Sounding Ornaments (1932)

Between ornament and music persist direct connections, which means that Ornaments are Music. If you look at a strip of film from my experiments with synthetic sound, you will see along one edge a thin stripe of jagged ornamental patterns. These ornaments are drawn music -- they are sound: when run through a projector, these graphic sounds broadcast tones or a hitherto unheard of purity, and thus, quite obviously, fantastic possibilities open up for the composition of music in the future. Undoubtedly, the composer of tomorrow will no longer write mere notes, which the composer himself can never realize definitively, but which rather must languish, abandoned to various capricious reproducers. Now control of every fine gradation and nuance is granted to the music-painting artist, who bases everything exclusively on the primary fundamental of music, namely the wave -- vibration or oscillation in and of itself. In the process, surface new perceptions that until now were overlooked and remain neglected. Possibilities that are definitely significant for a scrupulous and profound creator of music, for example, precise overtones or timbres characteristic of a certain voice or instrument can be reproduced with accurate fidelity through these drawn patterns. Or, when desirable, the profile of sound waves could be synchronized exactly, wave-trough with wave-trough, so that their dead-centers would coincide, sounding in perfect accord. Or, furthermore, new musical sounds are now possible, pure tones with a precision of definition in their musical vibrations that could not be obtained formerly from the manipulation of traditional instruments.

A number of experiments that I have just made confirm the unprecedented range and significance of this method. The soundtrack on present-day films is only 3 millimeters wide, but the artist of the future will naturally require the full width of the film-strip just for his musical composition. It would be essential for a complex and distinct composition, with the abstract, diverse effect of an orchestra, to utilize several 3mm soundtracks running parallel to each other. Each track would produce a different, well-defined sound, and planning them together, the composer could design and organize overlapping and intersecting wave patterns, on the minutest level.

In reference to the general physical properties of drawn sounds, we can note that flat and shallow figures produce soft or distant-sounding tones, while moderate triangulation give an ordinary volume, and sharply-pointed shapes with deep troughs create the loudest volume. Shades of grey can also play a significant role in drawn music-ornaments. High-contrast definition of the wave form decisively creates the prevalent sound effect, but as long as one places such a "positive" (well-defined) wave somewhere in the foreground, one can simply overlay other wave patterns simultaneously by using grey shades for the secondary sound effects. Study of sample soundtracks containing these complex tonal patterns reveals that not only do the layered ornaments produce refined, intricate musical sounds but also they appear unexpectedly as attractive abstract visual images.

A combination of any chosen sound-images is readily imaginable. The potential in this area is unlimited. But there are also other possible uses for graphic sound ornaments. Personal and national characteristics should be able to be identified by their corresponding ornament manifestations. The German style of singing, for example, with its emphasis on loud and ringing chest tones, creates a much sharper visual profile on the soundtrack than the softer, more melodic French style of singing with its emphasis on limpid head tones that produce rounder optical wave undulations.

The new methods introduced here offer new, fruitful stimulation that should be provocative to the whole musical world. Perhaps through the development explained here, the creative artist, the composer, will not only find a completely new way of working, but also he himself can simultaneously produce his creative expression in an indelible direct graphic which will be definitive in that he shall not be dependent on any reproduction by foreign hands, since his creation, his work, can speak for itself directly through the film projector.

The basis of designing a graphic art that can be actuated by a beam of brightest light will be the definitive, direct building blocks of music. Now it is the task of Industry to produce practical equipment that will enable every competent person to work in this manner. Besides a camera with the appropriate apertures for such soundtracks, the new equipment must include, certainly, the ability to play back the recorded sound on some speaker at any time, as often as the composer may want. These music artists

must also be concerned with combining their musical compositions created in this new manner together with appropriate optical imagery. This should result in the potential for combination of sounding ornaments with visible filmic, spatial forms and movements. With that union, the unity of all the arts is definitively, finally achieved, and has become unquestionable fact.

Oskar Fischinger

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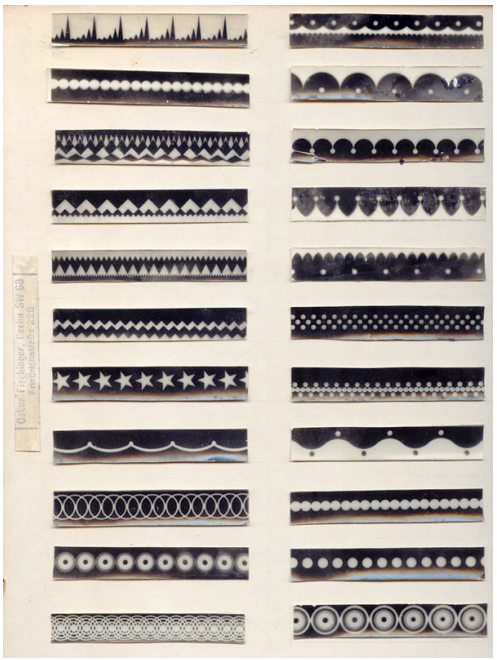
Detail from display card by Fischinger, showing some of his "ornaments":



A 16mm version of Fischinger's filmed *Ornament Sound* experiments has been preserved; an excerpt from this film can be seen in the Hirshhorn Museum's (Washington DC) *Visual Music* exhibition through Sept 11, 2005. A 35mm version is currently being restored by the Center for Visual Music.

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