

Little Boy

- **Jean-Claude Risset (1968)**

Little Boy was realized at Bell Laboratories. All its sounds have been produced with the MUSIC V program.

The Computer Suite is excerpted from music composed for the play Little Boy by Pierre Halet. The theme of the play is the revival of the Hiroshima bombing in the form of a nightmare of the pilot of the reconnaissance plane, who later developed guilts jeopardizing his mental health. The Suite attempts to roughly sum-up the movement of the play; it comprises three parts.

The first section, Flight and Countdown, follows the pilot's dream, which takes him through a musically stylized plane flight, with inharmonic textures, episodes of synthetic jazz and Japanese-like tunes. The flight is terminated by a count-down preceding the release of the bomb.

The following section is the Fall. The pilot thinks that Little Boy, the bomb with which he identifies himself, is falling - in fact this is a psychological collapse that never reaches any bottom, hence the endless descending spiral.

The last part is called Contra-Apoteosis like the anti-climactic end of the play. Here various time fragments are recalled or evoked in a deliberately desintegrated way, as the obsessions of the central character and his entire world mentally rotate. Thus the jazz band gets mixed up and ends as a gun-like beat; the Japanese instruments turn into sirens; a siren glides upwards yet becomes lower and lower; a pandemonium of sounds builds up above a rotating glissando, to be quieted down and dissolved into memories.

Jean-Claude Risset was born 1938 in Le Puy, France. At an early age he began playing the piano which later led to broad musical studies including composition with Andre Jolivet. Following completion of a doctorate in physics, Risset worked with Max Mathews at Bell Telephone Laboratories to develop computer sound synthesis. In 1975 Pierre Boulez asked Risset to direct the computer department at IRCAM the new music/acoustics research institute at the Centre Pompidou. Since 1979 he has been the Director of Research in computer music at the National Scientific Research Center in Marseille. Risset has performed and presented his compositions in many countries. His many prizes and awards include the Grand Prix National de la Musique in 1990. As one of the pioneers in the field, he has had a long association with Stanford's Center for Computer Research in Music and Acoustics (CCRMA).

Vox

- **Jorge Sad**

"... and in the Final Judgement Day for Composers, those who had sampled sounds from other composer's works were summoned to appear in Court, and were then asked to bring those sounds back to life. Terrible punishments awaited those that could not make that happen..."

(paraphrased from a fragment of "El Golem", Jorge Luis Borges)

Samples for this piece were taken from the album Led Zeppelin III and from Balinese music.

Jorge Sad (Buenos Aires , Argentina , 1959) received his Music Composition Degree from the Faculty of Musical Arts and Sciences of the Argentine Catholique University. He made postgraduate studies of Electroacoustic Music and Musical Semiotics at the Montreal University under the guidance of Marcelle Deschenes and Jean Jacques Nattiez. He has been awarded with the following scholarships : " Fondo Nacional de las Artes " 1988 , "Fundacion Antorchas " , 1989 , " Fonds des amis de l'art " , 1993. He is currently Visiting Composer at CCRMA under the Rockefeller Exchange Program.

Terra Infirma

- **Richard Karpen**

Terra Infirma, for computer-realized sound, is the prelude to The Earth on Fire!, a cycle of pieces which in varying degrees of directness (some are based on specific texts or "programs," while others are more "abstract"), express a rather dark vision. Terra Infirma, which was completed in 1992, has no specific program other than what the title might evoke, but sets the scene, as it were, for some of the works which follow. Other works in this cycle are, Il Nome, for soprano and tape, The Silence of Time, for percussion ensemble and tape, and Camera Cantorum, for four singers and computer-realized sound.

Terra Infirma was realized on a NeXT Computer system in the School of Music Computer Center (SMCC) at the University of Washington in Seattle using Csound and Lisp. All of the sound materials were derived in some way from acoustic sources and most are "hybrids" in that they combine digitized sound samples with purely synthetic material using digital signal processing techniques developed by the composer for use in past pieces with some improvements and enhancements for the current work.

Richard Karpen (b. New York, 1957), is on the faculty of the School of Music at the University of Washington in Seattle where he teaches composition, computer music and music theory and is Director of the Center for Advanced Research Technology in the Arts and Humanities. Karpen's works are widely performed in the U.S. and internationally. He has been the recipient of many awards, grants and prizes including those from the NEA, the ASCAP Foundation, the Bourges Contest, NEWCOMP, the Luigi Russolo Contest, the National Flute Association, and The American New Music Consortium. Fellowships and grants for work outside of the U.S. include a Fulbright to Padua, Italy, Stanford University's Prix de Paris to work at IRCAM, and a Leverhulme Visiting Fellowship to Scotland. He studied with Charles Dodge, Gheorghe

Constinescu, and Morton Subotnick and received his doctorate in composition from Stanford University, where, during 1985-1989, he worked at the Center for Computer Research in Music and Acoustics. In addition to Karpen's work in electronic media, for which he is best known, he has composed symphonic and chamber works for a wide variety of ensembles. His compositions have been recorded on CD by Le Chant du Monde/Cultures Electroniques 2 & 4 (Exchange, for flute and tape; Il Nome, for soprano and tape), Wergo/Computer Music Currents 3 & 7 (Eclipse, for computer-realized sound; Il Nome), Centaur/CDCM-12 (Saxonomy, for saxophones and tape, Denouement for computer-realized sound), and Neuma (Terra Infirma, for computer-realized sound).

Plastophonic World

- **Bernd Hannes Sollfelner**

Plastophonic World was produced at CCRMA. It's technically based on sound-synthesis with CLM, CSound, SoundWorks, SoundEditor, SoundOpener and RT. Rodin's monument lead the Composer to thinking and reflecting about the reality of hell. This became the basic idea of this piece.

"Isn't it like that "Hell" must be a place where money has more value than man and his life, where education , school and arts have the values of financial means, where the pluralism of cultures is replaced by a "Monoculture", where arbitrary acting is more preferred than responsibility, where the individual must obey any sick artificial ideology, where reality becomes artificial, where "Plastics" replace nature ? Is our world?"

Three Dreams

.Paper Castles
.Invisible Clouds
.Electric Eyes

- **Fernando Lopez-Lezcano**

Three Dreams is about impossible dreams. Time and time again, without learning from experience, we build beautiful Paper Castles on Invisible Clouds, thinking yet again that dreams are reality, or maybe that they can be turned into reality with sheer will power and a magical wand. These first two sections are like twin brothers, intermingled yet separate. As for the third and last, Electric Eyes, if you have ever felt the startling contact of electric eyes, there is no need for me to explain. If you have not, mere words will never be enough. That's my dream and the cause of a lot of paper castle building activities...

The piece was composed in the digital domain using the CLM non real time sound synthesis and processing environment running on a NeXT, and the four channel spacialization was performed

by a special unit generator programmed by the composer. Most of the sounds were created by processing sampled tubular bells, cowbells, cymbals, gongs, screams and knives. The rest of them were synthesized by quite simple additive synthesis instruments.

Fernando Lopez-Lezcano (Buenos Aires, 1956) received a Master in Electronic Engineering (Faculty of Engineering, University of Buenos Aires) and a Master in Music (Carlos Lopez Buchardo National Conservatory, Buenos Aires). He started working with electroacoustic music by building his own analog synthesizers in 1976. After graduating he worked for nine years in industry as microprocessor hardware and software Design Engineer and latter spent one year at CCRMA as Invited Composer (as part of an still ongoing exchange program between LIPM in Argentina, CCRMA at Stanford and CRCA at UCSD). He was Associate Researcher at LIPM and latter he did research and taught Electronic Music for one year at the Shonan Fujisawa Campus of Keio University, Japan. He is currently Lecturer and System Administrator of the computer resources at CCRMA. His music has been released on CD's and played in Europe, North and South America and East Asia.

IMAGE: the pop can

- **Ronald Alford**
- Performed by Ronald Alford & Candice Lowe

I have always wanted to perform electro-acoustic music since my first experience with tape (musique concrete). I wanted the raw material of my performance to be entirely sound from its natural habitat and what I could bring forth while I listened. I wanted the performance to be entirely of what I could do to manipulate the sound. The performance would thus be made up entirely of sound, as opposed to notes, which would suggest the direction of the performance, in the following ways:

- Rich harmonic content must be present naturally,
- Various manipulations must cause different harmonics structures
- Must come from what we experience all around us,
- Must come from what we hear though often take for granted
- Must come from a unique sound object

It bubbles, it fizzes, it's dropped, it's crushed, it bounces...

Now it's heard in its own composition.

Image is the result of my experience with a 20th century icon - our relationship, so to speak!. Though we never prize it as a musical instrument (for its acoustic qualities), it exhibits unusual such qualities, it is cheap, and it certainly has no problem with availability. And it meets all the criteria. It not only contains a most desirable cold drink, but I had a lot of fun with the container.

It crushes, it squeezes, it pops open, it rolls, it advertises, it makes lots of money for its inventor, its recycler, and it can be found from the dumps of Bangkok to the streets of Mexico City. From

Paris to Istanbul. And now, it is a playful piece of music that suggested itself to the composer on a hot summer day.....

Ron Alford studied at the University of Illinois, the University of Colorado, and Adams State College. He has studied with George Crumb, Larry Hart, Wayne Scott, Vladamir Ussachevsky, and Cecil Effinger. He taught music for 16 years across the American Southwest. He has been an active musician performing in symphony, chamber, jazz, church, and rock&roll all his life. He has written, arranged, conducted, and judged music events. He has operated recording studios, hosted opera and 20th century music on commercial and NPR FM radio. He was a founding member of the New Mexico Jazz Workshop, (1978-81), hosting such performers as Alvin Lucier, Bob Ostertag, Fred Frith, Henry Kaiser, Cecil Taylor, Robert Ashley, Brian Eno, Peter Gordon, John Cage, among others. He has been the recipient of grants from the National Endowment for the Humanities (USA, 1979), the New Mexico Arts Council (USA, 1980), and a California Arts Council (USA, 1988). He has had commissions for theater, ensemble, multi-media, film, and dance. His music also included the electro-acoustic experience, and after forsaking the tape recorder (a primary musical expression for a number of years), he discovered that software could be written to manipulate real sound by computer. Moving to California and performing a number of concerts in the Bay Area has started Ron on the path to branch out, with concerts in Austria, Montreal, England, Vancouver, Denmark, and Germany.

Candice Lowe is an author of speculative fiction (most recently, "Dead Metal," published by SPWAO in 1993), a photographer, a singer, and a performance artist. She holds a BA in Journalism from Northeastern University, Boston, Mass. Her most recent performance/multi-media pieces include "Neon Nights", "Dunes", and "Bobelen" utilizing her photography and movement.