

# PERFORMING OCEANS APART

*Navigating Networked Performance with  
Case Studies Using Waterwheel's Tap*

**Suzon Fuks**

## **Abstract**

I describe how I got interested in networked performance, and my development in the field since the 1980s. Experimenting with tools and processes, I eventually initiated Waterwheel, an Internet platform dedicated to water as a topic and metaphor. Taking some performances on Waterwheel as cases studies, I attempt to list the parameters that make networked performance a specific genre.

## **Keywords**

Waterwheel, Internet platforms, Tools, Networked performance parameters, Body presence.

## Introduction

When talking about performance, I first think about performer, audience, venue, interaction, format, length, skills, risks, beauty, the magic of the moment, and sharing. Surely these are not the only things, but performance is definitely a 'live' action requiring presence, bodies, shared space, and interaction in real time – unlike with video or cinema that is post-produced.

These parameters are the same in telematic or networked performance. It is a 'live art' for which the venue differs, and where the interaction between performers, between the performers and audience, and between audience members, have new modalities. In this article, I will describe how I came to work in the field of networked performance and address several paradigms, taking as case studies networked performance works produced on Waterwheel, a collaborative online venue for streaming, mixing, and sharing media and ideas, about water.

## NAVIGATING NETWORKED PERFORMANCE

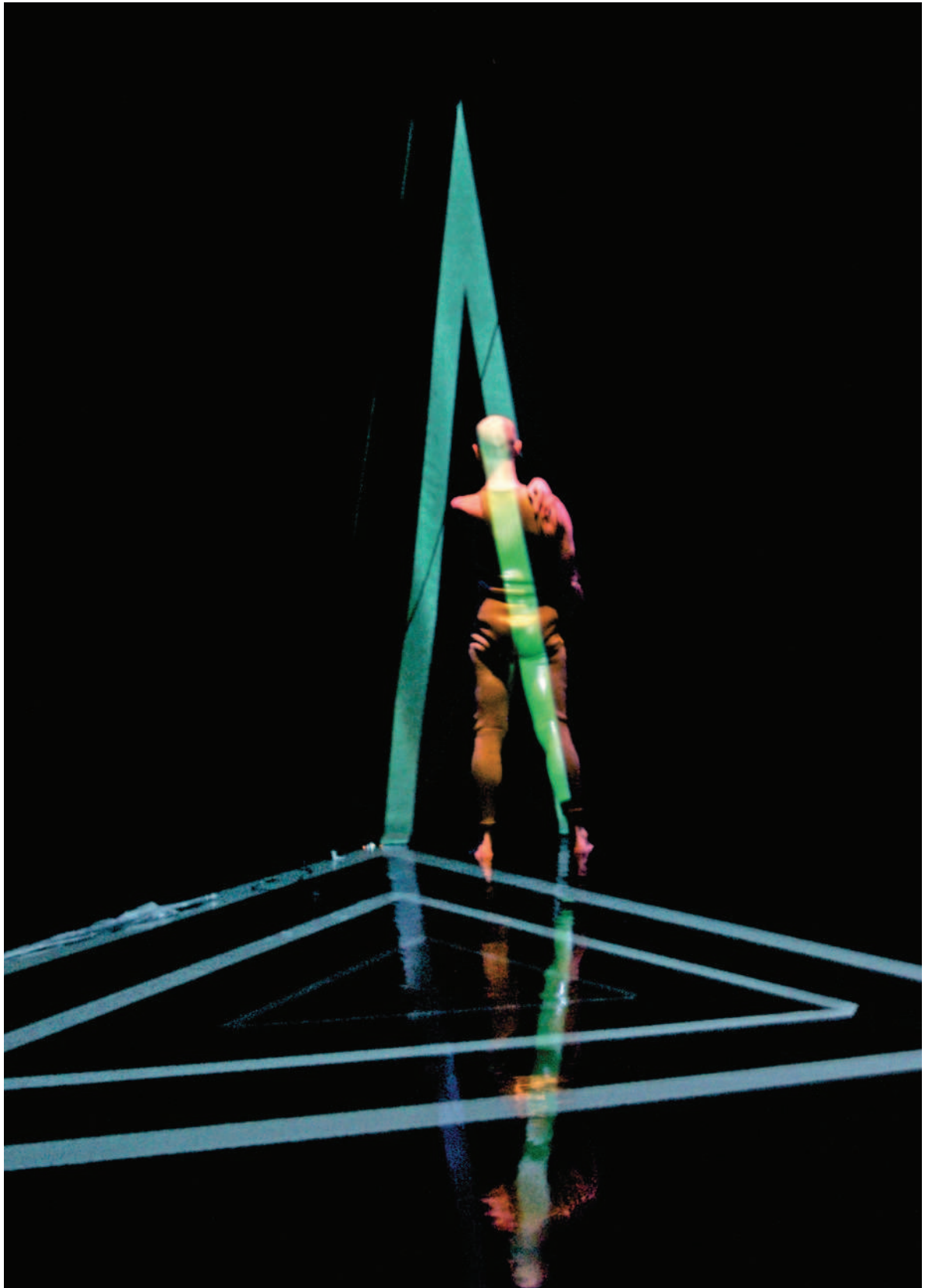
### Body presence and telepresence

The presence of the human body is central to my work for its faculties of perception, based on awareness through all our senses, and questioning what and how we perceive. A good example would be 'Mirage' (Fig. 1), an installation performance produced by Igneous and co-created with James Cunningham<sup>1</sup>.

The body and its function in performance have other facets. As an object, the body functions as representation; as an 'avatar', it is mediation or projection, for becoming someone or something different; as an individual, it has an identity & intimacy; and as a collective, it is part of a community, part of a whole.

Within human history, there has always been technology, as humans have made tools and developed methodologies for survival since the beginning of the existence of the species. Technology has evolved with our needs. Now we attribute a scale from low-tech to high-tech, depending on the simplicity or complexity of the tools and methods, but also from where we come from and how we can access the 'technology'. Personally I use it in artwork according to the content I want to produce, choosing this or that tool, and this or that process.

As an experimental artist, I also like to 'play with tools' – seeking new ideas, forms, formats, processes...



**Figure 1.** James Cunningham performing in *Mirage* by Igneous, Canberra, 2006 - photo Leighton

In so doing, I started playing with telepresence in the early '80s, making performances with projection-mapping of super 8 and slide images dispersed throughout the space, and using a microphone with modulated frequencies relaying sound through an installation of multiple radios. *NY City, Up and Down* (Fig. 2) was an installation solo-performance on human isolation in a fragmented city. I suppose that was my first approach to telematic / networked performance.

## Where it comes from, its history and definition

Information and communication technology (ICT) has developed these last 140 years and most particularly these last 20 years. Here are some dates of the creation or apparition of some tools, which have allowed for the development of networked performance (the information is gathered from Wikipedia): 1876, the telephone; 1890s, cinematography; 1948, television; 1977, the personal computer; 1980s, the Internet; 1983, the mobile phone; 1991, the webcam; 1997, the smart phone; 2000, the in-built webcam; 2009, popularization of the mobile app.

When experimenting on the Internet or through mobile networks, I often have in mind today this image of a person 140 years ago, on an old phone, sticking the receiver to the ear and cranking up the transmitter box, asking: 'do you hear me? Are you there?'<sup>2</sup>

We are still asking the same questions. We still want to feel, see, hear, sense a presence 'on the other side'.

So, with advances in technology, and particularly of the Internet and ICT tools, the field of 'Networked performance' has been created. Maria Chatzichristodoulou in her article 'Cyberformance? Digital or Networked Performance? Cybertheaters? Or Virtual Theatres? ...or all of the above?'<sup>3</sup> retraces its historical development, and discusses various definitions. As of today, my own definition is: a 'Networked performance' is a performance event happening simultaneously in multiple spaces, including the Internet or mobile networks, using telecommunication tools to link people and places.

## Personal motivation

I have travelled a lot and have forged friendships and collaborations along the way in various continents. I have lived on and off in India, sending communications by fax, while people in developed countries started to exchange emails on Internet. So it is only after immigrating in Australia, that I realized how the Internet could give possibilities of not only maintaining contact, but also developing new processes for making performances.



**Figure 2.** Suzon Fuks performing in NY City,  
*Up and Down*, Brussels, 1983



I moved from Sydney, a metropolis, to a remote regional town in beautiful Northern New South Wales. There, I experienced isolation and remoteness for nearly four years. From there, an artistic residency gave me the opportunity to relocate again to the city, this time Brisbane, where I am currently based. This life experience forged certainly the motivation of working in the field of digital performance.

## **Each platform, another field of experiences**

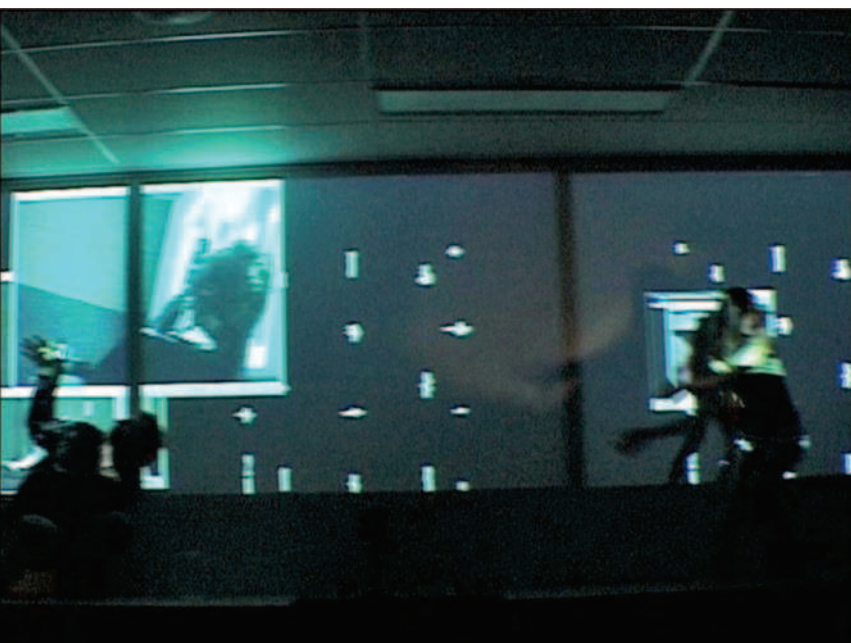
### *Accessgrid*

In early 2003, I started trying out various platforms and videoconferencing systems. Keith Armstrong and Kelli Dipple mentored me at that time, and arranged a few explorative sessions on AccessGrid, a high-end videoconferencing system. It had a special echo cancellation system making the sound much better, a visual output for 3 projectors, and allowed for a high number of simultaneous webcams and visuals. Accessibility was a major issue, as it was mostly reserved for corporates and some universities. People booking the system depended on availability of technicians, the opening hours and the set up of the rooms (which in some spaces was more flexible in terms of screens and projections arrangements). If there was a certain level of possibility for editing moving images on the go, only the technicians could manipulate them in each node – i.e. physical venue where equipment and people are gathered – and the final projected image was different in each node.

So the collaboration relied on good and precise preparation between nodes, before accessing the room – as time is money, there! I was quite frustrated by the rigid aspect of the interface and dispositive of the room, permitting only very flat interaction with the projections for the performers on site (Fig. 3). We also needed more time to develop a vocabulary, a way of scripting the various parameters for the performances. We mostly played on the liquidity of the body, on embodiment and disembodiment, on interpretations of the idea that death could be a place one could visit, with illusions of the transference of objects and body parts from one site to another, and movement across the space reflected in each webcam frame and across the projections.

### *Quicktime broadcaster*

I felt much more interested by the make-do characteristic of dial-up connections and accessible interfaces such as Quicktime Broadcaster. I loved the blocky aesthetic of low-bandwidth streamed video and how ghosts were suddenly emerging or disappearing from and to a pixelated world (Fig. 4). If we were spending a lot of time to calibrate the stream, we had at least freedom of scheduling or prolonging our sessions and the flexibility of trying scores and improvisations. But again, we could have only onsite audience, as we were webcasting from point to point.



**Figure 3.** video document still - James Cunningham and Rebecca Youdell in Brisbane at QUT Gardens Point, and Kelli Dipple in Amsterdam, performing on AccessGrid, 2003



**Figure 4.** screen capture of Quicktime Broadcast stream over dial-up connection, with Keith Armstrong & James Cunningham, Brisbane Powerhouse, 2003

## Upstage & activelayers

At that time I met Helen Varley Jamieson at a festival, where she performed *Swim* with Avatar Body Collision, using the Palace and iVisit. I met her again a few years later, just after the launch of UpStage. In 2007, I got involved in the first UpStage festival with the creation of three performances. In one of those performances, *The Old Hotel II*, I collaborated with Cherry Truluck from London, Liz Bryce from Dunedin (at that time) and James Cunningham, my long-term collaborative partner.

A year later, we named our quartet ActiveLayers. Although we did use webcam streaming already in the first performance, with a very slow refresh frame (1 image every 5 seconds) and no sound, we performed most of the time with graphical avatars.

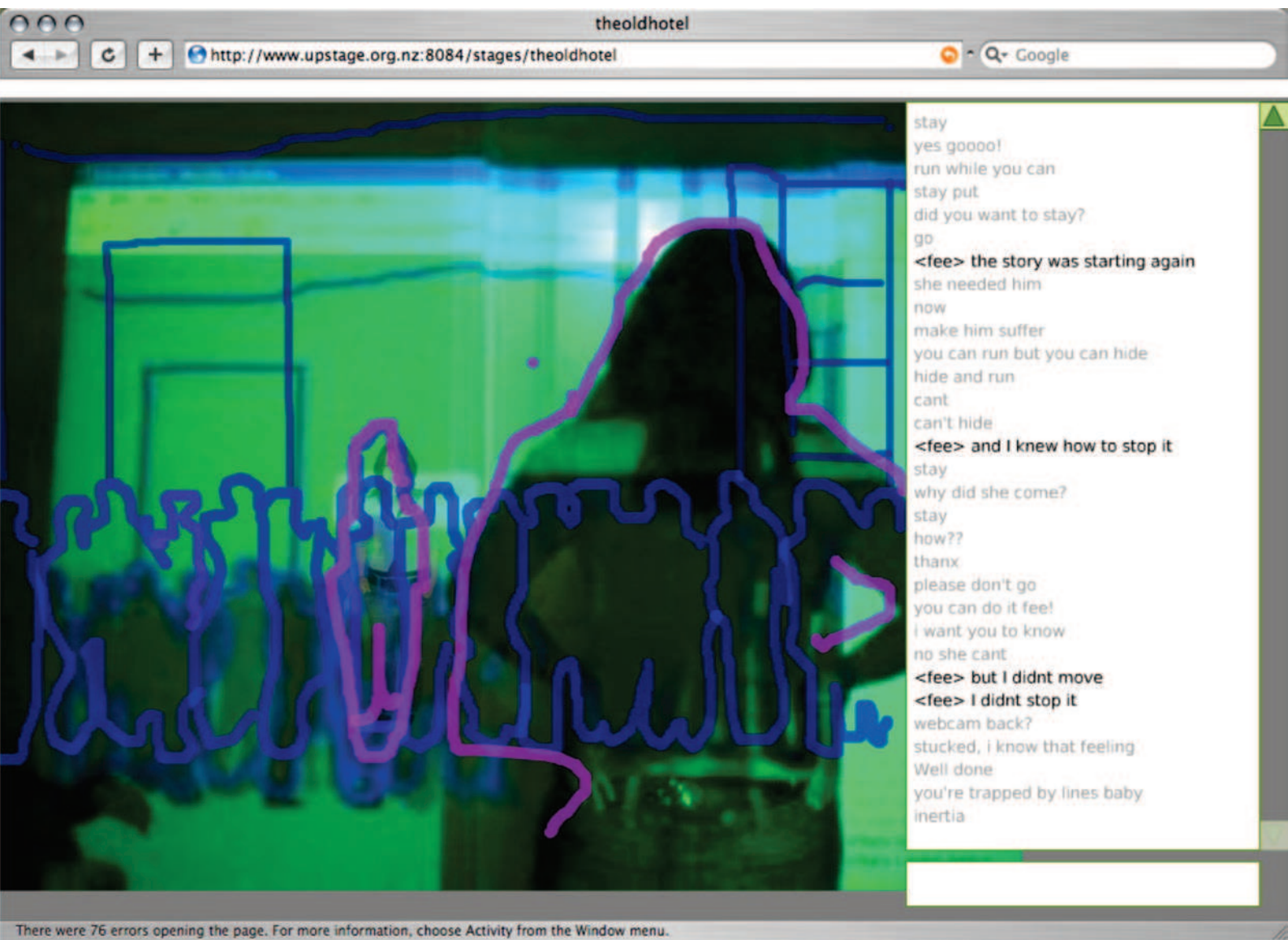
So, my digital design skills underwent a steep learning curve. The liveliness of the characters relied on their look, the variation of their poses and our dexterity in typing code to animate them. Their voices could be only the electronic text-to-speech type, as we couldn't yet upload sound files. I felt the stage became like a castelet (puppet booth) with us as the puppeteers. *The Old Hotel II* and *The Old Hotel III* (Fig. 5) were site-specific, with proximal audience in one node as well as online.

## Different format, different duration, other tools

In *Calling Home*, ActiveLayers tried a format similar to a serial, in 3 parts. In the first part, we experimented performing on multiple simultaneous stages. In the second part, we used different communication tools such as postcards, flyers, e-lists, blogs, podcasts and a website, hoping to glean various audience members from different sites over time to partake in the last episode, the third part *The Big Together*.

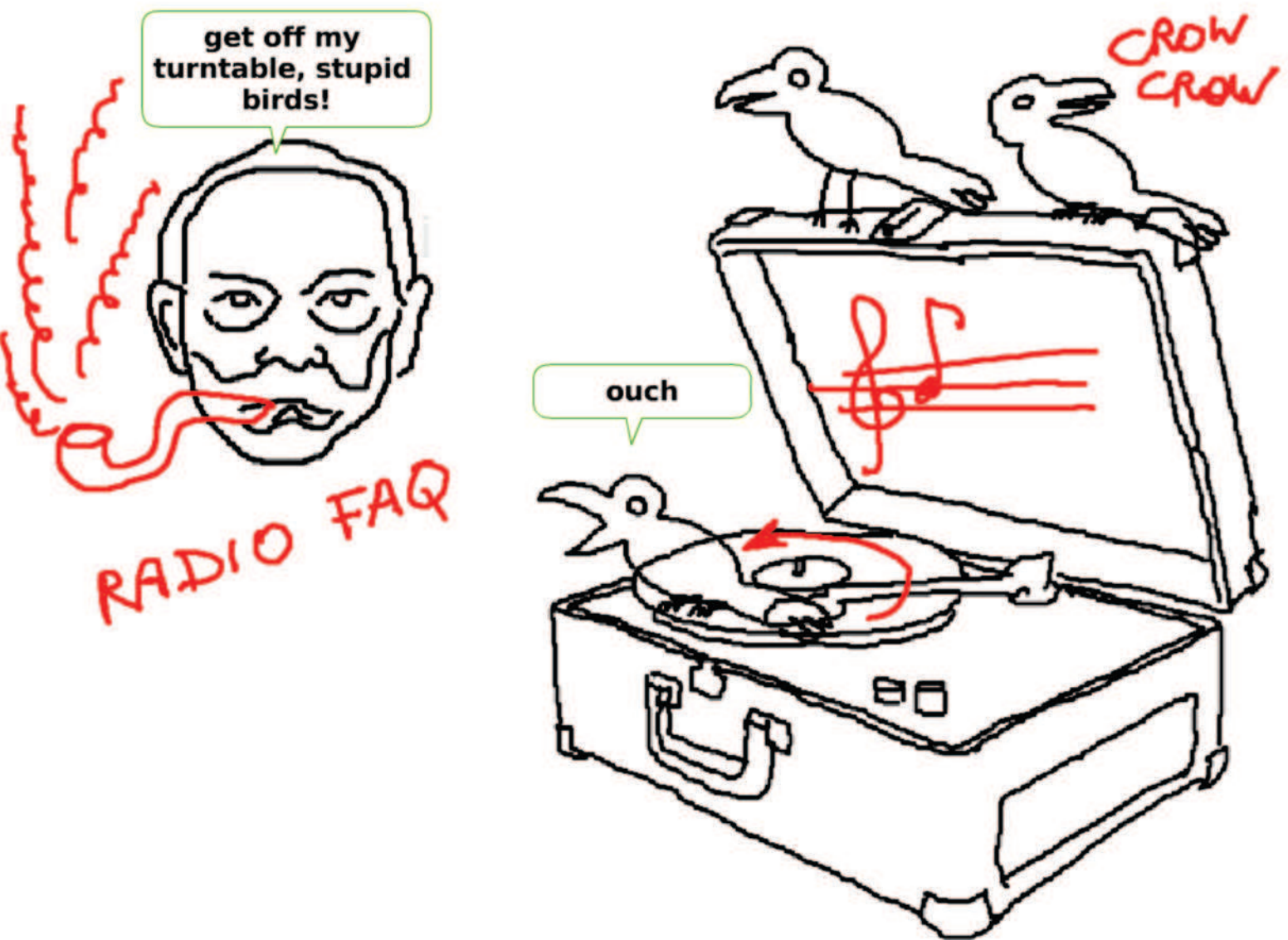
"We combined our disciplines of theatre, dance, video and visual arts not only through digital media but also in the method of working an idea."<sup>4</sup> We were each taking turns leading a session or two, in order to utilise different processes, such as: responding to a provocation with a media item of 1 minute duration, exchanging media and appropriating it to develop a character, and improvising using simple parameters inspired by Al Wunder's Theatre of the Ordinary<sup>5</sup>. Liz Bryce explained in our presentation *Re-Calling Home!* at the CyPosium in 2012: 'We were intending to draw live during the show, because we observed that the act of drawing was compelling for the audience to watch. We wanted to have a continuity of aesthetic. We chose to use the UpStage drawing tool, and to give the drawings a uniform 'look', we created avatars and objects by outlining photographs (Fig. 6). We found that the sound and tone of digital voices was annoying for many people so we added pre-recorded sounds, and clips of speech for our characters.'<sup>6</sup> By then, sound was featured on UpStage and we organised, recorded and edited a 'radio talk-back show' of mock interviews created on Skype with friends and other performers, who were improvising according to short prompts.





**Figure 5.** screen capture, *The Old Hotel III* by ActiveLayers

An example of webcam with performer in London  
and online drawing, on UpStage, 2007



**Figure 6.** screen capture of Calling Home!  
- The Big Get-Together' by ActiveLayers, on UpStage,  
2008 & 2012 - 'we observed that the act of drawing  
was compelling for the audience to watch'

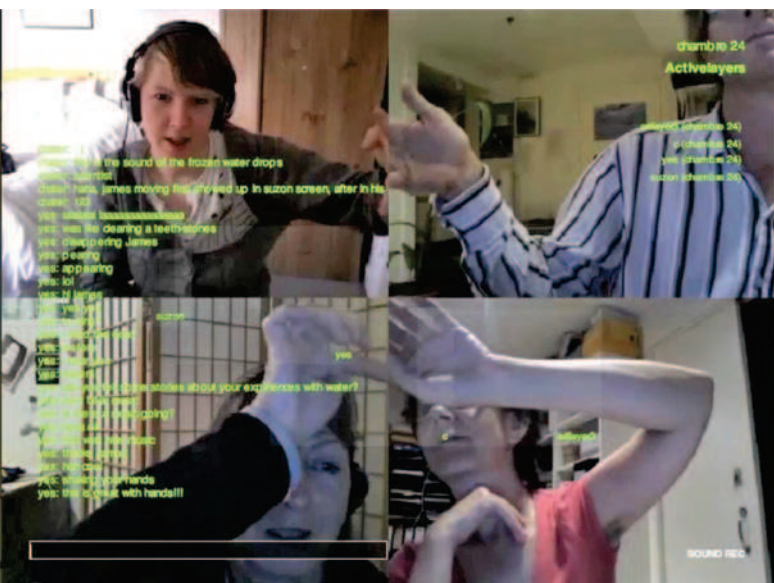
## Selfworld

ActiveLayers was always looking for new horizons in cyberspace. We explored Google Wave, which had a bag of tools including a videochat system ‘6grounds’ that didn’t however ever work for the four of us at once. James and I started missing ‘physical’ body movement and direct audio-visual connection. And the first time the quartet met ‘live’ and remotely through webcams, was on Liz’s birthday in 2010, in a room of the digital motel Selfworld (Fig. 7). It was wonderful to sing together and see each other after 3 years! We tried playing with scales and objects, as we could have thumbnail or full-sized webcams, and superimpose them on to one graphic backdrop. Processes were going much faster. We could show in real time where we were, what we were talking about. I was able at one point to show the others the traditional house and a paddy field next to it while in residence in Yogyakarta, connected to the Internet via a dongle. Unfortunately the webcams were stiffly straight and in a pre-conceived position, we could not use media except a backdrop, there was no drawing tool and the text chat wasn’t readable to our taste. The re-mounting of *Calling home, the Big Together* in December 2012 was the last performance of ActiveLayers, a nice agreed moment to disband.

## Dial & tank man tango

I forgot to say in 2008, James Cunningham and I experienced a streaming platform tailored for the project a *Day in a life – DIAL*, with up to six webcams set in a grid of 3x2, but only two tiny lines of text chat per webcam and no online audience!

In 2009, we used that interface to celebrate the 20<sup>th</sup> anniversary of Tienanmen Square with the streaming of *Tank Man Tango* (Fig. 8), a project instigated by Deborah Kelly. The choreography was taught via a video posted on YouTube, based “on the steps of the tank man who faced off the tanks in 1989 and became a symbol of courage against tyranny.”<sup>7</sup> The networked event linked 8 cities around the world: Auckland, Hobart, Brisbane, Singapore, Belgrade, Dunkerque, Brussels, and Richmond, Virginia. The choreographed dance routine was followed by an improvisation.<sup>8</sup> The technology enabled a group of activist artists in Singapore to partake with freedom of speech and creativity.



**Figure 7.** screen capture of ActiveLayers trial on Selfworld, Cherry Truluck in London, Liz Bryce in Rotorua, James Cunningham and Suzon Fuks in Brisbane, April 2010



**Figure 8.** Tank Man Tango Streaming on DIAL interface, June 2009



## Ivisit embedded

Becca Wood from Auckland, who was part of the streaming of *Tank Man Tango*, contacted James and I to join in the *Backyard Dances*, a performance she conceived for the Electrosmog Festival. We used multi-webcams on iVisit embedded in a website. The score was composed of a textual transcription of video footage contributions of people dancing in their backyards, read 'live' by text-to-speech to the dancers who were themselves responding to the words, dancing in their own geographically-dispersed backyards.

Performers felt disconnected from each other's location while dancing, as our sound was cut and we didn't have a text chat to get the responses and comments of the online audience, nor a vision of the node in Amsterdam where the festival was taking place. Again I had the same frustration of not having all performance components in one webpage.

## Transitions & social media

2009: Social media like Facebook and LinkedIn were booming. Although the tools seemed to be interesting, on one side touching a big public, the communication was pretty poor and missing depth or/and purposes, and on the other side, networked performance was a small niche with lots of possibilities for rich content. At the centre of my research, a question was coming back again and again: what can be done to combine the better of the two sides? I was also testing and collecting web-based tools such as white boards and creative media management websites. This is when I got a Fellowship from the Australia Council for the Arts, Dance Board. Timely, as I wanted to re-focus on dance and movement, using water vocabulary and scores around uses of water to involve audience in a participatory and physical manner.

I was developing the concept of a thematic platform, calling it then Virtual Fountains, listing all the tools I found useful and thinking how its back-end could be utilised as creative material for exchange between users. Igneous, the Australian company of which I am co-artistic, received funding which allowed us to work with Inkahoots, a graphic and web design studio which created the visual identity, user-interface design and programing for what became Waterwheel.

While Waterwheel was in construction, I facilitated a laboratory with a group of artists from around the world. They experimented with scores, protocols, various camera angles and scripting in the first phase, using Tokbox and Videowhisper, with showings to an onsite audience.<sup>9</sup> The second phase, they tested and gave feedback of what was becoming the Tap.



## Waterwheel

On 22 August 2011, Waterwheel (Fig. 9) was launched! Its video-conferencing and media mixing system, called the Tap, is its most important feature. The Tap has a high level of flexibility for presenting and/or performing, using up to 6 webcams, media and live drawing, with ability to position, re-size, overlay and fade them. All changes are viewable instantaneously on a single webpage where performers and audience meet live. The particularity on the Tap is that everything can move or be moved, offering new choreographic, kinaesthetic and kinetic possibilities.<sup>10</sup>

### EXAMPLES OF PERFORMANCES ON WATERWHEEL

In this chapter I take specific works that have been created using the Tap as case studies to illustrate certain parameters used in performance on the Tap (Fig. 10), listed under three sub-headings of the main paradigms: the body, space and time.

#### A. The body

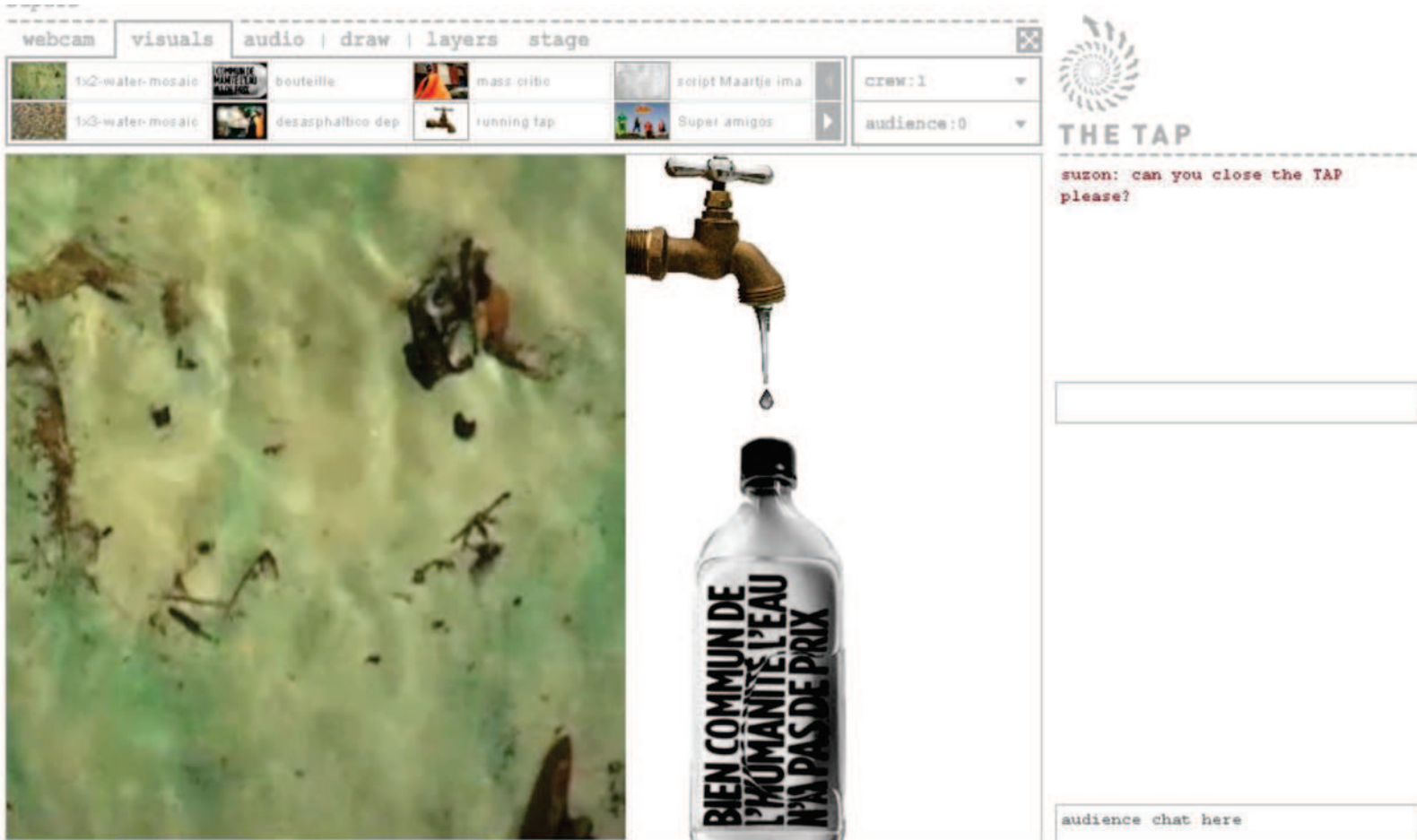
**WARM UP** is used as a dynamic and bonding way to start a movement work session. In it we transpose choreographic language and spatialization into the bi-dimensional screen space using the possibilities of movement of the webcam thanks to the tool palette (Fig. 11), which appears when clicking on any media positioned on the display area or stage.

**THE TALKING HEAD** is reminiscent of television and the serious downfall of the in-built webcam, fixing people in the front of their computer and keyboard. In *Good Water III: Synchronicity* (Fig. 12) Pegi Marshall-Amundsen, alias Detroit Diva, is satirising the presenter and DJ role, looking right in the webcam in order to give the illusion that she addresses the online audience directly. But to keep the conversation flowing, interacting and responding to the audience, she doesn't feel comfortable typing in the chat and looks on the side at times, to read what they have written.

**MOSAIC**: Each individual contributes a part of their face to make one face (Fig. 13). A member of the 'crew' (metaphorical term used on Waterwheel to signify a team member) manipulates the webcam frames while the performers are rotating in the role of the mouth, speaking in their own language. Some performers point an external webcam to selected parts of their face for close ups, some have to change their position in order to bring part of their face close to their computer's in-built webcam.



Figure 9. Waterwheel homepage



**Figure 10.** screen capture of the Tap, videoconference and media mixing system on Waterwheel platform, in crew view

## WEBCAM PALETTE

appears when you click on the visual object BUT audience does not see it!

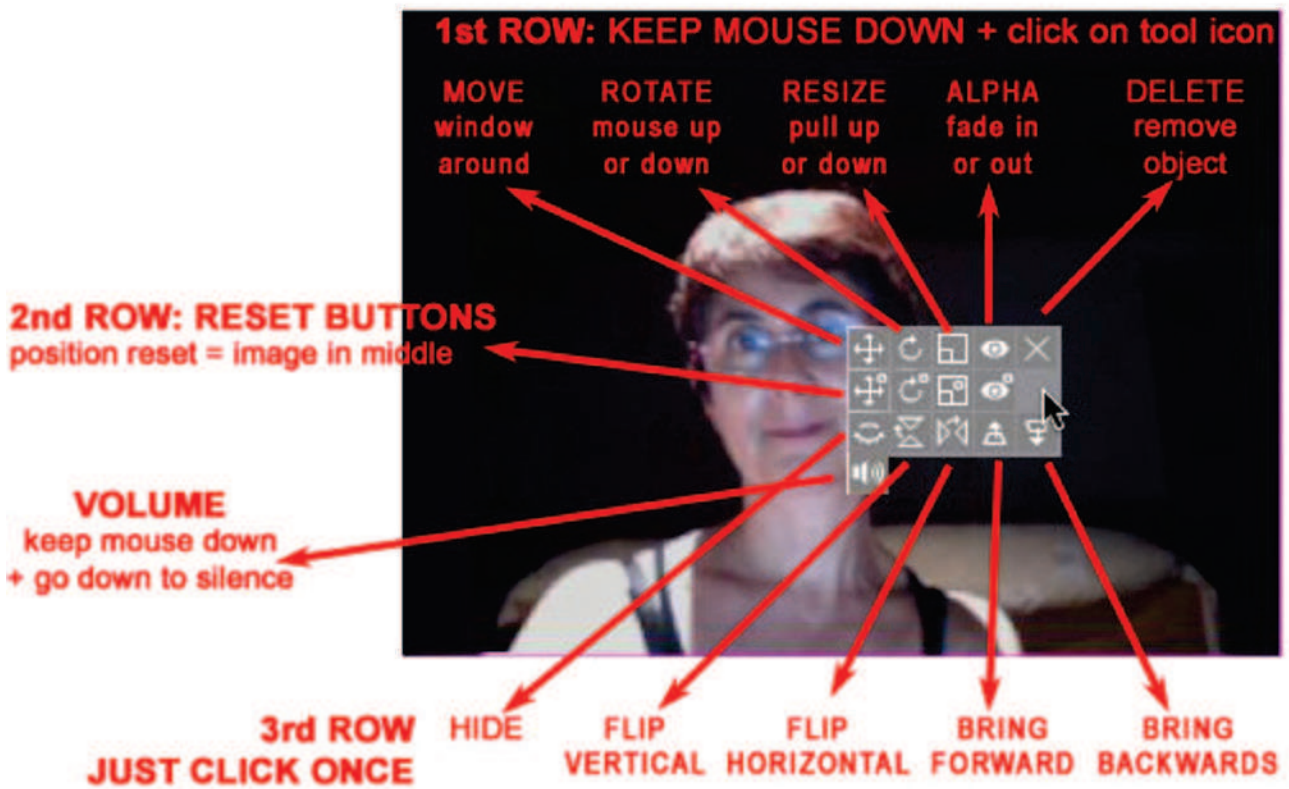


Figure 11. the tool palette on the Tap





## THE TAP

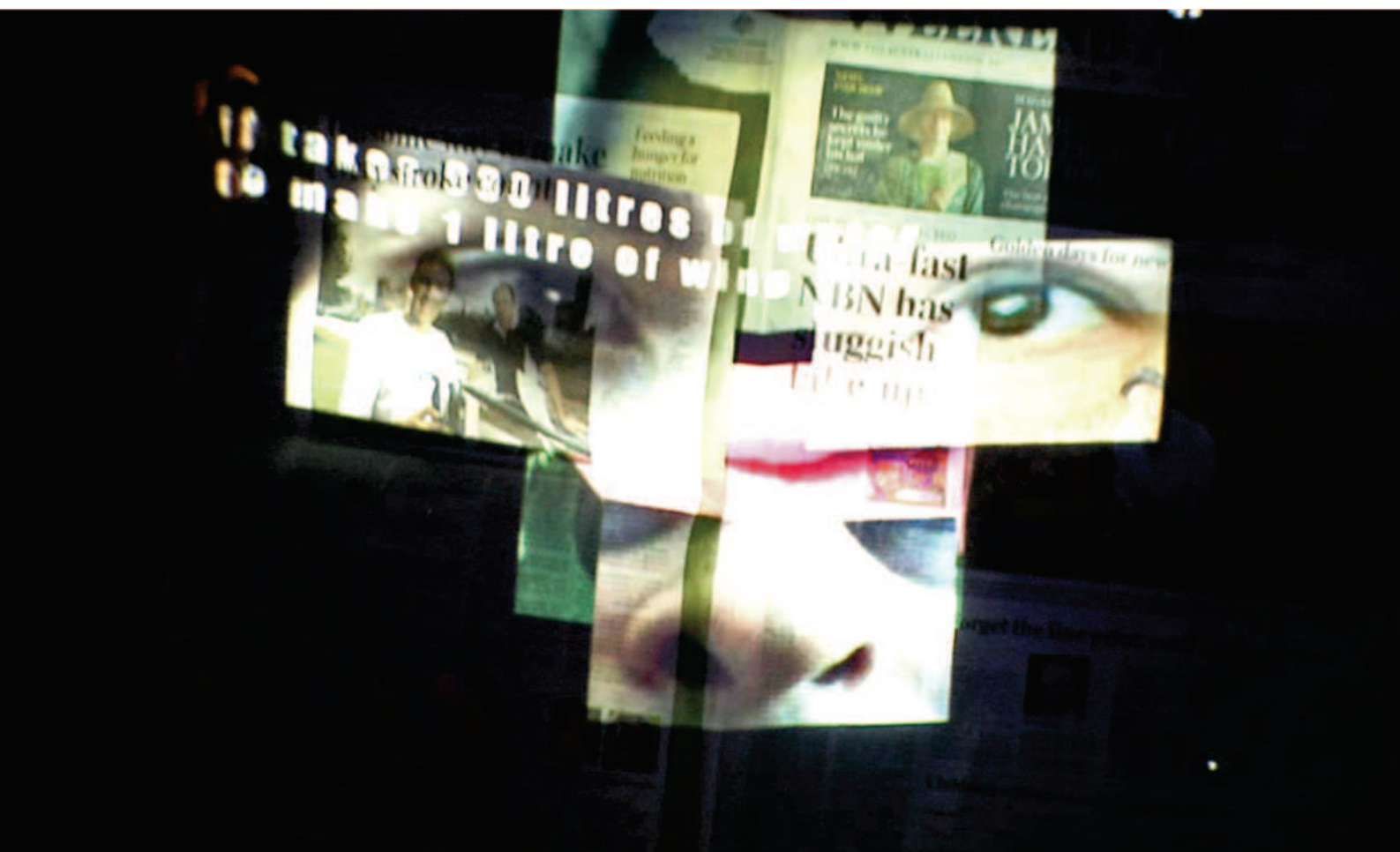
```
DetroitDiva: ok...please take  
your time  
DetroitDiva: 12 12 12 has just  
begun here in Detroit so we have  
all day!  
-helen: ok start when you're  
ready  
-helen: there maybe some late  
comers ...  
-helen: break a digit :)  
DetroitDiva: hello all...I'm  
Detroit Diva  
DetroitDiva: and this is Good  
Water III  
DetroitDiva: Synchronicity  
DetroitDiva: are you there?  
-Papers: Yes :)  
DetroitDiva: Through out this  
performance I would liek you to  
work with me  
-Bishop: We are  
DetroitDiva: Can you do that?  
carlotta: hi  
-Bishop: Yes.  
-Papers: Yes :)  
DetroitDiva: At times I will talk  
to you and at times I will...IM  
you  
DetroitDiva: ok?  
carlotta: yes  
-Papers: ok  
DetroitDiva: Hi Carlotta!  
DetroitDiva: and Papers  
DetroitDiva: welcome  
carlotta: hello  
-Bishop: Hello!  
carlotta: we have 15:38  
audience type here
```

Good Water III: Synchronicity



**Figure 12.** screen capture of *Good Water III: Synchronicity*, 121212 UpStage Festival, Detroit, Dec 2012.





**Figure 13.** screen capture of a video document of *Face the Facts* projected onto a newspaper that Anna Yen is reading on site with proximal audience, at the Judith Wright Centre in Brisbane, with James Cunninghams as manipulator and in webcams: Amin Hammami in Tunis, Cherry Truluck and Hedva Eltanani in London, Katarina Đorđević Urošević in Belgrade, and Maartje Belmer in Amsterdam, Dec 2011

**MULTI-LAYERED BODY:** Performers play with the liquidity of their own identities, enhanced by the transparency and superimposition possibilities (Fig. 14).

**CLONING** the body is possible by putting the same pre-recorded media as many times as wanted (Fig. 15), and juxtaposing the 'live' body and voice with the pre-recorded one.

## B. Space

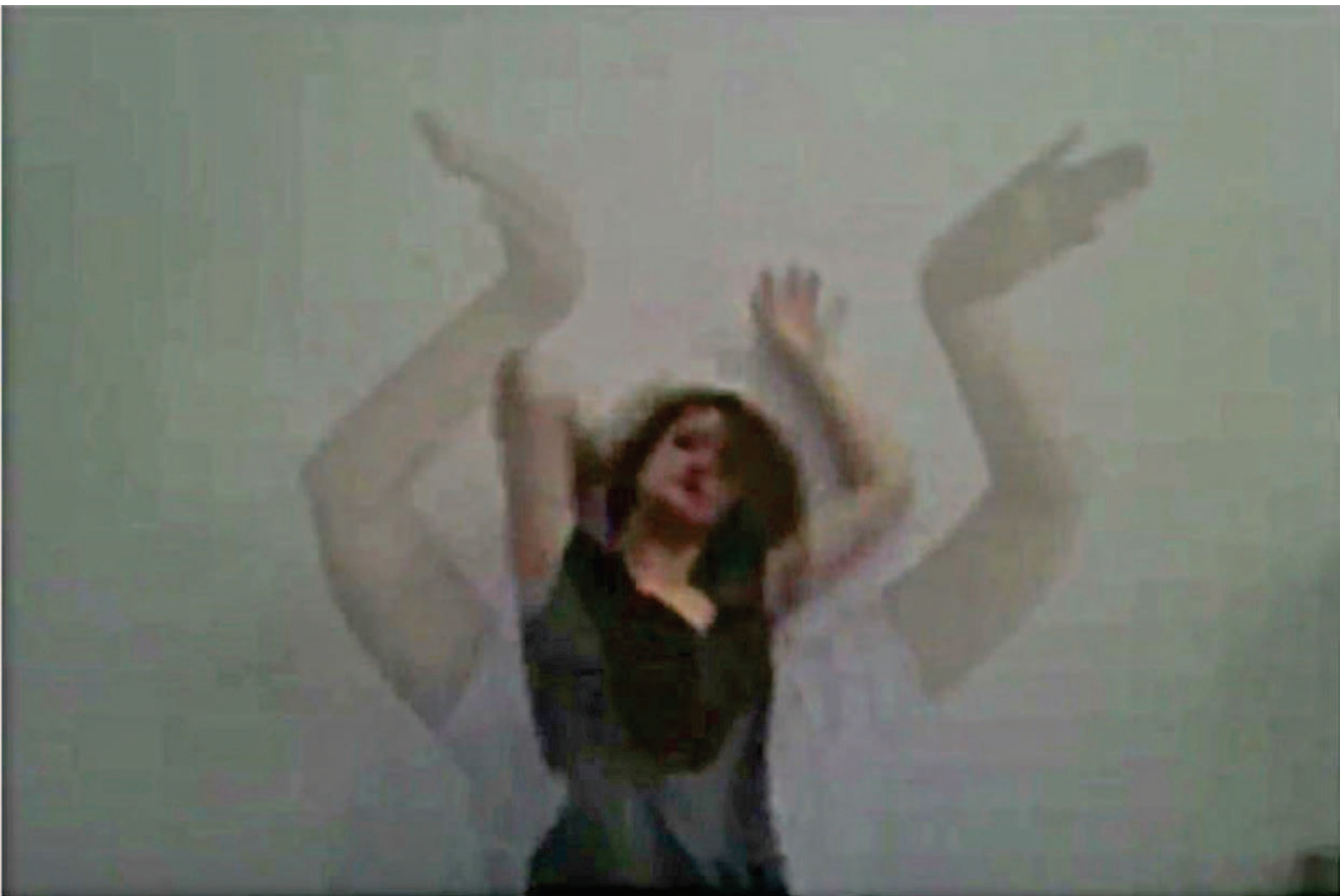
**THROUGH THE WINDOW:** The eyes – small moving details – are a strong indicator of the full body and trigger the audience's imagination to reconstruct it. The black screen can be taken as a window, a fence or a ceiling. There is a sense of proximity like erasing steam blown on the window screen (Fig. 16).

**SCALES:** Performers use the screen space as if it is a theatre with a set and props, the performers webcams are resized and masked to fit in the set (Fig. 17). In order to give the illusion of relating to the other performer in a remote location (Katarina Djordjevic Urosevic in Belgrade), I am looking on the side at nothing. As an anecdote, in order to be online while travelling, I was in a corridor of the Hilton Hotel at Iguazu Falls in North Argentina. Sound and performers voices can also give an imaginary dimension to the flat space.

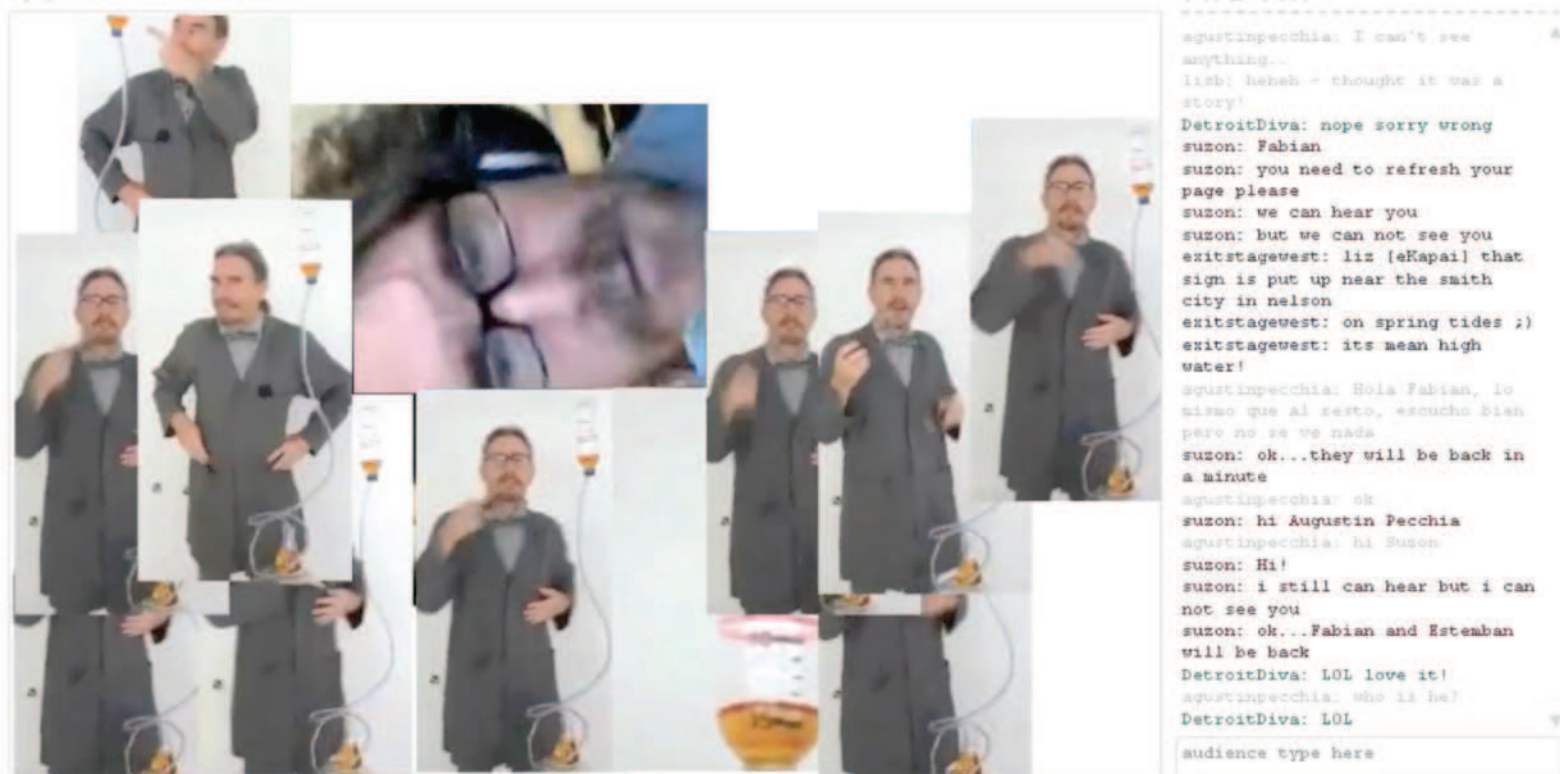
**MULTI-ANGLES** of the same space is not new in terms of television or cinema, but usually there are cuts from one angle to another. While in *Into The Abyss* (Fig. 18), multiple points of view are shown at the same time, with various sizes, in order to compose a new space.

**BRIDGING SPACES** by using a rope in both spaces, of which one is public with an onsite audience and the other audience is intimate. The resulting image is also viewed by an online audience. The two performers, one in each space, have a conversation, bouncing between each other, across distance. The rope is linking spaces as a metaphor of connection (Fig. 19). The onsite audience is witnessing mixed realities with one performer present with them in the public space and the other projected.

**OUTDOOR:** Wireless technology, mobile networks and light equipment enable going outdoors (Fig. 20). Real people, spaces and situations can inform and transform the performance.



**Figure 14.** screen capture of Pascale Barret in Brussels and Suzon Fuks in Amherst USA performing in *Less Than 6 Feet*, using transparency and superimposition of their webcams, 22 Aug 2012



**Figure 15.** screen capture of Professor Von Brucken Ducker alias Jeff Turpin, Time Keeper of the first Waterwheel World Water Day Symposium, 22 March 2012



**Figure 16.** screen capture of the beginning of *Waterwheel Installation* with Hedva Eltanani in London and Maartje Belmer in Amsterdam, gazing through the window.



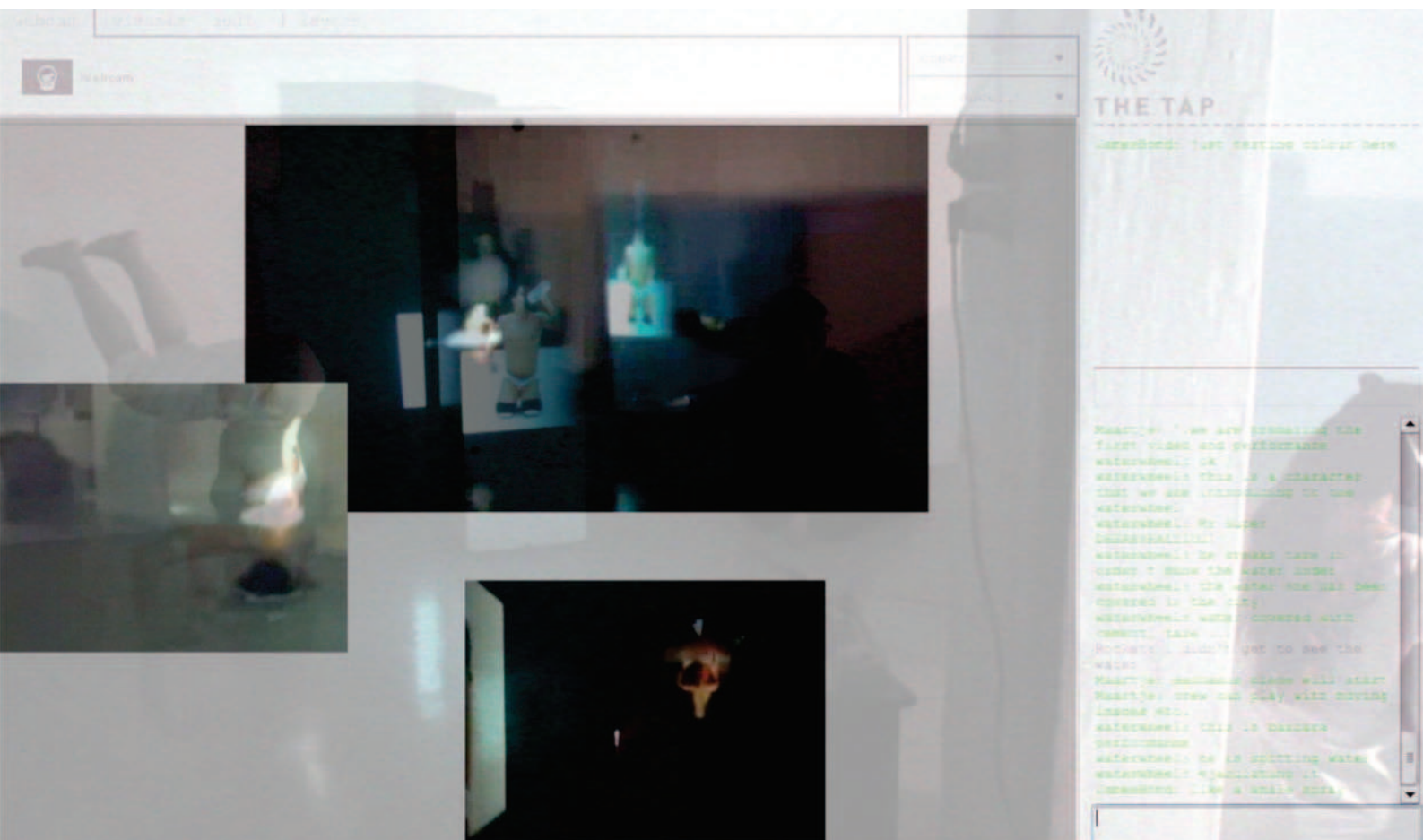


THE TAP

siron: lei, drunken  
 stars...twinkle twinkle...  
 Katarina: everyday someone is  
 drunk...it's a sailor story  
 siron: lets row the boat  
 -ALBERTO:  
 siron: come on, someone leave a  
 row!  
 Katarina: hip hip  
 siron: sorry!  
 Maartje: row, row, row the boat  
 -ALBERTO: YES I CAN USE  
 the...  
 Maartje: gently down the stream...  
 -as you I am still in  
 Katarina:  
 siron: gently down the stream!  
 the...prepare the sails!  
 siron: sail on!  
 Maartje: you live there!  
 -ALBERTO: SA MAI SUTARA  
 siron: Montpelier, is near the  
 sea!  
 siron: the river?  
 -as you Maartje  
 the...can I also prepare the sails?  
 siron?  
 -ALBERTO: YES, SURE!  
 -as: Si  
 Katarina: siimoda and chest at  
 vinas  
 siron: Hello  
 the...hello! Katarina  
 siron: Hello Sam?  
 -as: by  
 Maartje: write me if you want  
 the sails to go up  
 -as: si  
 siron: YES  
 -as: YES  
 Katarina: YES  
 Maartje: up!  
 -as: YES  
 -ALBERTO: YES  
 siron: YES  
 the...yes yes I the giraffe  
 siron:  
 siron: YES  
 siron: I...I...YES!  
 Maartje: the only way is up  
 -ALBERTO: COME ON...PLEASE!  
 siron: YES!

**Figure 17.** screen capture of SOS by Hedva Eltanani, with (from left) Maartje Belmer in Amsterdam, Suzon Fuks in Iguazu, Katarina Đorđević Urošević in Belgrade and proximal audience in London, Jan 2013

Webcams scaled down to fit the set.



**Figure 18.** video document still of *Into The Abyss* by Barbara Roland in Brussels, at iMAL, July 2011.



**Figure 19.** video document still of *Waterwheel Installation* with Anna Yen performing in Brisbane at the Judith Wright Centre in Brisbane with an onsite audience, and Maartje Belmer in Amsterdam.



#4 TAP - Waterwheel First Birthday

webcam | visuals | audio | draw | layers | stage 12:14 / 01:47:36

Webcam

crew: 7  
audience: 4



THE TAP

suzon: no there are usb wifi  
neoscenes: ah, okay, yeah that's better than bluetooth  
suzon: yes...i am reluctant o use bluetooth webcam ...  
neoscenes: for the mike/headphones they work okay okay  
suzon: West, are you ready after this?  
suzon: hi West!

mollyh: flat whites, the best  
mollyh: city cat  
-mem: yes, lots of milk  
mollyh: heh heh  
mollyh: yum  
mollyh: :')  
neoscenes: slurp  
-mem: coffee toast! yumi  
mollyh: oy  
amin: acapilla singing :)  
amin: milk opera  
neoscenes: I want the ladyfingers back ;-)  
mollyh: pastoral  
-mem: milky-cloudy  
-opera  
mollyh: like a scene from dalmas  
amin: tchaykovsky :)  
mollyh: Dalmas

audience type here

**Figure 20.** screen capture of Jeffrey Turpin performing for the Waterwheel first birthday party, outdoors, nearby Brisbane River, 22 August 2012

## C. Time

**SIMULTANEITY AND LAG** have to be taken into consideration when choreographing and/or performing across webcam windows. Slowing down at times for letting others catch up, skipping a move in order to resynchronise, ability to improvise, playfulness, immediacy and be in the moment with the flux of the stream provoke at times new rebounds, humour, the poetry of the unexpected, contributing to the feeling of liveness, togetherness (Fig. 21).

**CANON** singing and/or in harmony with the performer(s) own pre-recorded voice(s) can be done with cloned and mixed with several audio files.

**BRIDGING TIME** between onsite and online audiences. We've tried to make a script with parallel activities joining at times and where audiences were sharing their immediately prior experience with each other, becoming agents of the performance too.

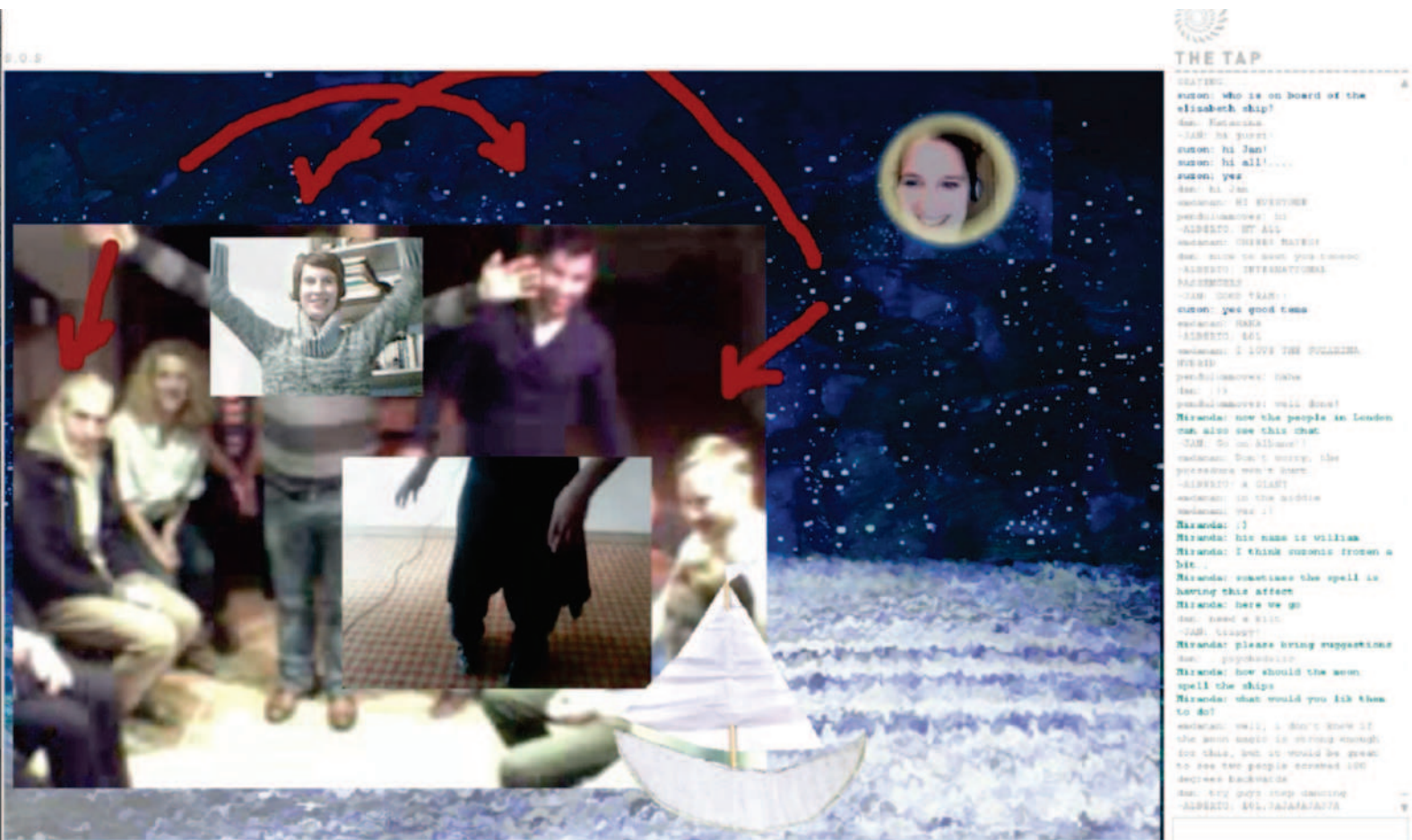
The **GO BETWEEN** bridges the two audiences online and onsite, describing the activities in the public space. This role is reminiscent of the radio commentator.

## Conclusion

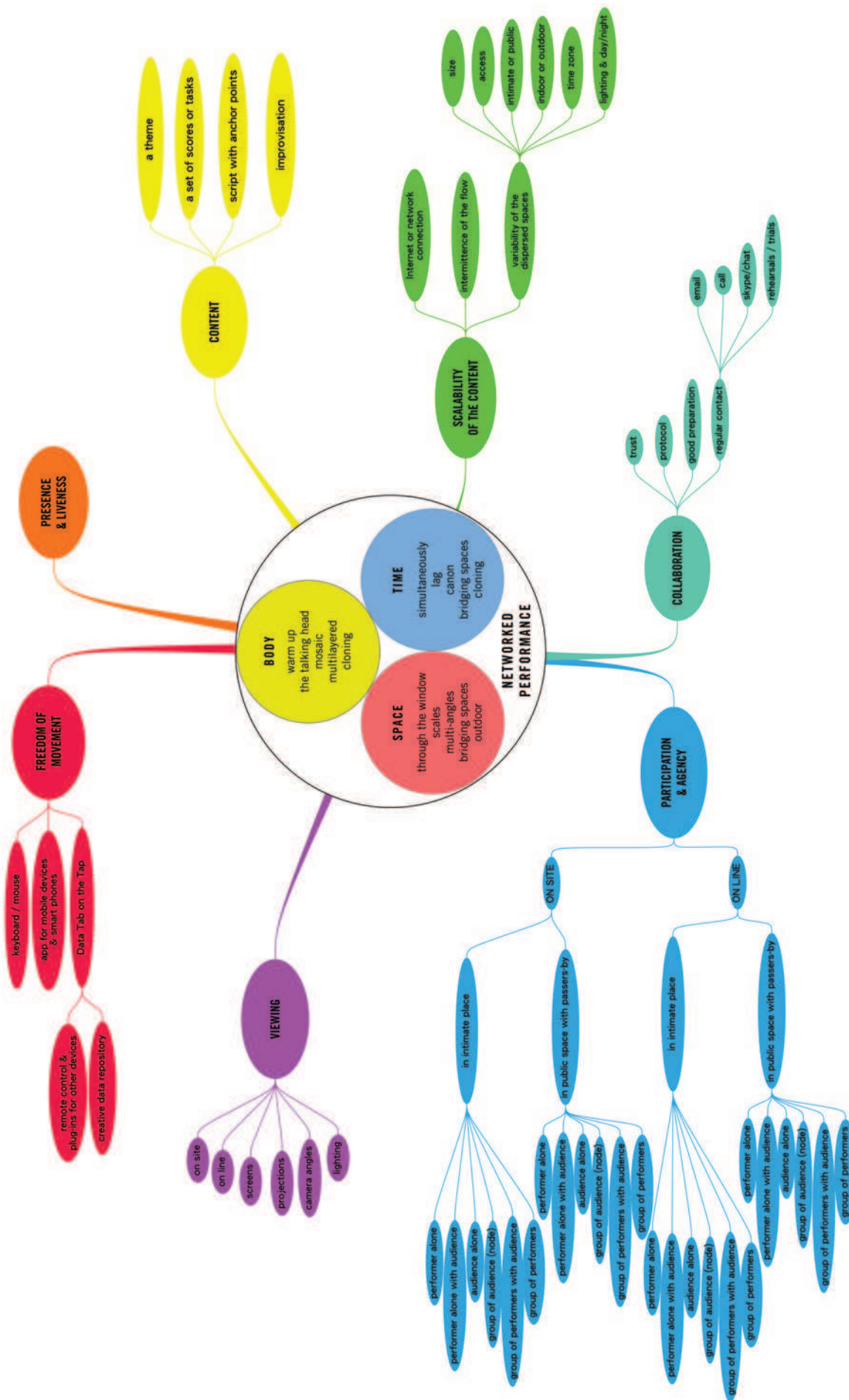
The perceptions of the body, time and space impact on crucial factors for networked performance (Fig. 22):

- liveness and presence are at the core;
- the content is based on a theme, a set of scores or tasks, scripted with anchor points or improvised;
- the scalability of the content is relative to the Internet connection, the intermittence of the flux, the variability of the dispersed spaces in terms of size and access (if there are intimate or public spaces), time zones and lighting which give a different rhythm and feel of action and reaction to performers and audiences (difference of energy if day or night time or if outdoor or indoor);
- the collaboration across disciplines and cultures lies on building trust and protocols, good preparation and regular contact by email and skype/ chat sessions;
- the participation and agency of artists and audiences depend on if performers have a proximal / onsite audience or/and an online audience, if they perform alone or with a group in an intimate or public space, if audience are given freedom or time to be agents of the performance;





**Figure 21.** screen capture of SOS by Hedva Eltanani, with Maartje Belmer in Amsterdam (top right), Suzon Fuks in Iguazu (black legs in the middle) and Katarina Đorđević Urošević in Belgrade (top left) are interacting and dancing with onsite audience in London, incorporating the lag, Jan 2013



**Figure 22.** Diagram of crucial factors in networked performance, November 2013.

- the viewing of the work for a performer or an audience member onsite or online relies on the camera-originated environments, the screens, in some cases the projections and the lighting of the space(s), as well as if it is an indoor or outdoor environment;
- the freedom of movement and the desire to participate as a performer and as audience away from keyboard/mouse-based computers, pushed the Waterwheel team to begin investigating the use of mobile devices to integrate remote physical movement and sound into the online structure of Waterwheel's Tap.

Taking a cue from research using sensors in dance, we are using mobile devices carried by or attached to participants to transmit location and motion sensor data and live audio for use as experimental content, feedback and control source for elements of the Waterwheel Tap while outdoors.

Ultimately we see a Tap 'Data Tab' as a structure that would invite creative / innovative projects with a data archiving facility accessible beyond the life of a project and used and reused by any artists<sup>11</sup>.

## Endnotes

- 1 Mirage by Igneous, co-creators James Cunningham and Suzon Fuks <http://igneous.org.au/projects/mirage>
- 2 'Now you are talking', an instructional film for the telephone using a combination of animation and live action. Produced by Max and Dave Fleischer in 1927 [https://archive.org/details/now\\_youre\\_talking\\_1927](https://archive.org/details/now_youre_talking_1927)
- 3 Maria Chatzichristodoulou, 'Cyberformance? Digital or Networked Performance? Cybertheaters? Or Virtual Theatres?...or all of the above?' paper presented at the Cyposium in 2012 on Waterwheel. Entire documentation including video and link to the pdf document available on <http://www.cyposium.net/selected-presentations/chatzichristodoulou>
- 4 ActiveLayers biography <http://archive.igneous.org.au/activelayers-bios.html>
- 5 'The Wonder of Improvisations' by Al Wunder, Wunder Publishers, 2006 - ISBN 0-646-455559
- 6 'Re-calling Home!' by ActiveLayers presented at the CyPosium in 2012 on Waterwheel. Entire documentation including video and link to the pdf document available on <http://www.cyposium.net/selected-presentations/activelayers>
- 7 'Tank Man Tango' by Deborah Kelly, video tutorial of the choreography <http://youtu.be/LLFmetOpbv>
- 8 'Tank Man Tango' streaming - part 1: the choreographed routine <https://vimeo.com/6374259> - part 2: the improvisation <https://vimeo.com/6374679>
- 9 see blog archive from February to 12 April 2011 <http://blog.water-wheel.net>
- 10 see blog archive from 23 April 2011 to 22 August 2011 <http://blog.water-wheel.net>
- 11 Presentation at ISEA2013 in Sydney and paper to be published soon

## WEB LINKS

Suzon Fuks blog <http://suzonfuks.net>

Igneous website <http://igneous.org.au>

Waterwheel platform <http://water-wheel.net>

AccessGrid <http://accessgrid.org>

UpStage <http://upstage.org.nz>

Selfworld <http://selfworld.net>

## Biography

**Suzon Fuks** is an award-winning intermedia artist originally from Brussels, Belgium. She studied dance, theatre and music, and completed a Masters in Visual Arts at La Cambre, a school formed on the Bauhaus philosophy, examining how different artistic disciplines inform each other. She has lived in Australia since 96, and has been co-artistic director of the company Igneous since its inception in 97, with long-term collaborator, James Cunningham. An Australia Council for the Arts Fellowship (2009-2012) allowed her to further research networked performance, which resulted in initiating the Internet platform Waterwheel.