Garrett Lynch Yoshikaze Up-in-the-air Second Life Residency

Garrett Lynch

Keywords: residency, representation, ‘virtual’, ‘real’, mixed-reality, performance.

Abstract

This article discusses the artist Garrett Lynch’s residency in Second Life® at Yoshikaze “Up-in-the-air”, HUMLab, Umeå University in Sweden.¹ The artist’s mixed-reality live performance and installation work in the ‘virtual’ world, part of a wider artistic practice on networks, focuses on the identity and role of the artist within an environment mediated by networked technology. The residency enabled the continuation of this practice and facilitated through the site of the residency the development of ideas of space and place as they relate to identity.

Eleven works, predominantly performance based, were produced during the residency that explored the breadth of the Virtuality Continuum (Milgram et al 1994: 1321-1329).² Each investigated the boundary between the ‘virtual’ and the ‘real’ and how creative practice can be produced at their intersection. Techniques of juxtaposition, framing, layering, folding, combination and mixing were employed throughout. Works involved performance across multiple ‘real’ and ‘virtual’ spaces and used specifically built props and environments in world, performance software for a number of computing and mobile devices and web 2.0 / Second Life mash-ups.

A number of recurring themes emerged in the development of work, including liminality, new frontiers, augmented or mixed presence and vision, which formed thematic strands of research. It is these thematic strands, their development and use that form the structuring of this article.

¹ Works are also documented and discussed in the artist’s publication Garrett Lynch Yoshikaze “Up-In-the-air” Second Life® Residency, published by Yoshikaze in association with Lulu.

² The Virtuality Continuum is a concept first introduced by Paul Milgram and has been employed in a number of his papers. The concept is used describe a range from the completely ‘virtual’ i.e. the world of digital data, to the completely ‘real’ i.e. our analogue reality. The reality-virtuality continuum encompasses all possible variations of ‘real’ and ‘virtual’, both separated and mixed. It has been highly influential in the field of mixed-reality.
Introduction

The artist Garrett Lynch’s practice focuses on 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. It considers how networks as environments reconfigure the artist and their practice, simultaneously expanding the possibilities of expression and communication while undermining existing value systems. In Second Life this takes the form of mixed-reality live performance and installation focused specifically on the identity and role of the artist. Practice employs ideas of representation that are folded, layered and framed between what is traditionally termed as the ‘real’ and ‘virtual’ terms that become increasingly more difficult to delineate as technology merges them.

Since 2008 the artist has undertaken practice within the ‘virtual’ world through an avatar, a representation, called Garrett Lynch. This representation uses the artist's ‘real’ life name (Austin 1964: 62-77) in Second Life and constantly wears a sandwich board stating ‘I'm Garrett Lynch (IRL)’. This functions as an abbreviation on the artist's national identity (Irish), an acronym on his ‘real’ location, In Real Life, and references Keith Arnatt's conceptual work, Trouser - Word Piece (1989).

From December 2010 to February 2011, Garrett Lynch was artist in residence at Yoshikaze Up-in-the-air in Second Life. The residency, hosted by HUMLab, Umeå University in Sweden, enabled the artist to continue research on identity in ‘virtual’ spaces. Differing from traditional residencies however, the artist was not in situ in Sweden but rather online/in-world for the duration of the residency. Instead of an artist working within a community that is geographically local, as is traditionally the case with an artist's residency, the artist worked within the context of a community, the host university, that was geographically distant and to an audience, visitors to the universities 'virtual' space, who were dispersed globally.

The residency afforded the artist the opportunity to shift the emphasis of research from identity to space. To explore the place of the residency, how in this specific instance the residency was affected by the ‘virtual’ nature of the space it occurred within and how in turn that informed or influenced the artist's projection of identity within that space. Place itself became a plastic material which could be constructed to specification without the limitations of ‘real’ space e.g. material qualities, physics etc. and could also be combined or remixed with

---

3 The use of the terms ‘real’ and ‘virtual’ are used throughout this article as a means of identifying with commonly understood notions of the physical world around us and the non-physical; primarily what is digital however also including dream and hallucination states. These terms are considered philosophically problematic, even more so with relation to mixed-reality, and as such have been used throughout within single quotation marks to remind the reader.
representations of other places. This enabled the production of numerous works where place and identity were all at once subject matter, material and site of activity.

Eleven works were produced during the residency, all performance and installation based work incorporating specifically built props, environments and performance software for a number of computing devices and web 2.0 services. Performances were documented with video and photography throughout. What follows is a discussion of the works, not as they occurred chronologically, but instead grouped together based on the themes, concerns and techniques used in the residency.

**Liminality; mixing ‘real’ and ‘virtual’ spaces and places**

Liminality was a reoccurring theme in many of the works produced during the residency however is most evident and dominant within the performances *Walking, not Running, and Getting Nowhere (Exploration #1)* and *Walking, not Running, and Getting Nowhere, (Exploration #2)*. The technical setup for both of these performances was almost identical and relied on a system of live feeds from places situated outside of the ‘virtual’ world. The feeds’ content and how they were used differed however enabling each performance to explore contrasting ideas.

In both performances the artist’s representation was positioned standing on top of a horizontal screen. The view into the ‘virtual’ world was the representation’s first person point of view, a view of the ground, which filled the field of vision as seen through the Second Life application window. Once the performance was underway the artist’s representation started to walk on the spot and the horizontal screen broadcasted a live video feed of movement from another place shot from the same first person point of view.

*Walking, not Running, and Getting Nowhere (Exploration #1)*

In *Exploration #1*, the artist walked the perimeter of his neighbourhood with a networked mobile device. A video feed recording the route underfoot, visually consisting of the pavement, leaves etc. and aurally the sound of passers-by, traffic etc. was broadcast through a web 2.0 live video service and a custom designed GPS (Global Positioning System) web application mapped and stored the path of the walk. In Second Life the video feed was streamed to the horizontal screen while a map created from the GPS coordinates was displayed as a HUD (heads-up display) of the artist’s location as he moved through ‘real’ space (Fig. 1).
Figure 1: Walking, not Running, and Getting Nowhere (Exploration #1), Second Life. Walking performance in Cardiff, Wales, employing streaming video and GPS.

The purpose of the performance was to consider a scenario where the artist’s representation in a ‘virtual’ world could become sentient and so more than a representation. In this context, the performance enabled an experience of ‘real’ space, a simple walk on a ‘real’ street, for the artist’s representation and attempted to reverse the voyeuristic/control relationship between artist and representation. Conventionally the artist, a user, will control his representation to experience the ‘virtual’ world by proxy. In this instance the artist became the proxy for his own representation, his walk became his representation’s mediated experience. The artist did not experience the ‘virtual’ world during the performance. His experience was restricted to the immediate surroundings of the walk while his representation experienced a mixture of both ‘virtual’ and ‘real’ worlds usually reserved for the artist.

Control of the performance, the route of the walk, remained with the artist however and while the representation was immersed in the audio-visual experience much as we immerse ourselves in ‘virtual’ worlds, it had no means of regulating it. The experience was therefore in this respect more limited than the conventional artist/representation relationship in a ‘virtual’ world. Unlike that scenario however, what was experienced wasn’t a simulation of a ‘real’ space, it was an experience of a mediated ‘real’ space and so in this could be considered quantifiably a better experience.
Walking, not Running, and Getting Nowhere (Exploration #2)

Figure 2: Walking, not Running, and Getting Nowhere (Exploration #2), Second Life, Google Earth, CamTwist and Bambuser®. Technical configuration for mixing Google Earth and Second Life.
In Exploration #2 the technical setup was identical to Exploration #1 however the video feed for the horizontal screen streamed from Google Earth® (Fig. 2). In Google Earth (the name of which is now a misnomer) the artist navigated the perimeter of the Apollo 11 landing site on the Moon and once again recorded the route underfoot. This time, this provided an experience for the artist’s representation of a ‘virtual’ space beyond its own ‘virtual’ world. The Apollo 11 site was chosen as one of a few locations on the Moon that is documented in detail and has a distinct edge/boundary where photographic detail is of a noticeably lower quality on the outside. Reminiscent of ‘virtual’ worlds, notably video games, which often have a boundary that hems the user in this visual, constantly in view, served to illustrate the liminal nature of the performance.

Unlike Exploration #1 where the ‘virtual’ and ‘real’ are mixed, in Exploration #2 another ‘virtual’ world, itself a representation of the ‘real’, is employed and mixed with the ‘virtual’ space of Second Life. Google Earth was chosen as that other ‘virtual’ world which would be used because it virtualises not just the idea of space, as is the case with Second Life, but also place, representing specific geography and architecture through primarily photographic means. It’s this contrast with the ‘virtual’ world of Second Life, both in appearance and purpose, which enabled the artist’s representation to experience another space and specific place, to be a unique interpretation of a ‘virtual’ reality.

With the steady increase in computing capabilities has come an increase in the audio-visual quality of ‘virtual’ spaces and our representations that move through them. The experience of liminality, juxtaposing ‘real’ and ‘virtual’ space and place, in both Walking, not Running, and Getting Nowhere performances was first and foremost for the artist’s representation and so suggests that once we reach the pinnacle of audio-visual quality, once immersion is to a high standard, improvements of our representations may entail the ability to experience, learn and act independently of their users.

‘Virtual’ tourism and new frontiers

The use of Google Earth in Exploration #2 as a ‘virtual’ experience for the artist’s representation led to three further works during the residency, two performances and one installation. If the artist’s representation could see and hear other ‘virtual’ spaces and places from the location of the residency within Second Life, could the artist’s representation actually visit these other spaces and places? This became the focus of those three works.

---

4 NASA images and videos taken during the Apollo 11 Moon landing can be seen as part of the Apollo series on Google Moon, [http://www.google.com/moon/](http://www.google.com/moon/).
Initially methods for moving the artist’s representation from the ‘virtual’ world of *Second Life* to *Google Earth* were investigated including exporting the artist’s representation as a 3D model, converting and to an extent rebuilding it so it could be articulated and animated in *Google Earth*. While this was possible it was decided that such a complex process would not be used as it would break with how identity had been employed in all previous *Second Life* practice by the artist. The artist himself is not in the ‘virtual’ world during the creation or performance of a work, instead he is represented there. Displacing the artist’s representation to another ‘virtual’ world, resulting in a copy or double in that space would be fundamentally different and simply an unnecessary exercise in fidelity to the original representation. Instead a more appropriate solution was chosen which involved creating a second-order representation, a representation of the representation, an avatar for the artist’s avatar.

By creating a second-order representation the artist was able to do three things. Firstly, works created with this representation would be consistent with earlier works in the use of ideas and processes of identity. The second-order representation was intended to relate to the artist’s representation as the representation itself does to the artist. Rather than be a facsimile, a reproduction as true to the original as possible, the representation could be employed as an extension of what it represents in a space the represented cannot enter.

Secondly, by creating a representation of a representation, translating identity from one ‘virtual’ world to another, each different and with its own technical constraints, a loss of data occurs. This loss of data was already evident in how the artist’s identity is represented in *Second Life*, a digital representation of an analogue being. In a digital world, identity is (as everything else is) reduced to information, symbols which are then represented in modern computing in audio-visual ways. While digital tools and techniques strive to reproduce information flawlessly, part of the nature of representation is the loss of data that ultimately results in what is no more than an interpretation of the original. The created second-order representation resembles a paper doll with no moving body parts. It is a representation of a doll with information lost in the process of translation. This process of representing existing digital information and losing information in the process undermines the common misconception that digital information is never lost or never degrades. Here there is a clear difference between original and representation and as different as the artist’s representation is to the artist, the second-order representation is to the artist’s representation.

Thirdly and lastly, by clearly delineating between the original representation and the second-order representation, works created in *Google Earth* would be created in a similar way to how they had been created in *Second Life*, that is through a proxy. This would continue ideas of a ‘virtual’ experience for the artist’s representation employed in the work *Exploration #2* and
enable the artist to explore that experience within a wider number of contexts.

**Meeting Sang (Colorado / Cardiff)**

The first work created with the second-order representation in *Google Earth* was titled *Meeting Sang (Colorado / Cardiff)*. The work was a performance however both performers and two of the locations used in the performance can be visited at any time from the artist’s website. The premise for this performance was to visit *Google Earth*, to be a ‘virtual’ tourist, meet and engage with the locals. Similarly to how a tourist documents/represents journeys and visits to locations, the performance was documented through a series of still and moving images. Unlike *Second Life however*, *Google Earth* has no avatars to meet, it is not considered a ‘virtual’ world to be socialised through. Users observe and explore place invisibly without embodiment and so the experience is not shared. Users are encouraged to contribute to the ‘virtual’ world by designing and adding 3D models of ‘real’ buildings and these are largely made through the *Google®* provided 3D application *SketchUp®*.

*SketchUp* is by default a blank canvas, a void, with only the minimum of indications that it is a 3D space, a horizon with colour indications of sky and grass, Cartesian coordinate axes and one human figure placed at the convergence of these axes. The figure is a tool for designers used for measuring the scale of 3D constructions and is a representation of Sang Ahn, a *Google* employee who works on developing the application.\(^5\) The figure is not an avatar in the usual sense. Sang Ahn does not control it, but it does visualise certain aspects of Sang’s physical appearance e.g. height, hair colour, approximate age, dress etc. and as such it embodies his identity in the ‘virtual’ space.

It was decided that this figure would be the tour guide for the second-order representations visit. The performance employed an itinerary and occurred as follows:

- The second-order representation arrives at the *SketchUp* Cartesian coordinate axes, a point of origin or geographic pole of sorts, where the figure of Sang is located to meet it.
- Sang and the second-order representation leave the ‘virtual’ space of *SketchUp* and arrive in *Google Earth* at Latitude: 40.0170N, Longitude: 105.2830W in front of the building in Boulder, Colorado in the U.S. (Fig. 3) where the software is developed.\(^6\)

---

\(^5\) This is revealed in a post on Angela Schwab’s weblog comparing the different figures in versions 6 and 7 of *SketchUp*. [http://blog.invaliddesign.com/2009/03/sketchup-70-vs-60.html](http://blog.invaliddesign.com/2009/03/sketchup-70-vs-60.html). Accessed 13 November 2011. In the comments to the post Sang Ahn states that the figure discussed above is based on him.

\(^6\) *SketchUp* uses a default GPS location of Boulder, Colorado for newly created 3D models. This is where *SketchUp* is created and explained in the online help note *Google Earth* model ends up in an unexpected location,
Finally Sang and the second-order representation move on to the location of the artist's home in Cardiff, Wales.

As a key figure representing the ‘real’ Sang Ahn, the identities and interests of SketchUp and Google Earth but also as the sole inhabitant of those spaces, the figure of Sang is a local and would have in depth knowledge of the spaces. Locations were chosen as specific to the figure of Sang, the ‘real’ place of creation of SketchUp and the second-order representation. The use of Boulder, Colorado in the performance however also refers to the default geographic position for English speaking users of SketchUp when they create a 3D model to be placed in Google Earth. Employing still and moving images to document cliché poses in the performance not alone relates the experience to that of a ‘real’ tourist but also to the community of Second Life where tourism and documenting that tourism have in itself become a social means of engaging with the ‘virtual’ space and it's residents.

Moon Walk

The performance Moon Walk consisted of another visit by proxy, through the second-order representation, to a location in Google Earth. This time rather than a touristic visit, the visit was to be framed as an expedition to a location that is considered largely unexplored in ‘real’ life. The site of the Apollo 11 landing on the Moon, previously used in Exploration #2, was chosen as the most significant place outside the Earth that is documented in detail within

http://sketchup.google.com/support/bin/answer.py?hl=en&answer=36224.
Google Earth.

The choice of location and the type of performance enabled further exploration of ideas used in Exploration #2. The performance begins with a flag already planted next to the location of the American flag. The flag contains the statement I’m Garrett Lynch (IRL) used in earlier works on identity in Second Life and displayed on the sandwich board worn constantly by all versions of the artist’s representation. A Moonwalk is then undertaken by the second-order representation in front of the Apollo 11 LEM (Lunar Excursion Module), which re-enacts parts of the walk by Neil Armstrong and Buzz Aldrin during the Apollo 11 landing (Fig. 4). The walk, in leaps and bounds, simulates the low gravity effects experienced by the astronauts.

![Figure 4: Moon Walk. Walking performance at the site of the Apollo 11 landing on the Moon in Google Earth.](image)

The act of planting a flag is to claim ownership of territory. The act in this performance however is purposefully futile since there is no physical territory, no land to own. It highlights that the territory is representative, a simulation, while the flag itself emphasises that the claimant, the second-order representation, is a representation. Both act and ‘virtual’ artefact are referents back to an understanding of ‘real’, physical spaces and bodies that inhabit those spaces, which is quickly becoming outdated.

Similar to Meeting Sang (Colorado / Cardiff) the performance enabled the artist’s representation to explore a ‘virtual’ space beyond Second Life. In this particular case however it was also an experience of other worldliness for the artist as a trip to the Moon.
holds certain ‘virtual’, imaginary and fantastical associations.

**After**

The last work created during the residency at the Apollo 11 site on the Moon in *Google Earth*, titled *After*, was an installation consisting of the sandwich board used in all performances and the flag used in *Moon Walk*. The sandwich board was exported from *Second Life* and converted to a format appropriate for importing into the ‘virtual’ space. Both sandwich board and flag were placed in close proximity to the American flag and Apollo 11 LEM (Fig. 5).

![Figure 5: After. Performance artefacts left at the site of the Apollo 11 landing on the Moon in Google Earth.](image)

The installations purpose was to leave a trace of the performances enacted within the space by permanently leaving artefacts used in those performances. In addition the sandwich board and flag, representations of ‘real’ artefacts that have in this instance only ever existed within ‘virtual’ spaces and been employed in the artist’s performative practice in those spaces, are juxtaposed with representations of ‘real’ artefacts, the American flag and Apollo 11 LEM, that existed in ‘real’ space and were used in historical events.
**Augmenting ‘virtuality’**

*Three Wearable Devices for Augmented Virtuality* consisted of a series of wearable devices constructed for three separate performances by the artist’s representation in *Second Life*. Conceived as a series of works, the devices/performances were constructed and performed at different points throughout the residency and interspersed by other works. This influenced and informed particular emphasis in each work. The works explored ideas of Augmented Virtuality (Mann 2002) where the ‘real’, or more precisely a mediated ‘real’, augmented the ‘virtual’ space. The devices were intended to give the artist’s representation a heightened sense of place and enrich the connection between artist and representation.

**Three Wearable Devices for Augmented Virtuality - Device #1: A Wearable Garden**

*Device #1: A wearable Garden* was the first of the three devices constructed during the residency. This particular device and performance concept was conceived prior to the commencement of the residency and as such informed the original proposal and its emphasis on ideas of space, place and identity.

![Three Wearable Devices for Augmented Virtuality, Device #1: A Wearable Garden](image)

*Figure 6: Three Wearable Devices for Augmented Virtuality, Device #1: A Wearable Garden, Second Life.* Artist’s representation wears a portable device containing a live video stream from his ‘real’-world garden.

The device worn by the artist’s representation during performance consisted of a hollow cylindrical surface fixed behind the artist’s representation by a belt-like attachment. On the
interior surface a live video feed was displayed of the artist's snow-covered garden. During
the performance the artist's representation moved around the space of the residency on
HUMlab Island. The static view of the 'real' winter garden was juxtaposed with the moving
view of the 'virtual' islands lush vegetation on a typically clear Second Life day (Fig. 6).

In much the same way as a flat is used in theatre to provide a backdrop and context for the
presented content, the device for the performance situates the artist's representation in a
location. Unlike a flat however which simulates place, the device presents or rather mediates
a 'real' place. This usage in a 'virtual' world essentially inverts the theatrical usage of actors
and scene, actual and represented, 'real' and 'virtual'.

The device serves as a visual prop that is to be seen by the artist from a third-person point of
view as if his representations own audience. In Second Life users have a choice of engaging
with the 'virtual' space through their avatar, their representation in the 'virtual' space, by ether
seeing from a first-person perspective through their representations eyes (Mouselook Mode)
or by seeing from a third-person perspective. Engaging with a 'virtual' space from a first-
person perspective can produce very rapid movements that are disorientating so a third-
person perspective has become the default way of seeing. The out-of-body experience
created by a third-person perspective distorts how we visually perceive. First-person
perspective is how we interact with the 'real' world and would expect to see and be embodied
in a 'virtual' one. Here however instead of the artist's representation essentially being a
window to the space for the artist it becomes his mental reflection within the space.

The artist's representation is, similar to previous performances occupying a liminal space
between 'virtual' and 'real', mediated, spaces. The worn live imagery, the mediated space
seen in relation to the environment of Second Life, 3D graphics overlaid with a graphical user
interface and framed within a graphical windowed operating system, becomes more unreal,
representative and virtualised.

**Three Wearable Devices for Augmented Virtuality - Device #2: A Wearable Map of the Region**

Created and performed after the series of works in Google Earth, Device #2: A Wearable Map
of the Region consisted of a flat square horizontal surface worn by the artist's representation
with a belt-like attachment from within a circular cut out centre. The upper surface displayed
a live view of the Second Life map at scale 1:10. As the artist's representation moved

---

7 Second Life uses Google Maps technology to map the virtual world. This allows users on the web to find places and link directly to them in Second Life. This is explained in the online help note Linden Lab official:map API, [http://wiki.secondlife.com/wiki/Linden_Lab_Official:Map_API](http://wiki.secondlife.com/wiki/Linden_Lab_Official:Map_API).
around the space of the residency wearing the device, the map updated with each rotation and movement to keep it centred on the current location and display a view of the representations immediate surroundings (Fig. 7).

![Figure 7: Three Wearable Devices for Augmented Virtuality, Device #2: A Wearable Map of the Region, Second Life. Artist's representation wears a portable device containing a scale 1:10 map of its location in the ‘virtual’ world.]

The title of the work alludes to Alfred Korzybski’s dictum that the map is not the territory (1931: 747-761). This metaphor, that representation and subject are not the same, later developed by Jorge Luis Borges in *On Exactitude in Science* (1999: 325), forms a key role in philosophical discussion around what has been termed as the Map-Territory Relation. Similar to Device #1, the device was a visual prop for the artist as viewer of his representation from a third-person point of view. Providing a point of view that is out-of-body enabled the device to become a continuation of a space that is itself already a representation. The device and performance remind us that ‘virtual’ worlds are themselves in many ways mappings of the ‘real’. While they may not literally and cartographically map out ‘real’ spaces they are maps of social and cultural forms and structures at play in our everyday lives. Within the ‘virtual’ world we identify ourselves with communities that may be largely dependent on a shared language, interests, profession, background or even ‘real’ geographical location.

---

8 It may interest the reader to read the following article, Fun with virtual world cartography, [http://arianeb.wordpress.com/?s=Fun+With+Virtual+World+Cartography](http://arianeb.wordpress.com/?s=Fun+With+Virtual+World+Cartography), which discusses the size of the space of Second Life in ‘real’ world measurements, its comparison to other ‘virtual’ worlds and ‘real’ islands.
The artist's representation is already within a map, a map that is rapidly becoming as large as the territory it maps. The device and performance are an attempt to visualise a map of this map in such detail that its scale becomes almost comparable and it will soon begin to incorporate itself on and on to infinity. Even scaled 1:1 however the map can never be a perfect representation of the original or in this case the original representation. Separated in time from the original representation due to periodic (one to three days) server caching of the Second Life map service (which should be noted is based on Google maps), the map can only incorporate itself if the wearer remains motionless during this time.

The device required detailed understanding of the space of Second Life which is separated into Sims (simulators, essentially plots of land), how the position coordinate system which has some similarity to GPS functioned and how the map service could be queried as the artist's representation moved so that it was continually updated on the surface of the device. Technically one of the most challenging and time consuming works of the residency the work, as a result of the period of time spent developing the work, also became conceptually highly rewarding.

Three Wearable Devices for Augmented Virtuality - Device #3: A Wearable Sea View

The last of the three device series, Device #3: A Wearable Sea View, was created and performed during the development of the last groupings of works created for the residency. This grouping had an emphasis on explorations of different modes of seeing within a ‘virtual’ world, themselves inspired by the use of third-person point of view in the first two works of the device series. This emphasis influenced the type of device that was created.

The device consisted of a semi-transparent hollow half sphere held in position over the head of the artist’s representation by an armature extending over the head and back to a belt-like attachment (Fig. 8). Unlike the previous two devices, Device #3 was a visual prop primarily for the artist’s representation. Inspired by the use of HUD’s (heads-up display) within Second Life, as a means of showing live information about or providing additional control of a space, the device overlaid a live video feed of a ‘real’ place onto the ‘virtual’ place of the residency. This enabled the artist’s representation to simultaneously see inside the ‘virtual’ world and outside/beyond it to another.

The device also refers to the Celatone by Galileo Galilei (Ayala 2010: 101-113), a device that enabled its wearer to see a distant place through one eye while using the other to navigate their immediate surroundings. Device #3 is a ‘virtual’ and augmented Celatone providing a mixed reality vision. An augmented virtuality is provided for the artist’s representation enhancing the experience of the ‘virtual’ world while the artist performing is, as always,
provided with an augmented reality experience, his ‘real’ experience is mixed with one within a ‘virtual’ space.

**Figure 8:** *Three Wearable Devices for Augmented Virtuality, Device #3: A Wearable Sea View, Second Life.* Artist’s representation wears a portable device containing a live webcam stream of a sea view from the artist’s ‘real’-world place of birth.

Place was used as a means of once more creating a connection between the artist and his representation. The place chosen for the live video feed was a view of Inchydoney in County Cork, Ireland, the county where the artist was born. As the artist’s representation moved around the space of the residency wearing the device, the view inside the ‘virtual’ world changed accordingly however the view of the ‘real’ place remained fixed. Seen from a third-person perspective the performance is similar to *Device #1*. The mediated ‘real’ space seen in relation to the environment of *Second Life*, video, 3D graphics and a graphical user interface, each layered on top of each other and framed within a graphical windowed operating system, becomes more unreal, representative and virtualised. In *Device #3* however rather than see the artist’s representation within a context it is the change to first person perspective and the representation itself seeing out of the ‘virtual’ world which allows it to attempt to situate and immersive itself within a context.

**Feedback and double vision**

Vision or how we as users see in *Second Life* was employed in a number of ways in both *Walking, not Running, and Getting Nowhere* works and all three works of *Three Wearable Devices for Augmented Virtuality*. In each case, how vision was used contributed to the work
in a significant way enabling the artist to immerse himself, his representation or the spectator and to frame or juxtapose the 'virtual' world in relation to other forms of representation of ether the 'virtual' or 'real'.

The following grouping of works is based on the use of vision as a central theme in itself rather than as a facilitator of another. Vision in combination with choreographed movement was used to move beyond first person and third person viewing to explore feedback, binocular screen vision, abstraction, automation and control. Works created in this grouping also enabled the development and testing of tools and techniques that would contribute to the final performance.

**Seeing the Seen**

*Seeing the Seen* was intended as a performance that would further explore ideas of the voyeuristic/control relationship between artist and representation employed in various ways in both series' *Walking, not Running, and Getting Nowhere* and *Three Wearable Devices for Augmented Virtuality*. Specifically, control of movement within a designed 'virtual' space was devised as a means of abstracting vision of the Cartesian 'virtual' space.

The artist constructed a hollow spherical set at the residency space floating above HUMlab Island for the performance to occur within. The set walls were slightly transparent to allow the conditions outside i.e. time of day, cloud cover, to influence the luminosity inside the set however excluded the possibility of seeing points of reference which might indicate location, orientation etc. The set contained a full-scale house in bright green surrounded by trees. This provided the only grounding point within the set.

Movement of the artist's representation was controlled from outside the 'virtual' space by a key press simulation application (an application which simulated keyboard strokes on the computer to trigger actions) that randomly panned, tilted and zoomed. Mouselook Mode, a first person perspective, was used to see the space during the performance. This enabled the body of the artist's representation to be out of sight and to view parts of the set within close proximity.

The combination of constructed set, random movement and first person perspective resulted in an abstract form of vision filling the *Second Life* client window. Captured as a texture, this vision was then fed through a video feed to the interior wall of the set allowing the representation to see its own sight in feedback with a slight delay abstracting it further (Fig. 9).
**Seeing the Seen** was the first performance during the residency that prioritised an aesthetic and employed a simple concept to this end. In many ways its function was as a testing of ideas and techniques that should be seen in relation to other works carried out during the residency and in particular towards an anticipated large-scale final work.

**Une Région, mais pas Centrale**

*Une Région, mais pas Centrale* (A Region, but not Central) was inspired by Michael Snow’s seminal video art, *La Région Centrale* (1970). In Snow’s work a camera mounted to a pre-programmed robotic rig was installed on a mountaintop in north Quebec (Media Art Net). The rig enabled the camera to move around two axes and capture the surrounding landscape. The resulting film of the landscape is familiar and yet as a result of how it is filmed, otherworldly.

The performance for the residency reinterpreted Snow’s work for the ‘virtual’ landscape of *Second Life*. The artist’s representation became the robotic rig with camera through which the viewer sees the landscape and moves around three axes within the space. Two instances of the *Second Life* client, each logged in as the artist’s representation, ran side by side on the same screen. The client on the left showed the performance through Mouselook Mode, a first person perspective while the client on the right showed the performance through a third person perspective (Figs. 10 and 11). This created an unusual form of binocular vision of the space enabling the viewer to simultaneously see both the location seen and the mechanism of seeing.
Sound for the performance was used for only the second time during the residency. *Walking, not Running, and Getting Nowhere (Exploration #1)* used sound as an incidental component, this time however the sound was reworked live alongside the visual. Movement sounds and the atmospheric sound of the wind in the 'virtual' world was captured, reworked in a number of ways through a purpose built audio application outside of the 'virtual' world and then streamed
back into the space creating a controlled feedback of textured audio. By employing sounds that originated from the 'virtual' world as the initial driving mechanism, manipulating and then building on these, a synchronicity could be maintained with both visuals seen.

Similar to the performance Seeing the Seen, movement through the space, this time at ground level of the residency, was controlled from outside the 'virtual' space by a key press simulation application. Seen from two points of view, the random movements of the performance became choreographic. The landscape, already otherworldly, 'virtual', became even more so as it was seen in ways and in detail through patterns of observation that were programmed and yet without a clear objective. Similar to Snow's work, ‘a satellite or a probe’ to another world, creating film which could be ‘comparable to the first rigorous documents of the surface of the moon’ (Holert ca.2003) the artist's representation becomes a probe for the viewer in the 'virtual' world.

The Green Stage

The final performance of the residency, which launched the residency exhibition, was a live mixed-reality, trans-locative performance by the artist entitled The Green Stage. Unlike previous performances that were primarily conceived for video and images, The Green Stage was to be performed before an audience who could be in the 'virtual' world at the performance space, at the gallery in Sweden or watching the live video stream on the web. The audience in the gallery or watching on the web were spectators and could not intervene in the performance however audience members in the 'virtual' world were invited to wander the space during the performance.

An enclosed stage was constructed for the performance. This was populated with a set consisting of a bright green house surrounded by trees, silhouettes of ‘real’ people and props of reclaimed and reworked Second Life Marketplace items (Fig. 12). Behind the house, through the trees, a live vista of a mountain range (the Rockies in Canada) could be seen. Next to the house a floating Second Life client window was positioned which was used during the performance to stream live video to (Fig. 13).

At the start of the performance, the audience who waited outside the performance space were led by the artist's representation from the 'virtual' gallery down a winding tunnel into the enclosed space. This passage from outside to inside served to highlight the transition from the 'virtual' world to an inner 'virtual' space that would be created during the performance. During the performance, Second Life client windows appeared from the green house and floated through the space. These floating windows and props placed around the set were
timed to periodically cycle through a number of colours, including green. The movement of
the artist's representation and the resulting direction of gaze captured as a video stream
through Mouselook Mode was choreographed from outside the 'virtual' space by a key press
simulation application which randomly panned, tilted and zoomed. This video stream of the
representations gaze was then broadcast live to the positioned client window enabling the
audience to simultaneously see the performer’s representation in the space and through its
point of view as the representation moved through the space.

**Figure 12:** *The Green Stage, Second Life.* View of the performance space.

**Figure 13:** *The Green Stage, Second Life.* Detailed view of performance mixed-reality video stream.

The live video stream broadcast to the positioned client window was not direct but
manipulated live. The green within the video was chroma keyed out⁹ and replaced by a live video of the artist from the ‘real’ world. As the artist's representation moved around the space, the artist's image moves around its surfaces as they change to green. The result is a mixing of representation styles. Looking through the ‘virtual’ worlds client window from within the 'virtual' world to a mixture of 3D and video creates a layering of a new type of 'virtual' space in the existing one. The ‘virtual’ world of Second Life is flattened and its stylised illusion juxtaposed against a photographic style is broken. In addition to using the visual channel of the live video to stream a visual mix of artist and his representations vision back to the ‘virtual’ space, the audio channel also broadcasts a sound that is equally representative of the artist. Audio from an ultrasound monitor of the artist's heartbeat, reworked in a number of ways, floods the space and evolves as a sound composition. As the performance increases in pace and complexity, the artist's heartbeat increases in tempo complimenting the visual tempo.

The space of the performance as a whole exists as a combination of ‘real’ place, constructed ‘virtual’ representations of place(s) and physical personal data directly experienced by all present. Image and sound combined within the constructed space links it to the artist enabling it to become a place created though identity. The client window displays a unique vision of the multi-layered hybrid space, an inner ‘virtual’ world replete with representations, seen only first hand by the artist's representation.

Conclusion

The residency culminated with a combined exhibition in Second Life and at HUMLab Gallery of all work produced during the residency. This included ten videos, eighty-nine still images, numerous props and objects used during the performances and installation and a print publication to mark the occasion. The Green Stage was performed on the opening evening of the exhibition making a total of eleven works produced during the residency.

The space of the residency in the 'virtual' world became a plastic and experiential place for the artist. Aspects of spaces were explored and exploited, places were combined and constructed creating new virtualised places. The residency visualised multiple locations, both ‘virtual’ and ‘real’, played on ideas of here and elsewhere that the artist (and in some works any audience present) could simultaneously experience in a variety of combinations. The place was explored in manual and automated ways. ‘Real’ local place was represented through streaming video, GPS and mapping, and mixed with other representations of places.

⁹ Chroma keying is a video technique for compositing two video images together. The colour in video A is replaced with the complete image of video B to create a new combined image. The technique is often used to position something such as a person in a place they aren't and so is a form of video based ‘virtual’ reality.
‘real’ and distant, e.g. through webcams, and other ‘virtual’ worlds e.g. *Google Earth*.

While the majority of concepts explored in the residency are of no surprise, the wealth of ideas and the techniques that were developed, not just in the ‘virtual’ world but also outside of it, are. These have provided material for ongoing development of practice with ‘virtual’ worlds. It was noted that when considered in relation to Paul Milgram's Virtuality Continuum (1994: 282-292), where ‘real’ and ‘virtual’ are diagrammatically illustrated as spaces that intersect, work while always situated in or juxtaposed in relation to the ‘virtual’ world was in fact occurring across or sourcing the breadth of that diagrams range. This resulted in the creation of work that was mixed reality but more particularly, an augmented virtuality, where experience in world was more immersive because of its connection to the ‘real’.

The mixed reality works produced always occurred through the artist’s representation. This allowed the artist's identity to remain an important consideration in relation to the residencies central theme of space and place, enabling the artist to represent his presence consistently across each. This defined a form of total identity, a singular identity, dispersed with a cumulative experience of both ‘real’ and ‘virtual’ as opposed to a dualistic identity of user and imagined avatar.

**Notes**


**References**


Holert, T. (ca.2003), 'Political whirlpools and deserts: Michaelangelo Antonioni, Robert Smithson and Michael Snow',


Mann, S. (2002), 'Mediated Reality with implementations for everyday life',

Media Art Net, 'Snow, Michael: The Central Region',

