



**Artists Documentation Program
Video Interview Transcript**

MAX NEUHAUS

MAY 2, 2008

**Interviewed by:
Brad Epley, Director, Artists Documentation Program,
and Chief Conservator, The Menil Collection**

**Video: Laurie McDonald | Total Run Time: 01:01:22
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This interview is part of the Artists Documentation Program, a collaboration of the Menil Collection, the Whitney Museum of American Art, and the Center for the Technical Study of Modern Art, Harvard Art Museums.

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About the Artists Documentation Program

Throughout the twentieth and twenty-first centuries, artists have experimented with an unprecedented range of new materials and technologies. The conceptual concerns underlying much of contemporary art render its conservation more complex than simply arresting physical change. As such, the artist's voice is essential to future conservation and presentation of his or her work.

In 1990, The Andrew W. Mellon Foundation awarded a grant to the Menil Collection for Carol Mancusi-Ungaro, then Chief Conservator, to establish the Artists Documentation Program (ADP). Since that time, the ADP has recorded artists speaking candidly with conservators in front of their works. These engaging and informative interviews capture artists' attitudes toward the aging of their art and those aspects of its preservation that are of paramount importance to them.

The ADP has recorded interviews with such important artists as Frank Stella, Jasper Johns, and Cy Twombly. Originally designed for use by conservators and scholars at the Menil, the ADP has begun to appeal to a broader audience outside the Menil, and the collection has grown to include interviews from two partner institutions: the Whitney Museum of American Art and the Center for the Technical Study of Modern Art, Harvard Art Museums. In 2009, The Andrew W. Mellon Foundation awarded a grant to the Menil Collection to establish the ADP Archive, formalizing the multi-institutional partnership and making ADP interviews more widely available to researchers.

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[Speakers (in order of appearance): Brad Epley, Director, Artists Documentation Program and Chief Conservator, The Menil Collection; Max Neuhaus, Artist.]

[BEGIN RECORDING]

[00:00:49]

Brad Epley: Today is May 2, 2008. My name is Brad Epley. I'm the Chief Conservator at the Menil Collection, and I'm here with Max Neuhaus, who is in Houston for the opening of "Max Neuhaus: Circumscription Drawings," [May 3-August 10, 2008, The Menil Collection] as well as the inauguration of a new sound work that Max has done for the Menil entitled *Sound Figure* [2007], both of which will open to the public tomorrow, May third. Thank you very much for coming, Max.

Max Neuhaus: My pleasure.

BE: And I was also going to add that this interview is part of our Artists Documentation Program.

[00:01:22]

BE: I thought perhaps we'd start with a little background information on how *Sound Figure* [2007] came into being here at the Menil.

MN: Sure. Well, do you want me to start with the first idea, or just start with—you mentioned before.

BE: Maybe the first idea, about whether you considered alternative sites for the—

MN: Yes, actually, Dominique [de Menil] showed me the museum in the early eighties before it was open to the public, but everything was installed. And at that time, I remember passing these pocket gardens and thinking, "Well, maybe that's an interesting place." But for twenty years, of course, it didn't—we didn't go any further. But it was Josef [Helfenstein]'s invitation to come and look for a site for a sound work that brought me back here again.

[00:02:15]

MN: But I should also explain that...

MN: I mean, many people call my work site-specific, but the site has a much more important role than even as a site in my work. Since the work is made out of—or created with—sound, the site itself becomes the physical element of the work. The work is made out of its site. So it's a much closer relationship than siting a piece of sculpture, choosing. So the first step, for me, is always finding a site that works. And I do it intuitively, and usually I find two or three things, which strike me in some way. I'm often not sure why.

MN: Anyway, I decided to continue with this pocket garden idea at first. And even we went so far as to start to make sound in one of these. After a few days of work, though, I realized that it really was completely impractical. I was looking, essentially, for a site that was connected to the museum, but yet outside it in some way. And then I looked around and thought about several other possibilities: perhaps building a sound volume in the lawn somewhere, under a grove, using the portico in some way. And then really decided to take the bull by the horns and say, "Why not make it in the main entrance here?" Just also because of the contradiction. Here is the main entrance to the museum, which of course is modest and minimal, and we put a sound work there, but we put a sound work there, which is very *subtle*. And so it's large. It's twelve by twelve feet. It's a big piece of sculpture, but you can walk through it and not know it's there if you're not paying attention. And so that contradiction, playing with that idea, rather than having a piece somewhere where people had to go and find it somewhere, just putting it in the most obvious place, but letting them have to still find it with their ears.

[00:04:31]

BE: I've heard you talk about the piece at [Dia:] Beacon, the *Time Piece* [2006] at Beacon, in terms of an institutional sound. Is this—would you consider to be kind of the Menil's institutional signature sound? Or not in the same way?

MN: No. I mean, really these two forms, *place* and *moment*, or *time piece* and *sound volume*. The time pieces are a little different, since they are not continuous; and they do mark time. They mark time by their disappearance. The sound grows gradually, and at its peak, suddenly disappears. And it's its disappearance that you notice. So it's, again, a kind of complement to the traditional sound signal.

MN: And then, since sound signals in history do act as the voices, either of a church, or of a town—traditionally in the Western cultures these bells are signals—and when measured time became possible, they gave everybody the time before it was common practice to have it. So, my idea was to, at the

same time as making an artwork, extend this tradition of aural signals; and so these moment pieces are very large. They cover the institution. They become a voice for the building.

MN: But, on the other hand, these place works are really about building a new perception of place with sound. So they are not heard outside. They don't form a mark, a time mark. It's like in any other artwork, like the [Michael] Heizer [*Isolated Mass / Circumflex* (#2), 1968-1978; *Rift*, 1968/1982; *Dissipate*, 1970; *The Menil Collection*]

in the same way. The Heizer is not a landmark so much for the building. It's an artwork. So this is an invisible sculpture on the walkway.

[00:06:36]

BE: So, the equipment and the concept of the piece was more or less in place by, say, July of 2007, so much that the equipment could begin to be purchased, and plans for installation made. And then, I believe you came down in October to actually create the sound, once the equipment was in place?

MN: Exactly. These place pieces go in three phases. The first and crucial one is the selection of the physical element of the piece, i.e., the site. And this determines a great deal. But still, after the site is selected, I have to find a way to embed sound in the space—in a given space. And that's a technical problem, basically. But once the site is determined, I can do that. And then the means to produce the sound are fabricated offsite, transported here, and installed. And once they are installed, I come and start to build the sound that will create the new place, essentially.

BE: Maybe we can work kind of from the specific, and then back around broadly, using the Web interface that you have for the piece, and talk a little bit about that.

MN: Sure. Okay.

BE: And then once we've walked through that, we can go back and maybe deal with some of the equipment specifics and issues going forward in terms of conservation and maintenance.

MN: Yep.

[00:08:03]

MN: Each of my works in institutions now have their own website just because they are—well, it's not part of the practice, usually, of a visual arts institution to deal with sound, partly. And also since the sound itself is realized with a computer, why not have the computer also look after the machinery of the sound work? So all the electronics are duplicated. So we have two computers. One is active—both are active at the moment—but at one point we'll turn one off, and every year switch computers so that if anything ever does happen, there is always a backup computer to do it. But this website allows my engineer and I to monitor what's going on. We've had it—the piece has actually been on for several weeks now, just because it's always with computer systems nice to—we call it “burning in.” We hope for no smoke. Smokeless fires. (laughs)

MN: So this website is only accessible to people—you, who have a password, and me and my engineer [Phil Burk]—so it's not anything public, and it should never be public. It's not—none of the technique—in fact, it's very important in works of mine that none of the technique be explained. One wonderful thing about these pieces is that they are almost solid, but they are completely invisible and inexplicable and mysterious. I mean, when you walk through, along that walkway, I mean, you've never experienced—your ear, [your] mind, has never encountered this. And as soon as you start to explain it, then you destroy the illusion. It's like explaining the magic trick, and, “Okay, now we know how the rabbit got out of the hat.” We don't want them to ever know. Keep the rabbit. (laughs)

MN: So this is the “Help” page, which just kind of tells us some of the basic functions.

[00:10:18]

MN: The work itself, every once a day, plays a continuous tone about four o'clock in the morning and measures that, just to make sure that none of the—the amplifier and the speakers are all the same—in the same area. And if they go out of a certain range, then this—server basically—sends email to me, my engineer [Phil Burk]; and once we get things settled, it will send it to you and to Steve [McConathy] as well, so that everybody is alerted that something may need checking or something.

MN: We don't want to do this now, because it would turn off the piece and interrupt it. But—

BE: May I ask a quick question about the test tone?

MN: Yeah.

BE: So does the piece actually sort of disengage while that test tone is being produced?

MN: Yes.

BE: Okay.

MN: Because the sound of the work itself is too complex. You never know—you don't know where to measure it, you know—

BE: Where the tone is—

MN: But if you put in a simple tone, then it's got to be within this range. It does—I mean—the amount of current drawn by each speaker changes just because of temperature and things like that. But within a certain range, once we find this range, it's a very good indication of, not necessarily that something's wrong, but something has changed, you know. And so this is—if something like that happens, we—you don't have control over this page, but I and Phil [Burk] do.

BE: Right.

MN: We can go in and run another calibration test to make sure it wasn't just an accident or something like that.

[00:12:08]

MN: This page is a page which we won't use probably again. It was used to set up the work. The work is not only the realization of this tone by the computer, but in order for this sound volume to be—in order for me to give the finest control over what this sound volume is, it's best if I have a way of maintaining a constant relationship between the ambient sound and the sound of the work—that they always remain the same. And so this means that we have a system which listens, is always listening to the ambient and adjusting very precisely the level of the piece. You don't hear this, and you should never hear it. And nobody should ever know about it because they'll go there and make noise and see what happens. But it should be completely transparent, and we've adjusted it now so it is.

MN: And that allows me to really have a—to fine-tune this point where the sound is there, and it's not there. I mean, where the—it's always, you know, hearing a

work like this, the listener has to—well, if he just walks without thinking that there's a piece there, the assumption—he doesn't think about it. He just thinks well, "I just heard some strange sound. Something happened." But in order to experience the work, the listener goes through a point where he realizes that this sound isn't coming from somewhere else. It's coming from there. Because every time he moves, he moves in a different way. But also it is not a natural sound, or it's not a full sound. But finding the sound is the first process. It's automatic, too.

BE: Um-hum.

MN: And once somebody has heard it, of course, then they hear it. They can hear it for much longer. They also remember it. You can walk away from the piece and still think you hear it, even though you can't hear it, you know. So in order for me to get that to happen, I really just have to find a very good, a special relationship between the ambient sound and the sound of the work. And this piece does that. It sets the level. It—this AGC stands for *Automatic Gain Control*, so it gives me—I can control how fast it adjusts, going up or down, or – so basically this is a very complicated thing—

BE: Right.

MN: —which takes a while to set because you have to come back and listen to it and make sure that you think it's right. It was great the other day when these guys were *not* supposed to be mowing the lawn, and were—because I got the worst case, and...

[00:15:22]

MN: I mean, we need to enforce this idea that the gardening noises—because they really are just the most terrible things. They are also in the same kind of—because they are constant, they are in the same kind of frequency range, so they really distort the piece, too.

BE: Um-hum.

MN: But what we—the discussions we have had about the fact that the museum has control over the physical plant, and the way the grounds look, so why shouldn't we have also control of the way the grounds sound—especially since the museum owns most of the real estate around here. So definitely there should never be any garden motor allowed during museum hours.

BE: Uh-huh.

MN: But even more so, I think it should be minimal because, I mean, the work is there 24 hours, seven days a week. So anybody has the right to come here, just like they would come and look at the [Michael] Heizer, and listen to this work. But if some guy is out there with a leaf blower or something, it's gone. I mean, it's like a *shh*. (makes sound) So I think this—Josef [Helfenstein] and I have talked about this, somehow implementing a policy. And I think it would also be a precedent, so it's something I can say in other museums who are less enlightened, I can say, "But look, the Menil did."

MN: Josef Helfenstein put his fist down. No garden utensils.

BE: No blowers.

(laughter)

MN: Exactly.

[00:16:55]

BE: So, this ability for the piece to adjust to ambient noise. That is not infinite. There's a cutoff point, though. It won't adjust to the loudest noise. It will—at some point, it doesn't really—

MN: Yeah. No, there is a max gain somewhere. Where is it? (looks at computer screen) Min Gain—Slow—Max Gain. Here it is. So it reaches a point where it just doesn't go any higher. I mean, down here, these charts, shows you exactly what's going on. This is a chart of fifteen minutes, which I can make a new one of right now. I can update all the charts. (moves/clicks computer mouse) And there they are. And this is the gain in the last fifteen minutes. So each of these divisions here, each of these squares, is thirty seconds.

BE: Uh-huh.

MN: And so that's the gain—how it's controlling the actual volume. Here is what's coming into the mic in the same period. So it's much smoother, that, but it follows it in the same way. You know, it's very technical stuff; but, you know...

[00:18:23]

MN: It's—going to this limit just gives me an incredible—With *Times Square* [1977–1992; reinstated in 2002], I don't have this kind of control, of course, because I didn't have it in 1977. And of course *Times Square* works if it's a snowy night at four o'clock in the morning, or if there is a fire engine coming down Broadway, it still functions.

BE: Um-hum.

MN: But, this piece is really—this sound is crafted to have this kind of very precise relationship. That's when it works, really, is—and so it's important. But, you know, once the piece is fixed, this doesn't change.

BE: This system of maintaining a relationship to ambient noise. Is that a development specifically for this piece, or have you utilized that in other works as well?

MN: No, it's a general principle. I mean, *Automatic Gain Control* is used in recordings; but this is a special implementation that I first implemented with Phil [Burk]. Let's see, Kassel [*Three to One*, AOK Building, Kassel, 1992–present] has it. And before Kassel, there was—*Time Piece Beacon* [2006] has a different system, but it does compensate just because—not so much the ambient, but the whole air conditioning for the galleries is on the roof. It's about ten separate systems, which—

BE: Um-hum.

MN: —so the level of sound around the building changes radically from summer to winter. So we had to deal with something like that. But it's not the degree, not the degree this is. But it's something that I first used actually with *Three to One* in Kassel in 1992, but with a system that was designed for something else, not really this piece. And so—

BE: Um-hum.

[00:20:17]

MN: But this isn't a job that anybody else needs to do. So you don't get any off-the-shelf hardware.

BE: Right.

MN: We really had to do—and that’s why I work with an engineer that’s able to build software that I need. I build my own software for the interface when I’m building the sound, which gives me much more flexibility than even working closely with somebody like Phil [Burk], because that’s really the point where I am touching.

BE: Um-hum.

MN: But for straight engineering, which is the site, and this kind of system, it’s an engineering job. It’s not something I need to do myself. He does it better than I would.

[00:21:03]

BE: Could I also ask you about this section on the website where you can hear the sound as well? There’s a—

MN: We can’t hear the sound directly—we can record it. So we can make recordings down here. And it automatically makes recordings of both this calibration and, because each of the loudspeaker sections—the six sections of loudspeakers down there—has its own microphone inside it. So we are actually able to hear each one separately. And it makes a recording of both the calibration tone and the sound work itself, which it sends to me every morning, and I listen to it along with all the other pieces.

Josef Helfenstein: Are you doing that every day, basically?

MN: Yeah.

JH: Sort of checking in on your pieces?

MN: Exactly. Like you check in with your secretary, I check in with Beacon, Houston. (looking at computer screen) Here’s Houston. From—so this is from—what is it saying here? Well, down here. There’s the sound file. You won’t hear much because it is just coming out of these speakers, and it’s too soft, really, to hear here. But, essentially the sound file is there. I just open up the email, play it, just to be sure. It’s a nice—it’s also, you know, a nice—it’s not a bad ritual to have in the morning.

BE: I was listening to it earlier today. It kind of runs through the different mics, I guess, so the first sound you hear is the ambient—

MN: Yes. You hear the microphone, and then you hear the piece. And then you hear—In the other recording, you hear the microphone and then the calibration tone. So the exterior mic, and then the microphone in each of the speaker boxes.

BE: Um-hum.

MN: And it's the best way to control it, really.

[00:23:05]

BE: I was going to see if there are any other features you'd like to talk about with the website. And if not, then we could maybe cut the fan—

MN: Let's just see here. Configure. Adjust amp. This is—I mean, if the amplifier ever needs to be changed. Of course any amplifier, audio amplifier, could be used. We have a spare one or two—I don't know how many. NO, we have—we only need one.

BE: I think there's one.

MN: Yeah. But in order to have the same level—and it should be clear now how important this level is—this is the procedure to match the level so that it has the same. "Adjust Mic." The same thing. If you change a microphone, then it is going to change also, so there's a procedure for adjusting the microphone. And then these: the configuration; the charts; the trends is just a long-term kind of things about— (looking at chart) So this is over a year or something—so that we can see if something is changing very slowly that would make a difference.

BE: Um-hum.

MN: This is—I don't read all this stuff. This is really stuff for Phil [Burk]. This is the log which tells what's been going on. Phil [Burk] has his own page down here, which he plays with. I don't know what he is doing down here. It's none of my business. (both laugh) As long as I get the recordings every day. I mean, it's also—it was my idea, this idea of getting the recordings every day because if you don't get the recording, you know something is *really* wrong.

BE: Right.

MN: Rather than just having it send it, you know, when something was wrong, it is also this daily thing. Also, just to make sure that it is always online, Phil [Burk]'s server sends every few seconds a signal to this server. If it doesn't get a signal back, then it knows somehow the Internet connection is down, or something like that. I mean, all this is kind of technical stuff. I think that's enough. More than enough.

[00:25:22]

BE: Okay. With regards to this level of monitoring, I was wondering if this is something that you ever see transitioning to the institutional owners or to a foundation or somebody to kind of—well, basically to oversee these and make sure everything is running properly, and the kind of expertise you would see necessary for that to be passed.

MN: I do. I mean, it's one of the reasons that I'm doing it for the institutional pieces, is that certainly I'm not going to be here forever. And until I did this, it really was—you know, I was the only one. It was my ear could say that something was wrong or not. And so this idea of building this self-monitoring in, having each piece have its own website, means—right now it's in Phil [Burk]'s hands because, of course, he provides the electronics, and he gives a two-year guarantee. But I think, yes, that at some point a foundation—if I'm *not* around anymore—a foundation has to be formed, and there--. I mean, monitoring this is an engineering task. It's not—

BE: Um-hum.

MN: And not only is there this website, but there's also a package of documentation which has all the software and everything in it. So what is there is described to the point where, even if the machines themselves in one hundred years don't work anymore, there's the information there to make the piece again with whatever technology is there. And, as you know, we have the speaker systems that are there, which are permanent and waterproof. The speakers themselves have *plastic* cones, so, I mean, they essentially will last an infinite amount of time; but we still have a duplicate set of speakers for each of the boxes that are sitting in your department there.

BE: So we have six—a full set of replacement speakers?

MN: Yeah.

BE: And we have two, I think, additional microphones for the ambient levels?

MN: Right. Yeah. And you also have the—getting, inserting—the speakers are on a PVC panel, and the speaker boxes themselves are made out of stainless steel. So inserting this speaker panel in the box, a new one, it has to be gasketed. The box has to be sealed, not only just to keep water out of it, but also to function as a speaker. The air inside a speaker enclosure acts as a balance. It's a spring that the speakers work against. So if there's a leak, it's like trying to drive a car on a flat tire or a low tire. The gasket material was special, and that's why they provided an extra bit of it. Because when you—you have to throw it away, essentially, if you change the speaker panel.

BE: Um-hum.

[00:28:20]

BE: One of the other technologically-related questions I had is, is there any potential for inadvertent change on our part, other than kind of the On/Off switch? In terms of dial settings and things like that? I noticed on the amplifiers, for example, the knobs are off—

MN: Right.

BE: —and all the other knobs, I'm assuming, are at their set point.

MN: Yes.

BE: It's in a locked cabinet with controlled access to the keys.

MN: Exactly.

BE: But is there—so is there anything that can be bumped or—

MN: I don't—I mean, if the door is shut, no. And the other—you know, the amplifier controls are the things which would actually affect the sound of the piece. The other knobs in there are knobs to control the microphones which are just monitoring it. So if they were bumped, you would get some funny error messages, which would not be too convenient.

BE: Right.

MN: (looks at screen) But there is another section on the site about maintenance, which is—I don't think we need to turn it on again—but it basically, the work will send out reminders, once every two years, to change the UPS batteries

and some other things once a year, to switch computers, turn one off, leave the other on. And there's a space on the maintenance page to write whatever you do to the piece, so there is a permanent log of what's been done, what date it's been done. So if something turns out to be strange, you can say, "Oh, six months, we did that. And that—"

BE: So if we're on the list to receive the warnings—

MN: The error messages.

BE: —the error messages, then we'd be on this same list to record them.

MN: Yeah. And whatever you do, you should write into the maintenance log here. You know, on the maintenance page—who did it, when you did it, and what you did. The most important thing, I think, about maintenance, from your side, is making sure that these—the speakers themselves in the jasmine beds—are invisible, you know. I mean, perceptually, the sound seems to come from here for most people. (lifts arms into air) So most people don't look down. But it's—right now you can—I mean, there is a rectangle which marks the speaker. But it's just, in the future it should be—we should try to have it completely uniform as a bed of jasmine, so there's no hint that it's coming from there.

BE: I think, unfortunately, one of the—actually, in some of the early tests, we discovered there were faulty microphones which precipitated digging up or, you know, reentering, which, I think, messed up the jasmine unfortunately.

MN: Exactly. No, when I built the piece, we didn't test the calibration system because that was later. That was a low priority. So, three months ago, we said, "Oh, well, we'd better see if this calibration system works." And of course, two of the microphones were damaged. And the worst thing in the world—digging it up again.

[00:31:19]

BE: I also wanted to revisit a point you mentioned earlier, and that's about to what degree the technology is significant for you. It seemed that it's not necessarily in the equipment pieces themselves, but it's more, perhaps, in this ability to regulate itself in relationship to the ambient noise. That's the kind of technological feature?

MN: You mean how it relates to me as an artist? How important it is to me as an artist? Or—

BE: Well, I guess, the actual pieces, whether it's an—for example, if it's a Mac Mini that runs the piece, or—

MN: Oh, no, no.

BE: —or a Dell that runs the piece? Those kinds of things are not so important. Or even the amplifiers themselves. It's—

MN: No, it's just choosing really on the basis of technology. You know, it's kind of amazing. The audio world has been so corrupted, the engineering of it has been so corrupted by sales, basically. The guys who sell hi-fi equipment are just—I mean, they are audacious liars, a lot of these guys. And it's very hard to hear the difference between two good amplifiers. You will never hear it. And the main thing is just choosing components that are built for long life. The amplifiers that I use, these have been in a piece in Geneva now for five years without—the first ones without ever—and, you know, they'll run forever. And if it doesn't run forever, there is a spare. And if that goes, you can always put in another amplifier and adjust it with this procedure. So it's—

MN: No, specific components don't make a difference. Except in the case of the speakers, because these are things which I invented, and also I designed; and that's why they can create these very special sound fields. And that's why we have the extra panels, because in five years, these little speakers won't be made anymore; and that would really change the piece, if you tried to put a different kind of loudspeaker in there. But that's the only part that's really specific to the work, the loudspeaker itself. And the enclosure, of course.

BE: Um-hum.

[00:33:38]

BE: I wanted to clarify a couple of changes that occurred during the course of finalizing the work, just because I wasn't clear about them in our paperwork. One was, initially the ambient mic was in the leaves at the north end of the walk.

MN: Right.

BE: And subsequently that was changed?

MN: Yes. Well, what I found, fortunately accidentally, is that right under the mic seems to be a favorite place for people to have cell phone conversations. And so the level of the piece would go up according—which would have nothing to do with the ambient sound—just because somebody was talking on his cell phone. And so we moved the mic much closer to the actual piece and pointed it so it is really monitoring what the sound is in the piece itself.

BE: Uh-huh.

MN: Which is tricky, too, because it has to distinguish between what the piece is and what the ambient is. For a dumb computer, this is not so simple.

(laughter)

BE: And the other change that I noticed was that initially, I think, the speakers were further away from the sidewalk; and you moved them a little bit closer ultimately? I think they were initially placed at three feet out?

MN: Yeah. No, they weren't ever placed, but the first drawing was to have them a little further away. But I really—I didn't want to risk—I knew that the sound field—I would have a concentrated sound field at this distance. I wasn't really sure, if I added six feet more, that I would have the same kind of concentration. And so to be safe, and the fact that we could completely cover them up. But, you know, even if they are uncovered, it's amazing. Nobody ever thinks—in other works they are completely visible, but they look like water—just part of a water drainage system. And when you actually get close to them with your ear, you hear the sound coming from the other side. So, I mean, your ear can never find this sound, even if you see it. It's *much* better if you don't see anything. It's just—

[00:35:44]

BE: And then one other point that you mentioned when you were here in October, setting up the piece, was the idea of the core elements of the piece being the sound itself, and the space. So essentially, the technology that is producing it is irrelevant in a way.

MN: Yes.

BE: Those are the things that must be preserved.

MN: Yes. It's the nature of the sound itself, but that's in the form of a sound file now, which is a circular sound file. So it's endless. And the shape of the piece itself is determined by the speaker system. And the level. I mean, the level, it's a much different thing than most people assume, since they have a hi-fi system, they can play the piece louder, or softer. But if you change, obviously, even the level one iota in this thing, it changes everything. So it's a different kind of parameter here.

[00:36:47]

BE: And in archival terms, I was wondering—because we have the sound file on two computers downstairs; one is the backup, and one is the one that's actively running—

MN: Yep.

BE: —is there, to think of it in terms of video, is there a master, or an edit master, that you have?

MN: Well, I think what we—I'm not sure—in the paper documentation, which will come, probably in a few months—we are still developing it for all these pieces just [because] we want it to be the same form—I think there will be a CD, not only with the sound file itself. Because it's digital, it never was an analog sound file. It never was a recording, so there's nothing about first generation, second generation. They are all the same, you know, ones and zeros. But also the software will be on this CD. So if, for instance, there was a fire in the box and both computers burned up, you'd still have this fundamental documentation which is enough to rebuild the software in a new kind of computer, even.

BE: Um-hum.

MN: No, that's all very well—I really insisted, you know, as part of my contract with Phil [Burk], that there be from-scratch documentation. So if there's nothing there, it's still possible to do this.

[00:38:08]

MN: Because it's—you know, for me to make the statement that, although I work with sound, I don't make music. I build entities with sound. And this entity is as much an entity as a piece of bronze sculpture, as a piece of steel sculpture, as a painting. And it—although of course in one sense it's very fragile. If you

unplug it, whsst! It's gone. But in the other sense, it's more robust, because you have a document that you can always make it again. So it's this kind of contradiction. But also, because its site *is* what the piece is made out of, it's not like a piece of sculpture that you can place out there, and then put in the basement again, and pull out again. By commissioning a work of mine, you are really—the institution is—agreeing that this location *is* a part of the work, and it can't ever be used for something else. It can never be taken away. The piece can never be turned off, because that is the destruction of the piece. It's not unprogramming the piece, or taking it out of view. It is destroying the piece because this element—

MN: So my agreement to make a piece out of a part of the museum has to be coupled with the museum's agreement to dedicate that place to this work and no other work. Not to ever put—certainly not put steel sculpture in the jasmine, which would not—we don't know who will be here in fifty years, do we? But don't do it. I will come back. It will sink into the ground, I guarantee you.

(laughter)

[00:40:26]

BE: Were there any other points in terms of the sound figure that you'd like to clarify, in terms of maintenance, or that maybe we haven't covered?

MN: No. But I think, you know, this idea of controlling the gardening ambient sound has to be a very serious program. And it's not obvious because, no, it hasn't been done before. But I think this piece provides a means—it provides an impetus to begin to take aural control over the campus as well as visual control over it. And it would be a wonderful example. But I think it does have to be concretized in some way more than just word of mouth. It has to be put up—

JH: We have a policy in place.

MN: Yeah.

JH: We have implemented the policy. The fact that it didn't work was a good example for us to make sure from now on it will work.

MN: Exactly. Yeah.

- JH: Yeah. Now that we've followed up.
- MN: So it's part of the museum procedure, so to speak?
- JH: Yeah.
- MN: Perfect. Yeah. You need—I think probably the reason it didn't work is there was no one watching. It was me, that was out there, who discovered it, right? Or—
- JH: No, it was a misunderstanding. In fact it was a miscommunication between Susan [Kmetz], Ralph [Ellis]'s assistant, and ground maintenance, you know, landscaping staff.
- MN: So they didn't understand that they weren't supposed to do it during museum hours? Or they didn't understand they—
- JH: They thought it was not in place yet, or—I mean, it was not clear to me either because we exchanged emails about this. But now, it is clear.
- MN: No, I mean, every time they work out there, essentially, no one can hear this work. So it's—
- JH: Yeah, it's like, if you would cover the [Michael] Heizer piece randomly. It's just absurd.
- MN: Yeah, people would come to see the [Michael] Heizer and it would be covered up because they were treating the lawn in some way or something. But the real culprit is this leaf blower. I mean, for years they used brooms and rakes, and now they have this machine. (gruff voice) They put it on. They put on their masks. Zoom. Nrafft. And they blow the leaves around. What the—
- (laughter)
- JH: I think it's a great example for us to pay attention to something we had never paid attention to. We don't pay the same amount of attention to aural control and to visual control.
- MN: I was joking with Josef [Helfenstein] the other day, in fact, "This little elevator is disgusting. It has a horrible sound in it, doesn't it? Nobody's ever noticed. It's absolutely disgusting, Josef. And next time I come back, I—it's like dirt on the wall, Helfenstein."

BE: We were complaining about its speed, too; so I guess that's two strikes against it.

MN: It's finished.

(laughter)

[00:43:26]

BE: Also, just before we stop, I wanted to clarify also the people that were involved with this particular installation. We've referred to Phil [Burk], but his full name is—

MN: Is Phil Burk. But he is in the documentation.

BE: Right.

MN: He runs a company that develops software. He is a kind of software guy. But very interested in the field. The whole field. Not so much of contemporary art, which he has never been involved in before, but electronic music, he is kind of a pioneer in certain aspects of it.

MN: But of course your own Steve McConathy was the main person here who resolved many of the logistic problems, which were somewhat complex.

BE: And Bill Sellers worked as the kind of sound technician?

MN: Yeah. I mean, we needed a guy, an audio guy, to build the cabinet. To build the rack, essentially.

BE: Um-hum.

MN: The rack is full of pre-made components, but connecting them is a job in itself. And he has the audio expertise to know which kind of plugs to use, how to solder, and all those things.

BE: Do you work with different engineers, depending on location? Or does Phil [Burk] work with you in Europe and in America?

MN: No, Phil [Burk] works with me now everywhere. But I always involve—the installation of the physical components, and the electricity and the Internet is always done by people of the institution, because then, it's not a strange box. They know it much—it's something which they've made, so it's integrated into the system. And also, I mean, in a museum, no one really likes to bring in an outside guy to drill holes in things. It's better if the museum staff drills the holes.

BE: Perfectly understandable.

[00:45:17]

BE: While you're here, and obviously on the occasion of your drawing exhibition here, I thought we might take a little time to talk about the drawings, too.

MN: Sure.

BE: One of the issues that came up with this exhibition were the frames. Do you have a preferred framing for your pieces? Most of them came in this kind of walnut—

MN: Yeah, that was—they were first shown at the Kunsthalle in Bern, and the frames—they didn't have much budget, and so they built the frames themselves. And they convinced me not to mat them. It was much better to hang them from a piece of double-sided tape. And ideally, the double-sided tape, I think, should be removed. I was speaking to Anne [Adams] about it today. I asked her, because they covered up the double-sided tape, which was showing through the paper, with the mat. So in a way they reduced the size of the drawing. So it changed the height-width relationship, too.

BE: So your preference is to have the pieces floated in the mat, as opposed to over-matted? Okay.

MN: Exactly. Yes. Yes. And this frame, it just happened to be what was done. I don't mind it. In the exhibition at Castello di Rivoli, we also showed the studies for the image panel; and we showed those in very simple white frames, just to distinguish the two. For me, it works. But it doesn't really—it's not so important to me here. It's not a big aesthetic choice. It's mainly that...

[00:47:03]

MN: The main problem that is consistently there is the fact that the drawing is, in fact, two panels. It's not one drawing accompanied by a caption or something.

MN: So, what constantly happens, especially when publications ask for a photo of a drawing, they get the photo, and they cut off the text, and they put the image there. Or they put the image, which happened here on the website. They put the image at the top, and they put the text panel down on the side. It's very important that no one ever publishes a photo of one of these drawings without this relationship of being side-by-side, text on the right, five centimeters, two inches between the two panels; and that they are published in a size where the text panel is legible. I mean, you can see the image, but if you can't read the text, you are missing half the drawing also.

MN: But this fundamental—I mean, I can't understand how it's—for years—how it's so difficult for people to understand that the image is only half the drawing, and the text is only half the drawing. The drawing is what they synthesize when they are read together, and both halves have to be there.

[00:48:30]

BE: But there are drawings that—or maybe are studies—that don't have a text component?

MN: Yeah. No, there are working drawings that don't have text, of course, because, I mean, they are products of the process of building a piece or something. There is another kind of drawings which I haven't found a name for, but they are also—you have some of them here—which kind of talk about aspects of the piece. Like this one about an exterior sound passing through a piece, you know. I mean, I use drawings for lots of things. That's the wonderful thing about drawings, that you can do so much with them, of course. It's a way of speaking, too, for me.

BE: Um-hum.

MN: Or bringing up a point.

[00:49:15]

BE: We also noticed that there is a certain variety in the tone of the paper. Do you consistently use the same kind of paper? Or have you noticed that there have been changes in the tone of the paper over time?

MN: No, that's really a product of age. I use exactly the same paper, always. It's a very heavy drafting paper, but it, depending—it's age and humidity. Some of them have moved around with me and been exposed to more or less humidity at different points. Hopefully they'll—

MN: It's a very robust paper. It's actually a sandwich, with a piece of plastic inside two pieces of paper. It was developed that way for stability for architectural drawing. But I really fell in love many years ago with the way it—with the surface—what happens to pencil on the surface. It just—I mean, it's just magic what happens. The difference between that and a normal piece of paper, what it does when the pencil is on there. So it's a—

MN: I bought all of it about ten years ago. There is no more, folks. (laughs)

BE: But *you* have a good supply, so—

MN: Yes, I hope so. Depends on how many pieces I do. I use it very carefully.

BE: Well, I think, unless you have anything else to add, that'll probably be—

MN: No.

[00:50:43]

Laurie McDonald: I have a question, Brad.

BE: Sure.

LM: Did you use some kind of voltage-controlled oscillators to tune the harmonics specifically for your piece? Or is it a software program?

MN: No, it's much more complex than that. I am fascinated by sound color, and I call—these sounds of these place works, I call textures, sound textures. And I—well, from my very early works, I started developing ways to build sound color, sound textures. And so I have a—I now have a fundamental palette of about 700 textures. But I never use—they are always starting points. I mean, I start to apply them in a situation, and then I begin to transform them in some way. And these, they are very, very complex sounds. Even though they are continuous and always the same, this sound is—I can't tell you how rich it is. It's like thousands and thousands of oscillators, the equivalent of that. And I am always inventing new ways to do it, so to speak. It's—in a way, if you make the analogy to visual color—sound color—visual color, we know. We

can make a color wheel. We can say most of it fits there. We know where this particular color fits in this. But a sound color wheel would have to have about twenty dimensions, not just two. And so it's fascinatingly complex. It's one of the reasons I build my own software interface to build these pieces. I have to find and shape that color out on the sidewalk there, and it's not something I'm comfortably sitting in my studio with. It's out on the street, but yet it's a very, very fine process. *Fine* in terms of meticulous. And it's fascinating. I mean, it's my—

MN: I'm of course in love with sound color. It's where I came from. I was, as a percussionist, you are—that's what we are. We thrive on—some people call it noise—but we thrive on sound color. And it's just amazing what you can do with it. It's completely inarticulate, of course, because it's been used, and the word “sound color, *tone farbe*,” is a term from music. It's a term really from orchestration. When the orchestra came in, and they realized that, of course, it wasn't only melody and harmony, it was the color of the orchestra which added dimension. But in music, always, you can make a piano rendition of an orchestral work, and everybody knows it's the same piece. But for me, I use color, sound color, as *the* essence. So if you change the sound color, I mean, it's the whole thing. It's not just a color on top of it.

MN: But it's always this funny confusion in music. The piece in Times Square, it's a big, rich color that I never—I mean, it has a harmonic structure in it, but I never really thought about it until a few years after it was installed. I was once at a party, and a musician walked up to the piano, and he went, “Bah,” (strikes imaginary piano chord with hand) and looked at me. And it turns out that those were the harmonics of that sound. But I had never really thought—I had never looked at that sound in that way. But that's all he could hear, you know. It's the difference between music and space, so to speak. But at that point I realized that he was never going to hear the sound. He was only going to hear that chord.

BE: It was always a chord, yeah.

MN: Yes. (laughs)

JH: So this is the kind of work you did when you were here, sitting on the sidewalk and building the piece, as you called it.

MN: Yes.

JH: This is exactly like—

MN: I built that color there. Yes.

JH: And you did that over, like a week or so, when you were here in October?

MN: Ten sweaty days.

JH: Ten sweaty days.

(laughter)

BE: Does it build continuously, or is there a point sometimes where you wipe out completely what you've started with and start again? Or do there always seem to be fundamental—

MN: It's always a progression. It starts out trying a lot of things, and then gradually becomes more and more focused. Of course, the wonderful thing about working with a computer, as opposed to a canvas, is that you don't have to decide to paint it all out. You just click, save, and start building it again somewhere else. And you can always go back to day one. But, I mean, the process, I always say, that my process in finding this sound, building this sound, is not very much different than the way I think most artists work. We work our—whatever material we work with—until it works. And the real key is knowing when it works because that's when the work is there—and not going past it. And the working is always—it's a very—it's a gradual, focusing process. And at the end, you know, it's very small things, but also it's very much different working with sound than something you can see because if you are working on a painting, you can go close, do something, and stand back. And then go close and do something.

MN: But you can't stand back from a sound. And the only way you get perspective is over time. So at the end, a lot of what I'm doing is just trying to stand back by not listening to the sound. Or listening to the sound, I often leave it on so that I come in from the normal environment and find it, and am confronted with it. Because, of course, when you are sitting there constructing this complex sound, you get so inside it—where you need to be in order to be able to construct it—but you lose the perspective. So to get perspective, it takes time. You have to *not* hear it for a day, or a night, or something. But at the end, it's more about not hearing it than hearing it.

(On screen: video montage of *Sound Figure*, 2007, at the Menil Collection)

[END RECORDING]