Against the Grain: A Conversation with Stephanie Strickland

setInterval() Conversation Series 7, November 24, 2015, at the New Jersey Institute of
 Technology in Newark. With interventions by Chris Funkhouser, Ian Hatcher,
 and a quick appearance by Andrew Klobucar.

Stephanie Strickland (b. 1942, Detroit, U.S.) is a writer based in New York City. At the time
Strickland studied mathematics at the university level, she was one of the few women taking
graduate courses, being even denied access to the math graduate library. She holds a BA from
Harvard University, an MFA from Sarah Lawrence College, and an MS from Pratt Institute.
Strickland writes poetry and essays. Her poetic work includes the print collections *Give the
Body Back* (1991), *The Red Virgin: A Poem of Simone Weil* (1993), *True North* (1997), *V:
WaveSon.nets / Losing L'una* (2002), *Zone : Zero* (2008), *Dragon Logic* (2013) and *V:
WaveTercets / Losing L'una* (2014), and the digital works, single-authored or in
collaboration: *True North Hypertext* (1998)*, The Ballad of Sand and Harry Soot* (1999), *To
Be Here as Stone Is* (1999), *Errand Upon Which We Came* (2001) *V: Vniverse* (2002),
slippingglimpse (2007), *Sea and Spar Between* (2010), *Duels—Duets* (2013), *Vniverse* app for
iPad (2014), *House of Trust* (2014) and *Hours of the Night* (2016). Strickland is a member of
the Board of the Electronic Literature Organization, for which she co-edited the *Electronic
Literature Collection, Volume 1* (2006). Her archive "The Stephanie Strickland Papers, 1955-
2016" is being collected by the David M. Rubenstein Rare Book and Manuscript Library at
Duke University.

This conversation was recorded at the New Jersey Institute of Technology on November 24,
2015 despite Strickland's refusal of taping. At the beginning of the session she describes the
procedure for a prior successful untaped interview (conversation, note-taking, checking back
to assure communication has occurred) to explain her preference. Álvaro Seiça thought he
had stopped the recording, but though he turned the screen off, his iPhone's voice memo
continued recording in the background. The main aim of the conversation was to discuss in
detail the work *slippingglimpse*, co-authored by Stephanie Strickland and Cynthia Lawson
Jaramillo. In the room, Chris Funkhouser contributed to the conversation, as did Ian Hatcher,
who has collaborated with Strickland on the app *Vniverse* (2014) and *House of Trust* (2014).
With an impressive and grounded *ars poetica*, Strickland elaborates on the ways mathematics,
programming languages, and writing systems share resemblances. The conversation dealt
with an eclectic range of themes and topics. They include Paul Ryan's "threeing" theory,
Gregory Bateson, and spatial and temporal compositional elements in *slippingglimpse*. Also
spoken of are modalities of reading, writing, and viewing; water patterns, reverse motion, and
word motion; text behavior, speed, and slowness; René Thom's catastrophe theory, organic
shapes and distributed nature-human agency; improvisation, performance, and audience; the

story of the passion of the flax and capturing technologies; politics and feminism; collaboration, sound, superimposition, and overlaying; contemplation and meditation; hovering, Director, Adobe, Apple, and Flash; books and Director and app versions of *Vniverse*. Finally, black boxes opened the notion of oracles.

Stephanie Strickland (SS): They wrote up what they thought I said, and I wrote back, you know, which is very interesting, right? Because you can see where you've failed to communicate, how it was heard, how you should make it … what are you doing Chris? No taping!

Chris Funkhouser (CF): What?!

SS: Seriously … no taping!

CF: Oh, you're not taping?

SS: No taping!

CF: Álvaro's not taping?!

Álvaro Seiça (AS): Oh… ok! Is it not ok that I tape the …

SS: You can look at the screens. That's fine! Not my voice.

CF: All right, well, I don't mind.

AS: So, is it ok, that if I tape both the conversation and what is happening on the screen?

SS: Do not tape the conversation-- All right, if I know the conversation is being taped, I will restrict what I say …

AS: Oh, ok, ok!

SS: I'll answer your questions … I will not volunteer.

AS: Ok!

CF: But I think then if your interviewer isn't listening, or isn't sharp, it's bound to not be a very interesting interview, that's true. I mean the best interviews are real questions.

AS: Well, I have questions!

SS: I think the best interviews are real conversations, out of which questions then come, and it has to be an iterative kind of procedure that actually arrives at something that's useful all around.

AS: No, for sure! But, I have some questions [laughs]!

SS: It's very easy to misunderstand things.

CF: I tape everything, unless someone objects.

SS: I know you do! [laughs] You tape and you … !

AS: I tape the interviews because even if I take notes, there are some parts that escape always.

SS: Absolutely.

AS: Because I can't take notes of everything.

SS: Absolutely, but that is exactly the thing that you need to go back and have this kind of iterative …   And so, what are we doing now?

AS: Well, so I thought we could start with *slippingglimpse*. [SG starts being projected on the wall.]

SS: OK, I need to find my *slippingglimpse*. [pause while searching]

AS: … So I just made some notes here.

SS: So I'll say I looked over the stuff that I had on it, and these are I think the two best papers—this is Kate Hayles's paper …

AS: I've read that one and yours as well.

SS: And this one, you've read this one, right?

AS: I've read that one as well.

SS: I think those are the ones that most represent what I think is going on there … And then these are things where people interviewed me and asked me specific questions, and these are the answers to some of their questions which might answer your questions, too; I don't know, depends what your questions are. [Strickland shows an assortment of files that include essays by N. Katherine Hayles and Lisa Swanstrom, and e-mail correspondence with both.]

AS: I'm interested in, I've read now … I'm trying to kind of deep read, pay really attention to this kind of complex surface of both text, image, moving image, moving text; looking into the code as well, and then I was reading the papers on that …

SS: Did you read Paul Ryan's book?

AS: I've read some of his essays, and I was watching an interview with him, and the *Video Mind* [*Video Mind, Earth Mind*, 1993], I have it here.

SS: You have the *Video Mind* here and the Earth-Score system, and all that?

AS: From which he was basically developing video and his triadic ideas—

SS: Yeah, and his whole idea, the "threeing" thing, right, and that kind of goes back to Peirce, right? Where Peirce was a chemist, and so he'd talk about a thing having three hands out, like a chemical bond. It doesn't just go from two to three, like a threesome or something, do you know what I mean? If you can have three, you can have all the connections in the world, you can build up from three. He [Ryan] has a very profound idea of reorganization of social behavior, on the basis of these threeing things, taking the positions. First of all, there's his talking stick, where the position—using Peirce's firstness, secondness, thirdness, which is kind of like the initiator, and the respondent, and the mediator positions. Each person in turn taking one of those roles. That's the simplified way, but behind it, Paul [Ryan] was a really deep student of Peirce, as well as other technology of what video could do, and in particular—he was a priest actually.

AS: Yeah I was actually watching video of the interview [Paul Ryan in Conversations with Harold Hudson Channer. 12-18-95 Air date] that he has on his website, about that, he was set to ….

SS: Yes, and so you know what he did with the kids, where he had them videoing the ecological situations with the river or this or that. And they'd take different turns being the editor and all that kind of thing. So that was the basis of that.

AS: But he also developed this idea that, in a system where you have three persons, let's say, just in a dialogue, or trying to collaborate, there is always …

SS: A trialogue …

AS: Or a trialogue, yeah, exactly … that there is always one that is excluded from that system, whilst the way …

SS: Not in *his* system.

AS: Not in his system.

SS: But our systems now are always to other the other one, right? So… the *history* here is that I went to a conference on Mary Catherine Bateson, whose work I admire, and Paul also admires, and he showed not these videos [i.e., the ones in *slippingglimpse*], but similar videos in black and white, and … I just knew I had to do something ... so he kept using this word *chreod*, which I had never heard of, right, so I go up at the end and ask him what that means, and I get his book and I read his book and everything, and I'm looking and the diagram in the book for the relational circuit is wrong! [laughs].

AS: Oh, is it?

SS: Yes, it's wrong! And so Cynthia [Lawson Jaramillo] happened also to know him because Cynthia had him—he was a teacher at The New School where she was [teaching]; she'd actually taken a course with him on his threeing thing right?

AS: And had you been already collaborating with her?

SS: No, no … well yes, in the *Vnivers*e, right?

AS: In *V: Vniverse*.

SS: So that was really odd. We'd looked at all kinds of illustrations, for *Vniverse,* and decided none of them were right, do you know, [that is, while creating *Vniverse*, SS and Cynthia had reviewed many forms of illustration and multimedia, and explicitly decided not to use any, because it failed to support their artistic purpose] and [inaudible] video. But you know what, I can deal with videos of this quality. This is good. [By contrast, upon seeing Ryan's black and white videos, SS thought that she could use videos of this kind in her next work.] And so I had to … I prepared this presentation, and I said, look, we could automate this circuit and make it right. She could program it, so it would actually work right. So we went to him with kind of … we have this to offer you, this thing is wrong in your book and we can fix it up, okay? [laughs] And we'd like to see your, we like these videos you have. And then he became *very much* on board with it, and he has 21 of these, right, and so we went to his house and looked at them, and actually, at his memorial service they showed these, with our stuff, this set of videos [*slippingglimpse*'s]. But anyhow, he let us use everything, and when I read a little bit about the "threeing" and everything, it struck me that, from the point of view of this piece [*slippingglimpse*]*,* we were trying to do a "threeing" thing. With the positions of the text writer, and the videographer, and the waters coded, to read, taking the positions in turn, and that each of the three modes that you can look at this piece in highlight one or the other of those.

AS: *slippingglimpse*'s opening screen reveals, in my perspective, one of the primary work's relations with space, which is the composition with squares. At the same time, these small thumbnails, the squares, they also form a larger square as opening screen. In my mind, it actually recalled [Eugen] Gomringer's "silencio," a poem …

SS: The concrete, yes.

AS: Yes, a poem that … oh problem … no connection at all [Wi-Fi]. I want to test this. Let's see. Gom-rin-ger [typing]. In the sense that it also has the blank, and it has 1, 2, 3, 4, 5, 6, 7, and 8, ok. These squares in turn form a big square, and here [in *slippingglimpse*] we don't have that blank [in the middle], but we have the "select one to start." It relates with the big square and the blank space, but also with the soundless connection, the silence, that the piece doesn't have sound media. Was there any relation or none at all?

SS: It was not in my mind, no. I did not have that piece in my mind, when I did it. I think, I would have liked to have you actually be able to see the movement [laughs] …

AS: Oh, inside the thumbnails?

SS: Yes, inside the thumbnails.

AS: So that it wouldn't be static?

SS: No, it would not be static, then.

AS: So, the composition here [opening screen], when you were discussing it?

SS: Well, it goes around, in other words, you really can start anywhere, and it is written for you to be able to start anywhere, and put it together, but …

AS: But it goes 1 to 10, right?

SS: But also you can go 1 to 10, like that [inverting direction].

AS: So it kind of makes a cycle?

SS: Yes, and in the book, you have the book, right? You have the *Zone : Zero* book?

AS: Yeah, yeah, I have.

SS: So, you have: so you know that the first one would be this one ["upward"]; in the book, it would go this way [points at the projection, in a clockwise motion], with the "leaf" being the last one, in the book.

AS: Actually, this also started from the sense that I was trying to write about the sequence, and then, I didn't want to say, oh, "the green sequence." So, I was looking into the code, and ok, this is in Flash, it's closed source, so I can't actually read, but then I start looking through and through, and I went to these pages, through the parent directory, and then I found out that each one of them, they are named, as: the "green leaf" ["green" and "leaf"], "the cabbage" ["lettuce"] …

SS: Yes, yes, yes [laughs].

AS: Which is very funny!

SS: Well, which we had to do! To talk about it! We had to talk about it, we had to say which one.

AS: Because you had to name the files, right?

SS: [laughs] But the hardest thing I ever, ever had to do, right, and I think Cynthia [Lawson Jaramillo] talks about it a little bit in the [Dovetailing [Details Fly Apart]](#) paper, is … so, there were 21, and Paul [Ryan] said you could have whatever you want. And so she [Cynthia] is processing it, and processing it, and processing it, as she is transferring it. And it doesn't have the quality she wants. So she wants to get them directly from Paul, and Paul gives us off to his technician, Rafael, whom we can't reach. And so he [Rafael] says, on the phone, one night; he said, there's 21, he says, which 10 do you want? [laughs, surprised].

AS: Oh!

SS: I'm on the phone, I'm not seeing them, I'm only remembering them [laughs]. From having seen them, and it's not like they aren't all of water … [laughs]. How are you going to describe this? So it doesn't look like the other, whatever, 11 … So, that was the most demanding language task I ever faced was describing, on the phone, without looking at it …

AS: But then when you got the files from him, they came with a name as well, right?

SS: No, they didn't come with a name, we gave them names.

AS: Oh! So you gave them names?

SS: We gave them names just so that we could work with them. You know, I want to do on this page, I want to do on this page, but it's very…

AS: I was intrigued by the fact that when I looked into the … I actually managed to download just the videos as .flv files, and they had longer names.

SS: Yes.

AS: So, for instance, one was just called "leaf" on the page [HTML], and when you see the file, it is "turning leaf," or I can't remember exactly now, but the "sepia" sequence was "calm sepia" before. So it has more information, right?

SS: Yeah, yeah, the way we see …

AS: So we see this kind of waterscape as potentially tranquilizer, or calm.

SS: Though often why I picked some of them was, if you look … do you want to go into it, or no [into the running *slippingglimpse* file]?

AS: Yeah, of course I want. [I click on a thumbnail]. I actually like very much this one ["leaf"].

SS: So if you do the "high-rez," which is not exactly "high-res[olution]" really, but it is more …

AS: It gets smaller, but it's still pixelated, right?

SS: Yes, smaller, yes. You can actually see the water pattern best here. In other words, the words somehow don't take up as much of [your attention]. If you go, especially look at this "sepia" one.

AS: If I look at, sorry?

SS: Just keep … just use the little arrow [carat] at the right. Well, actually, probably go backwards for "sepia".

AS: Did you want to see the sequence 1 or?

SS: I wanted to see the one that's called "sepia."

AS: Oh, the "sepia," ok, so maybe if we go "home," it's this one, right? [I click on the "sepia" sequence.]

SS: Right. So you can see much more, and if we look at the "high-rez," … you can kind of see the pattern; you can feel the water, just what the water's doing. [I click on "high-rez"]. And to me, in "full-screen" you start trying to read the language.

AS: [I click on "full-screen"].

SS: More than you do here [high-rez], to me you don't read it as much, I don't read it as much when it's here, except when it breaks the frame. And of course, it was important that it did break the frame. And I think there's one of these in which it doesn't break the frame, even though it's supposed to.

AS: Okay, so full-screen.

SS: So in this cut, this thing, this mode is where I think, see there's this whole where all I'm really seeing is what the water's doing. I mean, I see some words, but I don't … I only really sort of pick them up when they break the frame.

AS: Because I was trying to see most of them. They first go forward, and then they go backwards, right? They rewind, the water rewinds.

SS: The image? Only some. No, not all. No, they're all different, they're all different, and I named some of those things in these papers too [Strickland points at essays about the piece], the different filters and things that he [Paul] applied to them.

AS: Then it becomes interesting how the words get attracted.

SS: Well that's the process, that's the read.

AS: René Thom's theory of attraction, how …

SS: Yes, exactly, but did you read the *Morphogenesis*?

AS: Yes, how the motion as well of the pairs, or the lines, they get attracted again, so they zoom in, zoom out, this kind of movement.

SS: Well, the lines are drawn by whatever's going on with the …

AS: With the water.

SS: With the water. Yes, but the water pattern itself is what Paul is calling the "chreod." I'll just send you these [the essays], because there's a little bit of what Paul is saying.

AS: Sure.

SS: He went in in this intuitive way, like the guy [Brent Collins] I was telling you about [previous conversation during the train ride to NJIT], who made these sculptures that later turned out to be mathematically so … He [Paul] spent so much time looking at these, and so much time studying these, so when he went to Maine to go up and down and do this project, he would seek out one of these patterns, but then he would video it in such a way as to bring it out, now that's an intuitive … that's a reading of the thing that he is doing. He's trying to bring out what he thinks the pattern to be, and then when he's doing the editing, he'll even further do that, like he'll reverse the color, he'll use the negative, or he'll turn it backwards, he'll do other things. It's not documentary, in other words. It is a documenting of these things, but in a very, a processing kind of way, a way that I call a reading, right? He's reading it, for what he believes to be there, and what he is seeing, but ...

AS: What he believes to be the pattern, right?

SS: It's a very active thing. It's not just setting up a camera on a satellite, you know, and pulling it away; in other words it's a production.

AS: Yes, sure, but in a sense it's some kind of stabilizing flux to reach a loop?

SS: Well, yes, each one is, each one is a reproducing pattern so that it [inaudible]. So even though the whole thing is turbulent, all the time, it reproduces the pattern, the particular pattern of motion that you find [inaudible].

AS: So, in terms of composition. I would like to speak about space, but before that, when the three of you or, in the collaboration, you decided to include a "scroll

text" as well … because it's just a portion of, it's like truncated parts of the full sequence that appears onscreen, right? [I click on "scroll text" mode.]

SS: Well, it's like this: The full lexicon, the words you see up there [with the video] are all drawn from what is playing beneath it. Not every word is drawn, so we chose from, I think, about 7 to 10 things, and the things range from one word to maybe a phrase. But since you don't know where it ends up on the water, two phrases, that are really separate phrases, could end up next to each other, and you might think it's a whole phrase. In other words, then you would read it as a whole phrase.

AS: But why was it important to have it? Because, for me, I think the way the interface was done, and this idea of thinking about text as flickering, floating text, which connects to the theme of the poem, as also the chreods as well; but then, from a reading perspective, it's very non-linear, of course, because you can make whatever readings you want. But then still you decided to have this idea of a more, let's say, conventional page behind, kind of like an excavation there, like a layer that is behind.

SS: Well yeah, because the point was: How does the water read this? How did the videographer read the water? How does the water read the text? How do *you* [Strickland stresses] read the text? How did the writer read the water to produce the text? So, the point is to *contrast,* to have a cycle of reading experiences which are *not* the same, but each of which are accorded an equal priority, an equal weight. In that sense, it does match up with what Paul was thinking, even though we weren't thinking of that necessarily, right? And Paul didn't do anything on this, other than let us have the videos. He was not part of the thinking of the piece, or anything like that. So …

AS: But for instance, like when you have that square there [in "scroll text"], which is divided in two columns, in that sense, you can also … it is very interesting because sometimes you can also do a non-linear reading, right? You can either read horizontally or vertically.

SS: Absolutely, and it's meant … Exactly. And the page is meant to allow you to read horizontally and vertically, and the text is meant to come down. When it's white text, it's very hard for you to see, but sometimes when the text is black, the text will break the frame and come down onto the scroll …

AS: Oh yeah, it comes down.

SS: So that you have all on this one page. You have the typescript, which was whatever *my* reading was, right, presented there; then *your* reading is completely dependent on how you use the pointer. I mean the speed that you allow it to go on, maybe you're reading it backwards, right? Maybe the video is going backwards, and you're going to put the pointer over here [placing the pointer on "-"] and let the whole thing scroll up backwards to read it. Or, in some cases, definitely, obviously, you can read it both directly across the line and down the line [i.e., down the column]; both meanings are good, like in the "turning leaves," when it says … the brush's algorithm. In the text there, where it says "you could / brush over the entire image algorithmically." Look at the "turning leaves."

AS: The "leaf"? The "turning leaf"?

SS: Look at the "turning leaf," yes. [I go back to "home" and click on the "turning leaf" thumbnail.]

SS: If you look at the text. [pause] No, keep going, keep going. It says "Genetic Brushes / an evolutionary model where you could / breed two brushes together." That's fine. Or, it's "Genetic Brushes / an evolutionary model where you could / brush over the entire image algorithmically." Both of those.

AS: Exactly.

AS: Yes, that's interesting that you can read …

SS: So the point is that you have to make these choices about direction and speed, and so forth. And your choices are not the water's choices; you have to scan. You won't see anything, unless you create a difference by scanning with your eyes, and see what's between one position and the next. So the way we got the water to read, the simplest way we could do it, was to scan—you know this, right, because you read [the essay]—for the color differences. Every time there's a pixel difference, of 10 … Where the words get reassigned, I think you know I like the way [inaudible].

AS: But that means that if you read—and that was my question—if you regenerate the sequence, do you actually get different pickings? If I would regenerate here [I click on "regenerate"], would I get different selections of, let's say, this matrix text that is there [in the scroll]?

SS: From there … Yes, you get different selections, but for each text there is *a* subset of things that have been picked.

AS: Oh, ok, ok!

SS: Ok, of phrases, of various lengths …

AS: And those are fixed?

SS: Those are fixed, right! Which of those gets picked, which of those gets picked first, that will change on the regeneration, and whether or not … And also it rotates, it rotates a little bit, and then they grow and they get smaller, they grow faster. I think they grow faster than they shrink, I can't remember. But the idea was to have the words … if water was going to read, then the stuff in the water had to sort of look like stuff that would be in the water, and so we tried to make the text be sort of like thready little kelp-y things, do you know, [laughs] that would be in the water, right? And that would look … which is why it's that font [Scriptina], which ordinarily …

AS: This kind of calligraphic font, thin …

SS: Yeah, yeah, but which is also just kind of thready … it was the most organic-looking font we could find. And then by making the text grow and shrink, and rotate a little bit, and just kind of look like it's …

AS: Oh yes, if you let it run for a while, then the video stops …

SS: And then the text stays, and it keeps …

AS: And then, after one hour or two, and then there is this moment where it stabilizes, it kind of [Strickland laughs], it begins to stabilize at a certain point.

SS: Yes! I don't think I've ever watched it for a whole hour! [laughs]

AS: And then you have maybe …

SS: And afterwards! But actually the text keeps running a lot, right?

AS: No, actually it happened that I left the browser open, and then I came back, after a coffee, and then it was, oh wow! This is behaving; the behavior was different, afterwards …

SS: Yes, yes, but it also keeps going, it keeps breaking the frame, when your image goes away, then it's this text is being generated, and generated, and generated, and generated … [Strickland is happier than ever].

AS: So for you, because one of my questions is: How do you think about space in your poetic practice, in general? But if we specify about *slippingglimpse* or *V: Vniverse*, my question was, because you were saying that it was important for you to break the frame, so does the structure …

SS: I think all of the things that I make …

AS: Do you structure the content according to the themes that you are writing about?

SS: All of the content though, what we were talking about with architecture. See, to me, another thing about these pieces, the difference between *[The Ballad of Sand and Harry Soot](...)* and this [*slippingglimpse*]; because I think everything about *SandSoot*, which is a very early thing, it was done very oppositionally, right? It was always Sand versus Soot, Sand would say one thing and Soot would say another thing. And there is a third element there, which is the picture. But it just contextualized their debate, or their love quarrel, or whatever; people have called it many different things, right? The purpose of [*slippingglimpse*] … This was specifically not one thing versus another thing. This really was about how do you find a kind of looping relation, and you have to look around, and look at different subject positions, and not just the ordinary back and forth debate sort of thing. And, I did not, with *SandSoot* I never thought of that architecturally. But beyond that, almost everything, if I had money, and time, and everything, it should had been an installation [laughs]. It should had been an installation, right? [laughs more] And in one of these papers, we talk about projects we would have liked to have carried on and did something further with, which we never could do, but we were envisioning, you know, further things to do. Yes, ideally, it would have been reflected in real water and … [laughs]

AS: But that's even a broader way of thinking about space, because then you have like … you probably would like to engage in this kind of hybrid real-augmented or real-virtual …

SS: Well …

AS: But in terms of the canvas, I'm speaking about this because in the *Vniverse* you have the constellations, the space of the universe … it's kind of open ...

SS: … in *Vniverse* for sure … we really did! There was a point where had, we wanted to have either real water or mylar on the floor [laughs], and have …

AS: A projection from …

SS: No! [laughs] Have hanging, the constellations would be hanging with sensors, so then you would walk through the space, it would be like you walking through the constellations, right, and then you'd set off a … if you interfered with certain of the sensors on a certain timing, then the poems would be … you would hear them, right, and they would be reflected in the waters … it's

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always difficult, with the sensors, and the walking, and the water [laughs]. We really did look into it— But the woman who was going to do that as a graduate school project at Georgia Tech, instead she got pregnant. [big laughs]

AS: Oh, ok!

SS: And I didn't have anybody else to work with!

AS: Can we say then that the content helps …

SS: Yes, the content goes on and on and on and on …

AS: The content helps shaping the space, both the structure of the poem, but also the way the composition is made in the canvas?

SS: It would be that way. It's just a flat diagram, obviously, in the *Vniverse*. But it gets spontaneously interpreted as stars. And we're looking at it on a dome kind of thing. But one thinks that in space it's a three-dimensional arrangement. The water itself in motion is a three-dimensional thing. And I think that's alluded to when you look at it, it doesn't look … compared to all the space around it … it certainly looks three-dimensional compared to what we're looking at here on the sort of rice paper, the flax paper. And if we look at this [*slippingglimpse* scroll text] now, this just looks like flat text overlaying each other. But when the water is there …

AS: Well, but it gives a depth to it …

SS: Yeah, but when the water is actually present, then it feels like a more three-dimensional thing, right?

AS: Oh sure, sure.

SS: If you have the full-screen, right? So it does present the issue to you of what dimensions are you reading in, right?

AS: This one, actually … The green is very beautiful … [I click in the "lettuce" sequence].

SS: Yes, where's that stuff?

AS: But …

SS: The big one, the full-screen one, that's the water doing its stuff with the words. I mean that's what you most see, not just the pattern in the water, but the water interacting with the words, right, for me, right? And this ["lettuce"] one, where you're faced with many readings going on at once … What you may *recognize*, first, is that some of the words up there—which you maybe can or

can't read at first—but after a while you can, right, read some of them anyway
…

AS: Yes, you can, right.

SS: And then you say, oh! It's some of those same words there. Is it *saying* the same thing, or *is* it the same? [The question is whether the text in the water is the same as the text on the scroll; in fact, it is a randomly displayed subset of the language present on the coordinate scroll-text display. Or, the question is whether the text in full-screen is the same as text previously generated for that full-screen.]

AS: Yes, that questions the …

SS: Those questions come up, right? I mean, or they don't! I mean, maybe not.

AS: Yes, of course!

SS: They come up if you look at it more than once, but not if you're just looking at it once.

AS: I am interested in time as well. You have reflected and written in many essays on many different conceptions of time in digital poetics, for instance, the time lag of the network, the code to be run, the reading time, and the intervals in which poetic lines are set and animated.

SS: I think the most of that … didn't I talk about that most in "[Writing the Virtual](#)"?

AS: Yes, "Writing the Virtual: Eleven Dimensions of E-Poetry." I've read that one.

SS: I think that one is where I talk about time a lot, right? But also "Quantum Poetics"
…

AS: Yes, the "Quantum Poetics" as well. But even in the piece about *slippingglimpse* there are quite interesting considerations about time. My interest is like, what, if it's possible to reply, and how, is the importance of time in your poetry as an expressive dimension? And I am thinking on three levels here, if it's possible to expand or elaborate on that: time, from the outset, for you, in the work's composition; in regards to, or if you are already thinking about the relation with the reading cognitive experience, from the reading perspective; and then finally, when live performing the work, when you read it. So this kind of three different levels.

SS: Well, when I write, I always hear it, I always sound it. So it's streaming time, I mean that's what you're working with, and that's linear, right? I mean you only get … there's some overlapping, when you're hearing … [inaudible]. So

it's completely different than visual, right? What happens if the water reads? The water reading here is certainly visual, right, so the time of processing those words, in that medium, is very different than if you were hearing it. When you're reading, especially when you're reading in the scroll, which is asking you what are you going to do with this line in the middle of it and the inclusions in the paper, you have to have imagistic, spatial kinds of reading as well as a time-based reading. [A handmade paper, with different-shaped white flax-like strands included in it, serves as the background for scroll text.] So, but you're still doing it, you're still probably saying it to yourself, or underneath your breath, sort of silently reading, which is still going on in a kind of linear time, at the same time the imagistic thing isn't. You're getting an overall experience. So stuff is coming in, from many different modalities. And so, what kind of time is it? What it is, is, concurrent times, that you're being asked to process, all at once, and to some extent they may be quite individual. Because you know some people are more spatial in their perception, and some people are more linear in their perception, or more oriented to the ear, or to the eye; or they are more oriented to the *meta-level*, to the structure, so how does the one play against the other, or what am I seeing in terms of the clashing experience of what I am getting here [video] versus here [scroll], or if I'm just trying to look at this chreod … Are these words interfering with it? Is it helping it? Is it …

AS: Is it getting more noise? Or, less noise?

SS: Yes. Is it noise? Is it what? So … the time, within the piece, all of those questions get raised. It's a different kind of time than reading a book, or than listening to poetry. All of that is different. And it's different than going into a museum and looking at a picture.

AS: Exactly.

SS: All of those things are different. However, when you perform it, I always like to perform this…and I collaborate on these, and I like to perform them with more than one person, and so often we would overlap our voices.

AS: In this piece?

SS: Yes.

AS: OK, I've never seen that one.

SS: You've never seen it?

AS: No, you would overlap and …

SS: So, when I'm reading, say I'm reading it with Cynthia, right, and maybe she would read from the video, and I would read from below …

AS: The scroll? Aha!

SS: The scroll. Or, I would … I never read straight down, I would pick out what I wanted to read from the scrolling text at any given moment, and then she would find something, sort of an improv …

AS: An improv thing? Devising the process there?

SS: Yes, but then the audience is hearing … there's only a certain degree of overlap they can hear. We're not; it's not …

AS: Sure, and if you're not reading exactly what's on the screen, then you're picking certain parts of …

SS: And I'm probably reading what's on the screen *somewhere*, but not on … if someone is controlling the speed of the dial, and someone else is doing the reading, or … *Sea and Spar Between* is like that, all the time … with Nick and I, someone is controlling! [laughs]

AS: Someone is controlling, but still you have … thinking about other pieces where you have … because obviously you think much about the cognitive process and the reading experience. You allow people actually to have a tempo; it's a balanced tempo where you can actually read. Because a lot of pieces of digital poetry, let's say, and sometimes it's on purpose, they are so fast, and you don't have a controller, so …

SS: Right.

AS: You just end up by reading nothing … and then it becomes kind of a texture, it's so different.

SS: Right, right. And that's exactly the view of certain people. They actually don't want to allow you to do that … I'm much more, and Cynthia too, we are much more … if you took a sort of extensive text piece, not at the advertising level of a few words per screen … How could you slow people down? She went on to become a photographer, and one of her first things was slowness …

AS: Slow motion, right?

SS: You've seen that, right?

AS: I've seen the slow motion videos ...

SS: So we were both very interested in an experience that could be contemplative, or meditative, or slow; or would you ever want to just stop and look at it, or watch it happen. Not a YouTube thing, you know … [I laugh]. But, it's very much against the grain of what a lot of e-lit [electronic literature] is … which is how fast can you do it and how … you know …

AS: Yeah, yeah.

SS: So …

AS: So that plays with speed, there.

SS: And that's another sense of the time. But for an actual performance, it's about the audience, and often you can, depending on the size of the audience, you can invite people to read with you, right? First of all, you ask them which one they want to see. And then if it's a thing, it comes up, and if they start to read something about the flax, though I think, the most mysterious thing is probably "The Passion of the Flax." You've read "The Passion of the Flax" story?

AS: No, no, I haven't. "The Passion of the Flax"?

SS: So, ok, the folktale … the screens in here that talk about the hunters and the flax and … so that's based on … If you look at … You have *Zone : Zero*, right? So if you look at the notes in *Zone : Zero*, in the back it's got this; and Kate [Katherine Hayles] talks about it also. Kate talks a lot about it, actually! Kate knows more about it than I do! [I laugh] Because she knew that the guy who wrote it—I just *read* it, right—Kate knew that the guy … [Strickland searches in her papers] Where is it? Eisler! This guy died before he could publish it! And this guy finished it, before it was published. So she talks about that in here! So you can get that in here. [Hayles's essay "Distributed Cognition at/in Work: Strickland, Lawson Jaramillo, and Ryan's *slippingglimpse*."]

AS: The folktale?

SS: The "Cognition" … You're sure you have this?

AS: Yes, I have it.

SS: You have this particular one?

AS: Yes, I have that particular one, from *Frame*, yeah.

SS: Yeah, from *Frame*, yeah. Anyway, so that's what's furthest from people. That's why I love that Kate could get why it was in there [laughs]. This whole thing about capture, which is really what this reading thing is. And all these things

are … capture something in a poem, capture it with your video camera. Now we let the water capture the text. It's kind of like, Stop doing that! [Humans, stop doing that!] Let there be another source of … The other place we did that impulse is in *Errand Upon Which We Came* … I don't know if you've seen *Errand*?

AS: Yes, I've seen *Errand*.

SS: There's a little silver butterfly over [inaudible], right?

AS: Yes, there is, there is. That you can …

SS: The butterfly pins the screen instead of … we got that off the Nabokov website.

AS: Oh yeah, I've read, because you've asked for artwork from other people, right?

SS: From the [Zembla website](#) … we got permission to do that. You know Nabokov went around pinning butterflies all the time …

AS: He was a lepto, lepido [lepidopterist] …

SS: So the whole thing was like, *No!* How do you invert the use of some of these things? How do you give agency to what isn't normally thought of as having agency? And how do you do that? How do you model that in an interface?

AS: OK … [I am taking notes now].

CF: What piece were you talking about there?

SS: *Errand* …

CF: *Errand*?

SS: Yeah.

AS: To … kind of module [should be model] the interface. [I am handwriting this.]

SS: Yeah, and where did I write that? I did write about that …

AS: I have a last question, but now I'll make another question. We've been speaking about mathematics, about literature, but also … I've sensed also that you've engaged a lot with political and feminist issues.

SS: Yeah—

AS: And I was wondering how do you … or if you could expand on how you try, or not, to incorporate those issues into the themes of your own poetry, or in the works that you've been doing? Or, if you sense that you've been shifting, or you think that different works require, that you work on different themes? Do you always bring different …

[Ian Hatcher enters the room.]

SS: Hey! [smiles] How are you?

AS: Hey, hi! [smiles]

Ian Hatcher (IH): Hi! [smiles]

SS: How are you?

IH: Greetings!

CF: Greetings!

IH: Hello!

SS: Hello … We haven't got off the first thing, so … [Laughs a lot.]

AS: Well … [I laugh a lot. Everyone laughs. Funkhouser and Hatcher start speaking about the class on electronic literature that Hatcher just taught.] Yeah, it was, so … about this …

CF: Feel free to talk …

SS: Well, yeah … it's always there. I mean, *True North*, it's in True North, it's like the witch figure in *True North*. I don't know if you have the book, as well as the …?

AS: Well, you know, I've read the … It wasn't the *True North* ... what was the … I need to go to your website, I can't remember the title. [I meant *Give the Body Back* .]

SS: So, both *True North* and the *Vniverse* have this witch figure, there's a constant … there's a thing about rape in *Vniverse* and how does this happen … ? And there's certainly the flax, this capture, this level of capture, which is always the lesser-powered thing, where you kill the plant, or you kill the animal … So I think the power relation is pretty much there, everywhere, seen differently. Even *House of Trust*, right?

AS: I read … as well one of your books, which was… no, it wasn't this … I read *Give the Body Back*.

SS: Yes … So … *True North*, or the *Vniverse,* the *V,* would be more … and then *The Red Virgin* too, in a way [*The Red Virgin: A Poem of Simone Weil*]. The *V: Vniverse* would be more focused on that. And… *Dragon Logic*, too.

AS: Oh yeah, I have *Dragon Logic* as well.

SS: It doesn't go away [laughs] … it just doesn't.

AS: No, for sure, these things, they don't go away [laughs] … So my final question regarding this, and then we can open up for just a very quick, quick, quick, on the iPad [piece with Ian Hatcher], I don't know [laughs]. You've been

collaborating with a few artists, programmers, and poets, but not musicians, as far as I know?

SS: No …

AS: The fact that your works don't include sound … Am I right? All works? There's one that …

SS: Well … *Errand* has that.

AS: Yeah, *Errand* does.

SS: And the work I am working on right now [*Hours of the Night*] has a few sounds …

AS: OK, so the question was regarding that sound media aspect, if it's because you see sound as an additional feature that might disrupt the silent reading—that you've been writing about, and also that we spoke about, the silent reading—of hypermedia poems that already have such a complex … visually and textual…

SS: I think there's that level, that it's one more hard thing, and we don't necessarily … [A student knocks on the door and disrupts the conversation.]

CF: Did you come to see me?

Student: Yeah, I did.

SS: But also … I think it was very disturbing to me, to see how differently things played back on different *machines* … [laughs a lot].

AS: Do you mean sound in general, or do even voices of readings…?

SS: Everything! The pace, the whole … To me, even the difference between looking at this [paper] and looking at this [screen] drives me crazy! It's like … [laughs a lot].

AS: Looking at …

SS: Yes, the difference just drives me nuts! So … it's such a …

AS: Do you mean in terms of saturation?

SS: Yes, just the whole thing, just the experience of that faded whiteboard behind it, as opposed to a very deep black screen behind it, everything about it. So, in general, it's not possible to have the level of control over [laughs a lot] what is occurring … that I would like to have had … And I think that it *was* one more element, I didn't want to just throw in … People said, "Why didn't you record your voice reading"? Which is like a stupid idea … [laughs]

AS: Yeah… because it's a kind of… it's a tautology!

SS: Yes, I mean, are you going to listen? are you going to read or whatever? It's like this not pay attention thing, right? The same way with the taping, right? Don't dupli…

AS: With the taping?

SS: Right, why I don't want you to tape the conversation, right?

AS: Oh …

SS: Don't *duplicate* a channel, if you can add something with a channel … if that makes it a more interesting experience, that's fine!

AS: But, that's from a perspective of, let's say, reading exactly the text, but, I mean …

SS: Well, I didn't …

AS: You've been collaborating with Paul, who's a videographer and an artist as well, and …

SS: And Ian's [Hatcher] a musician.

AS: Ian is a musician … so, you've been thinking …

SS: And I asked him, could you *please* put some music in *House of Trust,* and he [Hatcher] said, no, you have to be quiet in a library …

AS: Hah! [big exclamation]

SS: Don't write that down … [big laugh]

AS: [With a big laugh] No, I'm not writing, I'm just joking! [everyone laughs].

SS: It's a joke.

AS: No, no, but this thing of are you going to listen or read? It's important …

SS: No, I think there could be some things, little bits of … but I think it's hard to work it in with everything else … It's already a lot to work it in …

AS: Hmm, it was my sense …

SS: … to work *text in* … *text* that you really, that it's not … you don't already know what it's saying … it's not like candy or gun or find the treasure chest, you know what I mean?

AS: You need to decipher, and then you have imagery and …

SS: It's not text that you can … that's conventionally going to be what you think it's going to be. So you have to pay attention to it in a certain way. And then it's already on the screen, like in *V: Vniverse* or here [*slippingglimpse*], what you can do, it's overlaid, in both those cases. In *V: Vniverse*, if you, depending on how you see it, the level and the way in which those things assemble or not,

wherever you put your hand, or wherever else is overlaid on it. And you see decay, or whatever … How many of those waves are you going to … I mean, to me, that's enough to explore, if you want to explore the interface. I think, sometimes, the sound … like if you use sound in a movie, it tells the whole story of the movie. Essentially, you could *turn off* [laughs]. You can turn off the dialogue, and just play the music, it's very much doubling the movie. That's what it's hired [i.e., meant] to do, right? With the musician … That is not interesting to me … So it's like, oh, you didn't get the first time, so why don't we just …

AS: … give you sound so that you … or, give you text so that you understand, or that you decipher in other way …

SS: Yeah, yeah, why don't I just drop really a large sound in here to make sure that you've heard. But also, you don't know what you have, in this one you have the dial. Who knows what speed you're looking at this?

AS: With the …

SS: With ... *slippingglimpse*, right? So if you're looking at … How do I know what you're reading? Do I know if you're looking at the full-screen? Do I know if you're looking at the scroll text? Do I know if you're … how fast you're going to run the text?

AS: No, exactly! Yeah, yeah. Hmm.

SS: No, and I think the contemplation meditation thing goes more with silence, I do.

AS: Yeah, you don't need to have like contemplation sound to kind of … [laughs].

SS: Someone's talking to you, it's not …

AS: Yeah. Hmm. That's fair enough! So, no I just, I mean we are not recording … but the video, I thought like … so you've never done a video recording, like interviews with you?

SS: I avoid them, when I possibly can. [laughs] I have one! Not a video thing, it's like … [laughs]

AS: Let's kill the recorder, afterwards! [laughs]

CF: But you taped her, your interview with her, right?

AS: The …

CF: You taped your interview?

AS: The sound? Yeah, just because I can't take notes of everything!

SS: But there's the *Errand* thing …

AS: But what interests me like no, just sorry, but sometimes with some authors, it just, it becomes interesting, because then I can ... we were traversing a certain space and then I listen, and I see where we were … I kind of go back to it. Without the doubling side …

SS: There's a thing, there's a thing that Patricia Tomaszek did …

AS: I know …

SS: You know that? That interview ?

AS: The screencast.

SS: That screencast thing.

AS: But I think that's wonderful, yes, the screencast?

SS: Well, it is, there, anyway. [laughs]

AS: No, wonderful that you have access to that, right?

SS: And people have, right. So that's kind of like a traversal thing. And then I think I have been videotaped giving readings sometimes, right, even by Scott [Rettberg] maybe, you know, when I was at Bergen, I don't know. But I don't … I'm kind of in favor of *live* events …

AS: Of that experience … So how was, how was your experience then on the … you've now collaborated in 2 pieces?

SS: Oh lots, I've collaborated on them all, really!

[cross talk confirming that AS meant specifically 2 collaborations with Ian Hatcher]

AS: You've been doing collaborations, a lot of collaboration. But was there any … Well, the only traversal, let's say, or reading I saw of the app [*Vniverse* iPad App] was one you did in Milwaukee, at the Text Pattern [Woodland Pattern bookshop, during ELO 2014] so I don't have an iPad. I need to get something like that, too. But was there anything you were trying to explore in terms of the space?

IH: Oh, that was, was that *House of Trust*?

AS: Come again?

SS: What are we talking about?

CF: *House of Trust*?

SS: Well, in terms of the app, one of the things that long ago, when I first made *Vniverse* [*V: Vniverse*, 2002], I remember showing it to people, and people would say: God, it's an information science kind of thing … oh, that's a really good way to keep track of information. I mean, they were seeing it as a

construct, they had no interest in the literature or anything about it. It was just like, oh this is the way to keep track of things, you know, assign them to different constellations, or something, right? And it did! It let you get into that particular bunch of things, do you know what I mean, words, but, so when we were doing that … So the thing is that they killed Director! Right, I mean, you can get it, but … right?

AS: Yeah, you can still work on that, but, yeah.

SS: Yeah, but it's hard, right? So the whole impetus was to make it *available* again, in a more available way, and Ian was doing *Abra*, you know?

AS: Yeah, yeah.

SS: So, he was investigating software that would work, right, and … Hey!

[Andrew Klobucar enters.]

Andrew Klobucar (AK): Hi!

SS: Hey, how are you?

AS: Hey, thanks for the adaptor [iPad VGA adaptor].

AK: Yeah, I hope it works.

AS: Yeah, I mean, I don't think we are going to … are we going to show, no?

SS: No …

AS: Do you wanna take it?

AK: Sure!

SS: And so, the whole issue was how to do a translation.

CF: Happy thanksgiving, Andrew!

SS: Happy thanksgiving, Andrew!

AK: I've got two, because I'm Canadian.

AS: Oh! Really?

AK: Ours is in October! Yeah, I'm always trying to be different! October is better!

AS: Nice to meet you! [Klobucar leaves the room.]

SS: So we had very different ideas of what a touch screen was. And so, Ian knew how to operate with one.

AS: But do you think it became more fluid now on the app than [in the previous version]?

SS: Well, to me … and again I wrote another paper about that, called "Loss of Hover." [Written with Ian Hatcher, and presented at the ELO 2014 conference.]

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AS: I haven't read that one.

SS: So, it might be …

AS: Loss of?

SS: Hover. Some of these things are due to come out …

AS: Are you thinking of collecting your papers … ?

SS: Oh god, the thing is, they're supposed to be published. These people take 10 years to bring it out in a book or something. But I can send it to you.

AS: Sure! Sure!

SS: So what I objected to, I object to the loss of pixel-level control when you push your finger down on a touch screen. But I also, the whole way … the interface [of Director *Vniverse*] was designed in a way no one ever uses an interface. The whole point was to have a set of gestures that, *to me*, were an analogy for the things that the poem was themed to. So, you couldn't do that [on an iPad], and one of the main things that you could do [on Director *Vniverse*], is that you can hover with the cursor, without clicking, over words, and things will happen. Things happen differently if you *hover* over the thing, or if you actually click on the thing. And if you click on it twice, something different will happen, and if you click on it three times, something different will happen. And if you have something happening—either you *stabilize* the constellation, or you have things playing out, or the decay going on—if you hover over any other star in the sky [simultaneously], you can bring *that* into association with *this* [whatever you had happening]. It kind of holds you in between.

AS: So, in a sense, do you think that it embodies more the experience of that platform, more than the desktop version?

SS: It's just that the hover was important to me, you decide between this [Strickland touches the Director *Vniverse* screen and activates the stars], you decide between this, or you move over here and see what is this star? What is the bearing of what this star says on what's happening *here*. You could do that, right, because you don't have to commit in the same way you have to commit … on the iPad screen …

AS: In the other one [desktop version, built in Macromedia's Director, 2002], you have the numbers and you select from them.

SS: But what you can do with the iPad screen, and people love this, is that you can draw your own constellation, which is another whole valuable feature. And we've put an oracle, in a sense the little number circle up here [in Director version] operated like an oracle, if you just put a number in …

CF: This is *Vniverse*, right?

SS: Yeah, on the iPad.

CF: Right.

SS: We have the oracle on the iPad, and so that's there in a more specific way, and what you could never do in *Vniverse* Director, which you can do in the app, is play the whole thing through in tercets. You can play the whole poem through.

CF: And can you calibrate it?

SS: You can just start it and hold it up [above your head, as Steve Tomasula told me he did, to see it as a sky performance]. You just hold it and the whole poem will play out, so you'll see it go from one constellation to another.

AS: OK, kind of cinematic experience. In the other you only [inaudible] sequences.

SS: Yes, it will go, the whole poem will play. You start with one, and it will just keep going, through the whole poem, so you get all 232 [referring to the number of stars and of tercets]. It's also the *tercets*, as opposed to the *Son.nets*, and which is the way it was actually first written. But I didn't…when I first wrote it that way, I didn't think you could publish an entire book of run-on tercets, right? Now, numbered run-on tercets…now, people read on screens so much that scrolling and identifying little units by number is very *common*. So the new book [*V: WaveTercets / Losing L'una*, 2014] does that, it gives you back the tercets! But when I first wrote it [*V: WaveSon.nets / Losing L'Una*, 2002], they all were published in that Son.net way. And you could get at the tercets in the Director piece.

AS: Yeah, you can.

SS: You can get at them. But it was very hard to have a sense of how the whole poem would run through. Because, in no case, when you just have the constellation, you can't run around it [i.e., sample stars going around the shape] and get it in order [i.e., get the tercets in order]. In neither version can you do that. In the book you can do that. In the book you have a very good sense of how it runs from the beginning to the end. You could not do that with Director. You *can* do that with the app. So that gives you something that you couldn't get in the

other. What you can't get in the app … though Ian explains to me very carefully that you can do anything on the app, with enough time, to program it that way! [laughs]

AS: Exactly…

SS: And it's not inherent to [i.e. the limitations of the piece are not inherent to the iPad platform] … [to IH] Am I representing you correctly? You should say it, right? More or less?

IH: Almost!

SS: Almost! It's just that it was easier in Director to *hover*.

AS: But thinking now about the Director Son.net again, and I don't know if you can speak to that, in relation to here [*slippingglimpse*] … Is it true that it is always 14?

SS: Oh, mine are of course 15, right? [laughs]

AS: Come again?!

SS: Well, my sonnets are *Son dot nets*, right?

AS: No, I mean, in *slippingglimpse*, is it true that each time you read, you always get 14 sequences?

SS: No.

AS: Like in the sonnet?

SS: No, no, no.

AS: OK.

SS: What did you mean? 14? What are you talking about? Where would it be? Where is the 14?

AS: Well, it's 14 extractions, it seems to me, I didn't make them all yet, but…

SS: No, it's not true, it's not true. It's not 14 in each thing, no, no. It goes from … it's not the same in each piece either. The thing is that you don't know …

AS: You never get the same number?

SS: Well … no, no. It's explained in one of these things [papers], right? So it's like moving from 7 to 10 [approximate number of phrases chosen to be read by the water for each video]. But the point is, if you think … if *evolution* happened to come up in front of *evolution into the* body, you might think that's a [4-word] phrase, right? [But in fact the water only happened to throw them together, this time.] So, you can't really judge by what the water is … *The water has its own way.* [Says in a hushed voice.]

AS: Yeah. [We all laugh.]

SS: Which is the *point*. So, no, no. It's not 14 like that.

AS: OK.

SS: But what I most liked about the Director *Vniverse* was this ability to be able to bring *any* part of the poem together with any *other* part of the poem. Quick. What the app returns to you is what the book gave you, in the sense that you can now read it through from beginning to end. So, do you [to Ian Hatcher] have the iPad, so we can just look at the …? Oh, we just gave away the projector adaptor.

AS: Oh, yeah … But we can look in your … do you have it there? [Hatcher has a tablet.]

IH: Mm-hmmm.

SS: Oh, so we can just show … we don't need the projector. See how much better it looks if it's *not* projected … [laughs]

[Silence while waiting for the iPad.]

IH: It locks, it's too [inaudible].

AS: So what do you mean in comparison here?

SS: How much better it looks when it is not projected? The black! Are you kidding me? The turquoise is turquoise. [Sound of Funkhouser taking photos is heard. The iPhone button shot sound is heard three times.] What is that? So you know you can draw, right? If you start doing tercets, if you just let that go, it will go, from [wherever you start through to the end]. Supposedly this is enough time for you to silently read it. So this [pacing] is based on that time of silent reading. And it will go through the whole poem. But if you choose something different…like, let me choose, let me choose this. If I'm tired, and I don't want to start from this part again, any star I choose will become the beginning of the sequence that I'm now reading. So now the poem will go on from here. And I just picked that because this will show you a place where it switches constellations. So we stop going from that guy [the Conductor constellation] and now we go through all the Broom poems [the Broom constellation], and then we go to the next constellation. So you see *all* the constellations play out. You'll have *all* the poem in order. That is not possible in either the [2002] book, or the Director version. [But it is possible, by following the constellation-name-header in the *WaveTercets* book.]

AS: Yeah, you type what you …

CF: That's cool!

SS: The drawing is not possible in the Director version. But this is a very linear interface. This is actually a return to the book. Now, the constellations, here you can choose them, and you can read what you want, and you'll see that that's *not* the linear order, actually. If you go around the poem, [i.e., follow star by star around the constellation] 197, and then 200 is the next one, and so on. So in this sense, you can bring together some different sorts of text, but nothing like here [Director], where I can … well here [to AS] just stabilize it. You have to click on it to stabilize it. So now, I can bring anything I want across this Broom, or, if I start to … hit it again, hit something again … while that's going on and this is faint, I can also overlay that with any other part and ask [to oneself as a reader] How does this go? The closest way … there are also instructions for this [in *Vnivers*e Director], for how to read by touch or by number. That is something that I would say exists between all of my works: the difference between touch and number is a basic thematic thing …

CF: On a regular laptop you can't touch [the screen with your finger] … but you're just talking about clicking … [i.e., "touching" with the mouse pointer].

SS: Yes, by touch, by clicking on it. But the thing is, if you use a mouse, if you just sweep your mouse across the screen, you can do it. Which *isn't* clicking. In other words, that's the hover thing.

CF: Right, right.

SS: And you can just, there's this overlay feature that you can do. And the other capability is to type the number in here [in the circle upper right], and that's kind of like an oracle, but this [*Vniverse* app] is a much better oracle. Because we gave it 7 questions, we gave it *the* 7 questions: Who? How? Why? What? Where? When? Which? [laughs]

AS: Yeah, yeah, yeah!

SS: So … what's your question?

AS: Are oracles important to both of you? Like, spiritually … Because *Abra* as well also has this …

IH: I think so, I mean, I don't know if … can I talk?

SS: Of *course*.

AS: If … are you allowed?!

CF: Sure, yeah!

IH: For me, it has to do mainly with ideas around information and accessibility and black boxes, which have …

SS: Not to mention it's a computer science term. [laughs a lot]

IH: Yes, a computer science term. I've just written in my book, *Prosthesi*s, about oracles, Turing oracles, and so on. Just that idea of privileged information, the level of information that is inaccessible, I find pretty compelling in a lot of ways, as an idea and as a [inaudible], resonant and troubling, and it is simultaneously kind of magical, and also … troubling …

SS: It's also like a metaphor for, to me, the whole e-lit thing.

IH: Yeah, the e-lit thing …

SS: So much information has been encoded at so many different levels, that by the time … And you believe that you can kind of approach it, like it wasn't magical … like a lottery or a crystal ball, or something like that, you know? We bring these questions without *any* sense of how people … Somehow, you have to have things like black-boxing. You have to encode a whole lot, and make that one level, and then operate on that level, and then on top of that, and on that level, and that level. And eventually you get to a point where you ask the final *question*. So, which question do you want answered?

AS: "What do I love?" [citing one of the *Vniverse* oracle questions]

SS: You love Cantor and reindeer ... and wandering … and R2 … [the oracle says, choosing from Vniverse keywords].

AS: R2.

SS: Right, right! So I think that means that you should go to Finland …

AS: To that conference?

SS: Right, to that conference! I think that's what that oracle is saying!

AS: Do you know that Raine is organizing this conference? [Bridges Finland 2016, I ask Funkhouser.]

SS: Raine Koskimaa? Yes!

AS: Poetry and math.

CF: Poetry and math?

SS: Well the whole … Art and Math. So anyway, each of these things, this is interesting in that … and so then … the new book has *all* tercets and it has the

names of the constellations, up at the top of the book [meaning as headers on the top of the printed pages].

CF: Is there a new edition of *WaveSon.nets*?

SS: Yes, which is the *WaveTercets*. So you have the whole of the tercets, with the name of the constellation up in the corner of the page. And the whole is being driven to this by the technology, too, towards mobile, on the screen … I have a tinier [mini iPad] screen, and on a phone, which we don't have it for the phone yet, but you could make it for the phone. A tercet is as much as you are going to get. You can't have a whole Son.net [sized] kind of thing [on a phone] so that drives the language to be smaller, and smaller, and smaller, so it's a response to…

AS: To technology.

SS: Yes, and to what Adobe did, and to what happens to the technology in general, and to the affordances of the different devices …

CF: But what did Adobe do? What are you referring to?

SS: They are not supporting Director. I mean, what Apple did!

CF: Oh, right!

SS: Because Apple didn't allow Flash. It's not that there was ever anything wrong with the Macromedia products, right? They were lovely!

CF: I use them! I still use them! So that book is out, or is it coming?

SS: Oh no, it's out!

CF: It's out! I haven't seen it. No, I haven't seen either the app version of *Vniverse*. It's new to me.

SS: Do you have an iPhone?

CF: I have a phone.

SS: I mean an iPad.

CF: I do.

SS: You just download it.

CF: Yeah, I will.

SS: It's called *Vniverse*.

CF: Of course!

SS: [laughing] Says Ian Hatcher!

CF: But I love that piece so much, you remember I wrote a piece in the *American Book Review* on that.

[Discussion in the background, AS offering to drive IH.]

SS: I think Ian needs to get back to the city.

AS: Yeah, yeah.

IH: I have to, unfortunately.

SS: I think you need to run *now*!

CF: A bit jetlagged, professor Hatcher? [Hatcher had just returned from Berlin.] Do you feel jetlagged today?

IH: A little bit …

AS: Thank you so much Stephanie! This was lovely, at least to me!

SS: This is easy!

CF: Were you in Brussels when they were in the lockdown … [as regarded the bombing]

IH: I was not, thankfully.

CF: Yeah, yeah.

SS: He was in Brussels, but do you know that Nick [Montfort] was in Saint-Denis, supposed to give a lecture, which was cancelled because of the suicide bomber five thousand bullet-raid … I mean, he was like 10 minutes away from it.

CF: Oh, I didn't know that. I was thinking about that, because I knew you [Ian] were going to Brussels …

IH: No, I missed it, thankfully.