Long Form Improvisation, Feedback Loops and Cybernetics

- A discussion of trans-disciplinary performance practice

Glenn Noble and Daren Pickles

Abstract

This is an edited and augmented transcript of a critically reflective discussion following performance-based research into the integration of theatre and dance improvisation practices and audible performance ecosystems. We discuss how the live work adheres to Cybernetic principals and how material is generated via this 'system of feedback' between the performers, technology, spectators and the environment. The discussion considers 'ex nihilo' creative methods and how 'meaning' is formed, drawing upon Marshal McLuhan's hypothesis concerning the 'post-literate society'. The ontological perspective is considered in reference to Martin Heidegger's essay 'The question concerning technology'.

Transcript:

DP - So, perhaps we should talk briefly about how this project came about.

GN - Well, Coventry University Performing Arts Department is unusual in that it not only contains Dance and Theatre courses but also Music and a BSc in Music Technology. I don't know if there's another P.A. department with this kind of portfolio, one that also includes technology? So when the students and staff collaborate on projects they invariably end up having some sort of technological edge. We also have a number of lecturers and professors who specialize in this kind of cross-collaborative performance with technology.

DP - Yeah, like Joff (Chafer)'s pioneering work with blended reality performance in Second Life and Adrian (Palka), who teaches across all disciplines but his research area is in making experimental music with the steel cello and technology. And we've got visiting professors such as Stelarc and also the interactive composer Rolf Gehlaar. So this kind of performance with technology is in the air at Coventry, it's part of the department's ethos.

GN - I also think the fact that we don't work in subject silos and live 'cheek by jowl' in the staff office; all subjects together, and in terms of teaching. It means we're constantly talking about, and sharing our research with each other. I've been practicing long-form improvisation for over ten years now and this is the third time I have drawn in Katye (Coe) and Joff to explore the work with me. I have worked with 'traditional' musicians improvising in the past, but I felt it was a great opportunity to work with the electronic music that you practice, and in particular the feedback loop process.

DP - And I've worked on a feedback dance/music piece with Katye before and when I saw the long form improvisation video of you performing in Liverpool, (Hoof! Spontaneous Theatre - Unity Theatre, April 2014), I was really stuck by how similar our work was, its kind of 'ex nihilo' nature and the way the disparate narrative threads at the start were drawn out and then interwoven.

GN - Yeah, it's also another type of feedback process…I will come back to this.

DP - OK, so I think we could both see the common themes running through each other's work and how well they might complement each other. Then our informal discussions about viewing this work via a Cybernetic framework were what really got us into a workshop setting. And I believe what we've found is that the live work DOES adhere to Cybernetic principles via this 'system of feedback' between composer, performers, technology, spectators, and the environment. So, the improvised performance is Cybernetic in that it recognises the non-causal, non-hierarchical nature of the man/machine/environment interaction. Also the fact that the complexity of the work arises from of the interaction of simple elements, and that order can, and does, arise from chaos, are both key facets of Cybernetic thinking (Wiener, 1946).

GN - Do you want to say a bit about the 'simple' technical process?

DP - In terms of what we are doing? Well, to begin with it's a *tabular rasa*, sonically speaking: Joff, Katye and yourself are mic'd up and the sounds of your speaking and movement are captured and recorded by me, sitting at the computer. So the sound is recorded and looped. Each loop is processed and played back into the space and then another loop is recorded and because the mic's are open in the space they record not only your voices, but also everything coming out of the speaker. So you get this very complex kind of sonic world built up, layer on layer, which is created from very simple initial inputs (your voices and movements in the space). It's a feedback loop that goes out into the environment and it then affects how you react, how you talk, and how you act.

GN - Yes, it is more than simply a soundscape or underscore.

DP - There is also the delay aspect, because the recoded sounds are from the past, which have been altered and then played back with a different sonic shape. They are layered so you get different sounds from different times, layered on top of one another, which alters the original 'meaning'.

GN - So in terms of the shaping control that you have: does it come down to a very simple set of options? For example, I think the first one is riding the gain control in order to generate some initial tonal feedback.

Image 1: [Daren Pickles. Photo by Glenn Noble]

DP - Yes, initially we do start with nothing. Then, in order to have some sound in the space (before you start speaking), I'll drive the gain on the mixing disk and that creates a feedback tone, which is taken in as the first loop and can often form sort of a bed for the soundscape. And by the way, feedback is the only sound that you can make which is inherent to the technology; you can always make feedback as long as there's a mic, amp, speakers and air in the environment.

GN - There is something about that: going into it with nothing visible. The 'tabula rasa' or the 'empty space' – to me there is absence and presence. The space is a 'substance' to shape, on which to make an imprint. After all, it's the sound of the space that begins the thing; it is the capturing of the sound of the space with the microphone. As if the work makes the 'substance' visible and audible.

DP - You're right it resonates; it's resonating off all of the walls and floors and ceilings within the space and the shape of the room in conjunction with the technology creating that particular feedback tone. We use it as a starting point but it's also a signal to the audience as to the beginning of the processes involved. In that initial sound we are revealing the core of the process. It's that thing of showing the audience the scaffold and revealing how it is made.

GN - I particularly like it because it's like a statement of intent: 'no tricks, no props, no plan'. The 'content' that starts to emerge does so from us simply entering the 'empty space' with spectators. This is Peter Brook's simple formula for an act of theatre to occur (1968).

DP - and it reminds me of the Alvin Lucier quote 'no ideas but in things'. (Rusche & Harder, documentary film 2013)

GN - The reason I asked: 'what were the controls?' is because I wanted to analogize the idea of a very simple set of technical 'controls' with some long-form improvisation principles such as 'mantras'. If you like, these are a set of constantly looping thoughts about how to make 'something happen'. We all have some basic technical processes that we're going to do, but we don't know what is going to come from them. Now, this is a vocabulary that's very well established within improvisation practice from Viola Spolin onwards. You 'mirror' (or feedback) what you see in the space: Spolin is quoted as often saying 'Don't initiate! Follow the initiator! Follow the follower.' (Paul Sills introduction, in Spolin, 1999: xiii). In this sense mirroring is actually plural – we think of 'mirror-copy' and also 'mirror-complement'; doing the other thing that the space shaping suggests. By being in the space and working in physical agreement, this 'following' can mean copying and complementing within the space all at the same time. So the mantras loop through 'mirror (copy/complement), explore, heighten, transform, mirror' and so on. The 'things' emerge from the space having a sense of substance, to be molded, shaped, cut through and sliced. And engagement with these 'things' leads to context being established – and from this 'ideas' emerge.

Image 2: [Glenn, Joff & Katye 1. Screen grab from video documentation]

DP - But it is more than just mime isn't it?

GN - Yes, it's the way you hold yourself; the way that you reach out to it and bring your hand back and discover what it is, already in your hand. So the language of mime is there in it, but so is an embodied sense of physical memory. This shaping space practice works alongside the mantras, mirroring, copying and exploring, in, for example: what kind of edges this space object has, in order for it to emerge; the use of space and gesture as well as the kind of movement quality or use of pattern and/or repetition – all of these simple body/space controls feedback within the system. This is then followed with the 'heightening' aspect of the mantras. You described this as akin to turning up the 'gain' – the creation of a positive feedback loop that creates an exponential increase in form, so that the simple starting action or shaping stops being what it once was and loses its original form. Then the 'transform' mantra takes you into a new discovery. That looping of mantras is the only control to make something happen, but by being embodied and present, the idea materializes within the space.

DP - The other things to consider affecting this space-shaping and transforming are the layers looping in the acoustic space as well.

GN - Well, to me this is where layering is a fundamental to the process really. The complexity of the sound layering is really similar to (and not separate from) the layering of the visual forms and fragmented narratives. This is where the sense of an autopoietic narrative comes from: as layers of speech, sound and action begin to converge with one another.

DP - The interesting thing that we found in doing it is that when you're starting from nothing it could go anywhere. It can just trail off and die if it's not fed enough energy! But usually the system that we're working with would encourage the narrative to spontaneously build up. Something would be said and captured and then you would move onto something else and that would come back in an altered form and maybe have a different meaning. Layering what was being said at the time and what was said in the past – there are so many parameters – and they all work together to drive the emerging narrative forward. There is also a lot that I can do with the recoded speech; I can 'musicalize' the vocals so that it doesn't sound like speech anymore but instead sounds like musical notes. Then you're into a mood being created as well; it's not just a speech-derived thing, after a certain point with such adaptation, the speech can be completely lost in the soundscape. So a musical mood can be created that's underpinning and setting a scene; an atmospheric bed that underlies; it's sort of filmic in that way.

GN - And for us, there is your capturing of the sound fragments, but also a capturing of the signifier of that physical, or scene material, and the capturing of these layers means that you have the potential for layering them or reincorporating, so you are providing a kind of a 'selection' or memory for us.

DP - I guess so, but it's not as straight forward as that because the sound world can be very complex, because there is so much going on. I might have eight to ten loops playing at the same time (and another ten on standby) all modified in different ways. It's up to me to pick what speech (or the music that's been made from the speech) is being fed back into the space. But it's not always straight forward as to exactly what track is producing what sound, so it can be quite unpredictable. I can't always quickly and easily go in, spot and push an element; it's more like riding a wave. It's one of the beauties within the system; it's quite analogue and unpredictable. So again, it's the machine, the process and the system all mitigating the outcome. I can push it in a certain direction, but it is not what I would call control. It's not like driving your car and deciding on what direction you wanted it to go, it's not that kind of control.

GN - Again, that's the same with the improvised material from the performers in the space. There isn't any theatre 'direction' or steering going on. There has to be a trust in the system, or performance ecosystem: a trust in its organic nature, in the fluidness of it. Something will happen and emerge…

DP - That's the beauty of it, something does emerge, something does happen. You do get a sense of narrative; you do get a sense of mood and intention. We're not intending to do 'narratively' driven work; we're not intending to create mood and emotion, but they are arising because of the system.

GN - I would say that we are intending to have a narrative emerge; for me there is an imperative from a particular 'theatre perspective' or aesthetic. We are intending to

have a range of emotions, a range of performance levels, we want to allow a variety of fragments of narratives to emerge and via the feedback loop/mirroring/reincorporation, these fragments begin to weave into a sense of a central thread, through simple shaping controls.

DP - Yes, but I think what your talking about are the 'simple' elements, fragments of emotion and narrative forming an overarching narrative (which I agree is achieved in the work). What I was talking about was *meaning*. We are not going in there saying this means this, and that means that. The meaning is emerging because of the threads of the narratives and the layering and complexity, which allow it to become meaningful on its own. That's the interesting thing about it, that it is very different from traditional music or theatre where the artist imposes the meaning upon the work. So in traditional theatre there's a script and a director, actors and so on and their all working to create this sort of platonic, perfect form that they believe the play can be. But actually, despite all of the structure in place to prevent it, every performance is different and the audience will ultimately walk away with different feelings and interpretations about the work. However, most work doesn't acknowledge that the performances are all different and it doesn't acknowledge that the audience may, in a sense, make their own meaning.

GN - Absolutely, I think an additional feedback loop is also provided by the audience. And because of this, it's where I feel there is a need for a performance formality, or performative responsibility – and this is a simple control too. It's not about naval gazing! I have to admit a level of prejudice - in terms of that area of free improvisation or jams, like the happenings of old; I find it often too self-indulgent. Omphaloskepsis as performance! Y'know – 'I see the improvisers having a great time, but what about the audience?' The more I do this, I feel an imperative for the material that emerges to be 'good' – to be witnessed and engaged with in terms of an audience.

DP - The audience is an additional element in the environment…

GN - the audience is part of the system.

DP - I feel if there's any meaning at all that we're trying to convey to the audience its about trying to examine what its like to *be*. What I mean is we're interrogating *Being* in the work. And I mean this specifically in relation to what Martin Heidegger said about technology; that it conceals Being. He said that there was nothing that we could do about this all-consuming force (technology) except recognise it and participate in it in a more radical way. He said that if we operated in this way, we might reveal true Being, if only fleetingly (Heidegger 1978).

GN - I certainly think we are being in the moment and I'd like to think that our use of technology is radical. We certainly recognise it's a vital and mitigating factor.

DP - Just to go back for a minute: what were you getting at before, when you were describing the shaping of space? Essentially, the work comes from nothing and then we are creating a sense of something. It's deliberate; it's a *tabula rasa*, where there is nothing there.

GN - I'm always aware of what the performance looks like visually in the space, from the audience's perspective. It's that imperative for 'good' work again. I mean using the space in a scenic sense and in the way that the themes and narrative fragments

emerge located somewhere within the space, so the space starts to develop an imprint both as a 'floor plan' and in the three dimensional form. Like I said earlier, I don't think of the space as empty – it is a moldable 'substance'. With space-shaping, we discover invisible objects, activities and architecture, but also a sense of the space being articulate in terms of tones and emotions, open and closed spaces and ranges of dynamics connected to pathways and movements. The way that we use space tells us 'where am I?' and 'what is this location?' and this precedes speech and scene. It provides context first and foremost. So it's an 'architectural' and psychological landscape, and because we are feeling around for different sorts of textures and themes to emerge, the spoken text is always connected to the physical space.

Image 3: [Glenn, Joff & Katye 2. Screen grab from video documentation]

DP - The interesting thing is that with the performance, there is a constant eroding and re-making of the imaginative space (the little imaginary environments and props you are creating with mime and gestures). Just when you get a handle on something happening, the position always shifts. That architecture and space you are imagining around you is always shifting…

GN - Yes: explore, heighten and transform…

DP - …but I think there's a big difference between the way we're using this theatre space and a traditional stage or virtual reality space. I have heard this called 'Cartesian space' (Coyne, 1995), where the space is all mapped out and is a representation of something that has a meaning. I think what we're doing is quite different to this; this is a blank space, in which we generate a constantly shifting imaginary space – but a very real environment. The space is always *emerging* and there's no map or meaning enforced on it.

GN - It's plural. The entire space is plural – essentially a place of montage that develops and then coalesces into an emergent dominant thread. Everything that we create in any one of these performances – where some 'thing' emerges (or becomes manifest) through the use of the space or a movement, or a scene emerges that is there to be discovered and reincorporated – never leaves the space. For me, operating in that three-dimensional space signifies things existing crudely, in DSL or DSR. Improvised fragments become connected to where they emerged within that one performance. And that's why you find the repetition of narratives occur, because you find yourself back in that spot… and often subconsciously, back in that pose or gesture… so that scene returns for reincorporation. The narratives loop back. The sounds do this too.

DP - Yeah, that's true but I also wanted to say something else about the sound and its role in the work, the fact that it's adding to what's going on, but in a subliminal way. If you were to watch a performance with ear plugs in (i.e. without sound) it would be very difficult to discern an overall mood or narrative (just as in film), so the sound (dialogue, music, sound effects) in a sense is telling the story. This relates to something else that I wanted to talk about in relation to the work, which is about Marshall McLuhan and his idea about our society today, which he called the 'Post-literate society'. He said we now live in an aural/acoustic world as opposed to the previous 'literate society', which was visual and text based. He also said that the post-literate society is akin to the 'pre-literate society' as this was also an aural/acoustic world. In both the pre- and post-literate societies, meaning-making is

formed collectively and outcomes were not fixed or preordained. I think this perspective really chimes with what we're doing. He also says that technologies in the post- and pre-literate societies are not merely a means to an end (as in the literate society where they were viewed as subservient tools), but instead means and ends become blurred and technologies could be used to drive processes and points toward new discoveries. I think this is very true of the way we are incorporating technologies into our process (Coyne, 1995).

GN - I think my understanding of post-literate theatre making is that actually the 'making of performance' acknowledges that for a long time, a particular dominant vain of British theatre ignored the visual and the physical. There was an apparent level of prejudice against anything that wasn't provided by the writer or contained in the written word and theatre was becoming anti-theatrical and anti-liveness (Harvie, 2005: 114).

DP - Well, it's just words on a page going through an actor?

GN - Yeah, and that's what much of our theatre practice has wanted to challenge. We 'write' in the space and that's why conversations about shaping the space are about the work leading us into the embodied discovery, we do the mirroring and moving and space-shaping and context-creating first – the 'playing', and then words follow…

DP - That is what is driving the language, it's your physical embodiment within the space that is the language. The sound in the space and the environment that is shaping the speech that is coming out. I'm not going to use the word text because it's not text, its embodied speech….

References

Brook, Peter (1968) *The Empty Space*. London: Penguin Books.

Coyne, Richard (1995) *Designing Information Technology in the Postmodern Age: From Method to Metaphor*. Cambridge, MA: MIT Press.

Harvie, Jen (2005) *Staging the UK*. Manchester: Manchester University Press.

Heidegger, Martin (19207811) "The Question Concerning Technology*"* in *Basic Writings*: Martin Heidegger, Krell D.F. (ed) (2011). Abingdon, Oxon: Routledge.

Rusche, Viola & Harder, Hauke (2013) *No Ideas but in Things: The composer Alvin Lucier*. Wergo, DVD. Original quote: 'no Ideas but in things' from William Carlos Williams poem Patterson, Book 1 (1946)

Spolin, Viola (1999) *Improvisation for the Theater* (Third Edition). Evanston, IL: Northwestern University Press.

Wiener, Norbert (1946) *Cybernetics: or the Control and Communication in the Animal and the Machine*. Cambridge, MA: MIT Press.

Biographies

Glenn Noble is Course Director for Theatre at Coventry University. He is a director, performer and musician who has been exploring long-form improvisation since 2005, performing all over the UK and in Los Angeles in collaboration with performers from Chicago's Second City. He continues practice-based-research into new frameworks for improvised narrative theatre performance and related pedagogy.

Daren Pickles is Associate Head of Performing Arts at Coventry University. He is currently researching feedback systems in composition, the application of Cybernetics to compositional systems and generative music for his Ph.D. He has worked with creative audio technology for over 25 years, as a recording artist with electronic music act Supercharger and as a composer for film and television.