Bergpredigt
Hubert Bognermayr/Harald Zuschrader

Sunday, September 8th, 1984, 4:30 p.m.
Neuer Dom, Linz

Hubert Bognermayr/Harald Zuschrader/Walter Karlberger
"Bergpredigt" (The sermon on the mount)

Computer concerto: performance in the Linz New Cathedral (Neuer Dom)
Music and computer realizations: Hubert Bognermayr, Harald Zuschrader
Words and parts direction: Walter Karlberger
Choirmaster and choir training: Balduin Sulzer, Master of the Chapel
Computer directors of the performance: Hubert Bognermayr, Harald Zuschrader, Klaus Prünster
Horns, Computer Wind Section: Anthony G. Morris
Conception of the sound equipment: Gerhard Englisch, Pro Show
Organizational Director: Alois Janetschko

In cooperation with the Federal State of Upper Austria and the Linz Diocese.

With the friendly support of Quantec Space Simulation Digital Equipment

Corp. Vienna and Hewlett Packard.

The first computer concert performance of the "SERMON ON THE MOUNT" in the second largest church of Europe shall lead to a new acoustical experience by its computer-calculated conception of sound distribution and the use of music computers.

Space simulations systems basing on the latest digital technologies allow a new method of the performance of programmed music. Through a special algorithm of simulation the acoustical reaction of any random or programmed closed spaces is imitated and can be combined according to the compositional principles with the acoustical parameters of the cathedral.

The computer-acoustical music already employed in the disc recording of "THE SERMON ON THE MOUNT" will be newly dimensioned at the performance in the cathedral by the "SPACE-WITHIN-SPACE EFFECTS".

So the conscious shaping of acoustics becomes a determining element of composition. The sound space "cathedral" is brought to an accordance with the sound space "composition".

While the natural change of light and shadow visually changes the interior of the cathedral, this conception of the "SERMON" wants to give more expressiveness to the sounds in the Linz Cathedral by the means of computer acoustics, wants to evoke certain moods with the listener, wants to fascinate acoustically as well as it wants to bewilder.

Until now organ, strings, trumpets, choirs and–if it was to be "modern"–percussion were to be heard in churches.

The instrumentary of the music computer, speech computer, sound stations and live sound mixing units is new to music in churches. Real sounds within non-real spaces and vice versa– a step into imagination and meditation of sound.

EXCERPT FROM THE CONCERT PROMPT BOOK

The following sounds develop slowly from diffusion level A and form a gradually intensifying sound cover just above the heads of the public: human breathing sounds–oxygen mask–African lepra bell–

The sound cover of diffusion level A is interrupted by the quotation: "Blessed are the poor, for theirs is the kingdom of heaven" from the acoustical distance of diffusion level C (30 metres high). The human breath sounds dominating level A are slowly replaced by the computer-acoustical compositional resolution of positive and negative interpretations of original quotations.

Three levels of diffusion were installed in the cathedral for the performance of "THE SERMON ON THE MOUNT":

LEVEL A: Dissolution of the main phrases into positive and negative interpretations of the present. Word-sound-images in connection with computerized natural and synthetical sounds (Loudspeakers at 2 metres above ground).

LEVEL B: Choir configurations distributed at different altitudes within the cathedral (not amplified).

LEVEL C: Computer voice–central phrases from the Gospel according to St. Matthew–in authentic translations of the last two centuries (loudspeakers 30 metres above ground).

By a constant interplay of the three levels of diffusion the spate of the cathedral shall find a new dramatical interpretation with the aid of the latest computer technology.

ABOUT THE OPUS "THE SERMON ON THE MOUNT"

Man does not trust the words of the mighty any more. Too much has been lied, with too deadly consequences. No wonder that people all over the world have started rediscovering a message which is almost 2000 years old and has so often been disregarded: the sermon on the mount by Jesus of Nazareth.

Especially young people from the most different ideological camps accept the demands of the SERMON and find an answer to their questions in them.

The menace to peace, the need to renounce violence, to reduce aggression , to turn towards tolerance and solidarity, a commitment to the suppressed and those without rights… love and peace are taken literally in the SERMON ON THE MOUNT.

This was a challenge to us as artists, to combine this work with the most criticized technology of our time–computer technology–and to compose, to produce, to interpret. The music computer gives us a completely new creative area for the musical interpretation of words. Simultaneously we have the chance to prove that technology in the hand of man may help humanity to peaceful, living, touching, human methods of expression. A fascinating task for

the three of us, to give a musical interpretation of this text still so actual. We decided to use an uncommon form: the original words are confronted with quotations from our time, with headlines, key words, stereotypes, clichés, cries for help, sound images. We want to place the ideas of Jesus right in the middle of the settings of our dangerous and endangered present: a present, where the mighty cynically consider a continuous bribery "peace". It is time to give a signal: the corporate life of mankind, the sense of our existence. Peace is at stake!

This opus was realized with our Erdenklang music computer systems, which allow us to store every sound source of our environment and use its output purposefully in our composition, production and interpretation work. The first results of this new way in music is our Computer-Acoustical Sound Symphony ERDENKLANG (6.25 030).

The basic material was the Gospel according to St. Matthew in its central parts and in authentic translations of the last two centuries. They were divided into positive and negative interpretations of our time, the statements being systematically collected from books, theological articles, speeches and radio transmissions. The speakers represent different types of people beyond the trinity "Man-Woman-Child" and their interrelations in the context of their social environment. In the musical interpretation of the "SERMON" we furthermore computer-acoustically incorporated rhythm and timbre of human voice. Here we took as basis interviews made in hospitals, homes, youth centres, in the streets and out in nature. Key phrases of these interviews were fed to the computer and transformed –together with signal words and the timbre of the voices– according to our dramatical conception.

With these word-sound images, original text passages, and the natural and computer generated sounds, we have created a new musical form: an oratorio for music-computer and voices.

The music, sound, word, and score programs were written by Hubert Bognermayr and Harald Zuschrader in their "Electronic Forester's Lodge Studio for computer-acoustical music" in Linz/Austria.

GOLD FOR "THE SERMON ON THE MOUNT"

A contribution to the Ö3-ORF-Radio series "Gospelcantate" with excerpts from the "SERMON ON THE MOUNT" was awarded the Main Prize of the International Christian Radio Festival in London 1984. The festival jury explained the award by stating that this solution of the topic "Sermon on the Mount" showed courage for new ways of arrangement and demonstrated the possibilities for the use of the latest computer technologies for the interpretation of words and music in a really exemplary manner.

OTHER PERFORMANCES OF "THE SERMON ON THE MOUNT"

Performances as image and sound meditation with large-scale diffusion:

Deutscher Katholikentag 1984, Zirkus Krone Building, Munich. World Congress of the Lutheran World Association in Budapest, 2 performances in July/August 1984 at the Sports Palace, Budapest. European Methodist Congress, July 1984, Congress Center Vienna.

Première of the "Sermon on the mount" as multimedia live staging at the Hallenstadion Vienna: music, dance, pantomime, light effects and screen projections.

Beside the Linz computer artists Bognermayr/Zuschrader the following groups will participate: dancers from the Vienna State Opera Ballet, renowned soloists from the Vienna Music College, the Music Conservatory of Vienna and the Radio Choir.

"The Electronic Forester's Lodge"
Studio for Computer-Acoustic Music on the Way to Vocal Fiction and Visual Coherence

Bognermayr/Zuschrader in an interview for "Art & Science" (USA, excerpt):

For a rather long time already we are occupying ourselves with computer- acoustic music.

Computer-acoustics offered some sensational new chances in comparison with the sound-synthesis of customary (analog) synthesizer.

In the first place we got away from the speculative features, which distinguishes the usual synthesizer music from the gamble with the controls, you find a "new sound"–and off he is again–or no longer reproducable in the same way.

When working with the music-computer you have to plan the sound, to construct, to calculate beforehand. A new quality of musical imagination has to be developed. Only conscious work leads to the goal.

In the second place computer-acoustics allowed manipulation of natural sound particles in any direction.

A hyper-complex synthesis of sound–of an unwanted and unimaginated richness–has become possible.

Finally we have developed countless new, unheard, "fictive" instruments. Through our work the musical alphabet has been enlarged. In some way we have introduced the Chinese alphabet (with a couple of thousands of signs) into the Latin alphabet.

Where we are internationally leading is exactly in those letters. Those are our "sounds", which we can–if we want to–put to the disposition of everybody.

In our opuses ERDENKLANG–Computer-Acoustical Sound Symphony–and in the SERMON ON THE MOUNT–Oratorio for Music Computer and Voices–it was our main goal to find new musical letters. A basic change of musical grammar was not our concern.

The wide international success of those two works is surely based on the fact that the listeners were able to apprehend the new musical letters and the sound images resulting from them and were not overburdened by an additional strongly changed computer-designed musical grammar.

We do not consider it one of our duties to do coaching in the field of new shapes of musical grammar.

Herbert v. Karajan, Mike Oldfield or whoever comes to us–and many famous stars do–want from us the new musical letters, with which they write their own musical grammar afterwards.

We do not work anymore in this old-fashioned occidental and inseparable union of artist/author/composer, this is no longer possible in the age of computer art, we think. A new type of artist has developed. We are researchers, composers, music engineers and utility musicians in one. We do develop–if this comforts you–very ambitioned artistic projects, wherein we undoubtedly try to break up and redefine grammar and syntax of music. This needs time, this needs maturity, this is too important to us to precipitate the matter. Our archive is full of such examples of composing.

The listeners are not mature enough for the compositions of the coming Post-Industrial Era. Not even the newer examples of changed musical grammar in a connection with traditional sound production have been successfully handled. The many "crashed" new-style composers are the best illustration.

But back to computer-acoustics.

As fascinating as the system is, for the time being there is the limitation that with our INSTRUMENTAL FICTION we still get stuck in the two-dimensionality of PLAYBACK.

Regardless of whether we want to write the hitherto unheard opera or the unheard pop-song, we still depend on singers to be dubbed on a composition-and-sound program.

This is an absolutely unsatisfying status.

What we lack is the "VOCAL FICTION".

We are in a feverish effort to work out the computer-generated human voice, as it is not at the disposal of man–at least as an option. Like in computer acoustics in the instrumental area, I can perfectly imitate natural voices with the VOCAL FICTION. The possibilities for artistical control of voices, anyhow, is considerably enlarged. You could say, the singer-fiction with the ever-sure three-line C is already very near. As a matter of fact, it is still unforeseeable what can be made with the VOCAL FICTION–even we can only vaguely perceive the outlines.

A second level in which we are engaged is pointing towards the visual area, of which everybody is speaking so much and achieving so little. Strictly speaking, in this field we are still at the first sound film, "Jazz Singer", whether we work with video now or not. Some kind of soundtrack is illustrated at pleasure with pictures, or, the other way round, a given sequence of pictures is dubbed with music. This is primitive.

The Austrian movie avantgardist and theoretician Peter Kubelka has rightly pointed out that the real sound-movies can be counted on the fingers of a hand.

Those are the movies where sound and pictures are means of expression having the same rights and are in counterpoint-like relations to each other–a very musical idea.

Our efforts are now directed towards an automatization of this interdependence of sound and picture, so that the picture is automatically a musical expression, and the sound automatically a cinematographical/visual means of expression–at the same time.

We call this project "VISUAL COHERENCE".

This is a very complex matter composed of different parts:

Digital elaboration of real images, pure synthesis of images and the software-programs to get from the idea of a picture to the sound level and vice-versa.

In fact the issue is the scientific coherence of SOUND/IMAGE UNITS, in order to get away from the present methods of translation and to develop an independent medium, a self-contained program material.