The Institute of Electroacoustics and Experimental Music at the Vienna University of Music.
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A brief history.
The composer Karl Schiske (1916-1969) and the pianist and producer Karl Wolleimer (b. 1919) already in 1955 planned to establish a studio for "Elektronische Musik" at the "Vienna Academy of Music". The installation of the Viennese studio was definitively completed by Wolleimer in 1958/59, being perhaps the first Studio to be established at a School of Music in Europe.

In 1959/60, the first significant electroacoustic composition ever realized in Austria was produced in this studio, the ballet "Fastasmatas" from Anestis Logothetsis (1921-94) with the technical assistance of the sound engineer Helmut Gottwald (b. 1938). The piece, tending to the French "musique concrete" approach already anticipated the future aesthetic development of the studio.

In the academic year of 1963/64 the course of electroacoustic music has been founded. In the same year, Gottwald started to build an electronic instrument which could be regarded as a forerunner of the voltage controlled synthesizer. This instrument, called AKAPSON as hommage to the "Musikakademie", was used for many years as a source for electronic sounds and is now a part of the collection in the Museum of Technology in Vienna. In the next year other electronic instruments, the AKAPIEP and the AKASCHIED, were built. The first was a rhythm machine which allowed the production of unusual polyrhythmic structures. The second a kind of third filter bank graphic equalizer.

During the sixties approximately 20 pieces have been produced by avantgarde composers like Karl Heinz Gruber, Günter Kahnewez, Peter Kolik, Friedrich Cerha and Roman Haubenstock-Ramati. The last two were later successively appointed assistant directors.

In 1970 the composer Dieter Kaufmann (b. 1941), former student of Schiske, came back from a period of studies in Paris, where he attended the courses of Olivier Messiaen and Rene Leibowitz, as well as the course offered by the GRM (the "Groupe de Recherches Musicales") under guidance of Pierre Schaeffer and Francois Bayle. His engagement as head of the course of electroacoustic music in the Viennese studio, now raised to the status of an institute inside the school of music, gave a new impulse to the spreading of the new form of music in Austria, also beyond the academic sectors.

In 1978 a digital system for real time sound processing controlled by a graphic interface, AKA 2000, was built by Peter Meckler.

The catalogue of works realized at the Institute increased in the seventies in more than 70 compositions from Austrian and foreign composers. To mention some names: Kaufmann, Wilhelm Zobl, Camilla Sooderberg, John Maryn, Wolfgang Dammay, Logothetsis, Ryszard Klosowski, Bruno Liberda, Günter Rafl, Christian Teucher, Mayako Kubo.

The Institute moved to a new location and the composers Haubenstock-Ramati, Erich Urbanow and Francis But successively took the direction of the Institute is the eighties. Under the direction of F. But the Institute received a generous extraordinary endowment from the Ministry of Science and Research in 1992 in order to renew all of the facilities.

The Institute of Electroacoustics and Experimental Music has nowadays 25 persons in its staff and more than 100 students. It occupies presently two floors of the Rennstillgasse 12 with 3 studios dedicated to applied music (each with a 8-track Digidesign Prototype based work stations for video and film synchronisation), 3 studios for Sound Engineering (an analog and a digital 24-track studios and an 8-track Prototype system) and 4 studios for electroacoustic/computer music (a 24-track mixing station, at Next/ISPWP based 8-track live-electronic studio, an 8-track Prototype system, Matrox, Macintosh, Atari based CDC stations as well as IBM and Silicon Graphics Indigo 2 system).

The Institute hosts the corcurate courses for Electroacoustic Music and Sound Engineering as well the lectures and practical work on Electronic and Computer Music for students attending the
"Composition" (MA) and "Theory of Music" (MA) degree program studies. It has developed activities in the field of music production, public concert presentation and documentation. It also beings to its objectives to develop research in subjects concerning all forms of the electroacoustic arts.

Activities:

The course of Computer Music and Electronic Media is an educational platform (three years) for artistic discourse of new forms of technology related to music and computer.

Technology and conditions of production concerning electroacoustic music are constantly in radical change. No production process in a studio is conceivable without the use of computers. In this context the term computer music is to be understood.

The digital coding of acoustic- and visual signals, the usage of these signals in telecommunication, the interdisciplinary integration of traditional genres like music versus the visual-, the performing arts and the virtual reality (VR) paradigm comprises new possibilities, requires new methods of production and ways of performance. Terms like digital art or new media are getting more and more important.

The course conveys the above paradigms in conjunction with a theoretical and practical education offering information of technical and scientific basics (computer- and electroacoustic music, acoustics, psychoacoustics, history, analysis, etc) as well as the fundamentals of the process of artistic creation (concept, realization and presentation).

The study is organized in two sections. In the first two years, a general overview of the field is presented to the students and he is expected to transform the new knowledge into practical works. In the third year specialization on a certain theme and/or on a particular technology is required in form of autonomous works, pieces or projects. Both artistic and theoretical works must be presented at the final examination in order to obtain a leaving certificate.

The equipment for these courses are: 24 and several 1-track analog tape recorders, Macintoshes with 8 & 4 track Pro Tools, Next/2CAM Workstation / PC Workstation / Silicon Graphics IIXDIGO 2 / Atari Falcon 30 and countless MIDIX equipment.

The course for Sound Engineering (three years) offers the opportunity to achieve the "Tonmeister" certificate. The curriculum is designed for musicians interested in pursuing a career in music and film recording, film mixing, sound reinforcement and related professions within the audiovisual industry.

The program's facilities include three Studios with AMEK "BIG 28" and AMEK "BIG 44" mixing consoles, Festex G-24 track analog tape recorder and 24 track digital recording (3 ADAT 8 Track) Macintosh based "PRO-TOOLS" 8-track harddisk recording system for post-production and audio-visual video.

By nature the program is multidisciplinary and includes courses in music, sound engineering, electrical engineering and business. Prospective students are expected to have a strong background in music performance and unclouded memories of high school mathematics and physics.

The class for "Composition with particular consideration of the electroacoustic and experimental music" (MA) of Dieter Kaufmann opens up the students the possibility to develop a creative attitude toward electroacoustic and digital media, toward experimental combinations of media and analogous art forms. Especially in the area the acoustic, the student has the possibility, to collect experiences in relation to new technologies in the area of the music and/or to realize compositional ideas under study conditions especially in the area of the audiovisual media (film, TV, Videoclip, Music-theatre, Multimedia etc). The studies of media composition, arrangement and jazz theory, music-processing and keyboards in these workshops are emphasized.

Research: One of the latest research projects of the Institute explores the field of Virtual Reality. The impact of movements of visual and sound objects on the design of virtual spaces investigates the interaction between the perception of visuals and audio events in a dynamic environment. This project is granted by the FWF (Forschungsförderungsfonds der wissenschaftlichen Forschung) of the Federal Republic of Austria.