

June 7, 1971  
20 Tompkins Road  
Scarsdale, N.Y.  
10583

Dear Pauline Oliveros,

This is to remind you that if you would like to contribute a text to the Cunningham book I am doing I would be most pleased, be it what form it may. But the time has come that I must have some concrete knowledge of, if nothing more, the length of your proposed text. The publisher needs a finished dummy by mid-June at the latest which means that although I don't need to have the actual body of texts by then I will need to know enough about them to lay out the book's organization and the relationship of text to photos in terms of both volume and substance. Ideally I would like to know in the next week how long your text will be. If before June ends I could have the text itself I would be delighted. Hoping to hear from you soon,

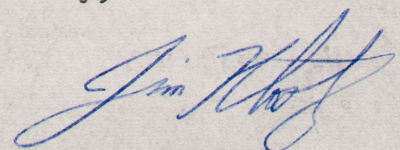
*Jim Hardy*

June 26, 1971  
20 Tompkins Rd.  
Scarsdale, N.Y. 10583

Dear Pauline Oliveros,

First, apologies for the tardiness of my reply. I was very happy to receive your draft, and very pleased with its contents which were quite along the lines I was hoping for. It is, in itself, not at all too lengthy, but as you yourself indicated might be possible, I would like to ask you if I might edit the O'Neill text. In fact, I am afraid I will have to ask if you could not paraphrase it in your own words to the extent that is necessary to illuminate the intentions of your score, for I do not want to involve anyone who has not dealt directly with Merce in the book, or in short, I would like to ask to edit the O'Neill text OUT completely. There are several reasons for that request, including questions of copywrites. But basically the problem is the question of length. The book is basically a photographic one. I have been very careful and very choosy in asking people to write for the book. The idea being that while the texts will remain subsidiary in volume they will be large in their illumination of the company's working methods or Merce himself. There are many people who might have liked to <sup>write</sup> ~~have written~~ something that I have not asked. Those I have asked are people who I feel are central to the Cunningham experience. With all due respects to Mr. O'Neill and to your score, I cannot include a text, particularly one of that length, by someone who is really an outsider, considering the number of the immediate Cunningham ~~and~~ "family" I have had to pass by. I hope you can either recount in your own words the essence of his text or else alter your text so that it is possible to omit references to it entirely. I'll be happy to discuss this further with you if you like. In any case, thank you for the draft. I like it a lot.

yours truly,



Since Merce Cunningham has long insisted that "The music goes its way and the dance goes its way", I was very interested in an exploration of that philosophy. When I composed *In Memoriam Nikola Tesla, Cosmic Engineer*, which was commissioned by the Cunningham Foundation in 1969, I had no idea what the choreography would be like.

Instead I became interested in the ~~Barger~~ concepts of the Cunningham Co. as a whole <sup>and any memory of their previous performances</sup> in relation to the theater or space and the adjoining environments (seen or unseen, heard or unheard) <sup>and nature of the musicians</sup> <sup>by Tudor + G. Mumma</sup>. The compositional problem was to extend, include, expand, explore, and store <sup>(re)invent & manipulate</sup> the auditory space within Cunningham's philosophy, which allows a natural relationship ~~to~~

~~arise~~ between rather than an im-  
posed relationship to arise between  
the music and the dance. This  
relationship is ~~very much~~ <sup>embodied in</sup> close to  
the following description <sup>of the Teala experiment</sup> ~~on which~~  
and the ~~response~~ <sup>response</sup> of the environment & inhabitants  
the score's central tasks are derived:

"Teala pursued his studies of mechanical vibrations in many directions. This was almost a virgin field for scientific research. Scarcely any fundamental research had been done in the field since Pythagorus, 2500 years before, had established the science of music through his study of vibrating strings; and many of the wonders with which Teala had startled the world in the field of high-frequency & high potential currents had grown out of his simple secret for tuning electrical circuits so that the electricity vibrated in resonance with its circuit. He now visualized mechanical vibrations in the building up resonance conditions in the same way, to produce effects of tremendous magnitude on physical objects.

In order to carry out what he considered

to be some minor + very small scale experiments, he screwed the base of one of his small mechanical oscillators to an iron supporting pillar in the middle of his laboratory and set it into oscillation. It had been his observation that it took some time to build up its maximum speed of vibration. The longer it operated the faster the tempo it attained. . . .  
(Zero the rest)

The musicians are asked to begin the piece by discussing the acoustical environment of the theater with the possible comparison to other performance spaces both real and imaginary. The essential element of this discussion is that the musicians are actually describing their own, real personal responses to the environment. <sup>"The"</sup> This conversation must be real in order to be a discussion <sup>dramatically viable.</sup> with the real of a PA System.

During the 2nd section of the piece the performers are asked to test the environment in order to find the

resonant frequency of the space,  
to report any interesting facts  
via walkie talkie and occasionally  
to broadcast particularly interesting  
features through the P.A. system.

The differences between the sound of  
moving walkie talkies and the stationary  
PA system are essential in the in-  
creasing collection + comparison of  
auditory phenomena.

Simultaneous with section 1 + 2  
recordings of the <sup>discussions</sup> and the  
adjoining environ-  
ments such as the stage, the basement,  
dressing rooms, <sup>the lobby</sup> or other connected  
spaces are being made. During  
section 2 these amplified environ-  
ments can be introduced as they  
are being recorded.

At the beginning of Section 3 all  
discussion, activities and recording  
stops. 2 or more audio generators  
never to exceed 100 cps begin an  
extensive slow crescendo from

inaudible to extremely loud.

During the course of this crescendo the stored environmental material <sup>from sections 1 + 2</sup> is played ~~for~~ back selectively, with generated electronic sound. The playback is of course modulated by the crescendos of the generators transforming the memory of that material. If the search for the resonant frequency has been successful, then <sup>of the generators</sup> the frequency selected by the musicians can cause the performance space to add its squeaks, groans and other resonance phenomena to the sound. Thus the space performs in sympathy with the musicians.

The audience of course imposes its own drama in this theatrical situation very much like the police in relation to Tesla. The musicians so far have always managed to stop before the theater comes crashing down, which is no

small indication of their virtuosity.

much, as the Cunningham Co. goes its way, the energy of his activity included and actuated the whole neighborhood causing a central dramatic episode.

The first performance which I was able to witness of Cunningham was done in silence. Cunningham's philosophy was quietly demonstrated that evening. The dance, indeed went its way and existed powerfully as a total organism without the any necessity for [accompaniment] It was an extraordinary experience for everyone and the subsequent drama was apparent in such ways as a critic's headline "Bruce Cunningham goes on in silence, thank God!"

Since that performance there has been a subtle tuning of the dance & music to a point of <sup>philosophical</sup> resonance such as I witnessed in a recent performance.



While Tesla's experiment went its way  
much, <sup>like</sup> ~~as~~ the Cunningham Co goes its  
way, the energy of his activity  
included and activated the whole  
neighborhood causing a central  
dramatic episode.

The first performance which I  
was able to witness of Canfield was  
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philosophy was exquisitely demonstrated  
that evening. The dance, indeed went  
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as a total organism without ~~the~~ any  
necessity of [accompaniment] It  
was an extraordinary experience  
for everyone and the subsequent drama  
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Since that performance there has  
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music to a point of <sup>philosophical</sup> resonance  
such as I witnessed in a recent performance

on the West Coast. The musicians  
have mastered the materials of a  
very difficult situation and very much  
go their <sup>own</sup> way. Their performance  
could exist independently of the  
dancers. But the dance and music  
together resonate powerfully.

Since Merce Cunningham has long insisted that "the music goes its way and the dance goes its way", I was very interested in an exploration of that philosophy. When I composed In Memoriam Nikola Tesla, Cosmic Engineer, for Canfield, which was commissioned by the Cunningham Foundation in 1969, I had no idea what the choreography would be like. Instead, I became interested in the concept of the <sup>its impact</sup> Cunningham Company as a whole, and my memory of ~~their~~ previous performances in relation to theaters or performing spaces and the adjoining environments; seen or unseen, heard or unheard and the nature of the virtuoso musicians, David Tudor and Gordon Mumma.

The compositional problem was to include, extend, expand, ~~explode~~ explore, compare, store and

manipulate the auditory space within Cunningham's philosophy, which allows a natural rather than an imposed relationship to arise between the music and the dance. This <sup>philosophical</sup> relationship is embodied in ~~the following description of~~ <sup>one of</sup> Tesla's experiments and the response of the environment and its inhabitants, from which the central tasks of the score are derived: (See xeroxed insert from Prodigal genius, The Life of Nikola Tesla, John J. O'Neill, Tartan Books.)

The musicians are asked to begin the piece by discussing the acoustical environment of the theater with possibly, comparisons to other performance spaces both real and imaginary. The essential ~~element~~ aspect of this discussion is that the musicians actually describe their own real personal responses

to the environment, the conversation ~~is~~ must be real in order to be dramatically viable. This discussion occurs with the aid of a PA system.

During the second section of the piece the performers are asked to test the environment in order to find the resonant frequency of the space, to report any interesting facts via walkie talkie and occasionally to broadcast particularly interesting features through the PA system. The differences in quality between the sound of moving walkie talkies and the stationary PA system are essential in the increasing collection and comparison of auditory phenomena.

Simultaneous with sections 1 and 2, recordings of the discussions and the adjoining environments such as the stage, the basement, dressing rooms

the lobby or other connected spaces are being made. During Section 2 these amplified environments may be introduced continuously or intermittently as they are being recorded.

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witness of Canfield was done in Silence.

Cunningham's philosophy was exquisitely demonstrated that evening. The dance indeed went its way and existed powerfully as a total organism without any necessity for [accompaniment]. It was an extraordinary experience for everyone and the subsequent drama was apparent in such way as a critic's proclamation; "Merce Cunningham goes on in silence, Thank God!".

Since that performance there has been a subtle tuning of the dance and the music to the point of philosophical resonance. The musicians have mastered the materials of a very difficult situation and very much go their own way. Their performance could exist independently of the dancers; but the dance and music together resonate powerfully.



"It was all caused, quite unexpectedly, by a little piece of apparatus you could slip in your pocket," said Tesla.

The device that precipitated the sudden crisis had been used for a long time by Tesla as a toy to amuse his friends. It was a mechanical oscillator, and was used to produce vibrations. The motor-driven device that the barber straps on his hand to give a patron an "electric massage" is a descendant of Tesla's mechanical oscillator. There is, of course, nothing electric about an "electric massage" except the power used to produce vibrations which are transmitted through the barber's fingers to the scalp.

Tesla developed in the early nineties a mechanical-electrical oscillator for the generation of high-frequency alternating currents. The driving engine produced on a shaft simple reciprocating motion that was not changed to rotary motion. Mounted on either end of the shaft was a coil of many turns of wire that moved back and forth with high frequency between the poles of electromagnets, and in this way generated high-frequency alternating currents.

The engine was claimed by Tesla to have a very high efficiency compared to the common type of engine, which changed reciprocating to rotary motion by means of a crank shaft. It had no valves or other moving parts, except the reciprocating piston with its attached shaft and coils, so that mechanical losses were very low. It maintained such an extremely high order of constancy of speed, he stated, that the alternating current generated by the oscillator could be used to drive clocks, without any pendulum or balance-wheel control mechanisms, and they would keep time more accurately than the sun.

This engine may have had industrial possibilities but Tesla was not interested in them. To him it was just a convenient way of producing a high-frequency alternating current constant in frequency and voltage, or mechanical vibrations, if used without the electrical parts. He operated the engine on compressed air and also by steam at 320 pounds and also at 80 pounds pressure.

While perfecting this device, he had opportunity to observe interesting effects produced by vibration. These were objectionable in the engine when it was used as a dynamo, so he adopted suitable measures to eliminate or suppress them. The vibrations as such, however, interested him. Although they were detrimental to the machine, he found their physiological effects were, at times, quite pleasant. Later he built a small mechanical oscillator driven by compressed air which was designed for no other purpose than to produce vibrations. He built a platform insulated from the floor by rubber and cork. He then mounted the oscillator on the under side of the platform. The purpose of the rubber and cork under the platform was to keep the vibrations from leaking into the building and thereby reducing the effect on the platform. Visitors found this vibrating platform one of the most interesting of the great array of fascinating and fantastic exhibits with which he dazzled the society folk who flocked to his laboratory.

Great hopes were entertained by Tesla of applying these vibrations for therapeutic and health-improving effects. He had opportunity to observe, through his own experience and that of his employees, that they produce some very definite physiological actions.

Samuel Clemens, better known to the public as "Mark Twain," and Tesla were close friends. Clemens was a frequent visitor to the Tesla laboratory. Tesla had been playing with his vibratory mechanism for some time, and had learned a good deal about the results that followed from varying doses of vibration, when one evening Clemens dropped in.

Clemens, on learning about the new mechanism, wanted to experience its vitalizing vibrations. He stood on the platform while the oscillator set it into operation. He was thrilled by the new experience. He was full of adjectives. "This gives you vigor and vitality," he exclaimed. After he had been on the platform for a while Tesla advised him: "You have had enough, Mr. Clemens. You had better come down now."

"Not by a jugful," replied Clemens. "I am enjoying myself."

"But you had better come down, Mr. Clemens. It is best that you do so," insisted Tesla.

"You couldn't get me off this with a derrick," laughed Clemens.

"Remember, I am advising you, Mr. Clemens."

"I'm having the time of my life. I'm going to stay right up here and enjoy myself. Look here, Tesla, you don't appreciate what a wonderful device you have here to give a lift to tired humanity. . . ." Clemens continued along this line for several minutes. Suddenly he stopped talking, bit his lower lip, straightened his body and stalked stiffly but suddenly from the platform.

"Quick, Tesla! Where is it?" snapped Clemens, half begging, half demanding.

"Right over here, through that little door in the corner," said Tesla. "And remember, Mr. Clemens, I advised you to come down some time ago," he called after the rapidly moving figure.

The laxative effect of the vibrator was an old story to the members of the laboratory staff.

*Begin* [ Tesla pursued his studies of mechanical vibrations in many directions. This was almost a virgin field for scientific research. Scarcely any fundamental research had been done in the field since Pythagoras, twenty-five hundred years before, had established the science of music through his study of vibrating strings; and many of the wonders with which Tesla had startled the world in the field of high-frequency and high-potential currents had grown out of his simple secret for tuning electrical circuits so that the electricity vibrated in resonance with its circuit. He now visualized mechanical vibrations building up resonance conditions in the same way, to produce effects of tremendous magnitude on physical objects.

In order to carry out what he expected to be some minor and very small-scale experiments, he screwed the base of one of his small mechanical oscillators to an iron supporting pillar in the middle of his laboratory and set it into oscillation. It had been

*his observation* that it took some time to build up its maximum *SPEED* of vibration. The longer it operated the faster the tempo it attained. He had noticed that all objects did not respond in the same way to vibrations. One of the many objects around the laboratory would suddenly go into violent vibration as it came into resonance with the fundamental vibration of the oscillator or some harmonic of it. As the period of the oscillator changed, the first object would stop and some other object in resonance with the new rate would start vibrating. The reason for this selective response was very clear to Tesla, but he had never previously had the opportunity to observe the phenomenon on a really large scale.

Tesla's laboratory was on an upper floor of a loft building. It was on the north side of Houston Street, and the second house east of Mulberry Street. About three hundred feet south of Houston Street on the east side of Mulberry Street was the long, four-story red-brick building famous as Police Headquarters. Throughout the neighborhood there were many loft buildings ranging from five to ten stories in height, occupied by factories of all kinds. Sandwiched between them were the small narrow tenement houses of a densely packed Italian population. A few blocks to the south was Chinatown, a few blocks to the west was the garment-trades area, a short distance to the east was a densely crowded tenement-house district.

It was in this highly variegated neighborhood that Tesla unexpectedly staged a spectacular demonstration of the properties of sustained powerful vibrations. The surrounding population knew about Tesla's laboratory, knew that it was a place where strange, magical, mysterious events took place and where an equally strange man was doing fearful and wonderful things with that tremendously dangerous secret agent known as electricity. Tesla, they knew, was a man who was to be both venerated and feared, and they did a much better job of fearing than of venerating him.

Quite unmindful of what anyone thought about him, Tesla

carried on his vibration and all other experiments. Just what experiment he had in mind on this particular morning will never be known. He busied himself with preparations for it while his oscillator on the supporting iron pillar of the structure kept building up an ever higher frequency of vibrations. He noted that every now and then some heavy piece of apparatus would vibrate sharply, the floor under him would rumble for a second or two—that a window pane would sing audibly, and other similar transient events would happen—all of which was quite familiar to him. These observations told him that his oscillator was tuning up nicely, and he probably wondered why he had not tried it firmly attached to a solid building support before.

Things were not going so well in the neighborhood, however. Down in Police Headquarters in Mulberry Street the "cops" were quite familiar with strange sounds and lights coming from the Tesla laboratory. They could hear clearly the sharp snapping of the lightnings created by his coils. If anything queer was happening in the neighborhood, they knew that Tesla was in back of it in some way or other.

On this particular morning the cops were surprised to feel the building rumbling under their feet. Chairs moved across floors with no one near them. Objects on the officers' desks danced about and the desks themselves moved. It must be an earthquake! It grew stronger. Chunks of plaster fell from the ceilings. A flood of water ran down one of the stairs from a broken pipe. The windows started to vibrate with a shrill note that grew more intense. Some of the windows shattered.

"That isn't an earthquake," shouted one of the officers, "it's that blankety-blank Tesla. Get up there quickly," he called to a squad of men, "and stop him. Use force if you have to, but stop him. He'll wreck the city."

The officers started on a run for the building around the corner. Pouring into the streets were many scores of people excitedly leaving near-by tenement and factory buildings, believing

**AN EARTHQUAKE** had caused the smashing of windows, breaking of pipes moving of furniture and the strange vibrations.

Without waiting for the slow-pokey elevator, the cops rushed up the stairs—and as they did so they felt the building vibrate even more strongly than did police headquarters. There was a sense of impending doom—that the whole building would disintegrate—and their fears were not relieved by the sound of smashing glass and the queer roars and screams that came from the walls and floors.

Could they reach Tesla's laboratory in time to stop him? Or would the building tumble down on their heads and everyone in it be buried in the ruins, and probably every building in the neighborhood? Maybe he was making the whole earth shake in this way! Would this madman be destroying the world? It was destroyed once before by water. Maybe this time it would be destroyed by that agent of the devil that they call electricity!

Just as the cops rushed into Tesla's laboratory to tackle—they knew not what—the vibrations stopped and they beheld a strange sight. They arrived just in time to see the tall gaunt figure of the inventor swing a heavy sledge hammer and shatter a small iron contraption mounted on the post in the middle of the room. Pandemonium gave way to a deep, heavy silence.

Tesla was the first to break the silence. Resting his sledge hammer against the pillar, he turned his tall, lean, coatless figure to the cops. He was always self-possessed, always a commanding presence—an effect that could in no way be attributed to his slender build, but seemed more to emanate from his eyes. Bowing from the waist in his courtly manner, he addressed the policemen, who were too out of breath to speak, and probably overawed into silence by their fantastic experience.

"Gentlemen," he said, "I am sorry, but you are just a trifle too late to witness my experiment. I found it necessary to stop it suddenly and unexpectedly and in an unusual way just as you entered. If you will come around this evening I will have another

oscillator attached to this platform and each of you can stand on it. You will, I am sure, find it a most interesting and pleasurable experience. Now you must leave, for I have many things to do.

Good day, gentlemen."

George Scherff, Tesla's secretary, was standing near by when Tesla so dramatically smashed his earthquake maker. Tesla never told the story beyond this point, and Mr. Scherff declares he does not recall what the response of the cops was. Imagination must furnish the finale to the story.

At the moment, though, Tesla was quite sincere in his attitude. He had no idea of what had happened elsewhere in the neighborhood as a result of his experiment, but the effect on his own laboratory had been sufficiently threatening to cause him to halt it suddenly. When he learned the details, however, he was convinced that he was correct in his belief that the field of mechanical vibrations was rich with opportunities for scientific investigation. We have no records available of any further major experiments with vibration in that laboratory. Perhaps the Police and Building Departments had offered some emphatic suggestions to him concerning experiments of this nature.

Tesla's observations in this experiment were limited to what took place on the floor of the building in which his laboratory was located, but apparently very little happened there until a great deal had happened elsewhere. The oscillator was firmly fixed to a supporting column and there were similar supporting columns directly under it on each floor down to the foundations. The vibrations were transmitted through the columns to the ground. This section of the city is built on deep sand that extends down some hundreds of feet before bed rock is reached. It is well known to seismologists that earthquake vibrations are transmitted by sand with much greater intensity than they are by rock. The ground under the building and around it was, therefore, an excellent transmitter of mechanical vibrations, which spread out in all directions. They may have reached a mile or more. They were more intense, of course, near their

source and became weaker as the distance increased. However, even weak vibrations that are sustained can build up surprisingly large effects when they are absorbed by an object with which they are in resonance. A distant object in resonance can be thrown into strong vibration whereas a much nearer object not in resonance will be left unaffected.

It was this selective resonance that was, apparently, operating in Tesla's experiment. Buildings other than his own came into resonance with the increasing tempo of his oscillator long before his own building was affected. After the pandemonium was under way for some time elsewhere and the higher frequencies were reached, his immediate surroundings started to come into resonance.

When resonance is reached the effects follow instantly and powerfully. Tesla knew this, so when he observed dangerous resonance effects developing in his building he realized he had to act fast. The oscillator was being operated by compressed air supplied by a motor-driven compressor that fed the air into a tank, where it was stored under pressure. Even if the motor were shut off, there was plenty of air in the tank to keep the oscillator going for many minutes—and in that time the building could be completely wrecked and reduced to a pile of *débris*. With the vibrations reaching this dangerous amplitude, there was no time to try to disconnect the vibrator from the air line or to do anything about releasing the air from the tank. There was time for only one thing, and Tesla did that. He grabbed the near-by sledge hammer and took a mighty swing at the oscillator in hopes of putting it out of operation. He succeeded in his first attempt.

The device was made of cast iron and was of rugged construction. There were no delicate parts that could be easily damaged. Tesla has never published a description of the device, but its construction was principally that of a piston which moved back and forth inside a cast-iron cylinder. The only way to stop it from operating was to smash the outer cylinder. Fortunately, that is what happened from the first blow.

# PAULINE OLIVEROS

Since Merce Cunningham has long insisted that "the music goes its way and the dance goes its way," I was very interested in an exploration of that philosophy. When I composed *In Memoriam Nikola Tesla, Cosmic Engineer for Canfield*, which was commissioned by the Cunningham Foundation in 1969, I had no idea what the choreography would be like. Instead, I became interested in the concept of the Cunningham Company as a whole, its impact, and my memory of previous performances in relation to theaters or performing spaces and the adjoining environments, seen or unseen, heard or unheard, and the nature of the virtuoso musicians, David Tudor and Gordon Mumma.

The compositional problem was to include, extend, expand, explore, compare, store, and manipulate the auditory space within Cunningham's philosophy, which allows a natural rather than an imposed relationship to arise between the music and the dance. This philosophical relationship is embodied in the following description of a Tesla experiment and the response of the environment and its inhabitants from which the central tasks of the score are derived: Tesla's experiment with mechanical resonance in his New York City laboratory (near the present location of the Cunningham studio) nearly ended in disaster. He adjusted an oscillator to the resonance of the building and then began to give the machine more power. This caused a minor earthquake which terrorized the neighborhood and brought the police out in full force just as Tesla perceived the magnitude of his procedure and smashed his oscillator before the building began to fall apart.

The musicians are asked to begin the piece by discussing the acoustical environment of the theater with, possibly, comparisons to other performance spaces both real and imaginary.

The essential aspect of this discussion is that the musicians actually describe their own *real* personal responses to the environment. The conversation must be real in order to be dramatically viable. This discussion occurs with the aid of a PA system.

During the second section of the piece the performers are asked to test the environment in order to find the resonant frequency of the space, to report any interesting facts via walkie talkie, and occasionally to broadcast particularly interesting features through the PA system. The differences in quality between the sound of moving walkie talkies and the stationary PA system are essential in the increasing collection and comparison of auditory phenomena.

Simultaneous with Sections One and Two, recordings of the discussions and the adjoining environments such as the stage, the basement, dressing rooms and the lobby or other connected spaces are being made. During Section Two these amplified environments may be introduced continuously or intermittently as they are being recorded.

At the beginning of Section Three, all discussion, activities, and recording stop. Two or more audio generators never to exceed 100 cps begin an extensive, slow crescendo from inaudibility to extremely loud. During the course of this crescendo, the stored environmental material from Sections One and Two is played back selectively mixed with the generated electronic sound. The playback is of course modulated by the crescendoing generators, transforming the memory of that material.

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ham's philosophy was exquisitely demonstrated that evening. The dance indeed went its way and existed powerfully as a total organism without any necessity for accompaniment. It was an extraordinary experience for everyone, and the subsequent drama was apparent in such ways as a critic's proclamation: "Merce Cunningham goes on in silence. Thank God!"

Since that performance there has been a subtle tuning of the dance and the music to the point of philosophical resonance. The musicians have mastered the materials of a very difficult situation and very much go their own ways. Their performance could exist independently of the dancers'; but the dance and music together resonate powerfully.