GOLEM
AN INTERACTIVE MEDIA OPERA

by
Richard Lowe Teitelbaum

GOLEM is an evening-length music theater work for five performers. It incorporates video, slide, and light projections and is staged on two raised platforms with hanging scrims, video monitors and prop materials. Both music and visuals are performed live with intervention by responsive computer systems.

Music
Richard Lowe Teitelbaum

Performed by
Shelley Hirsch, voice
David Moss, voice, percussion and electronics
George Lewis, trombone, computer and electronics
Carlos Zingaro, violin and electronics
Richard Lowe Teitelbaum, synthesizer-sampler keyboard, interactive computer and Disklavier piano

Lighting and Stage Design
Fred Pomerrehn

Video Image and Projection Design
Ben Rubin

Slides and Projection
Cecile Bouchier

Designed and Directed by
Richard Teitelbaum, Ben Rubin, and Fred Pomerrehn

Promotional Booklet layout and design: Ben Rubin/Tracy Leipold
Photos: Cecile Bouchier
The concept of the golem is an ancient one, stretching from its Biblical origin, as Adam’s “unformed substance” (before receiving a soul) to its later incarnations as an artificial man, and the modern day robot. I first became fascinated with the golem in the summer of 1984 on a trip to Prague, where I visited the magical tomb of Rabbi Lowe, who is said to have created his golem on the banks of the Moldau in the spring of 1580. I was struck then by the parallel with my own attempts to develop an intelligent, interactive robotic “pianist” and also by the golem as a symbol for the promises and dangers of our technological society. In the story of Rabbi Lowe, he created his golem to aid and protect the community from the danger of a brutal pogrom. Eventually, his golem grew too strong, ran amok, and had to be destroyed. This legend has continued to be an increasingly apt metaphor for the dangers of unchecked power of various sorts—technological, military, social and political.

Traditionally, a golem was an artificial man made of clay and brought to life by the incantation of magic formulas derived from kabbalistic manipulations of the Hebrew alphabet. In my work, I have digitally sampled the sound of the river banks in the voices of the spring peepers, and also certain Hebrew letters and texts, based on the ancient kabbalistic Book of Creation. Through the use of MIDI control, these formulas and texts can be “played” on keyboards (as well as triggered by voices and instruments), such that playing different melodic patterns will, in the words of the Book of Creation, “ordain them, hew them, combine them, weigh them, and interchange them.” Live audio signal processing, FM, and speech synthesis all form ingredients in a complex, interactive system in which the performers process and control each others’ inputs. When, to this witches brew, feedback is added through a circuit that “listens” and responds to itself, the golem comes alive and begins to act with a mind of its own.

In this performance, the golem is represented not only by human performers, but also by several interactive systems embodying artificial intelligence capabilities: For instance, computer-controlled interactive player pianos “listen” and responds to the live music of human vocalists and instrumentalists. In another case, the movement of projected images from MIDI-controlled interactive videodisc players respond to the musicians’ live performances in real-time.

Ben Rubin’s video projections include images from the German expressionist classic Der Golem (1920) by Paul Wegener, Hebrew letters on the ancient tombstones in the old Jewish Cemetery of Prague, and new material he created for this production.

—Richard Lowe Teitelbaum
Richard Teitelbaum

Composer/improviser Richard Teitelbaum has been acknowledged a pioneer in electronic music for over three decades, combining electronics with classical forms, jazz improvisation, and world music. His concert works for combinations of electronics, western acoustical instruments, shakuhachi, and voices have been heard all over the globe, from the Kennedy Center to the Berlin Philharmonic Hall, Centre Pompidou (Paris) and Concertgebouw (Amsterdam); and from the International Jazz Festival (Macon) to the Almeida (London), Holland (Amsterdam), Inventionen (Berlin), Abiko International (Japan), Aspen (Colorado), and Goodwill Games (Seattle) Festivals. He has performed and recorded extensively, as a soloist and with a roster of international jazz and classical masters including Anthony Braxton, George Lewis, Carlos Zingaro, Fred Frith, Lee Konitz and Katsuya Yokoyama (shakuhachi), for labels including Tzadik, Wergo, Hat Art, Centaur, Victo, Polydor, and Artists. A new recording of his Cyberband Project was released this May by Meers Music in Germany; a duet album with Anthony Braxton, "Open Aspects" was recently released on CD by Hat Art.

Teitelbaum earned his BA at Haverford and his MM degree at Yale, where he studied with Allen Forte and Mel Powell. While on a Fulbright to Italy he studied composition with Luigi Nono and Goffredo Petrassi; a Senior Fulbright took him to Japan to study Japanese classical and shakuhachi music. He introduced Europe to the Moog synthesizer, and was a founder, with Frederic Rzewski, Alvin Curran and others of Musica Elettronica Viva in Rome, and the World Band, (which included L. Shankar and George Mgridichian among others) at Wesleyan University.

His innovative use of micro-computers to control synthesizers and acoustic pianos earned Teitelbaum the 1987 Prix Ars Electronica, sponsored by Austrian Radio and Siemens AG. His "Golem: An Interactive Opera," which has played in New York, Linz, Cologne, Berlin, Amsterdam and Quebec employs a real-time, interactive MIDI-controlled video disc system by which the live music "animates," edits and controls moving images on the disc and projection screen.

Other recognition for Teitelbaum's work includes grants from the Asian Cultural Council and West German Government, and commissions from the Westdeutsche Rundfunk (Cologne), Venice Biennale, Hessischer Rundfunk (Frankfurt), Radio Bremen, the NEA and New York State Council on the Arts, and Meet the Composer/Reader’s Digest. He is currently on the faculty of Bard College in Annandale-on-Hudson, NY where he directs the Electronic Music Studio and teaches computer music, media arts, improvisation and world music.

Shelley Hirsch

Shelley Hirsch is a composer/vocalist/story-teller whose work for stage, concert, record, film and radio have been seen and heard internationally.

Among her staged musical pieces are the autobiographical multimedia musical, "O Little Town of East New York," which was produced for the stage by Dance Theater Workshop (NYC); "Celebration of the Obvious," which was produced by the State Theater's Kammer Theatre in Stuttgart; and her most recent "The Passions of Natasha, Nannette, Nina and Norma," a collaboration with visual artists Barbara Bloom, was produced by The Martstall Theater (Munich), the Hebbel Theater (Berlin), and the Weiner Festwochen (Vienna).

Hirsch has also presented her work at Merkin Hall, The Public Theater, Knitting Factory and St. John the Divine (New York); LAICE (Los Angeles); New Music America (Miami, Philadelphia & Helena); International Jazz Festivals (Victoriaville and Vancouver); Documenta (Kassel); the Purcell Room (London); Musee de l’Arte Moderne (Paris); Moers Festival (Germany); Shaffy Theatre (Amsterdam); Ars Electronica (Linz); Podewil (Berlin), Apollohuis (Eindhoven), and dozens of international festivals of improvised music.

She can be heard on over twenty-five CD's including "Singing," her record of solos and duos, as well as "O Little Town of East New York" on John Zorn's Arcana label, and she is featured on a compilation of improvisations on the Knitting Factory CD label.
David Moss

David Moss performs solo percussion and voice concerts around the world. He received a 1991 Guggenheim Fellowship, and moved to Berlin, Germany, in October 1991 with a stipendium from the DAAD Kunstervergri. Recent performances include the Kirov Theater in St. Petersburg, “Serious Fun” at Lincoln Center, Musica-Strasbourg, Akademie der Künste and Berlin Jazz Festival in Berlin. He performs with Heiner Goebbels & Heiner Müller in the theater piece, “Prometheus,” and plays duets with drummer, Han Bennink.

In 1994 and ’95 Moss was involved in numerous projects: he was composer-in-residence at Schloss Solitude, Stuttgart; he has sung in Heiner Goebbels’ “Surrogate Cities,” a new piece for Symphony Orchestra; toured Japan with Henning Christiansen; created and performed “Wild Wires/Tactile Tales,” an operetta with Hans-Peter Kuhn (premiered at the Hebbel Theater), as well as being the curator for “Provokalität,” a voice festival in Berlin; and leading a voice-workshop in Darmstadt. He has performed in Richard Teitelbaun’s “Golem” and toured with Ferdinand Richard & Peter Hollinger in FALAQ, and he continues to perform his solo percussion and voice concerts. Moss currently lives in Berlin and is at work creating an “opera for extreme vocalists” to premiere in Leipzig in 1996.

Carlos “Zingaro” Alves

Carlos “Zingaro” Alves was born in Lisbon, Portugal, where he began studying classical music and violin from an early age. For nearly twenty years he has performed internationally with such varied artists as Barre Phílips, Derek Bailey, George Lewis, Fred Frith, Otomo Yoshihide, Evan Parker, Jon Rose, and Peter Kowald. He also performs regularly with such groups as the Canvas Trio with German accordionist/clarinettist Rüdiger Carl and French bass player Jòselle Leandre, and in his own trio with British percussionist Roger Turner and American cellist Tom Cora.

Alves has created several film scores and has worked extensively with choreographers, dance companies and theater groups such as the Portuguese-based Comicos. He has been part of some individual and collective art exhibitions as well. Having received a Fulbright Grant in 1979, he was invited by the Creative Music Foundation (Woodstock, New York) to participate in meetings, classes and performances with such composers as Anthony Braxton, Roscoe Mitchell, Leo Smith and Richard Teitelbaun.

George E. Lewis

George E. Lewis (b. Chicago, 1952) is active in 21st century art and music as a composer, performer, and computer/installation artist. A twenty-year member of the Association for the Advancement of Creative Musicians, Lewis studied composition with Muhal Richard Abrams at the AACM School of Music, and trombone with Dean Hey. He holds a B.A. in philosophy from Yale College.

A recipient of several awards from the National Endowment for the Arts in both music and inter-arts categories, Lewis has presented his interdisciplinary compositions across Eastern and Western Europe, North America and Japan. His computer compositions have been shown at the Randolph Street Gallery in Chicago and the Musée de la Villette in Paris, and his "interactive music videos," combining the mediums of theater, video, and computer music, have been presented at the Arte Elettronica Festival in Camerino (Italy), and the Kitchen (New York).

Lewis' work as a trombonist is documented on over eighty record albums on which he is featured as composer, improviser, or interpreter. He has taught at Simon Fraser University and the Art Institute of Chicago, and was for two years curator of the music program at the Kitchen in New York City. Currently, Lewis is Associate Professor of Music at the University of California, San Diego.

Ben Rubin

Ben Rubin's video and sound works have been presented in theaters and museums in the US, Canada, Europe, and Japan. His multimedia designs for theater have included Robert Brustein's play, Demons at the American Repertory Theater, the Builders Association production of Master Builder, and Nicky Silver's play Food Chain directed by Bob Falls. Rubin designed the video staging systems for Laurie Anderson's current Nerve Bible concert tour and for Steve Reich and Beryl Korot's opera, The Cave. Rubin's latest audio installation, Not Dreaming In Public (in collaboration with lighting designer Leni Schwendinger) premiered at the Whitney Museum at Philip Morris this March. His Sink installation will be shown at the Ricco/Maresca gallery in New York in November, 1995. Recent and future exhibitions also include the Nickle Arts Museum in Calgary, the Storefront for Art and Architecture in New York, and the Clocktower Gallery in New York. Rubin has been awarded artistic residencies at the Banff Centre for the Arts in Canada and at the STEIM foundation in Holland. He received his masters of science in visual studies from the MIT Media Lab in 1989. He is a member of the Builders Association, an interdisciplinary arts collaborative.

Fred Pommerehn

Fred Pommerehn studied design at the North Carolina School of the Arts from 1982 to 1986. After finishing there he left for Europe where he was employed as assistant director of lighting at the Schiller Theater in Berlin. Since 1990 he has worked as a collaborative artist, designing productions in the dance, new music and performance areas for a variety of artists including Arnold Dreyblatt, Shelley Hirsch, Hans-Peter Kuhn, David Moss, Richard Teitelbaum, David Weinstein, Toda Dance Company, Ingrid Hammer, Ben Rubin and The Lost Chord improvisation group, of which he was a founding member. His most recent work with Arnold Dreyblatt, "Memory Arena," of which he was co-creator, opened in Hamburg in January, 1995, and will open in Munchen in October, 1995.

"Überfussig und Umleitung," his installation works, were featured at Nachbogen 1993 and 1994, and he was included in the top ten U.S. Young Designers List of 1990 (Theatre Crafts International). He has been living in Berlin since 1986.

Cecile Bouchier

Cecile Bouchier studied arts and scenic design in Holland, where she worked as a scenic artist for the main opera houses. She left Rotterdam and moved to Berlin and worked as a scenic artist for musicals and films, as well as several Robert Wilson pieces. She also worked as assistant set and costume designer for music productions in Berlin and Salzburg. She has created video visuals for Carmina Burana and a production of Mozart's Requiem that was performed in the football stadium in Eindhoven. She is now working for productions in Berlin by Joseph Toin/Toda Dance Company and in The Hague for the Netherlands Dance Theater.
Side-view rendering showing the performers on raised platforms behind and between two projection scims.
CRITICAL PRAISE
FOR RICHARD TEITELBAUM COMPOSER/PERFORMER

THE BOSTON GLOBE
“Inventive, free and funny and charged with adrenaline.”

THE MIAMI HERALD
“Powerfully original music.”

LE MONDE
“Richard Teitelbaum, enlightened explorer of the synthesizer and the first true musician of this instrument.”

THE NEW YORK TIMES
“The synthesizer is Mr. Teitelbaum’s chosen instrument, and he plays it — or rather them, because he uses a battery of synthesizers and other electronic gear — as expressively and musically as a concert violinist or jazz saxophonist. In this regard, he seems virtually unique. A number of musicians use the synthesizer effectively, but nobody in this reviewer’s experience plays it with the grace and delicacy of Mr. Teitelbaum.”

“Most creative improvising synthesizer soloist in contemporary music.”

A fascinating dialogue between man and machine.”

DOWNBEAT
“Teitelbaum, whose background includes both classical music and improvised jazz, is one of those rare individuals with the tasteful sensibility to recognize the beauty of his synthesizer and the technological expertise to intelligently employ it. He utilizes electronics to liberate his musical ideas, freeing them from the technical limitations inherent in performing on traditional instruments.”

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FALTER, Vienna

"...Richard Teitelbaum's interactive opera Golem was the most exciting artistic contribution to this year's Ars Electronica."

THE INDEPENDENT, London

"...Saturday night's centerpiece was the premiere of Richard Teitelbaum's memorable 'Golem.' the most dazzling new multimedia piece of the festival. A labyrinth of live music with interactive computer systems, projections, and film footage. 'Golem' spins off the theme of a soulless life-force and the threat of technology taking over in the age of virtual reality..."

LA PRESSE, Montreal

"Among the best-liked elements of this extraordinary happening of the avant-garde music scene was the visual dimension of 'Golem.'"

THE GAZETTE, Montreal

"...Teitelbaum’s multimedia biblical allegory...was thought-provoking...

"Unleashed in the Cinéma Laurier Saturday night, the 'Golem' was an intriguing metaphor for technology run amok, pitching live players against computer software imbued with artificial intelligence..."

DIE ZEIT, Berlin

"Teitelbaum's 'interactive opera' [Golem]...adventurously combines the strict logic of the computer world with Jewish secret science. It reflects a kind of direct joy in the overwhelming load of stimuli from the era of video clips. The work is also marked by a way of using the most heterogeneous styles which leaves one breathless: avant-garde free jazz, synthetic sound realism, 'musique concrete,' the experimental nerve of Charles Ives or the untamed gestures of the New York noise-pop musicians, even the works of Iannis Xenakis."

JAZZ IN TIME, Montreal

"Enchanting and hypnotic; leaves one shaken and moved..."
Scenes
Prologue: The Threat: Places us in the current climate of growing racism, hatred and violence.

In The Beginning: In response, Rabbi Lowe sets out to create his "protector" on the banks of the Moldau, on a warm spring night in 1580... an act and setting that recalls and recapitulates the original Creation itself.

Invoking Ancient Spirits: The Rabbi and his assistant cast spells and call forth the spirits of Ancestors.

Cantorial Choirs: The congregants pray for salvation.

Instrumental Interludes: (trombone, violin, and electronics)

"Create Me Not!": As the rabbi prepares to create his monster, the Golem's ghost appears, and pleads with the Rabbi not to bring him into the world, but leave him in peace. It warns of dire consequences if its warning is not heeded, but the Rabbi, proclaiming his intention to create "a champion of the people, a live man!" forges ahead undeterred. (The text is adapted from the classic Yiddish play Der Golem (1921 by H. Leivick).

Making the Golem: Piece by piece, the Golem is gradually assembled, tested and brought to life.

First Breaths: Baby Golem greets the world.

Command and Obey (The Game): An improvised game of pairs, cue'd by colored lights, starting as learning by imitation (teacher-student), at first humorous and friendly, gradually develops into hostility and conflict (master-slave), eventually disintegrating in an atmosphere of fear and foreboding. After briefly and longingly recalling the peacefulness of his previous, spiritual existence...

Golem Wild: The Golem, becoming frightened and angry, rebels

Chaos and Destruction: ...runs amok...

Coda: ...and is finally put to rest... Peace is restored, but with a hint that the endless cycle of creation and destruction may begin once again.

Performance History
Golem has been performed at the following:
Jewish Museum of New York (1989) (Workshop Performances)
Ars Electronica Festival in Linz, Austria (1990) (Workshop Performances)
Inventionen Festival at the Hebbel Theatre in Berlin (1992)
IJsbreker in Amsterdam (1994) (New Version)
Festival International Musique Actuelle (FIMAV)
Victoriaville, Quebec (1994)

A new recording of a live performance of Golem was released on the Tzadik label's "Radical Jewish Culture" series in July, 1995.

For more information contact
Tracy Leipold, Electronic Arts Research
13 Sterling Place Suite 4D, Brooklyn, NY 11217
Phone (718) 230-9814
Fax (718) 230-9585