Albumblätter

Es gibt keinen inwendigen Drang, etwas zu erfinden. Immer ist ein Auftrag dazu nötig, der Wasser auf die geplanten Räder gießt. Jedes Werkzeug setzt genaue Bedürfnisse voraus und hat den präzisen Zweck, sie zu befriedigen; sonst wäre es nicht da.

Ernst Bloch, Das Prinzip Hoffnung

1. Faced with the task of describing the Utrecht Institute of Sonology in retrospect, one involuntarily searches for a definition, for a programme that could have shaped the development of 25 years. On looking back, one's first reaction is to search for a description that would fit the Institute as a whole, rather like an train boarded at the start of a journey and left at one's destination. Sonology gave its occasional and permanent staff the feeling of taking part in something special, something unique: Sonology was more than just an electronic or computer studio like so many others, more than just a tuition subject, a library or an international meeting-place. The typical aspects of the Sonology experience, its premisses and attendant circumstances, ought to be dissected. But in the same way that the manager of a hotel cannot convey to his guests a true picture of what they actually experienced on their holiday, it is not proper for a member of the Institute staff to describe it "from the outside", like an exotic discovery.

Quite the contrary: the longer I reflect on the Institute as an entity, the more it disintegrates. I tend to see it as a sequence of days and weeks, successes and setbacks, ideas and realities, of changing circumstances, staff and students. I am tempted to compare my Sonology experience with my earlier Cologne experience at West German Radio. That, too. seems in retrospect to reflect a closed period (probably due to the constancy of the institution and its aims) with a distinct beginning and end, in spite of being the sum total of a host of individual experiences. Recalling my work in the Cologne studio, I could plunge into a mass of detail in which no-one who has ever visited the studio would recognize it.

Sonology is a similar case. The wholeness of the experience is slow to take shape because the Institute, unlike the Cologne studio, had to grope for its identity. The idea of Sonology as a process which favourable circumstances set in motion and adverse circumstances brought to an end prevents any wishful thinking about repeating the same thing in another place at another time.

2. Sonology was born of electronic music, more precisely as a composers' workshop installed in 1957 by Philips in Eindhoven, where Varèse composed his "Poème Electronique" for the World Fair in Brussels in 1958. This studio was presented to Utrecht University in 1960 and rechristened "Institute of Sonology" in 1967. The university provided the requisite staff and funds for closer scrutiny of the theoretical implications of electronic music in the field of musical aesthetics and production technique. The fact that we would be teaching university students necessitated a formal description of models and methods.

To me, the Sonology story starts in the summer of 1964, when I took on the job of artistic director of the then electronic music studio. Behind me lay a 10-year period spent in the West German Radio studio with Stockhausen and a number of other noteworthy composers. The Cologne period meant much more to me – and surely to other composers working there – than just harnessing new sound sources. The subject to be broached, though, was nothing less than the social function of music; for this was the first time that music could be disseminated worldwide and instantaneously via radio and gramophone recordings, and the first time that the composer could realize and convey his conception with the provable correctness of a mathematical formula. For the first time the composer was able to meet the challenge of technological world-change by employing technical means. If Sonology ever implied the composer's battle against a world in which the individual is engulfed in noise, and if Sonology ever provided the spur to understanding the noise of the world as musical language, then Sonology is rooted more firmly in Cologne than in Utrecht.

Be that as it may, I saw my task at the Utrecht studio as being to introduce this social-critical comprehension of music and the methods which had been devised for representing that comprehension. The signs were propitious. Although the apparatus from Eindhoven was obsolete and despite the lack of a conception outlining the studio's development, we did have a patron (the initiator H.J. des Tombe, Secretary of the Board of Curators) and a benevolent bureaucracy which, represented in the institute by a caring and energetic administrator (Frank de Vries), yielded to the budding institution's pressing urge for expansion. There was also a promise of 12 monthly salaries which the Institute's director could allocate at his own discretion for musical or scientific projects; the studio even had its own maintenance department with two technicians.

3. Of course this snapshot does not show the "Sonology" that was to enrich the vocabulary of several hundred students. But what snapshot ever could? Leafing through the album we see a commercial bureau moving out of its offices in the Atlanta building on the Plompetorengracht, and Sonology being allowed to renovate the rooms, purchase material and recruit staff. We see other rooms in the building still occupied by members of the university library staff, their clattering punch-tape machines emitting impulses which play havoc with the electric network; they, too, move out and are replaced by the sonological apparatus. In the attic a professor of theology occupies the only lecture-room in the building; he moves out, Sonology moves in. Each expansion created an additional job or an electronic studio or a laboratory or a library. Another snapshot shows the Institute's darkroom and chemical workshop for the production of printed circuits; another shows a television camera and monitor. The pictures reveal the true face of Sonology: steady growth, a perpetual search for technological angles, a constant stream of guests (composers, researchers, visitors), the bustling preparations for the day on which Sonology could get down to work, training in sonological thought, the initiation of countless students into the premisses and possible techniques of sonological music-theory. Or was all this already Sonology?

Other early snapshots in the album are of a succession of visitors and students from all over the world, and composers such as Andriessen, Boehmer, Ciamaga, de Délas, Eloy, Grippe,

Grosskopf, Halffter, N.A. Huber, Kaegi, Kagel, Karkoschka, Kayn, Laske, P.T.Lewis, Penherski, Rampazzi, Riehn, Schat, Shinohara, Sonstevold, Stiblij, Thoresen, Torstensson, Truax.

There were important technical developments in those early years too: a variable function generator, a four-channel envelope shaper (1965), a complete voltage-control system starting in 1966, the Institute's first computer in 1971. Concerts were organized (22 in Holland alone in 1966!), international congresses were attended, other studios were visited.

4. Sonology aimed at rationally permeating, describing and formalizing musical (especially intuitive) knowledge. In 1961, at "Huize Gaudeamus" in Bilthoven, I gave a series of lectures called "Music in its Technical Rationality", a tributary which later flowed into the sonological river. The idea behind this title was not only meant to provide a background for tuition and to guide guest composers in their production of electronic music, it was also to be embodied in the development of new apparatus and research programs. This involved among others the development of programs for Fourier transformation, spectral analysis of musical sounds, creation of a library of musical and speech sounds, protocol analysis, programs for Walsh transformation and its application to the analysis of musical structures, the VOSIM model, sound synthesis programs, composing programs, the relationship of percept and concept (e.g. programmed live electronic music, sonological application of formal linguistics, computer-aided graphics, audio-visual mapping).

A recurring problem is the collaboration of musicians and technicians, who have no common language. What musicians want is not always technically feasible, and the lines of technical development do not always coincide with those of music.

In our case the chasm was bridged by a physicist (Tempelaars) with a great love and knowledge of music. But even he could not stray from the path dictated by his scientific speciality. It was therefore not surprising that the sonological firmament of ideas of those early years eventually fell apart into constellations. Weiland was responsible for teaching historical aspects and organizing concerts, Tempelaars was in charge of signal theory and audio-psychology, I devoted myself to composition systems, Kaegi to his "Design of Musical Discovery" after developing (with Tempelaars) his VOSIM sound synthesis system, Paul Berg taught computer sound synthesis on the basis of his PILE program, Greta Vermeulen taught FORTRAN, the technicians designed analog studios, digital circuits and finally a hybrid studio. Each teacher initiated his students into his own subject, but imparted little of neighbouring ones. Not all teachers felt able to share Kaegi's faith in the students' ability to combine the pieces of the puzzle into a meaningful picture.

Among the planets in the firmament was Otto Laske, tireless in his efforts to chart the genesis of musical language; there were also Barry Truax, who developed his POD system, Steven Holtzman, who brought AI techniques (and programs) from Edinburgh, not forgetting Peter Struycken, a Dutch artist who after attending the Sonology course made systematic contributions to graphic design with the aid of the computer and plotter. It all became Sonology, due to an unorthodox approach, which pursued an idea rather than a program.

5. Summing up, I see distinct ideas at the beginning and multi-interpretable prospects at the end, a large number of individual disciplines with different theoretical premisses and referred to by the

collective term of "Sonology", an annual intake of 50 new students with no possibility of taking Sonology as a university subject, financial support in the early experimental years but catastrophic cuts (leading to the actual closure of the Institute) just when our garden was about to bear fruit. From the very onset Sonology had been exposed to the risk of being lost between art and science: one of the very reasons for a 378-page close-typed "orientation" in this no-man's land, published in 1975 by a working-party at the request of the Foundation for Experiments in Art and Technology, funded by the Ministry for Cultural Affairs. The risks were most painfully evident in the fact that the Institute, though part of the university, did not belong to a faculty; the humanities and the sciences were apparently unable to appreciate the concept of "universitas", at least niot in the special case of Sonology. In the course of this tightrope act above the ever-widening abyss, Sonology lost its balance, to become henceforth just another Utopia. [June 1986]