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Performance systems: making vs. exploiting

A roundtable discussion

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Introductory statement

On the second and final day of the conference Remote Encounters: Connecting Bodies, Collapsing Spaces and Temporal Ubiquity in Networked Performance proceedings closed with a roundtable discussion entitled Performance Systems: Making vs. Exploiting. The purpose of the roundtable was to explore performance systems used by artists and to compare/contrast strategies of making custom technologies vs. exploiting or hacking pre-existing technologies.

The roundtable members were largely gathered from the second half of the conference which placed a thematic emphasis on systems in networked performance art. Members consisted of three speakers; Marc Garrett (MG), Erik Geelhoed (EG) and Ian Biscoe (IB), and two performers; Prof. Dr. Stahl Stenslie (SS) and Paula Crutchlow (PC) who each researched or worked with a number of diverse systems, techniques, media and approaches. The roundtable was chaired by Garrett Lynch (GL). Additional contributions were made by conference speakers or performers in attendance and members of the public. These included; Annie Abrahams (AA), Elena Perez (EP), Elif Ayitar (EA), Kate Genevieve (KG) and Matthew Jarvis (MJ).
Transcription

**GL:** Welcome to the second roundtable of the conference titled Performance systems: making vs. exploiting. I'm going to keep this very open, I want it to really be a discussion more than anything else mainly initiated by the members of the roundtable but also the audience feel that you can join in at pretty much anytime you want. I think there is a lot to say about this roundtable topic that we have, especially today, discovered. Apart from that I won't interject too much unless I need to pull discussion back on topic – I will be quite strict about that. Ok so I'll just start things off with an initial question. I'm going to start with you Ian and Erik. When you were giving your presentation Erik there was a question that came to my mind; there was a lot of focus on high speed networks, this came up in questions later and I was thinking about what thoughts you had on the new streaming services that are available online, Ustream, Bambuser and the availability of these to artists? Are you working with artists who are using these systems?

**EG:** Yes, we are working with professional artists with theatre companies in Cornwall, the big ones which are Kneehigh (Kneehigh 2013) in Truro and a number of smaller ones. Falmouth University as part of extending their brand, because of the nine thousand pounds you have to pay every year as a student, do online courses, they do an MA in writing, so this would be a way of extending online teaching in performance art.

**IB:** In the Vconnect platform, we are looking at more a controlled system and so we are using point to point tunneling using UDP communications. We are using industry standard protocols but really trying to understand the full end to end, and particularly in environments where you have something happening in one place which affects something in the second place but that loops back round as we talked about yesterday. There are interesting interplays in that but there are also opportunities to have virtually no latency in that and it's quite important to understand the latency from camera acquisition through to frame grabbing, processing, encryption or selective encryption and compression, transmission, decompression, projection and then back the other way. So the round trip from camera to projector and then camera at the other end back to projector. It's quite hard to do that when you start putting third party services in there. As much as possible we are using open industry hardware and software components so we are trying to create something that could be open sourced and somebody else could go and buy the same bits and build.

**GL:** While you were giving this presentation you were talking about this very high-tech sophisticated technology and about constantly reaching towards
almost an elimination of delay. I was just thinking about the BMW Tate Live (BMW Tate Live 2013) performances that have happened over the last year and a half, a very controversial subject I know. It's quite interesting how they have appropriated these fairly open technologies, things that have existed in Flash, YouTube popularised and Ustream have had for several years, they have adopted this and now institutionalised it. I was wondering about how that has now become integrated within an artists practice, how they have become a little more savvy about the use of the camera and streaming to a distant audience and so how it's changing their performance for that single lens, a mono-vision. We saw a little bit of this in what you were screening, it was working at certain angles and certain positions but then when somebody would approach the camera the effect on the other wall would be quite unusual.

**EG:** Yes you don't know what you'll find so I think one last thing which is of interest to everyone is that we are working with British Telecom and what they are interested in within this European project is to develop what they call service aware networks. If you are in a Google Hangout and somebody is on broadband but somebody else is on a mobile phone in the car how do you guarantee quality of service without degrading one so you may end up just shipping audio at some stage depending on how fast their drive and how much in reach they are. Just thinking about Annie Abrahams work, they may want to maximise as much as possible, so instead of an eight seconds delay to someone in Finland it may be five seconds. They are developing technologies for that with a view to applying them. Most university research is, stick a finger in the air and maybe ten years from now the aggregate of the bulk of research.

**PC:** You said on one of your points, it was beyond national theatre live, is it a learning environment or a performance environment that you are making?

**EG:** All three, it's rehearsal, teaching and performance. At the moment national theatre live, very expensive, they have the money and can spend a million or so on camera crews but even then it's only one way, you don't get audience feedback so one strength of the research we are doing and haven't touched upon is how can you get audience response. If somebody watches on their laptop the least they have is a little camera so because of this network component in the project it may be possible to stream back at least some peoples views getting some interaction with your audience.

**AA:** The guy who makes my interface is normally working on much more high end technologies than I am doing. He adapted it for me to be domestic and he has, when you are watching something you can put your webcam
on so all the people who are watching and who want to be, they can be there together, chat and see other people who are watching the same thing as you are seeing. So he has that technology.

**GL:** There was an equivalent to Ustream\(^1\) which was similar to Annie Abrahams setup with multiple screens. They had been running for about four or five years but they have now shutdown. They were at the time the only online service that did this multi-display system that you could join free and use free but apparently it wasn’t used.

**PC:** Is that what Occupy used?

**GL:** It may have been, I’m unsure, I know artists did start using it quite quickly as they saw a lot of possibilities in it. It’s now all collapsed, there was an email about three weeks ago saying that the company just weren’t making profit.

**EG:** Well one of the things I’ve learnt today is that if your ahead of the curve, even with a product that in five years time everybody uses you’re going to end up very bitter.

**SS:** What we are taking about here are visual connectivities, visual solutions, which I think is a really exciting field and I worked with people from The World Opera (The World Opera 2013) last year, but video conferencing historically is an American phenomenon after TV came in the fifties and in the early sixties they started to broadcast live video conferences in the US, very expensive and very high-tech. At the same time people in Europe started to research this and I worked for an emerging telecom for a few years with a team who started researching the possibilities of video conferencing in the early seventies. When I came in the mid nineties to this research lab and they were still a very high profile video conferencing company, and they were researching how to develop this and make it into a success. In the mid nineties, they did not have a success so during my years there and for the past twenty years they were researching how to make it function. Then when the internet came in ninety eight as a public research field they stopped their research on how to make video conferencing function into, shifting the focus, why it didn't function. So there was a shift in perception that colours our conversations now. We are still taking about how to make it function.

**EG:** The reason why the HP system Halo\(^2\) was so successful was because, and

\(^{1}\) This refers to Stickam.com which ceased operation in March 2013.
that's why I've emphasised design. At the HP site in Bristol we had two video conferencing systems which have cobwebs hanging from the ceiling, nobody used them. They all sat huddled around their little desk telephones which were also terrible but as soon as Halo came out it was really hard to book space. It was booked from seven in the morning until twelve at night and it was a success story and all the big global companies, Shell etc. bought them.

PC: There is a kind of efficiency. I guess I'm more interested in what happens with the inefficiency of our human response to that communication. What I think is why do you want to put the webcam on the audience? What will the audience gain from that? What will the performers gain from that? What will be the communication between them? It's a radical shift in what you consider audience and also it's a radical shift in how you compose live performance, from the very kinaesthetic awareness to all of your structuring around the relationship between embodied and disembodied. It's so complex. So your conversation is about speed and efficiency but the inefficiencies are far more interesting.

EG: So your questions about audience those are the research questions that drive us. That's the idea about research if you knew it you wouldn't do it. My point about Halo was that it was designed well not by engineers, so it wasn't a system view, it's about people and telepresence, how can you create an environment in which people feel closer, in touch with each other. The questions that we're addressing are all human. It was nice that you had high resolution cameras and a fast network but what I learned because we had delay that was almost three quarters of a second, which was quite high, so personally I would sacrifice delay for resolution. The perception of delay is not that high when resolution is good.

SS: But high resolution and less delay, if you have the best conference system in the world and an environment, will it still create a full sense of telepresence? I think the answer is given, it will not.

IB: It will be a different type of performance or performance orientated interaction. If you look back in history people never heard of anyone perform that didn't live in the local village and then we had roads and wheels, travelling bards. Then we had the arc-light and I'm sure at each point we had somebody saying oh I'm not sure about these performances at night because it changes the whole way that performers put makeup on and then

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2 Hewlett-Packard's highly successful Halo Videoconferencing Unit which was sold to Polycom in 2011.
there were films and talkies and suddenly those actors and actresses who didn't have good voices were out of business. I think it's about experimentation, you embrace new technologies and see what you can do with it, some of the stuff increases social inclusion, creates more opportunities for the arts and some of it doesn't but you don't know until you have tried it. That's what we are doing, saying we can see opportunities for new low cost technology to do things that isn't just about having something that is technically very complicated or capable, it is hopefully, but that gives you flexibility. Because it's relatively cheap we can play with that. The end system might need less technology or it might need two or three different types of platforms aimed at different markets but hopefully as theatre groups are able to travel less this type of technology might allow them to have part of their...It isn’t just about projecting them into a remote space it's the possibility of how a small theatre group in a remote island might stage a joint performance with a large theatre group in a large city and in one place two or three thousand people might go and in the other place there will be two actors perhaps but that might be part of that theatrical experience. Lets say they are in a church hall, the people there are getting an equally valid experience they are just seeing a different part of that theatrical show that is networked and involves two places and two audiences. That could be very interesting.

**PC:** Yes but people have been experimenting with that for years with that.

**MG:** What's quite interesting with MakeShift's program online Upstage is that it's doing that but obviously not money backing it because it's art. Waterwheel (Fuks 2013) is the other version of Upstage and it has commercial backing. It's cleaner and much more efficient as an artware tool or collaborative media online but what I like about Upstage is that it feels authentic. I like that your feeling the intention. It's a bit like how many colours do you need to make something decent. Picasso's blue period is a really good period for painting in art and I think the artist is tested, just like engineers are tested by the materials they work with, by trying to find ways around just having a small palette and working with that. I think that there is a split where neo-liberalism comes in and takes over, appropriates a lot of artists tools and turns it into something else. The artist doesn't become that important anymore or that interesting because the profit is the main motif. I think that needs to be critiqued, I don't think it is. As Ian said it's weighing up the balance of accessibility. A good example is Brazil which is currently having a YouTube revolution. It's downloading more films than any other culture now because they have fast access to the internet but it's actually made server farms heat up much more and so there are climate change issues regarding video through all these networks. As important an
issue as the accessibility is, I feel there needs to be a discussion. Capitalism, futurism and fast-forwardism I think needs to be critiqued at the same time as the excellent qualities of what people are trying to introduce within the technology. There is a larger picture that should be explored as well as what the needs are regarding the technology and its use. There is another picture around the back, around the other side, that isn't being looked at but needs to be. I'm not saying it's negative but seen as something that can actually produce alternatives and something interesting at the same time.

EP: I wanted to say something about what you were talking about in relation to Paula's performance. I thought the reason why it's such a successful performance for you is that it takes you to within reach of both audiences, the online audience and the physical presence audience. You're not only experimenting with networked performance but also experimenting with a purpose and so you are connecting people in order to do something; in order to participate with you. Not just connect for connecting's sake but connecting in order to do something else, in order to do something together. Your magical dramaturgy is taking into consideration everybody's sensibilities, everybody is somehow brought and invited into this performance and you are saying it's not that I am telling you to come and help me, that's what your saying basically, help me to do this together, so it's this sense of purpose that we all share together with you and with each other that's really the core of this success. It's the design as Erik was saying that makes the performance so interesting regardless of whether it's high-tech or low-tech.

PC: That's why I was asking you Ian whether it was a learning environment or a performance environment because they are doing completely different things actually. What's necessary, and any system proscribes what your body does in it, you can't avoid it. It's really confining so I guess that's what I was trying to speak about.

EG: I think it's good to crystallise that energy, for me it's much easier as a non-performer to think about the learning environment. The campus where we are, there is a school down the road and the dance lecturer does workshops with the kids there and he wanted to try out if you could do it with a remote school. He has specialised in working with wheelchair users and dance so he worked with a girl from Plymouth. How about setting up a really good link where she can see his movements. For me it's much easier to think about that. We create the blank canvas and then it's up to the creativity of all of you here or the students or when I get the lecturers out of their little cubbyholes they might even come up creative ideas. So for performance I find it very difficult, there is a learning experience there, we just leave it open.
Garrett Lynch  

Performance systems: making vs. exploiting

GL:  I’m with Ian very much in that I feel that while you Erik and Ian are striving towards a more sophisticated technology, a better technology, I think probably what’s common with all of us is that we are all striving in some way towards a better something. It may not just be a better technology, it might be the experience of the technology or it might be improving the performance because of the technology. One of the divides I’m hearing is that the high end technology, you Ian and Erik are the high end, and the more improvised technology, what you are doing Paula, as Annie is calling it situated in a home setting, is that yours Paula is about adapting to the system that you have made. You said this during the tail-end of your performance today that there was almost a struggle with the system, your fighting the system, constantly adapting because there is lag built in.

PC:  But it’s not just to do with the lag, the system is the set of relationships between the technology and the body and the audience and all of the audiences relationship with their screens...

GL:  It is and I’m not portraying it as a negative, I’m portraying it as almost a shaping force for the performance which can be very positive.

PC:  But my question to them is the same thing, it’s not to do with speed, it’s to do with the impact of the system on the body so my question would be if your teaching telematically what’s being learnt? It’s not a criticism, it’s a question, a genuine question, what is being learnt?

EG:  That’s our research question, now that we have this system we can put it in a teaching situation. In your situation Paula when the sound was lost with the performer in France and you had to reboot, with any technology it’s about the communication, even then you needed to do something about the technology.

GL:  Just to sum up that train of thought, there is a slight divide there in that there is an adaption on your part Paula and on your side Erik and Ian there is an improvement of a system, your working to adapt the system.

IB:  But I still think there is an adaption here, in our work, and I don’t think there is a divide. It’s all about people at the end of the day and if it doesn’t make people happy or it doesn’t do something useful for people then it won’t get used whatever the technology is and it’s just different mixes. There is the guy busking on the street corner with a guitar with three strings and there’s a philharmonic orchestra or a major rock group in a stadium, ether people will like it or they won’t and they are all different mixes of art and performance capability and technical skill and technology.
Garrett Lynch  

Performance systems: making vs. exploiting

PC: I guess my point is that it's much more about, in performance terms dramaturgy, collaboration, about the fact that the only reason that I feel like I have the knowledge to even attempt to do MakeShift is that I collaborated for seven years with film makers making short films with young people. I feel like there is a whole range of vocabularies that the performance maker or artist needs to be able to hold that space and more often than not you are failing so therefore in quite a number of them it's a group activity, it's a massive group activity. MakeShift was a group activity it was consistently responding to feedback so here we have two people in a bigger wider team who are representing just a part of what the aim of the thing is so there are obviously other collaborators who would speak differently.

EG: We are constantly in dialogue and our brainstorms are open and I would say efficiency drive is not the priority, I can see that in an engineering environment, but no for us it's about people and that's what I do as a psychologist so we are not ramming the technology down peoples throats and saying here this is good for you.

PC: People are still fascinated by this, by the fact that they can connect with someone like Hole in Space to people on the other side of the world, that they forget that it's in essence a cinematic image. It's not another theatre space and so that image has to be considered in relationship, so much more, with the performing body than it actually is.

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MG: I just wanted to talk about open source really and how much can you give back to the community regarding open source data. A lot of what we do at Furtherfield is accessible. People want the data for how to build their own Drupal websites but also some of the online performance platforms we have created and I was just wondering. I'm not saying the data we supplied them is that useful but it's a kind of ethos that we work with and it has been used by other groups and I think that has happened regarding Upgrade as well for Waterwheel. So I was just wondering what the data you produce, it's high end much more professional, what makes it less proprietary. If there is a spirit of open source within the ethos somewhere it gives back to the community outside, are you allowed to do that?

EG: Yes and that's the philosophy. We work in this Pervasive Media Studio environment (Pervasive Media Studio 2013) in Falmouth like the one we set up in Bristol and the whole thing is artists coming in, technologies, social

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1 Drupal is an open source content management system (CMS) for creating websites.
scientists like myself, people who know how to stage events and people talk to each other and it's all open.

**MG:** The data your using to make these.

**EG:** Yes that's all published because Ian builds the computers from scratch.

**MG:** So I can download it and put it in our space.

**IB:** Well you would be able to once we have got to a point where we thinks it's stable.

**MG:** I'll use the broken ones, I'm happy with that.

**EA:** I was actually saying this to Annie last night, my students sometimes come and say, graduate students, and I ask them what do you want to do for your project because they have to do a project and the response will be something like I want to work in augmented reality and I have to say sorry that's not what I asked, I asked you what you want to do. So I think it's about content, not just about people but about content. The reason why yours Paula works as well as it does is because you knew what you wanted to do and then MakeShift ended up becoming the means to an end in doing that but you already knew what you wanted to do, you already had an idea, you had feelings you had emotions that had been triggered by that Albatross photograph so there is a whole reason why you actually went and made an art work. It could have been performance art, it could have been augmented reality, it could have been an oil painting, it could have been just done with a pencil on a piece of paper. Your medium, and I'm trying to tie that in with the presentation yesterday about aesthetics because when I said aesthetics I did not necessarily mean beauty or harmony but what I mean I think, and hopefully it works, is the visual or sonic language you need in order to translate that content into a product, into something that is then participated in or viewed or listened to. When that crucial link is missing, which in your case it isn't as that is working absolutely beautifully then I think you have a viable art work regardless of whether it's performance art or like I said an oil painting or whatever. I think aesthetics is very crucial as it provides the language with which that is actually transferred into something else.

**GL:** I'm just going to move the conversation on a little, I'm very conscious that we are at the moment very much talking about visual systems, mainly streaming video systems and Stahl made this comment that he is not working in the visual side of things he's working with...
...invisible

...yes invisible, touch, so I want to pull you a little more into the conversation and I was just wondering if you had any thoughts about why the focus has been on streaming technologies, is it because there is a certain idea that they are easy to use, access, people have an inherent knowledge of cameras, pointing a lens because photography has been around for so long? I was wondering what you thought of the emerging maker 'revolution' and what might happen with relation to your practice?

DIY and Maker? Well first of all I'm not against high-res visual experiments, I think they very much belong to the whole body of media aesthetics and I'm very much at home in that field too but yes the Maker scene. I develop all these black boxes, Ian knows that too, the complexity of electronics. Apple started in their garage, they used surplus parts, that's really the maker industry, people gathering things and making new things out of it. I'm not saying I'm on that level, I don't think hacktics is on the Apple level but the access to things and the ability to make things attached to the computer was closed off until Arduino and the Maker scene came out. 2005 Arduino came. So we were using flat screens mainly for thirty years and now we are starting to do stuff and I think the approach of open hardware, it spawns a new industry and new thinking because we can make that ourselves. The quality is usually not the best but that's not the issue, the issue for me the idea of aesthetics and creativity, conceptual creativity, how can we conceive of new ways of doing things? They are a solution on that level as are my suits too, it's not always about the resolution, it's really coarse even if I have a thousand emitters. It's about how do we find new ways of applying things, to fail and to fail better. That's what I think is important here, we are allowed to fail.

To fail as best as you can.

It's quite an exciting time because as well as the emerging Maker 'revolution', there is now this emerging 3D printing revolution, and these are really now moving us beyond software.

We opened the seventh Fablab in the UK in Falmouth last Tuesday before

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4 The Maker 'revolution' or movement is named after technology based DIY culture with an emphasis on making physical things. It shares much in common with the hacker ethos which focuses on software. It has a number of associated organisations and publications including the Maker Faire and MAKE a publication by O'Reilly Media.

5 Arduino is an open source electronics platform (http://www.arduino.cc/).
we came up here for the weekend and the guy from Fablab Manchester was the first one there. This thing started about ten years ago really over in the states. We have all that kit but we have another room set up with a laser cutter, a small CNC (computer numerical control) 3D printer and I think two or three days a week that is completely free of use so if anyone wants to come along, work with the university, a local business or individual, they can come in and use that equipment as long as whatever they produce is open source so you've got that mix of things of being able to make. You can still come along use a saw and nail a plank of wood together as well, or sew a piece of material together.

MJ: Does it come with a technician? All these technological hardware needs someone who knows how to use the technology.

IB: We do have technicians yes and they also want to instil a certain ethos in people that use the facility regularly for free. If they become capable, because if you get something for free you should then share that, they are asked to pass it along. You do see people that just come along and use it and never share.

SS: Back to the political side of this. Again media archeology 3D printing is really cool but still you have to have a 3D model that is perfect and that's the problem with 3D printing. If you can't make a model you won't get a perfect thing. Twenty years ago they also said virtual reality for 3D modelling is going to be the new Photoshop, it's going to be so liberating but it never worked. So I think it's a revolution but in the end how do you liberate your creative potential because you can't just make a toy like that. You have to spend years learning how and this is the part of culture, learning focus, how do we utilise these technologies without enslaving ourselves? How do we use these technologies to liberate ourselves? Now we return to the theme making vs. exploiting or being exploited.

MG: I see this as a continuation of the industrial revolution so we are all playing part of that story here with regards to technology and production and I feel that I sympathise with the Luddite, I do feel there probably will have to come a time when we start smashing up the computers we are using to regain something.

EP: There is a situation now in terms of exploitation of the land which in-

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*Fab Lab or fabrication laboratory is a small workshop which supports Maker and DIY culture. MIT maintains a growing list of labs worldwide online ([http://fab.cba.mit.edu/about/labs/](http://fab.cba.mit.edu/about/labs/)).*
includes exploitation of coal mines to create mobiles and more computing parts. So there is a direct connection in our globalised world where we know information from different parts so people, farmers, are taking out their land, their productive land, to exploit for materials for us to have computers and mobiles and so on.

**PC:** But there are also processes that infantilises the machine, well the machines don't but the processes do. I feel if something breaks I can't mend it so I'm working with software I really don't know very much about. I'm starting to use it but I don't know how to code it and so as soon as you start you kinda go I can't do anything with this machine; if it breaks I've had it so therefore I am enslaved to a whole system.

**GL:** What would be your tactic to solve that? How do you move forward from that situation?

**SS:** If I could answer that, because that goes back to 3D printing which is kind of the reinvention of capitalism, you can't fix it but you can buy a 3D design made by some mechanical turk to fix it for you so liberating technology but it makes you buy even more.

**GL:** So how do you circumvent that problem of increasing consumerism?

**PC:** I don't because the other thing is, well if I just had some time I'd be able to learn everything in the world but you can't so therefore do it with others. You have to surely form alliances so that you share knowledge and you share expertise. So I might hold something that someone wants and maybe at some point I'll be able to exchange it so that I actually really get to know how to work a computer.

**KG:** I think 3D printing has a lot of interesting political potentials, it could shift the means of production in some really interesting ways. I've just been on a residency in New Zealand with the Maori community for a few weeks. The message that was really vehemently made was that technology was ruination. A difficult message and I understand why, living amongst fracking sites and a massive hole in the Ozone layer, that is the perception and is really strong there. But yes technology is here so rather than write it out of existence, my interest is exploring the new possibilities of communication that it can offer and 3D printing for example is another way that tactic communication might unfold. I'm doing a project printing my biosensing data when I'm eliciting happiness, that sense that you can hold a fear, that's a new thing. It's early days but there are depths within these kind of technologies that allow us to unfold so much about our sensory experience of
the world and actually start communicating what we previously thought of as interiority to people, that's really fascinating. I think the thing that keeps on emerging is this, let's not just connect for connecting's sake. I had a long conversation with Kevin Warwick's wife over a coffee recently which was fascinating, she allowed her body to be hacked basically, she could feel a signal from her husband. For some reason it was really painful, he was allowed an anaesthetic and she wasn't. The whole thing sounded absolute madness but all it is is one shock, I'm here darling, and that's not really deep communication for me. That seems more about performing the act of communication and I think something that's really emerging is right well we have been doing this for twenty years, maybe using performance technologies to start creating new means for communication is what we should all, engineers, performers and critics alike be more focused on, that question of content.

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GL: I want to pull it back a little bit now to performance systems because we are starting to get very very wide at the moment. There was a very interesting point that Paula raised which I thought built on ideas that Marc was discussing in his talk. You were saying Paula about not being able to fix things and the frustration with things that are out of your control because larger you're working with things that you've exploited, appropriated, these Flash technologies and your trying to use them cleverly. I was wondering about these propriety technologies, and I was building up an image as Marc was talking about software companies being the new neo-liberals, is that creating a sort of frustration which actually makes that hack aesthetic, does that generate the hack aesthetic? Has it come about because of that frustration?

MG: I think regarding technology rather than just shout at technology all the time you can find different values and those values could be social hacks as well as technical hacks and I think that's why we started DIWO, Do It With Others, which is a way around a curatorial hierarchy. Everything we do is about critiquing control, dominance, misogyny and masculine frame-

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7 Kevin Warwick is professor of cybernetics at the University of Reading. The discussion here refers to experiments undertaken as part of his Project Cyborg involving the implantation of RFID (radio-frequency identification) transmitters in both his and his wife's arms with the aim of communicating directly between two nervous systems from afar.

8 Do It With Others, an e-mail-art project on the NetBehaviour email list which culminated in an exhibition at the Furtherfield Gallery in London (http://www.furtherfield.org/exhibitions/do-it-others-diwo-e-mail-art).
works and so that's part of the aesthetic. Values are to a point kind of like philosophical aesthetics to some extent so they are not necessarily art with apostrophe aesthetics yet to me I think now that that kind of context is of equal worth as an aesthetic because I think that dialogue then becomes where you can include values within the aesthetic experience. That makes the work much more grounded in different ways and it doesn't have to be a specific piece of work to make that happen. So limitations, yes I do think create other situations that are quite positive but you have to be a type of person that would want to do that, want to make a change not through violence but through being creative.

PC: I think the really interesting thing about ownership, ownership when you learn something you own it and ownership when you are not allowed to interject into something. I think ownership and our need for consumption and I was saying to Annie Abrahams earlier that this project has really changed me because of the conversation, the endless conversation about waste and consumption that I have been having with all these people. You can't help but take it on board so what's shifted in me in this sense of ownership of things and as the project went on I felt the need to give out more control to other people and the more control I gave out the better the whole thing became. The more I learnt the less I wanted to buy, the more I wanted to make. It's the process of doing those things which enables some kind of empowerment. It wasn't overnight, it's a really slow thing.

MG: I completely agree, I feel exactly the same that the act of giving and sharing is not a kind of holly feeling but it's something where you feel fulfilled because it comes back in different ways and you learn from that. It's a way of experiencing something beyond ourselves.

KG: Giving in to the network?

PC: It's pro-active, it's not submissive, it's a conscious, massive effort. The effort of making that event between those three spaces, the effort to gather people together and go through this process just to get a small group of people together for this short moment in time and then the effort to hold it and to try to surf the fragilities of the technology as well, it's absolutely massive. It does take a big effort.

KG: I was thinking surrendering one sense of owning it. One makes all that effort yes but we surrender the sense of owning it as it happens.

PC: There is a thing about the aesthetic and the art aesthetic of ownership as well, you know all of those politics in how we pay for things and how we
consume art, I guess as well this issue of copyright within these different art making processes and how corporates have to shift and then all of the methods that they are using to try and keep hold of some sort of commodification of what's being made. I also find that really interesting.

GL: It's a problematic model again isn't it that they are trying to generate money and how that can conflict with creativity.

MG: It's a terrible thing because if your somebody who is exploring free culture, open culture, you can end up being put in a position that you're somebody who doesn't want other people to make money and I think that's a mythology to some extent. We have all got to survive, we have all got to earn money to survive, we are all existing within a capitalist system and we can't deny it. So I've got somewhere to live, I've got somewhere to buy food but it's the authenticity, which is not a very post-modern word obviously, of what you are after. As a Punk myself the spirit of what I liked about that is someone else can take control of the media on their own terms and no matter how horrible and nasty some of it was in a way it was the emancipation of a culture that happened. We all got fed up of prog-rock and we ended up wanting to create our own record labels. To me that was great because that created a revolution in eighties music. In a sense when you critique a system and you challenge a hierarchy good things do happen. The argument isn't really about economy, economy is just there to control it in one sense and that distracts us from the dialogue.

PC: It's kind of the Zapatista approach as well of creating the alternative.

MG: Well I'd rather have fun, live and explore things. There is a sacrifice, when you make some money you end up bland don't you, if that's all your aim is. But if you're someone who wants to take risks in life and really explore what people are as well as what technology is then you're going somewhere aren't you? You're re-evaluating your own relationship to culture and people around you and that's exciting.

SS: I was thinking in terms of the stage wise, because we are at a conference, because we are stage bound for this performance context we were thinking all about the stage space inside a theatre, and because we have been getting into the methods and talking about 3D printers my question is how you can imprint experiences outside the stage, to turn the world into a stage? The question of hi-res video quality video conferences versus mobile media, we had Sander (Sander Veenhof) with his mobile media yesterday, my body suit which is also mobile based, these technologies promise to be a tool like 3D printing to take performativity, like flash mobs and smart mobs into
the real world and that's an new area for performativity that should be explored. Marshall McLuhan said in the sixties, in the electric age we are all humankind as our second skin⁹ and so that's a question about social networks out there.

**MG:** What's interesting with using second skin is the data body of everyone as the second identity, their virtual identity which is the accumulation of data of what we use online. Information from Facebook, we visit Facebook or we visit sites that are being followed by marketing companies through browsers and all that. Does anyone know Heath Bunting? Do you know his project, the Status Project? (Bunting 2013) That is a perfect example of a second skin but the virtual skin and that information, flowcharts, grids, networks etc. each individual that he has done and then totted it all up at the end, the value of that individual, the status in respect to the state, what they value. He's being comparing that to objects, when you compare the work of a car compared to the work of you or myself or the work of a surveillance camera. What rights does a surveillance camera have compared to our human rights and what's becoming quite interesting is that object are gradually starting to become more licensed to protect their rights than humans. There begins to be a shift where our skin, our second skin, is also how we are being evaluated and not our traditional selves so you have all these shifts going on regarding how people are valued through systems. That's what we are dealing with in networked culture, it's not the fact of whether it's a failing system or not, it's all about how you're seen, what value you are worth compared to objects. Data, genetics is all part of that. That's what I find really fascinating, humans are being gradually shoved out of the picture. While we are happily clicking and waving at each other online everything is being collected and big organisations get lots of money out of this, big arts organisations sell data so that they can survive. I think Ars Electronica (Ars Electronica 2013) did it a few times when they needed money because it makes this big business. The ID cards that Tony Blair tried to introduce in 2006 or 2007 it wasn't because he wanted to survey people it was because the marketing companies wanted to buy the data from the ID cards. Data is big business and so our second skin is big business.

**GL:** On that point we are going to finish there, I know there are a couple of questions but we have to finish at some stage. Thank you all very much for coming to Remote Encounters and contributing.

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⁹ "In the electronic age we wear all mankind as our skin" (McLuhan 2002, 52).
References


About the Contributors

Garrett Lynch (chair, introductory statement and transcription)

Garrett Lynch (IRL) is an artist, lecturer, curator and theorist. His work deals with networks (in their most open sense) within an artistic context; the spaces between artist, artworks and audience as a means, site and context for artistic initiation, creation and discourse. Recently most active in live performance Garrett’s networked practice spans online art, installation, performance and writing.

Post-graduate of the École Nationale Supérieure des Arts Décoratifs (EnsAD), Paris, France Garrett is currently Senior Lecturer in New Media at the Faculty of Creative Industries, University of South Wales. He has previously taught on several new media courses throughout England.

URL(s): http://www.asquare.org/, http://www.asquare.org/networkresearch/

Marc Garrett (panel member)

Marc Garrett is co-director and co-founder of the Internet based art collectives and communities – Furtherfield.org, Furthernoise.org, Netbehaviour.org, also co-founder and co-curator/director of the physical gallery space formerly known as ‘HTTP Gallery’ now simply called the Furtherfield Gallery in Finsbury Park London, UK. Our mission is to co-create extraordinary art that connects with contemporary audiences providing innovative, engaging and inclusive digital and physical spaces for appreciating and participating in practices in art, technology and social change, whilst discovering alternate routes around already dominating structures/hegemonies, that critique hierarchical behaviours. Influenced by situationist theory, Fluxus, free and open source culture, and processes of self-education and peer learning, in an art, activism and community contexts.

Co-curating various contemporary Media Art exhibitions, projects nationally and internationally. Co-editor of ‘Artists Re:Thinking Games’ with Ruth Catlow and Corrado Morgana 2010. Regularly hosted Furtherfield’s critically acclaimed weekly broadcast on UK’s Resonance FM Radio, a series of hour long live interviews with people working at the edge of contemporary practices in art, technology & social change. Currently studying a Media Art history Phd at the Birkbeck University of London.

Net artist, media artist, curator, writer, street artist and activist. Emerging in the late 80’s from the streets exploring creativity via agit-art tactics. Using unofficial, experimental platforms such as the streets, pirate radio such as the locally popular ‘Savage Yet Tender’ alternative broadcasting 1980’s group, net broadcasts, BBS systems, performance, intervention, events, pamphlets, warehouses and gallery spaces.
Garrett Lynch  

In the early nineties, was co-sysop (systems operator) with Heath Bunting on Cyber-cafe BBS with [http://irational.org/](http://irational.org/).

URL(s): [http://www.furtherfield.org/](http://www.furtherfield.org/)

Paula Crutchlow (panel member)  

Paula Crutchlow is a performance maker and director who co-authors live events across a variety of forms. As a co-founder and director of Blind Ditch she combines digital media, response to site and heightened performance modes to engage audience and participants in distinct and active ways. Her work often uses a mix of score/script, improvisation and structured interaction to focus on boundaries between the public-private, and issues surrounding the construction of identity and the politics of place. Paula is currently the Artistic Adviser for Adverse Camber directing work with some of the UK’s leading storytellers, she was an Associate Lecturer in Theatre at Dartington College of Arts, Devon 2001-10, and teaches Digital Performance Practice at the University of Plymouth.


Prof. Dr. Stahl Stenslie (panel member)  

Prof. Dr. Stahl Stenslie is a visual artist, curator and media researcher specializing in experimental media art and interaction design. His artistic focus is on art and artistic expressions that challenge ordinary ways of perceiving the world. He has a PhD on Touch and Technologies from The School of Architecture and Design, Oslo, Norway. Currently he is teaching as a professor in Art and Technology at Aalborg University, Denmark.

Ian Biscoe (panel member)  

Ian Biscoe’s background as an entrepreneur, engineer and raconteur has seen him build a number of companies in Europe and the Americas. His business and engineering activities have straddled electronic, mechanical and software expertise in the fields of aerospace, process control, entertainment and telecommunications. In between his own business ventures he has served on the boards of FTSE100 and Fortune 500 companies. He more recently studied Architecture and Landscape Architecture before coming to University College Falmouth as a PhD researcher investigating Cognitively Enabled Built Environments. He maintains a blog on his research activities at: [http://cognitiveenvironments.wordpress.com/](http://cognitiveenvironments.wordpress.com/). As a part of his research at Falmouth Ian is currently designing and equipping the new AIR
Garrett Lynch

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(Academy for Innovation & Research) building with a network of wireless enabled environmental sensors, enabling the building to perform as a living laboratory, investigating the potential for improved communications between buildings and their inhabitants. He is also designing and building a Bee Research Facility which will be fabricated using engineered timber and erected at the Tremough Campus.

Erik Geelhoed (panel member)

Erik Geelhoed is a Research Fellow at University College Falmouth working on the Vconect program. Previously, with a background in psychology, he worked (1992 - 2009) at Hewlett-Packard Research Labs emphasising the importance of user requirements research in technology development and design. He worked with a number of art and community organisations during his time at HP.

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