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Meaningful connections: Exploring the uses of telematic technology in performance

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Abstract

Telematic or networked performance is an art form that emerged in the 1980s that applies telecommunication technology to performance. Today, there are typically two versions: high-tech and low-tech. Hi-tech telematic performance has been criticised for focusing on developing the technical and dismissing the aesthetic, by merely displaying the telematic connection in a theatrical manner. In this article, we will look at performance works that go beyond the mere technological display of the connection and examine what the technology is being used for in aesthetic terms.

We will conduct a comparative analysis of two low-tech telematic performances that represent two large trends of practices within the field. On the one hand, the performance ON LOVE (2013) by Dutch visual artist Annie Abrahams uses telematics to create visual and dramaturgical juxtapositions. On the other hand, the performance make-shift (2012) by British theatre directors Helen Varley Jamieson and Paula Crutchlow uses telematics to engage remote audiences into active participation and collaboration. Through the analysis, we will be able to identify the purpose behind the technology while bringing forward the artistic strategies that are being used and this will help us develop an aesthetics of telematic performance.

1 Introduction

Telematic or networked performance is an art form that applies telecommunication technology to performance. More specifically, telematic performance uses telecommunication networks to establish links between remote spaces, and presents the activities in those separate spaces at a single performative event. As a genre, it traces back to the 1980s when video conferencing enabled remote visual connection, allowing artists like Nam June Paik (1984) to "begin to (telematically) talk, simply to (telematically) talk" (quoted in Dixon 2007, 420).

Today, there are typically two versions of telematic performance. One is high-tech; it uses teleconferencing to connect full-body performers in two or three dimensions, has high resolution, and is expensive and cumbersome; so technically complex that it needs to be mounted in a fixed location. The other version applies low-tech, domestic technologies such as Skype, has low-resolution, is cheap and pervasive; technically so simple that it can be used anywhere (Geelhoed 2013).

Since its early beginnings, high-tech telematic performance has taken place almost exclusively within university networks, since it could only be carried out thanks to the collaboration between scientists and artists (and sometimes supported by private industry) in networks with abundant funds and technical resources. This type of collaboration has become a widespread and celebrated practice within the scientific community, since the disciplines involved help each other fulfil their own agendas while simultaneously contributing to academic inquiry (Faver 2001; Sheppard et al. 2008). That is, scientists use performance to further develop technologies, planting their technologies in social aspects of human activity while also researching ways of commodifying these technologies. Artists, on the other hand, use technology as a means of experimenting with innovative machinery to pioneer the development and modernisation of the performance field.

This apparently beneficial collaboration has resulted in two problems. First, due to its high-tech nature, high-tech telematic performance remains a rarity in regular theatre touring circles, since such groups usually cannot provide the appropriate technological means or adequate broadband for transmission. As a consequence, high-tech works remain as laboratory experiments of scientific departments in research institutions, are used mainly as academic proof, and become part of a large 'network of citations' that legitimates the genre within the scientific community while producing research insight (McGonigal 2006). In this sense, high-tech telemat-

¹ In conversation with telematic dance practitioner and theorist Ivani Santana (2013) under the frame of the Remote Encounters conference held in Cardiff, 11-12 April 2013, she explains how in her experience, the reason for high-tech telematic performance not to be shown in regular theatre and dance venues is not because of the technology per se but because of the broadband that cannot sustain such heavy data flows.

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ic performance emulates the future of performance, helping to define and advance the field, but as they are too high-tech to be performed in regular theatre circles, such performances work more like a vision of what performance can be rather than an accurate representation of the state of the art.

The second problem rests in the fact that high-tech telematic performance has been criticised for working only as technological demonstrations with no aesthetic value in themselves (Berghaus 2005; Dixon 2007), since they use what I have elsewhere called a Shock and Awe Aesthetic that seeks to impress audiences only with technological display while dismissing the aesthetics of the works (Pérez 2014). Performance and game scholar Jane McGonigal warns about the risks of the convergence of art and technology and argues that "projects that seek to advance technologies further risk undermining the aesthetic for the sake of the technical, and create works that are technically advanced but offer little interest as cultural products" (2006, 140). It then becomes important to ask where exactly is the value of these works located and what role is technology playing in this genre.

In recent years, there has been a proliferation of telematic projects within art circles, as video conferencing has been made available to artists and the everyday, ordinary person. These projects are low-tech versions that provide crucial information on the real, as opposed to the 'envisioned', aesthetic qualities and possibilities of this genre.

In this article, I propose looking at making a comparative analysis of two lowtech pieces: ON LOVE (2013), by Dutch visual artist Annie Abrahams, which uses telematics to create visual and dramaturgical juxtapositions, and make-shift (2012), by British theatre directors Helen Varley Jamieson and Paula Crutchlow, which uses telematics to engage audiences into active participation and collaboration. Each piece represents a body of work currently taking place in theatre and performance venues.

I shall argue through my analysis that the artistic value of these performances rests in the ways in which they give technology a role, using it with a clear purpose or artistic intention other than mere technological display of telematic connection. I also identify the artistic strategies used and what is achieved through the works.

2 The performances: ON LOVE and make-shift

From their homes, in front of their web cameras, nine English-speaking performers communicate on the issue of love. The performance, ON LOVE, follows previous works in the frame of the Angry Women research series that Annie Abrahams started in 2011 where performers communicated and collaborated using anger as a theme, and where anger was displayed onscreen using the web cameras as facilitators. ON LOVE changes the subject but also aims at displaying the performers'

understanding of love in an environment where performers are physically alone, but digitally together (Abrahams 2013).

The performers are united in a webcam grid visible on their screens and projected as one single video in one main performance space. This performance space is responsible for controlling the shared sound and image, as it is the only space with a sitting audience, who watch the video projection as if in a movie theatre. The audience members' role is to watch and mentally process and decipher the conversations.

The performers execute a protocol or script together. Sometimes, this is expressed as a simple rule or sometimes a few pages of text, but there are always open instructions that need to be negotiated by the performers during the performance. There are certain rules that regulate this communication while simultaneously adapting it to the performance setting, which are the following:

- The performers are connected, using a webcam, to a shared interface where they can see images and hear the sounds from all the other performers;
- Because of network delay and the way the interface has been constructed, no two performers receive the same images and sound at the same time;
- To avoid difficulties while speaking due to digital delay, performers must wear a headset to avoid hearing their own voices, and cannot judge their participation in the total sound environment (Abrahams 2011).

make-shift is a long-running series of networked performances located in peoples' homes. It is an event that takes place telematically between two ordinary houses (normally in different countries) and an online performance space accessible to anyone with a broadband connection. The dramaturges Helen Varley Jamieson and Paula Crutchlow are each located in one house, and are in charge of working with the participants (from eight to twelve people in each house) while they also manipulate the online event where there are online participants. The artistic intention is to create a performance where participants experience an intimate live performance event while they also take part in a conversation about social issues.

Jamieson and Crutchlow explain the piece in their website as follows:

The work has an important ecological theme, which is raised and discussed through both form and content in a light but meaningful way. Participants are asked to bring all the plastic they have used in the previous 24 hours to the event where they are invited to join in some easy games and tasks. Paula and Helen (one in each house) guide the evening through elements of personal stories and experiences, webcam choreography, avatar puppetry and audience interaction with participants co-authoring the work as it progresses.

Everything that happens in the houses is streamed to online audiences who can also join in the activities and contribute text chat visible on the interface to everyone participating. The event ends with a sharing of food in the houses and a discussion around the consequences of global connectivity and consumption (Jamieson and Crutchlow 2010).

3 Similarities: connecting private homes with low-tech.



Figure 1: Tony Chapman (UK), Pascale Barret (BE), Denise Hardman (UK), Antye Greie (FI), Martina Ruhsam (SI), Annie Abrahams (WL), Ben Robinson (UK), Hedva Eltanani (UK) and Derek Piotr (USA). Interface grid of the performance ON LOVE. Photography by Ienke Kastelein, Free Art License.

These two performances have the following things in common: First, they use low-tech, domestic telecommunication technologies modified to serve their artistic

practices². Annie Abrahams uses an interface named mosaika.tv, a platform similar to a telematic tv-set. Developed and adapted by Ivan Chabanaud (Abrahams 2013), the interface allows more than one stream and is able to project them all together in one image, as shown in Figure 1.

Helen Varley Jamieson and Paula Crutchlow use what they have called the Live Stage link, a purpose-built online interface that contains two elements within a single web page: audio-visual streams, and UpStage, an online performance platform with avatars, audio and a text chat, as shown in Figure 2.



Figure 2: The audio-visual streams on the left (one for each house) show what happens in the private homes. The rest of the screen shows UpStage, where the virtual avatars interact and communicate the main narrative. The text chat (part of the UpStage) is where performers communicate with each other and with the online participants.

² These are tailor-made technologies that started as low-tech, but developed into quite sophisticated and complex ones as they got funded. In this article, I am using them as an example of low-tech because of their origins in artist studios with little resources, but their development into high-tech needs to be acknowledged. This shows that the line between lowtech and high-tech is blurry and difficult to define.

UpStage was initially developed in 2004 in New Zealand, and continues to be maintained by a global community of volunteer open source developers and artists that follow the ideology of Free/Libre Open Source Software (FLOSS). The Live Stage interface connects with the philosophy of open source movements where code is publicly shared and open for modification. Mosaika.tv is not open source *per se*, but is made available by the developer to anyone who wants to re- use it, free of charge.

The second aspect these interfaces have in common is how both performances connect private homes. ON LOVE connects nine performers, each sitting in front of their computers in their private spaces, and composes a shared image that is rendered onto a public space; a theatre stage, gallery or museum. The private spaces of the performers are, this way, displayed as an art. make-shift connects two private homes, each with its own informal stage as shown in Figure 3, and online platforms to which online visitors connect. In total, there are three spaces with both performers and spectators: home number one (Jamieson and participants), home number two (Crutchlow and participants), and the online interface (virtual avatars of Jamieson, Crutchlow and Dave, a middle-aged corporate man with a robotic voice and strange sense of humour, together with the online visitors).



Figure 3: A moment at the beginning of the performance make-shift in a private home. The interface is projected onto one of the walls for the audience to see. Photography by Andrea Ass.

The third aspect the two interfaces have in common is how telematic communication is not only used as a vehicle to carry out the performance with but is also a topic explored in the performance, in a meta-reflective level. This means that both

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performances invite reflection on the nature of telematic technology per se (possibilities and limitations), in addition to the main conducting theme. In Abrahams' case, the main theme is love. In Jamieson and Crutchlow's performance, the main theme is ecological consumption.

4 Differences: disciplinary and cultural traditions

In disciplinary terms, each performance piece belongs to a different tradition (or trajectory), even though we find them 'in the same room': the theatre stage.

Shannon Jackson explains how, in the contemporary art fields, the visual arts, theatre and performance often find themselves in the same room under the umbrella of "contemporary experimental performance" (2011, 2). This is so because, on the one hand, visual artists "have begun to refuse the static object conventions of visual art" and turned towards the performative in an attempt of "exploring the durational, embodied, social and extended spatiality of theatrical forms" (ibid). On the other hand, theatre practitioners have also refused "the temporal conventions of dramatic theatre, approaching the static, all-at-once, juxtapositive conditions that art philosophers from Lessing to Reynolds have associated with painting" (ibid). According to Jackson, it is crucial to identify the tradition to which the performance work belongs and the new tradition that it is embracing in order to better understand the conventions being challenged as well as the innovation for which the performance is aiming (ibid).

Jackson's appreciation is helpful to our analysis since it helps us understand the different genealogies of the works being compared that find themselves united under the umbrella of technology. Annie Abrahams is a visual artist exploring the embodied possibilities of the theatrical medium. In contrast, Jamieson and Crutchlow are theatre practitioners moving towards new media art forms.

The second difference between these two works is the cultural tradition to which they belong. Abrahams's work belongs to a tradition that considers the work of art as an independent and autonomous entity created by a specialist, an artist, and which contains within itself a message or abstract idea. The artwork is understood as an object that the creator passes onto a receiver, who then consumes and deciphers it.

Jamieson and Crutchlow's practice belongs to the opposing cultural tradition that considers the work of art as a collaboration between authors and spectators, and treats the audience in democratic terms, inviting its members to co-create artworks. This strategy is indeed a shared premise within the tradition of the avant-garde, which advocates the democratisation of the arts by empowering people through encouraging full participation in aesthetic acts and processes (Dewey 2005). To include audiences in the mechanisms of artistic production experimental performance practices foster co-authorship by understanding artworks as resulting from the meeting between authors/performers and spectators on equal terms rather than spectators consuming a work created exclusively by the authors.

ON LOVE and make-shift belong to different artistic disciplines that cohabit under the umbrella of performance and technology. As they contribute to two opposing cultural traditions, the two performances analysed together provide crucial information on the state of affairs of the performance arena today.

5 Performance strategies and the role of technology

ON LOVE and make-shift use telematic technology in performance in very different ways and for different purposes. What are the strategies used? And more importantly, what does telematic technology afford?

ON LOVE uses telematic technology to juxtapose images and conversations to tackle the issue of love. The piece starts with a view of the performers' backs, who, one by one, turn towards the web camera (towards the audience) to start his or her performance on love. Each performer talks to the camera, an action by which each one is simultaneously addressing the other performers and the audience, a gesture that puzzles the spectator. To the audience, it is unclear whether the performers are talking to each other, to the audience or to themselves, or a bit of all three, as there are signs that point in each direction. It is also unclear whether the performers are following a script or following personal impulses and opinions. In this sense, the boundaries between a real conversation and a theatrical one are blurred, as is often the case in performance practices.

The layout of the interface projected on stage is a large square divided into nine smaller squares juxtaposed to each other. In each square, we see the face and a bit of the upper body of the performers (what one normally sees in videoconferences), as well as a backdrop of the room where they are sitting. The lighting is different in each square, revealing that the performers are located in different time zones, and the furniture reveals a few performers' private homes in the background.

The juxtaposition between the images of the background put against each other make explicit the performers' differences while the conversation aims at bridging those very differences into a unitary performance.

Dixon argues, from a theatre and performance perspective, that mere juxtaposition does not qualify for telematic performance to be satisfactory (2007, 427). He claims that "telematic works too commonly suspect that the simple presence of these remote, virtual bodies is considered to be enough, since the magic of technology is there for all to see" (*ibid*). In his view, the juxtapositions need to be meaningful rather than separated and arbitrary (*ibid*, 428).

In this sense, he is criticising 'postdramatic theatre' practices that merely juxtapose technology with postmodern text, using "not having to make sense" (*ibid*, 401) as an alibi for creating works that lack dramaturgical elaboration as they embrace "the meaningfulness of meaninglessness" as their aesthetic value (*ibid*). Postdramatic theatre is Hans-Thies Lehmann's roomy term to describe theatre and performance practices that deconstruct canonical texts, substitute characters with images and figures, and in general, follow principles other than those of the Aristotelian drama (Lehmann 2006).

In their recent book, Multimedia Performance (2012), Rosemary Klich and Edward Sheer argue that these type of performances are part of the tradition of the "theatre of images" (65) and follow the post-dramatic theatre paradigm because they seek to create visual works that prioritise visual narratives over textual dramaturgy. In their view, these works do not lack dramaturgical elaboration, they just follow principles of visual composition rather than dramaturgical ones to create and communicate meaning (*ibid*).

The juxtaposition that Abrahams uses in ON LOVE is not juxtaposition for juxtaposition's sake, rather, it has a purpose: revealing each performer's real and private takes on love. The spectator moves across squares, looking for differences and similitudes between performers and their locations, while listening to their different takes on love, which may be fictional or not. In this sense, the visual juxtapositions (the squares), the dramaturgical juxtapositions (the words) and the performative juxtapositions (the performers' attitudes and actions) work together to simultaneously convey and blur a clear message on love.

make-shift uses telematic technology to foster collaboration and discussion between three different audience groups and, in this way, tackles the issue of consumption. The work uses improvisational strategies that invite participants to carry out actions that contribute to the making and development of the performance.

For example, the on-site audience is asked to write on small pieces of paper the name of something non-biodegradable that they'd recently disposed of. Those words are then fed into the interface by Jamieson and Crutchlow, the UpStage, which starts showing a narrative based on those words.³ Another technique to invite participants into the work includes giving them different instrumental tasks in the performance, such as filming certain part of the performance, holding machinery or even typing text into the interface.

The on-line audience members are asked the same questions as the on-site audience, but in addition, they are also given a quiz by Dave (a virtual avatar) that is

³ This improvisation technique echoes the audience-request system created by Viola Spolin and Paul Sills in Chicago in the 1960s-80s, a common technique used in any improv show today.

more elaborated than the questions asked to the on-site audience. This is because, as the online visitors cannot participate physically in the event by performing the instrumental tasks, the degree of elaboration and complexity of the material typed into the text box needs to be larger. This way both audiences, on-site and on-line, are given tasks that fit the medium where they are located; the on-site performance explores the physical and visual interaction, while the on-line performance focuses more on visual interaction and textual communication.

The improvisation strategies allow the organisers to address the three audience's sensibilities, aiming at treating the three groups on equal terms rather than prioritising one over the rest. The variety of tasks that the audience members are asked to do has the consequence that audience members go through several roles during the same event; spectator, performer, builder, video-producer, learner and team-player. This way, make-shift gives audience members a sense of empowerment as they contribute to the performance as a whole.

The performance space is thus expanded, as it includes audiences located in remote spaces. Dixon argues that for space to expand in interesting ways, the activities taking place in the different spaces need to have aesthetic value in all the spaces, or at least in all the spaces where there are spectators (2007, 413). Following Dixon's line of thought, I have argued elsewhere that space is expanded not only by 'having' spectators remotely located, but also by having them carry out actions that have an impact in the performance itself (Pérez 2014). make-shift exemplifies this observation by giving tasks to all the participants, on-site and on-line, and in this way, goes beyond mere connection into meaningful collaboration.

6 What is the artistic purpose?

'Alone together' is an idea coined by psychologist Sherry Turkle (2011), which refers to the ways in which new communication technology affects human relations in a time when technology has pervaded all aspects of human activity. She argues that, on the one hand, technology allows us to feel connected and get a sense of companionship when we are physically alone, but on the other hand, it keeps us constantly connected even when we are physically together, distracting us from actual physical interactions (*ibid*). Alone togetherness is thus a situation that contains both elements of possibilities and limitations.

The two performances analysed in this article reflect Turkle's ideas on the possibilities and frustrations brought by technology.

ON LOVE creates a sense of intimate communication afforded by the use of web cameras, which are placed in the performers' own private spaces, in their home offices, bedrooms or studios. This set-up of apparent intimacy affords performers to talk about private, important matters, and Abrahams uses this intimacy to discuss

issues such as love (and anger), big concepts that are difficult to tackle and normally need appropriate conditions to be approached. ON LOVE creates an intimate space where it is safe to be honest.

The interface gathers all the 'confessions' on love and projects them simultaneously onto a large surface that resembles a typical surveillance screen; where multiple locations are shown to facilitate surveillance by a security officer who watches what happens in those spaces. In this sense, the interface and its projection on the theatre stage can be understood as a betrayal of the intimacy afforded by the web cameras, as the communication that seemed private and intimate becomes suddenly public.

On the one hand, the web cameras create a sense of intimacy and safety that affords performers reflecting on difficult and abstract issues in a nuanced, honest way. But, on the other hand, the interface betrays this intimacy as it projects the confessions for all to see. What we learn is that telecommunication technology can provide a sense of privacy that is not real because it can be easily manipulated and become public. The sense of privacy is only apparently so, since it is ultimately not really private.

make-shift also informs us about Turkle's ideas in the following way. The three audience groups are physically separated from each other, yet they collaborate through the online interface. The telematic connection allows one group of people gathered in the privacy of a home to connect to a larger community of people to discuss social issues and work around them to figure out alternative ways of dealing with the problems. The performance aims at raising social awareness around consumption, and also shows participants that it is possible to reach out to a wider audience and collaborate with them in a meaningful way, even though they are remotely located. In this sense, the use of telematic technology allows global connection, affording collective social action about issues that matter, providing a sense of possibility.

But the performance also problematises the use of telematic technology by displaying onstage the heavy orchestration that is required to put on the event; the effort necessary only to be able to connect with the other group to then collaborate. The orchestrators, Jamieson and Crutchlow, are in charge of a thousand little operations, and constantly ask for help from participants to be able to complete all the actions necessary not to lose contact with the other groups. The vast amount of work necessary to make meaningful collaboration happen is brought forward in this performance, as it shows the dedication that is required and the precise reciprocity with the other audience groups to reach meaningful collaboration.

On the one hand, telematic technology affords reaching out to remote audiences, and collaborating with them for social change, but the technical difficulties

that arise may stop the process all together. In other words, 'telematic' used in this way may still be a dream more than a reality.

7 Conclusion

The starting point for my analysis has been that in telematic performance, technology needs to be given a role and be used with a clear purpose other than mere technological display. This means that telematic technology should be used not only to connect remote spaces and to a limit itself to displaying the connection in a theatrical manner, but it should also use the connection in order to do 'something else' with it.

The analysis of the two low-tech telematic performance pieces suggests the following about telematic performance as genre.

The artists' intention with make-shift's telematic connection is to allow collaboration between remote groups of participants to have a conversation about ecological issues and then come up with alternative ways of dealing with consumption. The contributions to the conversation come from on-line visitors as well as from on-site participants, who, together, fill with content a piece where organisers have constructed a hybrid dramaturgical frame that is partly theatrical, partly technological.

ON LOVE uses telematic technology to connect remote performers for an intimate and honest conversation on love. The purpose of the connection is to display each performer's individuality while simultaneously being part a group in the performance. This is achieved by the use of visual, dramaturgical and performative juxtaposition strategies, which affords the creation of layers of meaning.

Both performances bring forward telematic communication as a theme, including its possibilities and its discontents. On the one hand, telematic communication presents the creative possibilities that it affords at the service of performance, collaboration and discussion, but it also shows the problems it generates; the technical obstacles that need to be overcome to be able to connect and the confusion around technology's private/public nature.

ON LOVE shows how interesting and also problematic it is to try to have a conversation with this technology, while make-shift gives us a taste of the possibilities of the genre for meaningful collaboration and yet it also shows how hard it actually is to make happen. We learn of all the technological configuration and its complexity in setting up what we have to go through in order to connect to each other in a meaningful way. In this sense, our everyday routines are displayed in front of us, making explicit how much dedication technology, which was supposed to make our lives easier, actually requires.

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