

## 28

## THE PHONOGRAPH

## The Toy that Shrank the National Chest

The phonograph, which owes its origin to the electrical telegraph and the telephone, had not manifested its basically electric form and function until the tape recorder released it from its mechanical trappings. That the world of sound is essentially a unified field of instant relationships lends it a near resemblance to the world of electromagnetic waves. This fact brought the phonograph and radio into early association.

Just how obliquely the phonograph was at first received is indicated in the observation of John Philip Sousa, the brass-band director and composer. He commented: "With the phonograph vocal exercises will be out of vogue! Then what of the national throat? Will it not weaken? What of the national chest? Will it not shrink?"

One fact Sousa had grasped: The phonograph is an extension and amplification of the voice that may well have diminished

individual vocal activity, much as the car had reduced pedestrian activity.

Like the radio that it still provides with program content, the phonograph is a hot medium. Without it, the twentieth century as the era of tango, ragtime, and jazz would have had a different rhythm. But the phonograph was involved in many misconceptions, as one of its early names-gramophone-implies. It was conceived as a form of auditory writing (*gramma*-letters). It was also called "graphophone," with the needle in the role of pen. The idea of it as a "talking machine" was especially popular. Edison was delayed in his approach to the solution of its problems by considering it at first as a "telephone repeater"; that is, a storehouse of data from the telephone, enabling the telephone to "provide invaluable records, instead of being the recipient of momentary and fleeting communication." These words of Edison, published in the *North American Review* of June, 1878, illustrate how the then recent telephone invention already had the power to color thinking in other fields. So, the record player had to be seen as a kind of phonetic record of telephone conversation. Hence, the names "phonograph" and "gramophone."

Behind the immediate popularity of the phonograph was the entire electric implosion that gave such new stress and importance to actual speech rhythms in music, poetry, and dance alike. Yet the phonograph was a machine merely. It did not at first use an electric motor or circuit. But in providing a mechanical extension of the human voice and the new ragtime melodies, the phonograph was propelled into a central place by some of the major currents of the age. The fact of acceptance of a new phrase, or a speech form, or a dance rhythm is already direct evidence of some actual development to which it is significantly related. Take, for example, the shift of English into an interrogative mood, since the arrival of "How about that?" Nothing could induce people to begin suddenly to use such a phrase over and

over, unless there were some new stress, rhythm, or nuance in interpersonal relations that gave it relevance.

It was while handling paper tape, impressed by Morse Code dots and dashes, that Edison noticed the sound given off when the tape moved at high speed resembled "human talk heard indistinctly." It then occurred to him that indented tape could record a telephone message. Edison became aware of the limits of lineality and the sterility of specialism as soon as he entered the electric field. "Look," he said, "it's like this. I start here with the intention of reaching here in an experiment, say, to increase the speed of the Atlantic cable; but when I've arrived part way in my straight line, I meet with a phenomenon, and it leads me off in another direction and develops into a phonograph." Nothing could more dramatically express the turning point from mechanical explosion to electrical implosion. Edison's own career embodied that very change in our world, and he himself was often caught in the confusion between the two forms of procedure.

It was just at the end of the nineteenth century that the psychologist Lipps revealed by a kind of electric audiograph that the single clang of a bell was an intensive manifold containing all possible symphonies. It was somewhat on the same lines that Edison approached his problems. Practical experience had taught him that embryonically all problems contained all answers when one could discover a means of rendering them explicit. In his own case, his determination to give the phonograph, like the telephone, a direct practical use in business procedures led to his neglect of the instrument as a means of entertainment. Failure to foresee the phonograph as a means of entertainment was really a failure to grasp the meaning of the electric revolution in general. In our time we are reconciled to the phonograph as a toy and a solace; but press, radio, and TV have also acquired the same dimension of entertainment. Meantime, entertainment pushed to an extreme becomes the main form of business and politics.

Electric media, because of their total "field" character, tend to eliminate the fragmented specialties of form and function that we have long accepted as the heritage of alphabet, printing, and mechanization. The brief and compressed history of the phonograph includes all phases of the written, the printed, and the mechanized word. It was the advent of the electric tape recorder that only a few years ago released the phonograph from its temporary involvement in mechanical culture. Tape and the l.p. record suddenly made the phonograph a means of access to all the music and speech of the world.

Before turning to the l.p. and tape-recording revolution, we should note that the earlier period of mechanical recording and sound reproduction had one large factor in common with the silent picture. The early phonograph produced a brisk and raucous experience not unlike that of a Mack Sennett movie. But the undercurrent of mechanical music is strangely sad. It was the genius of Charles Chaplin to have captured for film this sagging quality of a deep blues, and to have overlaid it with jaunty jive and bounce. The poets and painters and musicians of the later nineteenth century all insist on a sort of metaphysical melancholy as latent in the great industrial world of the metropolis. The Pierrot figure is as crucial in the poetry of Laforgue as it is in the art of Picasso or the music of Satie. Is not the mechanical at its best a remarkable approximation to the organic? And is not a great industrial civilization able to produce anything in abundance for everybody? The answer is "Yes." But Chaplin and the Pierrot poets and painters and musicians pushed this logic all the way to reach the image of Cyrano de Bergerac, who was the greatest lover of all, but who was never permitted the return of his love. This weird image of Cyrano, the unloved and unlovable lover, was caught up in the phonograph cult of the blues. Perhaps it is misleading to try to derive the origin of the blues from Negro folk music; however, Constant Lambert, English conductor-composer, in his *Music Ho!*, provides an account of the

blues that preceded the jazz of the post-World War I. He concludes that the great flowering of jazz in the twenties was a popular response to the highbrow richness and orchestral subtlety of the Debussy-Delius period. Jazz would seem to be an effective bridge between highbrow and lowbrow music, much as Chaplin made a similar bridge for pictorial art. Literary people eagerly accepted these bridges, and Joyce got Chaplin into *Ulysses* as Bloom, just as Eliot got jazz into the rhythms of his early poems.

Chaplin's clown-Cyrano is as much a part of a deep melancholy as Laforge's or Satie's Pierrot art. Is it not inherent in the very triumph of the mechanical and its omission of the human? Could the mechanical reach a higher level than the talking machine with its mime of voice and dance? Do not T. S. Eliot's famous lines about the typist of the jazz age capture the entire pathos of the age of Chaplin and the ragtime blues?

When lovely woman stoops to folly and  
Paces about her room again, alone,  
She smooths her hair with automatic hand,  
And puts a record on the gramophone.

Read as a Chaplin-like comedy, Eliot's Prufrock makes ready sense. Prufrock is the complete Pierrot, the little puppet of the mechanical civilization that was about to do a flip into its electric phase.

It would be difficult to exaggerate the importance of complex mechanical forms such as film and phonograph as the prelude to the automation of human song and dance. As this automation of human voice and gesture had approached perfection, so the human work force approached automation. Now in the electric age the assembly line with its human hands disappears, and electric automation brings about a withdrawal of the work force from industry. Instead of being automated themselves—

fragmented in task and function—as had been the tendency under mechanization, men in the electric age move increasingly to involvement in diverse jobs simultaneously, and to the work of learning, and to the programming of computers.

This revolutionary logic inherent in the electric age was made fairly clear in the early electric forms of telegraph and telephone that inspired the "talking machine." These new forms that did so much to recover the vocal, auditory, and mimetic world that had been repressed by the printed word, also inspired the strange new rhythms of "the jazz age," the various forms of syncopation and symbolist discontinuity that, like relativity and quantum physics, heralded the end of the Gutenberg era with its smooth, uniform lines of type and organization.

The word "jazz" comes from the French *jaser*, to chatter. Jazz is, indeed, a form of dialogue among instrumentalists and dancers alike. Thus it seemed to make an abrupt break with the homogeneous and repetitive rhythms of the smooth waltz. In the age of Napoleon and Lord Byron, when the waltz was a new form, it was greeted as a barbaric fulfillment of the Rousseauistic dream of the noble savage. Grotesque as this idea now appears, it is really a most valuable clue to the dawning mechanical age. The impersonal choral dancing of the older, courtly pattern was abandoned when the waltzers held each other in a personal embrace. The waltz is precise, mechanical, and military, as its history manifests. For a waltz to yield its full meaning, there must be military dress "There was a sound of revelry by night" was how Lord Byron referred to the waltzing before Waterloo. To the eighteenth century and to the age of Napoleon, the citizen armies seemed to be an individualistic release from the feudal framework of courtly hierarchies. Hence the association of waltz with noble savage, meaning no more than freedom from status and hierarchic deference. The waltzers were all uniform and equal, having free movement in any part of the hall. That this was the Romantic idea of the life of the noble savage now seems

odd, but the Romantics knew as little about real savages as they did about assembly lines.

In our own century the arrival of jazz and ragtime was also heralded as the invasion of the bottom-wagging native. The indignant tended to appeal from jazz to the beauty of the mechanical and repetitive waltz that had once been greeted as pure native dancing. If jazz is considered as a break with mechanism in the direction of the discontinuous, the participant, the spontaneous and improvisational, it can also be seen as a return to a sort of oral poetry in which performance is both creation and composition. It is a truism among jazz performers that recorded jazz is "as stale as yesterday's newspaper." Jazz is alive, like conversation; and like conversation it depends upon a repertory of available themes. But performance is composition. Such performance insures maximal participation among players and dancers alike. Put in this way, it becomes obvious at once that jazz belongs in that family of mosaic structures that reappeared in the Western world with the wire services. It belongs with symbolism in poetry, and with the many allied forms in painting and in music.

The bond between the phonograph and song and dance is no less deep than its earlier relation to telegraph and telephone. With the first printing of musical scores in the sixteenth century, words and music drifted apart. The separate virtuosity of voice and instruments became the basis of the great musical developments of the eighteenth and nineteenth centuries. The same kind of fragmentation and specialism in the arts and sciences made possible mammoth results in industry and in military enterprise, and in massive cooperative enterprises such as the newspaper and the symphony orchestra.

Certainly the phonograph as a product of industrial, assembly-line organization and distribution showed little of the electric qualities that had inspired its growth in the mind of Edison. There were prophets who could foresee the great day

when the phonograph would aid medicine by providing a medical means of discrimination between "the sob of hysteria and the sigh of melancholia . . . the ring of whooping cough and the hack of the consumptive. It will be an expert in insanity, distinguishing between the laugh of the maniac and drivel of the idiot. . . . It will accomplish this feat in the anteroom, while the physician is busying himself with his last patient." In practice, however, the phonograph stayed with the voices of the Signor Foghornis, the basso-tenores, robusto-profundos.

Recording facilities did not presume to touch anything so subtle as an orchestra until after the First War. Long before this, one enthusiast looked to the record to rival the photograph album and to hasten the happy day when "future generations will be able to condense within the space of twenty minutes a tone-picture of a single lifetime: five minutes of a child's prattle, five of the boy's exultations, five of the man's reflections, and five from the feeble utterances of the deathbed." James Joyce, somewhat later, did better. He made *Finnegans Wake* a tone poem that condensed in a single sentence all the prattlings, exultations, observations, and remorse of the entire human race. He could not have conceived this work in any other age than the one that produced the phonograph and the radio.

It was radio that finally injected a full electric charge into the world of the phonograph. The radio receiver of 1924 was already superior in sound quality, and soon began to depress the phonograph and record business. Eventually, radio restored the record business by extending popular taste in the direction of the classics.

The real break came after the Second War with the availability of the tape recorder. This meant the end of the incision recording and its attendant surface noise. In 1949 the era of electric hi-fi was another rescuer of the phonograph business. The hi-fi quest for "realistic sound" soon merged with the TV image as part of the recovery of tactile experience. For the sensation of

having the performing instruments "right in the room with you" is a striving toward the union of the audile and tactile in a finesse of fiddles that is in large degree the sculptural experience. To be in the presence of performing musicians is to experience their touch and handling of instruments as tactile and kinetic, not just as resonant. So it can be said that hi-fi is not any quest for abstract effects of sound in separation from the other senses. With hi-fi, the phonograph meets the TV tactile challenge.

Stereo sound, a further development, is "all-around" or "wrap around" sound. Previously sound had emanated from a single point in accordance with the bias of visual culture with its fixed point of view. The hi-fi changeover was really for music what cubism had been for painting, and what symbolism had been for literature; namely, the acceptance of multiple facets and planes in a single experience. Another way to put it is to say that stereo is sound in depth, as TV is the visual in depth.

Perhaps it is not very contradictory that when a medium becomes a means of depth experience the old categories of "classical" and "popular" or of "highbrow" and "lowbrow" no longer obtain. Watching a blue-baby heart operation on TV is an experience that will fit none of the categories. When l.p. and hi-fi and stereo arrived, a depth approach to musical experience also came in. Everybody lost his inhibitions about "highbrow," and the serious people lost their qualms about popular music and culture. Anything that is approached in depth acquires as much interest as the greatest matters. Because "depth" means "in interrelation," not in isolation. Depth means insight, not point of view; and insight is a kind of mental involvement in process that makes the content of the item seen quite secondary. Consciousness itself is an inclusive process not at all dependent on content. Consciousness does not postulate consciousness of anything in particular.

With regard to jazz, l.p. brought many changes, such as the cult of "real cool drool," because the greatly increased length of

a single side of a disk meant that the jazz band could really have a long and casual chat among its instruments. The repertory of the 1920s was revived and given new depth and complexity by this new means. But the tape recorder in combination with l.p. revolutionized the repertory of classical music. Just as tape meant the new study of spoken rather than written languages, so it brought in the entire musical culture of many centuries and countries. Where before there had been a narrow selection from periods and composers, the tape recorder, combined with l.p., gave a full musical spectrum that made the sixteenth century as available as the nineteenth, and Chinese folk song as accessible as the Hungarian.

A brief summary of technological events relating to the phonograph might go this way:

The telegraph translated writing into sound, a fact directly related to the origin of both the telephone and phonograph. With the telegraph, the only walls left are the vernacular walls that the photograph and movie and wirephoto overleap so easily. The electrification of writing was almost as big a step into the non-visual and auditory space as the later steps soon taken by telephone, radio, and TV.

The telephone: speech without walls.

The phonograph: music hall without walls.

The photograph: museum without walls.

The electric light: space without walls.

The movie, radio, and TV: classroom without walls.

Man the food-gatherer reappears incongruously as information-gatherer. In this role, electronic man is no less a nomad than his paleolithic ancestors.