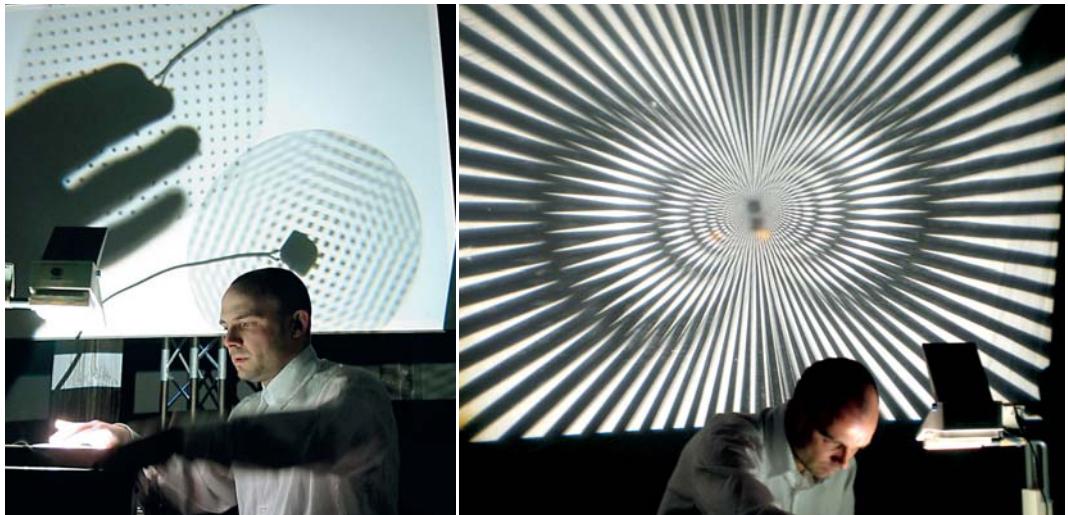


Sound and Sign

On the Unity of Acoustic and Visual Events



The work of MikoMikona in the field of transformation of graphics and sound displays a method of bringing into play in an original way what is written and what is realized. As "musical scores" in their "Fourier Dance Formations," the artistic duo MikoMikona utilizes raster graphics that are employed as an instrument for the sound origination process. Provided with the instruction to create inferences with the help of these pictorial structures displayed on transparent foils that are projected as a light show on a large-format screen by an overhead projector, the prepared graphics assume the character of, if not an Entwurfsschrift then by all means an Aktionsschrift that—comparable with hand-grip notation for string instruments—prescribes a certain execution of what is to be played without determining the concrete realization down to the last detail.

With the help of a custom-developed switch, the interferences projected onto a wall are transformed into acoustic signals whose lower frequency segments are audible by means of an amplifier. The musical equivalent of the interferences that MikoMikona produces is the tonal suspension that comes about when two tones with slightly different frequencies are superimposed. It is well known that such tonal suspensions are used to tune instruments as well as to produce synthetic bass tones in constructing organs, whereby two 16' pipes that are tuned a fifth apart from one another are used to produce a suspended, deeper 32' tone.

Before the background of the equivalence of graphical and musical suspensions, the direct conversion of video and audio signals by means of this optical-acoustic switch leads to an additional interference: the suspension events on the visual and acoustic levels—minimal shifts resulting from the electric switch and the differential propagation of light and sound waves—upon merging in the consciousness of the viewer/listener, create a synesthetic suspension. Sound and image are momentarily juxtaposed to one another and produce an interfering tension. This interference of two fundamentally different sensory perceptions is accessible only to the highest level of attention and can be experienced by the

viewer/listener only in a state of supreme concentration. If it succeeds, the suspension makes possible moments during which the audience experiences a seamless unity of acoustic and visual experiences. The unity of sensory input in the perception of vibrations emerges precisely by means of aporia, through the tender hovering of difference. The TV experience of moirés reveals yet another characteristic of interference: it instantaneously directs attention to the medium and the viewer's own perception. Only apparently a trick played on the senses, interference breaks through the illusion of the broadcast and permits viewers a glimpse at what has gone into the making of the technically created image. The optical-acoustic switch with which the video signals of the overhead projector are translated into vibrations utilizes elementary video technology. Images taken by a B&W camera are fed to a switch that eliminates all control signals for the optical conversion into a TV or video image and forwards pure visual information for the purpose of acoustic implementation. Thus, what is heard is a pure picture signal.

Now, a final bit of intellectual interference completes the circle of the "Fourier Dance Formations": the picture repetition frequency of the camera is 50 Hertz—i.e. 50 half image events per second—and the line rate is 15,625 Hertz. These two Hertz figures as constants of the camera technology that couples the video and audio elements mark both the borderline frequency in the audible spectrum of human hearing and bring the optical and acoustic worlds into congruence. The interpretational patterns of "chance" and "higher order" (according to which an as-yet-unknown principle of sensory physiology is at work in this correspondence of hearing and visual technology) are appropriate as equally valid interpretations of the "Fourier Dance Formations" to produce an intellectual interference that, during the course of a performance, begins to hover above the presentation of the work.

Text Kai Hoelzner (abridged)

Translated from German by Mel Greenwald

MikoMikona |||||

Klang und Zeichen

zur Einheit akustischer und visueller Ereignisse

Die Arbeit von MikoMikona im Transformationsfeld von Grafik und Klang zeigt einen Weg auf, der Geschriebenes und Realisiertes auf originelle Weise ins Spiel bringt: Als „Partituren“ verwendet das Künstlerduo MikoMikona in den „Fouriertanzformationen“ Rastergrafiken, die als Instrument für den Klangentstehungsprozess verwendet werden. Versehen mit der Anweisung, mit Hilfe dieser auf durchsichtige Folien aufgezeichneten Bildstrukturen Interferenzen zu erzeugen, die durch Overheadprojektoren als Lichtspiel auf eine Leinwand projiziert werden, haben die vorbereiteten Grafiken den Charakter wenn nicht einer Entwurfs-, so doch einer Aktions-schrift, die – vergleichbar mit Griffnotationen für Saiteninstrumente – eine bestimmte Ausführung des zu Spielenden vorgibt, ohne die konkrete Ausführung bis ins Letzte zu determinieren. Mit Hilfe einer selbst entwickelten Schaltung werden die an eine Wand projizierten Interferenzen in akustischer Signale umgewandelt, deren niederfrequente Anteile über eine Verstärkeranlage hörbar werden. Die von MikoMikona erzeugten Interferenzen finden ihr musikali-sches Äquivalent in der Schwebung, die entsteht, wenn man zwei Töne mit geringfügig unter-schiedlicher Frequenz überlagert. Schwebungen werden bekanntlich zum Einstimmen von