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4 February 1946.

Article for FILM MUSIC NOTES

by Ivor Darreg.

Electronic music is now coming into its own. We are at the beginning of a new and engrossing chapter in musical history. Having been, for the last two decades, a faithful servant--recording, amplifying, and reproducing speech, music, and sound effects with ever greater fidelity as time went on, electronics is now proving its ability in the direct production of all manner of musically-valuable sounds, by means of the many new electronic musical instruments lately emerged from the laboratory stage. Tones of all kinds--the loudest and the softest; the deepest and the highest of pitch; pure tones, tones artistically blended with noise-sounds, rhythmic percussion, and imitative sound effects; even the vowels and consonants of human speech and song; all these may be electronically generated and played by the musician at the keyboard or fingerboard of these new instruments. There are also, of course, electrically-amplified instruments having conventional strings or reeds, etc.

Film musicians and composers should investigate these greatly expanded resources now opened to them. Of all the forces of nature, electricity is the most refined and subtle; we may thus expect electronic musical instruments to express musical feeling much more perfectly than can ever be done with our present instruments that are restricted to mechanico-acoustic principles. Those arrangers, composers, conductors, and performers who employ electronic musical instruments will attain their ideals more closely. In consequence listening audiences will more thoroughly enjoy what they hear. It goes without saying that a more perfect musical rendering of dramatic emotions will prove very desirable in attaining

the aims of film art.

The creative ideas of modern composers have become far too advanced to be properly expressed through our ordinary musical instruments of today. The world will never know how many beautiful musical themes have been lost for all time because the composer or arranger hesitated to write passages that might be too difficult on the present awkward orchestral instruments. Often a melodic line or a chord will demand a certain particular tone-color in order to sound at its best, but if the instrument having the wanted timbre cannot play the passage easily, one will either alter the theme(to its detriment) or give it to another instrument (at a sacrifice).

Timbre, by the way, will assume greater importance in music with the advent of electronics. Tone-color will rank with rhythm, melody, and harmony as a fundamental factor in musical composition. Electronic musical instruments will even be able to hold one note and play a "melody" of timbres on that same pitch. The performer will also possess a vibrato of tone-quality-change, as well as the usual vibrati of pitch-change and loudness-change.

Special instruments for use when composing are now possible. No longer will a composer be forced to "funned" his orchestral ideas through the relatively narrow and restricted piano "bottleneck." Apparently it is not generally realized what a tyrannical stranglehold the piano has been exercising over the composer's inspiration. True, the piano has immeasurably aided the evolution of our music; but, benevolent as it may seem, the piano's dictatorship is still a dictatorship.

Though some new rules might possibly take their place, many of the present "thou shalt nots" and "you mustn't try its" of music will be swept away by electronics. A purer intonation will be available for certain adagio and largo passages. New tuning systems will come into use to meet the needs of the various less-than-semitonal

scales. Atonality, too, will profit from the use of timbres specially created for atonal music, and special non-harmonically-related scale-tunings will also be available on occasion.

The percussions of the electronic orchestra will enjoy a greater variety and flexibility than even our present strings. The situation now obtaining, where string players must play eight or more to one part, will be eliminated. More players will be needed in the electronic orchestra than is now the case, because there will be so many new tone-colors and thus more choirs: all these choirs will be complete, because electronic instruments of whatever kind will come in full sets from sopranino to contrabass.

Orchestral balance will be improved; the conductor will have greater control through electrical indicators, gain and tone controls. There is also the possibility of specially designing instruments for film work so as to compensate for the frequency-response characteristics of the sound and recording equipment used. A feeling of greater truth, clarity, and sincerity will result when we have instruments that will be perfectly suited to the sound-film medium. Where tempo is unusually rapid, or where difficult sync problems exist, it might be worthwhile to use special instruments playing one or two octaves lower than usual, performing and recording at one-half or one-quarter normal speed. The playback at normal tempo would then supply a minutely careful rendition, yet with less rehearsal time.

When musicians, through electronic advances, are freed of the burden of needless drudgery imposed by conventional instruments, they will be able to concentrate their newly-released efforts on the attainment of greater artistic heights in their music. Proper co-öperation and coördination between musically-trained and electrically-trained persons will bring the Electronic Age to music quickly and smoothly. The "brick wall" supposed to divide the musical field from

the study of electricity and sound is quite imaginary. The attempt to stop musical progress and freeze everything at a pre-1900 status quo is equally ridiculous. For this reason--to help foster an understanding of the importance to us of electronic music--the writer has engaged in both electrical and musical activities.

The day will come when the film without electronic music will be as out-of-date as the silents.

THE END.

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Though some new rules might possibly take their place, many of the present "thou shalt nots" and "you mustn't try its" of music will be swept away by electronics. A purer intonation will be available for certain adagio and largo passages. New tuning systems will come into use to meet the needs of the various less-than-semitonal scales. Atonality will greatly profit from the advantage of specially designed tone-qualities, as well as the occasional use of non-harmonically-relatid scale-tunings.

The electronic orchestra will have percussions with greater variety and flexibility than even our present string sections. The situation now obtaining, where string players must play eight or more to one part, will be eliminated. More players may be needed in electronic orchestras than now are being used, because there are so many new tone-colors, and the instruments that produce them will come in complete sets from sopranino to contrabass: all choirs will be complete.

With the aid of electrical indicators, crescendi and diminuendi can be prefectly suited to recording requirements. Balance will be improved. There is also the possibility of specially designing instruments for film work so as to compenstte for the frequency-response characteristics of the sound equipment used. A feeling of greater truth, clarity, and sincerity will result when we have instruments that are perfectly adapted to the sound-film medium.

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Another field which might profitably be explored, especially where tempo is unusually rapid or difficult sync problems occur, is that of devising instruments to play one or two octaves lower than usual, playing and recording at half or quarter speed to correspond. On reproducing the recording at normal speed, a performance of normal pitch and tempo will result, but more minutely perfected than usual.

Since instruments in electronic orchestras will be capable of playing extremely high and low tones with ease, earnest consideration ought now to be given to methods of writing such notes. Extensive use of leger lines wearies the eyes, and the writing of interminable dotted 8va lines consumes too much of everybody's time--including that of the copyists! The new instruments deserve a break, and two or three new notational signs wouldn't strain anyone's memory unduly.

Coöperation and coördination between those musically trained and those electrically trained is urgently needed in order that we may enter the Electronic Age in Music quickly and smoothly. The "brick wall" supposed to divide music from the study of electricity and sound is purely imaginary. The attempt to stop musical progress and freeze everything at a pre-1900 condition is equally ridiculous. For this reason--to help foster an understanding of the coming importance of electronic music--the writer has engaged in both the electrical and musical fields.

The day will come when a film without music from electronic orchestras will be as outdated as the silents.

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