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Exploring the Nexus of Collaboration, Notation and Meaning in Mixed Electroacoustic Music

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Abstract

For acoustic instrument performers of mixed electroacoustic music, the location of meaning is as hybridized and perplexing as the place of the genre itself within musical practice. While most acoustic instrument performers within the (contemporary) classical tradition might search for meaning close to the score, those specializing in mixed music repertoire find that notation often proves a false friend, or at least not a map of the meaning of the work. This presentation is the result of interviews with performers commissioning new works for their instruments and electronics: Luciane Cardassi, piano; Laura Carmichael, clarinet; Dana Jessen, bassoon; Michael Straus, saxophone - and with the composers who have written works for them: Paula Matthusen, Chantale Laplante, Peter Swendsen. My questions revolved around the relationship of notation to the meaning of a work – with particular attention to what changes when technology/electroacoustics plays a part – and the role taken by collaboration in creating that meaning and notation. I suggest that many aspects of these new works, including meaning, are not "written" into the composition, but are "discovered" somewhere between the expertise of the performer and that of the composer. As such, this partnership is a prime example of the "Zone of Proximal Development", introduced by the early creativity scholar, L. S. Vygotsky, who described it as "the distance between the actual developmental level as determined by independent problem solving, and the level of potential development as determined through problem solving under the guidance of or in collaboration with more capable peers."

Introduction

The following is a fairly narrow slice of a large pie that I ordered to help me understand the nexus of collaboration, notation, and meaning in mixed electroacoustic music. I wanted to listen my way into the subject, by asking fellow composers and performers involved in creating mixed electroacoustic pieces collaboratively, what their experiences were. In jumping into a process that meant interviewing my peers, I wanted a better understanding of why and how an efficient (even beautiful) score is sometimes – often in fact – the reflection of the combined breadth of knowledge of the collaborators involved in its creation. This is not only true in the choice and design of more traditional notational practice, but also of newer score formats and types, often necessary in mixed music, like audio and video documents. I

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also wanted to see how collaborative interaction can lead to greater (verbalized) meaning, and its explanation via the score. This has often been my personal experience of collaborative work, but I wanted to see how that worked for other people.

It was comforting but also troubling to have my own feelings reconfirmed by others, even musicians I did not know before the interview (Heather Roche)[1]. The performers I interviewed all shared a passion for collaboration and were concerned about notation. The composers mostly saw the need for and were all open to better, easier solutions. What I hope to share here are some of my own conclusions, which unfortunately do not include a new notation solution.

For myself, the interviews allowed me to derive the following:

if
combined knowledge = more efficient (even beautiful) scores

and
shared experience = greater meaning

however,
more beautiful scores *don't always* = greater meaning

but what seems certain is that

combined knowledge		greater meaning
+	*often leads to*	+
shared experience		more efficient scores

What felt clear, was that there is a connection between notation and collaboration that can be exploited.[2] I use two of Peter Swendsen's works to illustrate such collaborative technical and semantic score-making. But back to the beginning:

The five performers who commission new works for their instruments and electronics that I interviewed were Luciane Cardassi, Laura Carmichael, Dana Jessen, Heather Roche, Michael Straus. The five composers who've written for these performers who I also spoke to were Monty Adkins, Chantale Laplante, Paula Matthusen and Peter Swendsen. I am also connected to the group because I've commissioned a piece by Peter Swendsen, but have been commissioned to write for Luciane Cardassi. In roughly one-hour-long interviews, I asked them a series of questions divided into three sections:

1. the meaning-score relationship
2. notation in electroacoustic music
3. the role of collaboration in creating scores.

Of the hours of interviews, there were some pieces that stood out in reference to each of my key questions, so I use them to give a kind of field report.[3]

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[1] One can argue that I work with and know people of like mind, and that is certainly true. Heather Roche was recommended to me by Laura Carmichael, who probably also would suggest someone of like mind. I am not providing an unbiased report.

[2] Obviously, this was good news, because that reconfirmed my recent composition projects. But perhaps I needed a little encouragement in that direction. In either case, again, this in not an unbiased report.

[3] In the EMS 2012 conference, I played these small sections because I believe there is much in the voice that is lost. I have all the interviews and edits available.

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Collaboration: how can it help notation?

Before the series of questions about collaboration, I read my experts the following from Lev Vygotsky, whose work from the 1920s on creativity and childhood development and learning felt true to me:[4]

> what we call the zone of proximal development, it is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under (adult) guidance, or in collaboration with more capable peers.

I suppose I wanted to show my own bias as well as to have them react to this statement to see whether their own experiences of bringing a piece to creation resonated with the idea of *scaffholding* – another one of Vygotsky's terms – each other to learn the next step.

This *scaffholding* – a temporary framework for construction in progress – of composers by performers who share information about the performance practice of their instrument and tradition, which is still essentially oral, is clearly explained by Laura Carmichael:

> In terms of contemporary music, notation can provide a lot of energy, because of the curiosity of different ways that sound can be expressed, and at the same time, whether it's Beethoven, or some really contemporary piece, the music is not on the paper. Not completely. So I feel like so much of our performance practice is about interpretation in that sense, and that is an oral tradition that gets handed down. You still have to make it into a whole, somehow. You can't just be stuck in the page completely, and the page cannot give you all the information you need, in order for it to come to life.[5]

And when it comes to electroacoustic music, what is not on the page increases when electronics are involved. Not only is there a performance tradition of the instrumental practice, but new instruction needed for how to score the electronic elements. Pianist Luciane Cardassi talked about just some of her frustrations with a lack of clarity in scores involving electroacoustic elements:

> And there are so many things that are often left outside the score. Like, the sound itself, right, when I play in different pianos, in different spaces. There is often a different acoustic, but still it is one instrument. Now if we play with electronics, everything is different. Just the placement of the speakers, for example, is very often not part of the score, not discussed on the score, or the kinds of sounds that the composer wants to have… You know, I would say most of the scores I see for piano and electronics, say it's for piano and stereo speakers or four, or a number of speakers, but the actual placement is very difficult to talk about, also because they don't know where the piece is going to be played. We would need to have some sort of explanation of what is wanted. And now, I'm not talking about a collaboration.

So I suggest that the performer can act as the ultimate debugger of a piece. I'm sure most instrumental music composers have had the experience of how much sharper the focus of a piece become when an expert performer asks questions. Luciane Cardassi is very interested as a performer in helping prevent disasters, as she explains:

> When I look at the score, and everything is so intensely and then so carefully notated, but I feel the composer went out of their way to make those decisions that will have to be different in a

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[4] And apparently very well-respected in the education community, at least by a friend of mine who used to teach ESL to teenage children of immigrants to NYC, Jennifer Michalsky.

[5] All quotes are transcriptions of my interviews with these musicians in April and May 2012. I have not edited or abbreviated the conversational style, other than to take out any pauses.

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different hall or at a different instrument. So sometimes I think it's excessive information, because you're trying to do, to give everything that's been so carefully decided, that it can be a really bad thing. Because I want to go and play everything, and then I go to a different hall, and it doesn't work.

Collaboration: what are the issues for scoring?

In collaborative work the composer -sound-score/meaning-sound-performer relationship can be very intense, because often the piece is written so specifically for – and in some ways so determined by – an exact performer. In talking about what determined the score of the piece she wrote for me, Paula Matthusen says:

> There's a weird sense of ownership that happens in electronic music between composer and performer that I don't think people necessarily talk about a lot, because it's not just that I'm giving them, like "your piece," I'm actually giving them you playing – those are samples of you. So I think there's something there that's interesting. And that's why in a lot of electronic music, in the notes I say, 'make sure to write that this was written for so and so,' because there is a sense in which the authorship is inherently destabilized by that, because it really comes out of this process of recording and back and forth, at least for myself.

I think Paula pretty much puts her finger on ownership issue, but I will not follow that tangent. I felt it worth mentioning, because it is an issue that mills around this topic. I would instead I'd like to focus on how mixed electroacoustic scores are often no longer just on paper, but include different types of media. Often that media, as Paula mentions, would not exist without the performer. In that sense, this invaluable information – and sonic material for the piece – would not be possible without collaboration. This is also where the general and specific knowledge that we call "performance practice" – usually passed along verbally, either in orchestration books or from the mouth of an expert performer – morphs from information about the history and practice of an instrumental practice into often non-verbal, sometimes entirely sonic exchanges, of the kind that happen intrinsically when improvising or playing chamber music. It seems to me that the conventional idea of "score" has yet to cross into a landscape where a written notation could be accompanied by, or even replaced with, some kind of score entirely in sound. Some composers have, of course, embraced the diversity that technology and studio-based techniques have brought to mixed music. Some of these even include conceiving not only of different performative media but also of pieces that challenge the linearity/hierarchy of the Western tradition with contemplations of interactive processes. Monty Adkins' studio-based composition allows for exploration of different approaches to putting mixed music together, including interactivity and the making of scores through collaboration. He reflected the following:

> No, I don't have any persistent frustrations [about notation] really, but I suppose this is because I've worked mainly with people who I know, or mainly with people who are used to working in this kind of relationship where you come into the studio, you record a bit – a single person or a small group of people – and they'll try things out, you record it, then you'll build up a relationship more through the kind of sonic backwards and forwards rather than notational possibilities. So more often than not, my questions are not, giving them pieces of manuscript paper and saying 'is this performable, can you do this?' It's more along the lines of 'if I want you to make this sound here that you made in the studio, how would it be best for me to notate it for you?'

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Obviously, here the intersection of performance practice and technology allows for new hierarchies and responsibilities towards the creation of the score.

Unfortunately, over the course of the interviews, my own feeling that the path is still wrought with difficulties was confirmed by the experience of most of the performers. Situations where the studio is used as an effective instrument for creating effective notation seem few and far between. Heather Roche, an active and enthusiastic performer and commissioner of works for clarinet and electronics, remarked:

> I've had a number of experiences working with composers where, when we're talking about the clarinet, then I'm the kind of the mountain, and then we go into testing things with the electronics and there were a number of times where I had to stop the composer and beg him, to tell me what was going on, because he was just working and setting things up, testing things, saying 'play this, play this.'
> Collaboratively, it was a very difficult moment, because in terms of collaboration, I'm more interested in dialogue and the effects that dialogue can have. When one person has not a clue what is happening, that's difficult. And that has only ever happened to me when technology is involved and that I don't know how it works.
> One of the things that I really like the idea of is, always being able to have practice patches or even just sections of the piece in mp3 even, to be learning the piece alongside the electronics. I mean, it would be like playing chamber music with six other people and only working together on the day of the gig. I don't know: how do you build chamber music with technology?

Of the many things that Heather brings up, I'd like to focus on two: first is the idea that there is not enough information about the non-instrumental parts and the other is that what is left out is crucial information about "what is going on", which for me has a direct link to meaning.

Adding to or replacing (parts of) the traditional notated score with other kinds of scoring (anything from the fixed "tape" of a piece, through practice patches and Frankenstein versions[6] to recordings of performances) are necessary for effective communication, from the point of view of making it possible to rehearse and perform the piece within the incredible chamber music heritage. What collaboration between performers and composers clearly does is offer a think-tank and testing ground for possibilities.

Trac(k)ing collaboration & creating meaningful artifacts

Finding common ground, sharing expertise, establishing meaning or direction, these are all hallmarks of pieces created collaboratively between a composer and performer(s). But is this, can this be reflected also in a score?

Lev Vygotsky reminds us that:

> The zone of proximal development defines functions that have not matured yet, but are in a process of maturing, that will mature tomorrow, that are currently in an embryonic state; these functions could be called the buds of development, the flowers of development, rather than the fruits of development, that is, **what is only just maturing** (my emphasis). (Vygotsky, 86)

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[6] I stole the name "Frankenstein version" from Monty Adkins, who used it to describe a proto-version of a piece where the 'live' instrumental parts have been stitched together with various recordings, simulations, etc.

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This brings two things to my mind:

> 1. That in such pieces, the performer has invaluable information about what the score should look like, since the piece took shape in that zone between compositional and performative practice.

> 2. Documentation of this gestation period could be of great use in defining the performance practice of the piece, i.e. the score.

Gerry Stahl, whose specialty is Computer-Supported Collaborative Learning, proposes that there are three stages in the creation of a collaborative work

> 1. People are involved in some collaborative activity involving their interpersonal relations, social context, physical objects, etc.

> 2. Some object, bodily gesture or word becomes associated with this meaning and acts as a persistent externalization of the meaning.

> 3. The artifact can later be used as an embodiment of the meaning that was created in the previous stages (Stahl, 530).

Even though Stahl is talking about a different field (I believe his work more largely to be in Education) of collaboration, I am attracted to the image of score as artefact of the generative process leading to the fixed work. As a result, I've focused some of the observations made by my interviewees through the lens of these stages defined by Stahl.

The first two stages imply musical intimacy – getting to know, not needing to say. Paula Matthusen gives a good example:

> This piece that I had performed last Monday, which was for mostly brass, winds, percussion, but it was also for electric and bass guitar. So James Moore was playing the electric guitar, and the conductor had a lot of questions about the guitar part. James is someone I've worked with **a lot**, he's performed a lot of my pieces, so I was kind of, 'Ya, James will know what to do.' He knows what I like and likewise, I know what he does, I love what he does, and so it was kind of fun, it felt a little subversive to have that performer in a very classical ensemble and to have him know what my aesthetic preferences are. It felt like a way of subverting the paradigm of having the very very classical fixed notation, and then, the performer still wins, I feel like.

Obviously what is going on between Paula and this performer is identifiable but not made overt in the score. She also reminds us that this nexus of meaning, score and collaboration is not at all fixed or stable, a subject worthy of its own discussion.

For performers, the relationship with the composer clearly raises the stakes on meaning in works. Michael Straus, whose commissions for saxophone regularly include real-time electronics, video and robots remarks:

> In terms of the pieces that I am performing right now, they all emerge from relationships with various composers. I think the meaning is in the collaboration, for me at least.

That has been my own feeling as a performer, since I have started working with composers. The interviews certainly confirmed that collaboration is of huge importance to my connection and involvement in the meaning of the piece.

It is also important to remember that the composer's injection of meaning or the performer's understanding of it are not the only ones however, as Peter Swendsen and Luciane Cardassi point out.

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Peter Swendsen:

> It is not so much that I see the performer the means towards creating a certain kind of meaning for the audience. Rather, I would look at the performer as a partner in that investigation of whatever it is that the original meaning that I either had or was trying to discover. And that together, I and the performer or performers would try to put this process out there for the listener to engage with and construct his or her own meaning. So there are really these three points: the pre-compositional search for meaning, the mid-compositional, working with the performer search for meaning, and then there's the resulting listener's search for meaning. But to get back to the middle point, the working with performers point, it's not that the performer's role is simply to enact my ideas but rather that we would find a way to bring both of our experiences to this process in a way that would make those come to life more so than I could do on my own.

Luciane Cardassi:

> I can't explain it very well: there's something about the energy of everybody there [the audience], trying to listen and get their own meanings, and that's beautiful. So I think there would be several layers there, several meanings: for the performer, for the composer, transferred through that piece of music and interpreted by the audience.

Like a snowball, then, a piece seems to gather layers of meaning as it rolls. And clearly, neither all of the meaning nor its story (with all its intricacy of collaboration) can exist in the artifact of the score. That said, I do think there are examples of scores that flow directly out of the collaborative experience, and as such are in some ways documents of the process. Peter Swendsen's *Northern Circles* and *Nothing that is not there and the nothing that is* are such examples.

Joining forces for effective notation: examples

Both Peter Swendsen's *Northern Circles* and *Nothing that is not there and the nothing that is* were written for specific performers (Dana Jessen/Michael Straus and Jennifer Torrence). Their scores were written largely as a response to working sessions and intense discussion about how to be clear. This clarity exists on many layers of the pieces: from the detailed description of the electronics, to various kinds of graphics that show timelines, techniques, and sonic elements in the music. I believe that the scores speak so eloquently for themselves (and are very effective for any performers of those instruments to follow, as is clear from the fact that the pieces have managed to live and attract interest beyond their first performers and performances), and thus do not need me to enumerate specific examples. I also mention that the original collaborators on these works all refer to Peter's pieces as examples of the best practice, and as such I believe them to be worthy of inclusion. One of the specific aspects that the performers praised was how well integrated the descriptions of the electronic elements of the score were.

The view from the tip of the iceberg

Obviously, eleven hour-long interviews with experts in their field include so many valuable ideas and ways to express them. In the preceding pages, the often lengthy quotes constitute such a tiny percentage of all of that material, synthesized to speak to a thin cross-section of all the issues that were touched upon. What was clear, however, from the discussions is that there is a strong connection between collaboration and the establishment of meaning, and that the

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score plays a role in carrying that meaning and certain artifacts of that collaborative process. Another aspect of the story is that of technology, which I have not overtly touched upon, other than to shine light on the fact that electronics do not always play nice with traditional notation and that new techniques and strategies are necessary. What I've also tried to emphasize is that collaborative practice can be harnessed to provide a space for brainstorming, testing and defining these strategies. Future questions include how new technologies interface with other performative traditions, and how studies of collaborative practice in other artistic domains that have creator-performer relationships, such as film, theatre and dance, deal with questions of notation, authorship and individuality.

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