

Mind Of The Universe

Isao Tomita

Saturday, September 8th, 1984, 8:00 p.m.

Danube Park

Mind Of Universe

THE HISTORY OF THE UNIVERSE WITH MUSIC, LIGHTS, LASER AND FIRE
ABOVE THE DANUBE.

(First performance)

CONSULTANTS:

Dr. Carl Sagan

Dr. Frederick L. Scarf, TRW-Space and Technology Group, California

Dr. Masaki Morimoto, Radio-Observatory Nobeyama

Dr. Jun Jugaku, Astronomical Observatory, Tokyo

Dr. Tatsuzo Ohbagashi, Institute for Space Flight and Astronomical Sciences

PARTICIPANTS:

Goro Yamaguchi, Shakuhachi-player

Mariko Senju, violin

Soloists from the Linz State Theatre

Linda Roark-Strummer, soprano

Birgit Greiner, alto

William Ingle, tenor

Riccardo Lombardi, baritone

Ladies and gentlemen of the Linz State Theatre Choir

Conductor: Ernst Dunshirn, Director of Music of the Linz State Theatre

General Producer: Yozo Hikita

Coordinator: Taki Katoh Kurokawa

Show Director: Kohei Katsura

Stage Director: Tetsuya Ogurii

Lighting Director: Jiro Katsuhira

Assistant Sound Engineer: Saturo Takahashi

Assistant Sound System Designer: Yoji Uemura

Assistant Mixer: Teruo Shimura, Toru Kikuchi

Loudspeaker Equipment: Dynacord/Straubing, Dir. Ing. Josef Galneder

Light Effects: Art & Light Team, Vienna

Laser: Cinetics Performance, FRG

Helicopter: Haas Comp, Bad Vöslau

Ships: DDSG, Vienna, SBL, Linz

Fireworks: Josef Scheutz, Bad Ischl

Sponsored by CASIO Computer Co., Ltd.

We want to thank CASIO COMPUTER CO., LTD. for their generous financial backing of this project.

"MIND OF UNIVERSE" tells a story of the creation, development and the future of our cosmos and our planet. Tomita expands his monumental opus like a gigantic arch from the "Big Bang" over the slow development of the Earth to the future of mankind in outer space. 18,000 million years of the universe's history will be presented to all the spectators on the evening of September 8th, 1984 on the banks of the Danube, by Isao Tomita via a 9-channel stereo sound system together with music and light.

The idea for this project was born when Tomita watched Stanley Kubrick's "2001—A Space Odyssey"—and saw a Space Base circling around the Earth to the tune of Johann Strauss' "Blue Danube Waltz"...

Tomita's opus consists of six parts: As an introduction, 30 minutes before the beginning of the performance, the public is presented a distant kind of sound, very soft, very quiet—just as if it were coming directly from outer space.

Then the concert begins

Part One: THE BIG BANG

Part Two: COSMIC EVOLUTION

Part Three: THE BEGINNING OF LIFE

Part Four: A CALL FROM THE UNIVERSE

Part Five: MAN IN THE UNIVERSE

Part Six: HYMN TO THE UNIVERSE

Tomita wants to create a new visual experience in the open space with this new opus.

"MIND OF UNIVERSE" tries to incorporate almost all means of artistic design in open space: light, laser, fireworks, reflections, projections on surfaces of water and smoke, light columns, light pyramids, a helicopter as UFO and others.

In the past few years a growing number of one-dimensional visual events in the open space have been developed, be it fantastic laser shows, fireworks or the Fire Theatre. "Mind Of Universe" consists of the basic elements of light and fire on the one hand, the achievements of computer and synthesizer technology on the other. Nature and High technology are united in the tale about the history of the universe.

The Danube Park as an area of events is marked and framed by light columns, on the Danube the ships with the participants on board are in a constant dialogue with the universe: a chorus vessel with a choir of 100 persons, a ship for two soloists (violin and Japanese flute), as well as a ship for additional light sculptures. Banks of mist and walls of water serve as projection screens for the laser; a helicopter—equipped with full sound and light—appears as an UFO, tries to get in contact with infinity.

Isao Tomita himself floats in a 5-ton light pyramid as control unit, as musical and technical High-Tech Centre high above the river Danube.

MIND OF UNIVERSE wants to introduce a new dimension to experience art, a Spectaculum Mundi of the Electronic Age.

Part One: THE BIG BANG

18 BILLION YEARS AGO—THE BIG BANG

OUR UNIVERSE WAS BORN

DISTRIBUTION OF CONCENTRATED MATTER AND ENERGY

BEGINNING OF AN EXPANSION STILL GOING ON

CONTINUOUS ENLARGEMENT OF SPATIAL STRUCTURE

COOLING DOWN OF RADIATION

BIG BANG–GIGANTIC RAGS OF GAS IN OUTER SPACE

SHAPING OF STARS AND GALAXIES

Part Two: COSMIC EVOLUTION

THE COSMOS STILL IN A STATE OF SHAPELESSNESS

DEEP AND UNPENETRABLE DARK AFTER THE FLOW OF MATTER AND ENERGY

CONSTITUTION OF DENSE GATHERINGS OF GASES

CONCENTRATION TO AGGLOMERATIONS OF MATTER

IGNITION OF THE NUCLEAR FIRE

DEVELOPMENT OF THE FIRST GENERATION OF STARS–THE COSMOS IS
INVADED WITH LIGHT

CONCENTRATION OF THE GASES TO FORM GALAXIES–GALACTICAL
ENSEMBLES–STARS–PLANETS–LIFE.

Part Three: THE MATERIALIZATION OF EARTH

CONDENSATION OF EARTH FROM INTERSTELLARY GASES AND FROM DUST–
4.6 BILLION YEARS AGO

IN THE SWAMPS AND SEAS OF THE EARLY PLANET ORGANIC
AGGLOMERATIONS COME INTO BEING: LIFE

ADVANCE OF EVOLUTION–REPRODUCTION, MUTATION AND SELECTIVE
ELIMINATION OF MOLECULES GATHERING:

CAMBRIC EXPLOSION: NEW SHAPES OF LIFE FORM

FIRST HUMAN BEINGS TEN MILLION YEARS AGO

Isao Tomita:

"I think it must have been a fantastic adventure when mankind left its home in the OCEAN
and came to the dry land, to EARTH and entered an empty space:

Making its first experiences with rain–wind--storm–thunder–burning heat, developed feeling

at the sight of wonderful sunsets.
Began to enjoy romantic moonlight and wonderful rainbows...
In the course of millions of years humanity made important advances,
used its intelligence to create wonderful things-but also for destroying.
Mankind is always striving forwards—striving for the still untouched step of evolution
between the universe and Earth."

Part Four: A CALL FROM THE UNIVERSE

A PUZZLE: IN THE NIGHTLY SKY STARS HERE AND THERE.
OPENING OF PARTS OF THE COSMIC SECRETS

MEN WATCHING PUZZLING EVENTS IN OUTER SPACE
RESEARCH OF THE CONNECTIONS
DEVELOPMENT OF LIFE
DEVELOPMENT OF STARS
FASCINATION OF THE STARRY SKY.

Isao Tomita:
"Humanity feels attracted by the glitter of the stars.
Mysterious puzzles of outer space...
Don't they whisper to us?

Sometimes it seems to me as if they wanted to communicate themselves, invite us to explore
them."

Part Five: MAN IN OUTER SPACE

Opening of the cosmic era by mankind

STOCK TAKING OF THE LIFE-FORMING MATTERS.
RESEARCH OF THEIR CONTEXT.
CONQUEST OF THE LAST POSITIONS OF HUMAN FATE. UNIVERSALITY.
EVOLUTION.
RADIO COMMUNICATION.
RADIO TELESCOPES. SATELLITES.
SPACE STATIONS IN ORBIT.
INTERSTELLARY SPACE-FLIGHT:
THE THRUST INTO THE UNKNOWN.
THE UNDERSTANDING OF THE COSMOS.

Isao Tomita:
"After all the discoveries there still remains to be discovered: US AND THE UNIVERSE

Man leaves the atmosphere of the earth, enters cosmic space—a first step."

I believe that our children will live in other cosmic areas one day—THEY will make the
decisive step, as adventurous as when we left the sea three billion years ago and had to go past
every danger.

Mankind will leave the solar system. Will fly to the stars behind the galaxies. COULD meet extraterrestrial life... or: Is it impossible that extraterrestrial beings will come to the Earth? Humanity will take part in the history of the Galactic Civilization.

Part Six: HYMN TO THE UNIVERSE

A DISCOVERY VOYAGE BACK TO THE ROOTS, TO THE BEGINNING.
SEARCH FOR CIVILIZATIONS IN SPACE.
PICKING UP CONTACTS BY MEANS OF ARTISTICAL MESSAGES TO THE
EXTRATERRESTRIAL.
PENETRATION INTO THE SECRETS: WITH BRAIN–SPIRIT–CREATIVE POWERS.

The end of the cosmic tale:

Isao Tomita:

"On our tour through time and space the Danube Park transforms itself into a space centre: Let us leave the blue glistening Earth, let us move among the planets, meteors—a mighty, mechanical rhythm is pushing us forward. It symbolizes the discovery of the universe by Man... Human voices—a choir—resound in space, flow past many planets, penetrate through the solar system to the stars... the choir is a symbol of the infinity of stars and gaseous nebula.

A spaceship comes up towards us—extraterrestrial beings having developed a civilization long before us? A bridge of communication is erected, music establishes contact between us and the spaceship... a violinist as representative of humanity picks up communication with the spaceship (a helicopter). The ship withdraws, comes nearer again with lights and signals, with sounds we recognize as Beethoven's Symphony No. 9. Flashing lights invite us: join in, sing!

Alongside the Danube the lights are turned on, the choir starts singing, the spectators join in: the song to praise the universe...

Human voices. Computer sounds. Cosmic radiation transformed into audible frequencies. They form the musical part of this tale and this will be—with the auditory's singing at the end of the voyage—transmitted from Earth into outer space: a message from the inhabitants of this planet.

Are we ever to receive an answer?

Isao Tomita & the Plasma Symphony Orchestra

Conductor & Arranger: Isao Tomita

Concertmaster: AD Leo String sections

1st String Section: AD Leo

2nd String Section: V371 Orionis

3rd String Section: EV Lacertae

String sections 1—3 include violins, violas, cellos and double basses

Oboe: UV Ceti

Harpsichord: SS Cygni/V Hydrae

Organ. RV Tauri/MM Cassiopeiae

Soprano Humming: W Virginis & Delta Cephes

Dawn Chorus: The Magnetosphere above the star called EARTH

Steam Locomotive (white noise): A Proto Star in Orion

11 Pulses Per Second: Vela X Pulsar

The music

In the history of music we can always distinguish important shoves of development. These intersections in musical history, when one period of development ends and the next one starts, are not only milestones for a new musical style, but also for a new consciousness of hearing developed from it.

Examples of this phenomenon are the development of polyphony in the 8th century AD., the invention of staff notation between the 11th and the 14th century, the development of the opera about the year 1600, instrumental music about 1750, the dissolution of the classical major-and-minor system beginning with Wagner and Liszt and having its climax with Schoenberg and his pupils.

It can be well imagined that the 80s of our century will be considered a caesura in musical history. Computer music is achieving its independence, a new consciousness of hearing is developed.

Alongside with Robert Moog from the USA, who constructed one of the first synthesizers, and Wendy Carlos, who played a lot of classical pieces on the synthesizer for the first time, the Japanese ISAO TOMITA is undoubtedly one of the musicians who were and are pioneering in this area. Contrary to the radical artistic schools, as for instance the "bruitism" in the twenties, classical music is the basis for Tomita's arrangements. In addition to these new arrangements of traditional music by and by a new musical aesthetic is developed. This does not mean the dissolution of traditional music, but a continuation of its development in a new direction. Completely oriented towards this basic idea, Tomita uses for his "MIND OF UNIVERSE" traditional western Music as well as Japanese, and in addition compositions written for the computer and realized with its aid. True to this instrumentarium Tomita assigns his music a very specific function in this oeuvre, nevertheless well integrated among light, movement and space.

The introduction for "MIND OF UNIVERSE" will be a specific sound of radiation from outer space, having a definite wave shape and forming part of the Plasma Symphony Orchestra.

During the six parts of "MIND OF UNIVERSE" works by Igor Stravinski, Heitor Villa-Lobos, Richard Wagner, Johann Sebastian Bach and Georg Friedrich Handel will be heard in a typical "tomitaesque" sound interpretation.

The Finale, part 6, of "MIND OF UNIVERSE" will be musically symbolized by the chorus from Beethoven's Symphony No. 9. Musical dramaturgy and the arrangement of music in space characterize, among others, the new consciousness of listening. This is no longer the

traditional polarity of musicians and listeners, like in "normal" concerts, but is replaced by space with all of its parameters.

Isao Tomita about his music

"The performance of MIND OF UNIVERSE shall become a communication instrument between terrestrials and extraterrestrial beings. It will be transmitted into outer space via the parabolic antenna of a radio-observatory—maybe one day extraterrestrial beings will receive these sounds from Earth.

The music is composed from

- an arrangement of already existing classical works
- own compositions of computer music
- sounds from Earth, like the twittering of birds, animal voices, different noises
- a chorus, that will sing at the performance—sounds from a Japanese bamboo-flute
- sounds of a violin

Also cosmic radiation from outer space will form a source of sound in this performance. Electromagnetic waves and light curves from stars and outer space will be received by Voyager and the Nobeyama Radio Observatory and afterwards transformed into audible frequencies.

All those sounds will be integrated in the production of this 12-channeled "Sky-and-Ground-Spectacle" in order to create a SPACE SOUND above the river Danube. It is the melting of sounds from outer space made audible by technique, of sounds generated in the computer and of live music."

The musical program in details

INTRODUCTION

"The Unanswered Question" by Charles Ives

PART ONE: THE BIG BANG

- a) "A Compressed Soul of the Universe" by Isao Tomita
- b) "Thus Spoke Zoroaster", Introduction by Richard Strauss

PART TWO: COSMIC EVOLUTION

- a.) "The Expanding Universe" by Isao Tomita
- b) "Tristan and Isolde: Isolde's Liebestod" by Richard Wagner
- c) "Hymn To The Sun" by Nikolai Rimsky-Korsakov
- d) "Cranes In Their Nest", traditional Japanese Shakuhachi Music + the sound of Voyager

PART THREE: THE EVOLUTION OF LIFE

- a) "The Planets: Saturn" by Gustav Holst
- b.) "The Rite Of Spring—Adoration Of the Earth, Dance Of The Young Maidens" by Igor Stravinsky
- c.) "Daphnis And Chloé", Suite No. 2 by Maurice Ravel
- d) "Chorus Of The Creatures On The Earth," by Isao Tomita Music based upon "Bachianas Brasileiras No. 4—1 "Preludio" by Heitor Villa-Lobos

PART FOUR: CALL FROM THE UNIVERSE

- a) "The Lark Ascending" by Ralph Vaughan Williams
- b) "Close Encounters Of The Third Kind" by John Williams
- c) "Canon" by Johann Pachelbel

PART FIVE: MAN IN THE UNIVERSE

- a) Scene of a departing space ship by NASA Space Centre and Isao Tomita

b) "The Planets: Mars, Neptune, Jupiter" by Gustav Holst

PART SIX: HYMN TO THE UNIVERSE

a) "Ode To Joy" from the 4th movement of Symphony No. 9 by Ludwig van Beethoven

b) Finale from "The Firebird" by Igor Stravinsky

Isao Tomita

Isao Tomita is one of the most important interpreters of electronic music in the classical sector. He studied music at the Keio University. After first successes as a composer of music for film and TV he makes his breakthrough with "Snowflakes Are Dancing" in 1974. Music experts declare his interpretation of Debussy a revolutionary thing. His virtuosity in the invention of new sounds to match the contents of the music interpreted by him, the palette of sound-colours, the scrupulous construction and illustration of the themes enthuse both audience and critic.

With "Planets" by Gustav Holst Tomita takes his next step—into outer space. Here at last the limits of expressive possibilities with a traditional orchestra are definitely exceeded. The start of a rocket at the beginning of "Planets" conveys to the listener the impression of being part of the vessel's crew.

In the technical field Tomita goes on experimenting. Biphonic-Sound techniques allow him to dislocate the music from the speakers. He separates the plane of listening not only in left and right, but also in "up" and "down". In 1979 "Space-Tomita" turns back to classical music: The album "Daphnis and Chloe" appears, where Tomita applies once more his means of sound expression to classical music.

At Ars Electronica '82 Tomita realized the "Bermuda Triangle", a science fiction fantasy, visualized by Ron Hays. And at Ars Electronica '82 the first plans about the large-scale project "MIND OF UNIVERSE", to be realized in 1984, were made.