

VESPERS

for any number of players who would like to pay their respects to all living creatures who inhabit dark places and who, over the years, have developed acuity in the art of echolocation, *id est*, sounds used as messengers which, when sent out into the environment, return as echoes carrying information as to the shape, size, and substance of that environment and the objects in it (1968)

Play in dark places, indoors, outdoors, or underwater; in dimly lit spaces wear dark glasses and in lighted spaces wear blindfolds. In empty spaces objects such as stacked chairs, large plants, or human beings may be deployed.

Equip yourselves with Sondols (SONAR-DOLPHIN), hand-held echolocation devices which emit fast, sharp, narrow-beamed clicks whose repetition rate can be varied manually.

Accept and perform the task of acoustic orientation by scanning the environment and monitoring the changing relationships between the outgoing and returning clicks. By changing the repetition rate of the outgoing clicks, using as a reference point a speed at which the returning clicks are halfway between the outgoing clicks, distances can be measured, surfaces can be made to sound, and clear signatures of the environment can be made. By changing the angle of reflection of the outgoing clicks against surfaces, multiple echoes of different pitches can be produced and moved to different geographical locations in the space. Scanning patterns should be slow, continuous, and non-repetitive.

Move as non-human migrators, artificial gatherers of information, or slow ceremonial dancers. Discover routes to goals, find clear pathways to center points or outer limits, and avoid obstacles.

Decisions as to speed and direction of outgoing clicks must be made only on the basis of usefulness in the process of echolocation. Any situations that arise from personal preferences based on ideas of texture, density, improvisation, or composition that do not directly serve to arti-

culate the sound personality of the environment should be considered deviations from the task of echolocation.

Silences may occur when echolocation is made impossible by the masking effect on the players' returning echoes due to the saturation of the space by both the outgoing and returning clicks, by interferences due to audience participation, or by unexpected ambient sound events. Players should stop and wait for clear situations, or stop to make clear situations for other players.

Endings may occur when goals are reached, patterns traced, or further movement made impossible.

For performances in which Sondols are not available, develop natural means of echolocation such as tongue-clicks, finger-snaps, or foot-steps, or obtain other man-made devices such as hand-held foghorns, toy crickets, portable generators of pulsed sounds, thermal noise, or zehn kilohertz pure tones.

Dive with whales, fly with certain nocturnal birds or bats (particularly the common bat of Europe and North America of the family Vespertilionidae), or seek the help of other experts in the art of echolocation.

Activities such as billiards, squash, and water-skimming may be considered kindred performances of this work.

Based on the work of Donald R. Griffin.

Taking slow sound photographs of the space

VESPERS (1969)

When was VESPERS written?

Let's see, I got the idea for it in 1967, and like most of my pieces I thought about it for a long time before I actually made the final realization. I thought it was final, but the other day as I was resting in the middle of the gym, I started listening to the footsteps of a runner as he ran around the oval track. At first you'd hear a single echo, but then as he circled and got in a different place, the echo would begin to multiply—not really multiply but add—so that there would be three echoes for every step. This gave me the idea that perhaps I should keep the idea of the piece open. That's a funny thing for me to say because in the original version, you know, the one with the Sondols, I don't care about the speed at which the players play. I'm not interested in what goes out, I'm only interested in what comes back. But if I ever made a version of VESPERS using runners, I would want to have runners of different styles and speeds—long distance runners, milers, sprinters. Whereas the Sondol version is for anyone to play, I'm beginning to feel that I ought to utilize the specialties that people have.

I know that one of your instructions in playing the Sondols is rather than to play in a certain way, just not to change the way you play too quickly.

The reason is so that the players are not self-conscious about trying to make the outgoing pulses interesting. I always tell them that if I wanted to make interesting rhythmic figures, I'm certainly prepared to do so. Often I find that people who have never played a musical instrument before, people I get off the street, so to speak, a few hours before the concert, do the best job because they don't have preconceived ideas. You see, I want to make the space be the interesting thing, not the personalities of either myself or the people playing it; what goes out into the space, therefore, has to be neutral.

It's a curious performance piece though, because the point of it, it seems to

me, is the way the environment responds to the ticks from the sound guns, and yet the sound guns themselves are such an unusual product. The idea is very general, playing your environment, but the instrument that you use is very specific.

Yes, but I don't enjoy stipulating that one has to use Sondols, I'd like to leave that open. They're very expensive anyway. I don't mind sending them around, but I only have four of them and that means that only four people can play the piece at the same time. Do you know these little tin toys called "crickets"?

Oh, clickers.

I think they're called "crickets" after the insects. They make beautiful sharp sounds which, although not terribly directional, produce fairly clear echoes from reflective surfaces. A few years ago I bought a thousand of them to use in performances because I thought audiences might enjoy participating. The first time I tried using them was at the Concord Academy for Girls in Massachusetts. I had been asked to give a lecture-demonstration and thought that it would be educational for the girls to participate. The night before, I had instructed four of the girls how to use the Sondols. My plan was to have them start performing and at a certain point the girls with the "crickets" would gradually join in. During the performance, a transformation took place from the very sharp pulses of the Sondols to the more diffused echoing sounds of the "crickets." The texture changed from one in which you could hear isolated echoes to one in which you could hear the room begin to ring or sing.

Later that year I tried it in Helsinki. While my four Sondol players were playing, I passed out a hundred or so "crickets" to members of the audience who then began playing them. And while many of them understood that the piece was about echoes and echolocation, some students from the conservatory who were there started making banal rhythmic figures. Instead of trying to hear the room, they played childish patterns. After the program was over, we packed up all our equipment and went into the town. It was early spring in Finland, that period of time when the sun finally comes out after a long period of darkness, and as we walked through the streets of Helsinki, we could hear people, singly, or in groups of two or three, playing their "crickets". It was beautiful. Perhaps they got the point of the piece more after the concert than they did during it.

The piece brings to mind all sorts of animal features and it's whimsical to use cricket toys because they do sound like real crickets, but just how natural-

istic were your ideas? Did you have animal ideas before you found out about the sound guns or vice-versa?

All I remember is that I did—oh, I remember how it all happened! Mary was trying to find a studio where she could work on her sculpture. She put an ad in one of the Cambridge underground newspapers saying she wanted to form a communal studio and she got an answer from a fellow who had an empty garage. We both went over to see him. I started to talk with him and he mentioned that he worked for Listening Incorporated, an electronics company in Arlington, Massachusetts that was involved in sound research and deciphering dolphin speech. He told me that they were developing, among other things, small, hand-held echolocation devices for boat owners, acoustic engineers, and the blind. He loaned me a prototype of one of these devices, called Sondols, and I began experimenting with it, learning how to interpret the echoes it made off objects and reflective surfaces. At about that time, I began reading “Listening in the Dark”, Donald R. Griffin’s wonderful book on acoustic orientation by animals and men. He describes how bats and other nocturnal creatures survive exquisitely by identifying objects and obstacles by the echoes that come back from them. They can discriminate between the sounds that go out and those that come back, which carry information about the environment. Actually, the title, *VESPERS*, comes from the North American bat of the family *Vespertilionidae*.

If your purpose is sound, a bat is a useful creature to imitate because his purpose is entirely useful. He wants to play his environment so that he can move around in it.

Yes. It’s not to leave our environment now to go under the ocean or into outer space, where we could find ourselves without information coming into our eyes. In that case, we would have to rely on our ears and we haven’t done that very well as far as I can see. So *VESPERS* is in part an educational piece. You’d be surprised how many people don’t know about echoes; some very fine musicians have been at performances and they think it’s about phase relationships. They just don’t hear the echoes, and I want people to hear those echoes.

They don’t always sound like what you usually think of as echoes; I mean, sometimes it’s the timbre of the click from the gun that seems to change. I know when I was performing the piece I wasn’t especially aware of a return click for every outgoing click because it’s much too complex; what you do hear is that what seems to be coming out of the gun changes as you move it to different areas in the room.

Yes. I know that if four people are playing in the same space, the echo situation is so complex that the players cannot read their own echoes; therefore, they have to stop. So the task that I set them, that is, to orient themselves in space and to move from one place to another, regulates the texture of the piece; I don't have to compose that.

So again it imitates the usefulness of a bat's equipment. You perform the piece in the most practical manner; when you can't do what you're trying to do, you don't do it.

Right, I am satisfied not to compose terribly much but to let the space and the situation take over. In other words, I don't intrude my personality on a space, I don't bring an idea of mine about composition into a space and superimpose it on that space, I just bring a very simple idea about a task that players can do and let the space push the players around. In that way, I always learn something about a space and never forget one in which I've done the piece. It's as if I take very slow audio photographs of that space.

The Sondols have their task to perform and they do it with clicks that sound like insects. In the versions of the piece where you handed out the little toy clickers, what relationship do they have to the people playing? Are they sort of a responsorial chorus from the environment? How are they supposed to respond to the mix in the air?

To the what?

To the mix of the ticks in the air.

Well, I remember last September Mary and I drove down to North Carolina from Ann Arbor, and as we were going through Kentucky, we stopped at a gas station. Out back, there was a whole field filled with cicadas, I think they were cicadas anyway. They were producing a great deal of noise and I don't know what intent they had, whether it was social or sexual. Even so, I enjoyed the situation that thousands of them were producing these marvelous sounds at the same time. I also remember a bush I used to pass by. One day, it was August, I heard an insect in it, maybe a cicada or some other insect, but anyway it was alone and was producing a tremendous amount of sound, which echoed within the bush and off a cement wall, and I couldn't help but superimpose my idea that it must have heard the echo that came back. Now perhaps its sound was for another use, but with my understanding of echolocation, I thought that, well, I'm sure it heard that echo. So whether the single insect in the bush or the thousands in the field were actually involved in the process of echolocation, I got the idea of having members of audiences participating in some way. It would do

two things: one, relieve the anxiety or tension built up during a performance in which there are only four Sondol players and, two, while each person wouldn't actually have an experience in echolocation, the room would buzz and ring in the same way that that field in Kentucky seemed to ring.

Would you agree that the bias of most people who feel themselves familiar with music toward expecting instruments probably hides the point of the piece from them? They expect the soundguns themselves to be of interest, when what you're trying to do is to elucidate the particular place they happen to be.

Well, after performances people come up and play with the Sondols, a situation that I like very much, but one of the first things they do is put their hands over the loudspeakers and pretend they're playing a trombone or some other brass instrument. They make wah-wah sounds or speed the pulses up and slow them down in rhythmic effects; they try to do old things with new means. Perhaps that's strange for me to say because I'm tuning in to a very old activity, bats and other nocturnal creatures have been using echoes for years, so I'm more old-fashioned than anybody.

It seems a very social idea, a friendly idea, to have the audience be able to do something too.

Yes.

Do you think that the time will come when you can give a concert and the audience won't be anxious, when they can accept it that an aspect of the concert is taking advantage of the social situation of being together, and so won't feel left out?

I think so. It seems to work pretty well when I explain the piece before the performance, that is, when I tell the audience what is going to happen and how it's going to happen. But even so, there's often anxiety when a blindfolded performer bumps into something. Once in Zagreb, Mary Ashley got completely disoriented and ended up in a corner, but if the audience understands that, they will feel concern. I'd like to keep that in the piece.

Do you think that audiences that get uncomfortable perhaps feel they're not getting any information from the music and are therefore gathered together for no purpose?

Perhaps if they don't hear the echoes very much. I just did the piece in Cambridge for the Harvard School of Education, and for the first time, an audience that wanted to participate didn't make banal rhythmic patterns. Individuals in the audience made clucking vocal sounds that imitated the Sondols fairly accurately, and it didn't bother me.

You mentioned that you wanted as neutral a sound as possible ...

Right.

. . . from the clicking guns, and of course the patterns they make when they're being played together are indeterminate, so it might seem as if you're not getting any intentional information from the guns. Yet you can form a clearer picture of the environment because they're not trying to tell you stories.

Right.

So I wonder what you think about the concept that musical performance is sending messages, because in this case, though no specific message appears to be sent, it's paradoxical in a way, you do obtain specific knowledge about your environment.

Well, you know the old story about art as communication!

What do you think about that story?

We composers always denied it, but if you make a picture in sound about the space you're in, you're telling people something. The performers are spread out in the space when they start, and each of them can tell the others where he or she is and what the echo situation is in that geographical location. The audience receives the same information, so I suppose you'd have to say that *VESPERS* is a communication piece.

It's curious that by giving up your prerogative as a composer of sending information, you're allowing the environment to reveal itself.

Exactly.

By having minimal content in your end of the process, you're performing a service for the audience.

Right, that's what I try to do.

And what's also strange is that audiences who aren't satisfied with that state of affairs feel cheated because they think you're not giving them information.

They would say that I'm not communicating. Perhaps I'm not communicating but the particular room that they're in, is. And I think people should find out about that, don't you?