Conference Report

Metaphor in Classical music composition

At the end of June, Anno Hellenbroich of EIR *and the Schiller Institute in Germany, addressed a conference in Budapest, Hungary, on the subject of "Between the Notes: Metaphor in Classical Composition." Hellenbroich is known to* EIR *readers through his work on music over many years, including his direction of the production of* EIR*'s special issue of Sept. 4, 1998, "The Case of Classical Motivic Thorough-Composition." His participation in the Budapest conference came in the context of his tour of Hungary and Slovakia with Birgit Vitt of the Schiller Institute in Germany, and Margaret Greenspan of the Schiller Institute in the United States. In many conferences and discussions in the two countries, they presented two fundamental issues of human rights: the need for urgent reconstruction of the Balkans; and the gross violation of human rights in the United States, notably in the case of Lyndon LaRouche and associates. Margaret Greenspan is the sister of LaRouche associate Michael Billington, who is serving a 77-year sentence in a Virginia prison.*

The following report on the music conference was filed by EIR*'s Wiesbaden bureau.*

Hearing, singing, and speaking are among the most basic phenomena of human life, and so people are always researching these phenomena. Some carry out this research in order to help people with hearing problems, some in order to improve the acoustics of a music studio or the quality of the telephone, and others wonder how a human being can hear so much with such a tiny organ as the ear.

One researcher who carried out investigations and made a number of inventions in all these areas, Georg von Békésy, who received the Nobel Prize in 1961, was the focus of a three-day international scientific conference held in Budapest at the end of June.

More than 100 scientists from the United States, Japan, Ukraine, and various European countries, who work in the most diverse disciplines of medicine, physics, communications sciences, music, and education, gathered in the beautiful rooms of the Hungarian Academy of Sciences on the occasion of the 100th anniversary of Békésy's birth (he lived from 1899 to 1972). In an interview, the scientific organizer of the conference, Professor Laijtha, emphasized the interdisciplinary approach which gave this conference a special significance for further scientific research on hearing.

Anno Hellenbroich was invited to speak about what the Classical composers "hear," and what principles underlie their compositions, in order to better understand what the great Renaissance Cardinal Nicolaus of Cusa described as the "mental ear." Hellenbroich emphasized the importance of the investigations and experiences of the *bel canto* school of singing, for a deeper understanding of musical hearing.

In his opening remarks, he stressed that an international group had analyzed thousands of compositions, looking at the registers and register shifts of the human voice, and that this group had come to completely different conclusions from those of Helmholtz's postulation (on the basis of Rameau's theory) of the so-called resonance theory of hearing.

Using examples from the famous motif from the *Musical Offering* by J.S. Bach, Hellenbroich demonstrated how Wolfgang Amadeus Mozart and Ludwig von Beethoven had worked this motif into their compositions. (If one keeps in mind that Beethoven was deaf for nearly 20 years, the question of "mental musical imagination" is posed sharply, given that it is the later works of the deaf composer which manifest the most extraordinary harmonic development.) In this connection, Hellenbroich emphasized the importance of educating the population at large for "active hearing."

Medical aspects

Various speeches at the conference showed that considerable progress had been achieved in helping people with hearing problems, particularly in the area of new surgical techniques, such as using lasers in order to make stiffened bones in the ear mobile again. But there are still a number of unknowns, such as the processes by which sounds, words, and tones are actually apprehended by the human mind

Georg von Békésy discovered in his researches in the 1930s and 1940s, that a non-linear migratory wave in the interior of the cochlea transfers the incoming waves of sound to the hair cells of the basilar membrane. The hair cells then conduct impulses corresponding to the frequencies to the brain for processing.

One contribution to the conference called attention to certain acoustic phenomena, discovered at the end of the 1970s. It was observed, following stimulation, that emissions of sound are to be detected coming from the inner ear. As the speaker demonstrated, this characteristic of the healthy ear can be used to carry out routine diagnostic tests of newborn children, to determine whether or not they can hear. This makes it possible to diagnose congenital deafness, and thus to initiate medical and educational treatment at an early age.

"Active hearing" and how it functions, for example, via the external hair cells' impulses to the brain, is an area of research into human nature, the phenomenon of psychophysical parallelism, which leaves many unanswered questions for research.