

QUASIMODO THE GREAT LOVER (1970)

for any person who wishes to send sounds over long distances through air, water, ice, metal, stone, or any other sound-carrying medium, using the sounds to capture and carry to listeners far away the acoustic characteristics of the environments through which they travel.

Use one or more microphone-amplifier-loudspeaker systems to lengthen the distance over which the sounds may be sent. In large, single places such as prairies, glaciers, or ocean basins, use single systems of great power or several weaker systems in series. Connect small, separated spaces such as rock formations within faults, detached railroad cars on sidings, or the rooms, foyers, and corridors of houses, schools, or municipal buildings with relays of systems, adding shorter distances to make longer ones. For example, the spaces of a three-story American high school may be connected by a four-stage system in which the performer's first stage is located as far from the listeners' last stage as possible and in which the microphone-amplifiers of each stage are placed as far as possible from their respective loudspeakers. If the first stage microphone-amplifier is located in a classroom on the third floor, its loudspeaker may be placed outside the classroom door facing down the corridor at the end of which is located the second stage microphone-amplifier whose loudspeaker may be placed facing down the stairwell to the corridor below at the end of which is located the third stage microphone-amplifier whose loudspeaker may be placed in the first floor lobby in which is located the fourth stage microphone-amplifier whose loudspeaker may be placed inside the gymnasium/auditorium. All sounds that move through this system, from loudspeaker to microphone and so on, are processed by the physical characteristics of the classroom, corridors, stairwell, lobby, and gymnasium/auditorium. Longer distances and further processing may be brought about by deploying additional relay systems in libraries, laboratories, cafeterias, offices, and boys' and girls' locker rooms.

The distance from one system to another should be maximum, depending on the sound-sending power of each system or on the physical limits of the given environments. Whole systems, however, should span enough

distance so that, given the medium, the sounds must travel for at least one second of time through that medium, or for a shorter time provided that the environment is of such a quality that it is capable of processing the sounds in the time given to the extent that they are perceived as being of different origin by the listeners at the last stage of the system.

Isolated from the listeners at the last stage, sing or whistle, or play any large or small musical instrument through the system.

Using the music of the humpback whale, *Megaptera novaeangliae* of the family Baleanopteridae as a model, compose a repertory of simple sound events such as single pitches of short or long duration, simultaneities of various densities, upward and downward sweeps, and sounds with different envelope shapes, or compound events made from combining two or more simple events to produce such combinations as accelerating or decelerating pulse trains, upward sweeps followed by tones of short duration, or motives seemingly modal in character.

Extensions or modifications of the range, timbre, envelope, or duration of any sound by electronic, mechanical, or any other means may be made at the performer's first stage only. Further extensions or modifications should be made only by the environment or environments through which the sounds travel.

Design formal structures with sets of successions of sound events in which each event within a set is subject to gradual, repetitive, and cumulative variation with respect to pitch, timbre, amplitude, envelope, or any other aspect of sound and time in order to amplify in time the relationship between the original sound event, its change, and the environment through which it travels. Starting anywhere on a minimum-maximum continuum, vary one aspect of the sound event and move to an extreme situation with respect to this aspect. For example, a sound of short duration may be lengthened, little by little, so that the reverberation time of the environment may be perceived, at first in terms of the discrete sound events and their echoes, then with more and more complete overlappings, until finally the lengths of the events are too long for either practical performance or measurement. In each subsequent set, vary one other aspect of the sound event, retaining throughout that set the extreme situations

arrived at in the preceding sets, taking care not to reverse the direction of a variation between two adjacent sets. When the variation of one type of sound event has been exhausted, move to sets of successions in which an additive procedure is followed, that is, where one sound event is followed by another, those two repeated and followed by a third, those three repeated and followed by a fourth, and so on.

Performances may be considered finished either when all the variations of sound events have been exhausted or when it is felt that all the acoustic characteristics of the given environments have been fully explored, tested, and articulated.

Multiple systems may be constructed in series or parallel that crisscross or interweave with one another, loops may be made to re-cycle sounds through the same spaces, and sounds may be sent through two or more systems of dissimilar media in order to discover their acoustic characteristics, their ability to process the sounds that travel through them, and the relationship between the speeds of sound in each.

Two or more players of similar or dissimilar instruments may send sounds through one or more systems from one or more geographical locations. For example, a trio of double bass players, isolated from each other in separate Quonset huts, may send sounds via interlocking relay systems out into canyons and cafeterias, across lawns, through wooded areas, administrative offices and aquaria, and onto a glider park.

Systems may be set up in public or private places on permanent or semi-permanent bases for people to move through and use freely. Ambient sound events such as footsteps, door slams, and explosions may also be welcomed for processing.