavia. He has been involved in Amsterdam-based internet content providers "desk.nl" (culture/arts) and "contrast.org" (politics). He co-organized the The Next5Minutes, a series of international conferences on public access and media activism, and Next5Minutes II. 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). All texts in Dutch, German and English are available at: <http://thing.desk.nl/bilwet>.

Karl Heinz Maier (A), born in 1963, lives and works in Linz.

Enrico Marchesin (I), born 1974, is network manager of the University of Siena. He is working as a free-lance media designer.

Norbert Math (A) works in the fields of radio art, electronic music, installation, internet.

Hiroshi Matoba (J) graduated from Tokyo University in 1985. He is artist and researcher at C&C Media Research Laboratories, NEC Corporation. He has been working on multimedia human-machine interaction.

Mongrel (GB) is a mixed bunch of people working to celebrate the methods of London street culture. Mongrel is centred around Matsuko Yokokoji, Richard Pierre Davis and Harwood. We are dedicated to defeating the self-image of societies in which it is usual to presume those involved in "intellectual pursuits", and those attending "culturally prestigious events" are far above the mundanity of political conflict. In other words, societies of people who positively cultivate a view of themselves of being "liberal arty post-racists". We make socially engaged cultural product employing any and all technological advantage that we can lay our hands on. We have dedicated ourselves to learning technological methods of social engagement, which means we pride ourselves on our ability to programme, engineer and build our own software and custom hardware.

Noisia Men/New Vision (A) Tom Blue (director and production manager, concept): musician, composer, and lyricist specializing in projection design and composition. Gernot Ursin, Wolfgang Krsek: composers, studio musicians, and producers of many international music productions in the field of experimental music and film music (specializing in nature films). Domino Blue: singer, choreographer, and graduate of the Conservatory of the City of Vienna. She spent four years as a member of the ensemble of the Staatsoper in Vienna and two years at the Viennese Burgtheater. L. Gris (deceased 1995): metal sculptor who employed a unique welding technique to create stainless steel playable sound sculptures whose resonances can be activated by any type of physical contact.

Dietmar Offenhuber (A), born in 1973; studied architecture at the TU Vienna; with R.E.L.A.I.S, awarded the Prix Ars Electronica 96 for a collaborative work with manuel schilcher, gerda palmeshofer and martin rutgersson.

Roberto Paci Dalò (I), born 1962. Composer/theatre director/media wizard. Most of his work – under the concept of dramaturgy of media – is dedicated to the new communications technologies creating performing arts and telematic live projects produced by European radio stations, museums, festivals. In 1985 he co-founded Giardini Pensili. In 1995 he created RADIO LADA, the on-line cult web art radio. In 1993–94 he was guest of the Berliner Kuenstlerprogramm des DAAD. He was also Associate professor at the Department of Scienze della Comunicazione, University of Siena and trustee of the Mediterranean network of the telematic project Horizontal Radio (1995). Since 1991 he has been the artistic director of the radio and media festival LADA / L'Arte dell'Ascolto.

Dave Pape (USA) is a Computer Science PhD candidate at the University of Illinois, Chicago, in the Electronic Visualization Laboratory. He earned BS and MS degrees from Rensselaer Polytechnic Institute. Prior to coming to EVL, he worked in the NASA/GSFC Space Data and Computing Division. There, he created numerous scientific visualizations for research and education, which have been shown on national television, at the Smithsonian Museum of Natural History, and at various conferences. At EVL, he is responsible for much of the core software used by CAVE and ImmersaDesk sites worldwide, and has helped create virtual reality applications shown at Siggraph, Ars Electronica, ISEA, Art Futura, and MediARTech.

Daniela Alina Plewe (D) lives in Berlin, studied philosophy, literature, anthropology and video at the Université de Paris VIII. 1991–95 member of the AI-group "Logic, Theories of Knowledge and Information" at the Freie Universität Berlin. 1995 project artist at ZKM, Center for Arts and Media, Karlsruhe. 1995 grant from the French Embassy, Bonn. 1998 grant from the Senate of Berlin. Since 1992, computer-works.

Projekt Atol was founded by Marko Peljhan in 1992. It has so far produced three cycles of works: LADOMIR-faktura, EGORHYHTMS and UCOG besides smaller video and performance productions, lectures and the works in the new RESOLUTION series. Projekt Atol's 10 year project MAKROLAB was first presented at documenta X in Kassel, Germany during the summer of 1997. The project is due to end in Antarctica in the summer of 2007. RASTERMUSIC was founded by Olaf Bender and Frank Bretschneider as the continuation of their work with electronic music, which had been initiated in the former DDR. Rastermusic is a label which has dedicated itself to a form of music which can be described with words like sound design, technology, rhythmic, sound aesthetic and minimalism. The music is mainly produced and created with the help of electronics and/or

computers. NOTON was founded by Carsten Nicolai who deals extensively with specific types of electroacoustic sound creations: eg. music used in exhibitions, installations and soundspaces. The WARDENCLYFFE PROJECTS are a joint series of projects by PROJEKT ATOL and RASTERMUSIC/NOTON, which deal with the world of telecommunications and signal intelligence in conjunction with connecting rhythmic and noise patterns. The work is based upon and inspired by Nikola Tesla's Wardencllyffe communications experiments. Up to now projects in Kassel, Dessau, New York, Long Island and Rotterdam have been presented.

Martin Reinhart (A), born in 1967. Studied at the Institute for Applied Art in Vienna; since 1996, doctoral program. Teacher in the area of adult continuing education, project-related activities making works of art available to a broader public, independent film technician and film critic. As film technician, Reinhart has produced cameras for Otto Nemenz International (Hollywood). Technical staff member of projects in collaboration with Martin Arnold, Linda Christanell and Karl Sierek. As an artist, many years of work with experimental film techniques, and director of numerous short films (1992 to 1997).

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.

Maria Roussos (USA) has a Master of Fine Arts from the Electronic Visualization Laboratory and a Master of Science in Computer Science and Education from the University of Illinois at Chicago. Her background includes degrees in information science and prehistoric archeology. Maria's publications and research have focused on the design and evaluation of virtual environments for K-12 and informal education, including the NICE Project, as well as the application of digital media in the representation of cultural information. Her projects and collaborations have been featured at Siggraph, ISEA, ThinkQuest, etc. The File Room project, for which she was the Production Coordinator, won Honorary Mention at Prix Ars Electronica '95. Maria's current work includes the design of new media and on-line art education for the Walker Art Center in Minneapolis, MN.

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. 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, Research and Art. 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.

Christine Schöpf (A), studied German and Romance Languages, PhD. Journalist for ORF since 1977, since 1981 head of the department art and science, focusing on Ars Electronica. Prix Ars Electronica since 1987. Since 1996 member of the Board of Ars Electronica Festival.

Sabine Seymour (A) has been a consultant in the field of new media in the US and Europe since 1994. She has worked on many projects in the area of digital art and media criticism; she took part in the Ars Electronica Festival 1997 and the 1998 New Media Arts Festival in Osnabrück. Her current projects are "EU|FO," a study of the multimedia scene in Europe, and "woMedia – Presentation and Perception of Females in the Media." She received her master's degree in 1997 from the Interactive Telecommunications Program of the Tisch School of the Arts – NYU. In 1994, she was a Chazen MBA Exchange participant at Columbia University; in 1995 she got her doctorate from the Economic University in Vienna.

Tom Sherman (CDN/USA) is an artist and theorist best known for his media art and writing about person/machine relationships. Sherman was moderator of Ars Electronica's FleshFactor symposia in 1997. He founded/co-founded organizations such as A Space Video (1973, Toronto), Fuse Magazine (1978, Toronto) and the Media Arts Section of the Canada Council (1983, Ottawa). He is currently an Associate Professor at Syracuse University in New York, U.S.A. Recently his activities have centered on live performance and WWW-based radio. A frequent contributor to Kunstradio/ORF, Sherman released an audio CD of his recent voice/music work entitled Personal Human (with Bernhard Loibner and Jean Piche) in 1997. In 1998 he formed Nerve Theory, a performance/recording collaborative, with Bernhard Loibner.

Paul M Smith (GB). After completing five years in the British Army he studied Fine Art at Coventry University then continued on to complete an MA in photography at the Royal College of Art where Artists Rifles was created during his MA.t, where the series was created. With the advent of the digital age, the ease to which alterations can be made has given him the opportunity to implant his immortal imago within a photographic context. Portraying an ahistorical document of battle, open for reinterpretation within one's own minds eye.

Acting as every figure within this work, he has courted the military ideal where there are no individuals, just the unit, brothers in arms.

Stadtwerkstatt (A) – independent cultural association since 1979 Stadtwerkstatt is an initiative for the incitement of critical confrontation with the conditions of life, for the encouragement of initiatives aimed at the "opening of free spaces" and for artistic and cultural development, which are translated into exemplary works of art. A building complex housing cultural venues and workshops at Kirchengasse 4. Stadtwerkstatt as communications platform for the regional and local artistic and cultural scene – on one hand, a stage for events: Do It Yourself and Cafe Strom; on the other hand, headquarters of initiatives working on behalf of the democratization of new media – servus.at, the stage in cyberspace, and FRO, free radio in the cable network. Also, base of operations to carry out its own art projects. Stadtwerkstatt focus issues are realized on an exemplary basis by means of artistic interventions in public spaces.

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.

Mike Stubbs (GB) is director of HTBA – Hull Time Based Arts, artist and filmmaker.

Supreme Particles (D) Michael Saup: Media/installation artist, working in fields of computer media and art. Studied Fine Arts, Computer Science and Music. Numerous international exhibitions, screening, concerts and awards. Founded Supreme Particles in 1992. Based in Frankfurt, Germany. Anna Saup: Film and video artist; since 1991 stage and theatre projects. Numerous international exhibitions. Co-founder of Supreme Particles. Anne Niemetz: Multimedia artist. Works with digital video and audio, internet and cd-rom. Joined Supreme Particles in 1997. DJ Tricky Cris: DJ since 1987; various projects such as Raggamuffin Sound System, Global Youth, Serious Dropout. Releases with Electrolux, Echo beach, Stay Tuned, Dancepool. Edition Riddim Wize at Warner Chappell Publishing. Robert O' Kane: Founding member of Otherspace; various cooperations with international artists; developing interfaces for VR-Environments. Has been teaching at the State University of NY, Buffalo and at the Institute for New Media, Frankfurt. Herbert Cybulska (D): Master lighting technician. 1989–1994 technical director and chief lighting technician at the Theaterhaus Frankfurt. Free-lance lighting technician at the Alte Oper Frankfurt, Schauspiel Frankfurt, TAT Frankfurt, Mousonturm Frankfurt, Bayerisches Staatsschauspiel Munich, Nationaltheater Mannheim, Berlin Six-Day Race.

Wolfgang Temmel (A), born in 1953. With his visual and acoustic as well as recent olfactory works, he has participated in numerous exhibitions and festivals (e.g.: Ars Electronica Linz; steirischer herbst; Wiener Festwochen; Berliner Hörspieltage; europa'79, Stuttgart; Banff Center of the Arts, Canada; Radio ORF – Austrian Public Broadcasting Station; Graphische Sammlung Albertina, Vienna; Neue Galerie am Landesmuseum Joanneum, (Graz). Between 1985 and 1992, he collaborated with Fedo Ertl (A) to form the artists' duo TEER (TEmmel/ERTl). Since the beginning of the Eighties, he has produced an ever increasing number of acoustic works; amongst these was (He)artbeats at the 1989 Ars Electronica Linz in cooperation with ORF Kunstradio. In 1989, he founded the Stille Post Orchestra. In 1991 the CD Stille Post No. 1 was released. In 1992, he founded the Ensemble Acoustic Resource (E.A.R.) with Axel Rab and Mr. Spock. In cooperation with the Graphische Sammlung Albertina and the ORF Kunstradio, he realized the project Symphonie No. 1 Albertina. In 1995 for ORF Kunstradio he realized the piece Am Arsch der Welt. Since 1983, Temmel has been working on Eine Kunstgeschichte (An Art History) in diverse medial situations.

The Times Up harbourside laboratories (A) have a history that reaches back to the pardon entitled "A PROCLAMATION for Suppressing of PYRATES" given in 1717 by King George to the Caribbean pirates. At least two ships escaped the pardon and hanging by relocating to this central European location on the Danube, one of the main shipping channels at the time.

Maintaining a low profile, camouflaged at times as an office and depot for the Donaudampfschiffesellschaftkapitänsnutze, the laboratory raised its flag once again at the end of 1996.

TNC Network (F). Established in 1995 by the two data jockeys Beusch/Cassani, the international production and communication network TNC Network operates at the productive interfaces between art, technology and entertainment and has, during the past few years, implemented a number of pioneer network/radio projects between Europe, Japan and the USA such as the Clone Party, commissioned by Ars Electronica in 1997. TNC Network is widely known as the producer of the media fiction The Great Web Crash and as the operator of the offbeat net radio Radio TNC which was launched in 1995. Radio TNC for the first time connected different European broadcasting companies into network events, familiarising them with the concepts of networked production processes, and became one of the first platforms for the exploration of the connection between radio

and internet. At the Ars Electronica Festival 96 Radio TNC's Webstudio constituted the interface between the festival and the radio and network worlds. On the occasion of this year's festival, the Edition Ars Electronica/Kunstradio will produce the CD *The Screen Turned Black*, a remix of the soundtrack of the global network events organised by TNC between 1996 and 1998.

Virgil Widrich (A), born in 1967, began his career as a director at the age of 12 shooting super-8 films, including *Auch Farbe kann träumen* (cartoon, 1981), *Monster in Salzburg* (horror, 1982) and the feature-length work *Vom Geist der Zeit* (action/adventure, 113 min., 1983–85). In 1992, collaboration with Peter Greenaway on the exhibition *100 Objects to Represent the World*. From 1993–95, production manager of the *Diagonale* film festival in Salzburg. In the CD-ROM industry, production manager and screenwriter of numerous works including *Robbi – Abenteuer auf CD-ROM* and *Salzburger Festspiele CD-ROM*. Author of the screenplay *Heller als der Mond* (Screenplay Prize of the City of Salzburg). Speeches on screenwriting, film software and multimedia production in Austria and abroad.

Ilana Zuckerman (IL) lives and works in Jerusalem. In the 1980s, she founded "studio one" for radio art at the Israel Broadcasting Authority. Her works have been widely broadcasted by radio stations in Israel and abroad. Since 1990, she has been active in the international forum of "ars acustica".