BLOCK H

INTERACTIVE INSTALLTION
DOCUMENTATION

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Introduction & Background

There are many communities worldwide that are embroiled in violent conflict - from the gangs in South London and LA to the Basque separatists and the Middle East. As violence becomes an increasingly common fact of life, public painted memorials of 'fallen comrades' and graffiti in support of them or their cause have surfaced. With the stabilisation of the political climate in Northern Ireland and the evolution of the peace process the British Government has begun to replace murals that have paramilitary content or contain sectarian messages.

Though the façade of unity is being promoted, the communities are as socially divided as ever. The generations of distrust and bitterness within the civic system and between the families within it are ingrained, but not necessarily permanent. This project seeks to serve as a re-contextualisation of the murals and as an exploration into divisions and similarities between communities and the individuals that lead and inspire them.

Concept & Theory

The physical communities of Northern Ireland can be construed as communities of memory publicly displaying recollections of past history through their murals. "Looking to the past for what can be pressed into the service of the future, such communities may fashion for themselves a heroic past, a reworking of earlier times that Nietzsche calls monumental history."[1] By reinstating a particular event or memorialising a particular individual such as Bobby Sands into the present, the murals of the Northern Irish communities serve to perpetuate long held modes of association and belief, supplementing both unity within a particular community and partition from others who live close by.

For many within Northern Ireland their murals are akin to Barthes' notion of the photographic 'analgon' of reality, depicting a past actuality. Indeed murals have been used by mass media as a recognisable feature of the local urban landscape, reproduced countless times enabling an existence beyond their daily physical embodiment. Bergson noted that while we exist in the present '*practically, we perceive only the past,*' [2] the murals provide a perpetual referent to a view of has previously happened.

Counter-Strike is in a sense, realistic in style (if offers weapons identifiable as real world ones, if a player is killed in game play they cannot take part again until the next round or "restart"). It is certainly not realist in the sense that, as Galloway notes, realism requires 'a more-or-less direct criticism of current society and morals.'[3] When FPS (First Person Shooter) games are played entirely within the conventional rules there is little to challenge or subvert the conformist ideologies they perpetuate. However, there have been several attempts to challenge this imbalance with interventionist projects including *Velvet-Strike* and *dead-in-iraq.* While *Velvet-Strike* actively encourages disruptive techniques within game play *dead-in-iraq* serves more as a memorial to American soldiers who have died in the current war in Iraq. I intend include some of the pacifist sprays generated by *Velvet-Strike* as a user option within game play.

Public space is progressively subject to privatisation and intensified methods of surveillance and control. It is either shrinking or morphing into 'public-use' or 'public-access' space. Spaces that once helped us define our communities and our roles within them now often emanate a sense of disengagement and removal, leading to feelings of fear and ambivalence. John Dewey argued that our individual identities are created through meaningful interactions and exchanges with others in the social world while simultaneously changing the world within which individuals exist.

The shifting boundaries of physical public and private space are echoed by the internet where the private body becomes part of a virtual public space. I seek to underline this by covering a physical, private structure (the house) with projections of a virtual space (the Block H map).

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[1] Wyschogrod, E. *Man-Made Mass Death: Shifting Concepts of Community*
Journal of the American Academy of Religion, Vol. 58, No. 2. (Summer, 1990)
http://links.jstor.org/sici?sici=00027189%28199022%2958%3A2%3C165%3AMMDSCO%3E2.0.CO%3B2-C
[2] his italics. Bergson, Henri. *Key Writings.* Edited by Keith Ansell Pearson & John Mullarkey London, Continuum, 2002. pg 131
[3] http://www.gamestudies.org/0401/galloway/

We live in a media saturated environment in both our personal and public domains. The murals of Northern Ireland offer us an avenue to explore the notions of sanctioned and unsanctioned art in public spaces and how these may be used as tools of community propaganda, giving voice to those beyond the mainstream. While the murals are a dominating feature of the representation of the public world in Block H, inside the house section of the exhibit I aim to explore the notions of state sanctioned propaganda and advertising, blending political, public faces and ideologies; displaying the content on a television.

The media's use of terms "terrorist" and "freedom fighter" are both arbitrary and context-specific: the disparity between Fox News and Al Jazeera News suggest the perspectives of different audiences are poles apart. Where dissidents were re-voiced by actors in response to a since defunct censorship act, equally powerful symbols of state surveillance and control are manifest in all countries deemed "free" or otherwise.

Design & Development

The inside and outside areas of the installation are literally connected through their content. The outside elements feature a virtual outdoor environment, where the interior of the houses are inaccessible. The physical presence of the room's external structure is suggestive of going inside one of the houses depicted in. Both areas contain many shared symbols that further assist users in linking the cross-associations between the areas.

Outside of House: Counter-Strike Block H (CS:BH)

The 1st person perspective replicates our own perspective on the physical world. When moving and exploring within a virtual environment this is a crucial element in the construction of the conceit of real experience.

Another of the deciding influences for using a FPS multiplayer game was *Americas Army* - a game developed and hosted by the American military that bears a resemblance to other already popular combat style games such as *Medal of Honour* and *Half Life*. It purports to accurately reflect the training and combat environments their real soldiers are immersed in, while boldly stating that the best recorded player stats could result in a commission for real world army service. *America's Army* operates as a flytrap recruiter, training simulator, and fully fledged propaganda machine.

A key inducement toward using the CS engine was the ability to generate custom textures for a custom environment, and therefore meld "real photographs" into an artificially generated but plausibly realistic space. Murals could be placed in the context of the environment they are painted. The user is offered a type of immersion, the chance to explore how such an environment is affected by such murals and how ordinary looking housing can be segregated by warzone-like barricades and peace walls.

The team element facilitates such concept metaphors as division, disparate interpretations, the sanctioned and unsanctioned, physical and intangible territory.

CS gives you access to outstanding 3D sound, graphics, and physics with latest Source Engine. Developing for the Source Engine is made flexible and accessible by the openness of the developer SDK and the original developer's active encouragement of modification. What would normally run into tens of thousands is made available for the £20 cost of the game: Map Builder & Model Maker free to use, texture compiling performed by free plug-in).

Online and Local Multiplayer Combinations:
- CS can be played on ones own using computer generated opponents (bots)
- CS can be played while on ones own with opponents connected through the internet, which may or may not be known to them.
- CS can be played by a group of people in the same physical location, fighting amongst themselves, against remotely connected players, or a combination of the above

CS modification is such a strong medium because there are so many potential modes of experience. It also has a substantial online community that provides an existing technical and cultural framework that this project seeks to tap into. It is important to articulate a concept that has the ability to be seeded amidst an active digital community while also remaining intact throughout its proliferation.
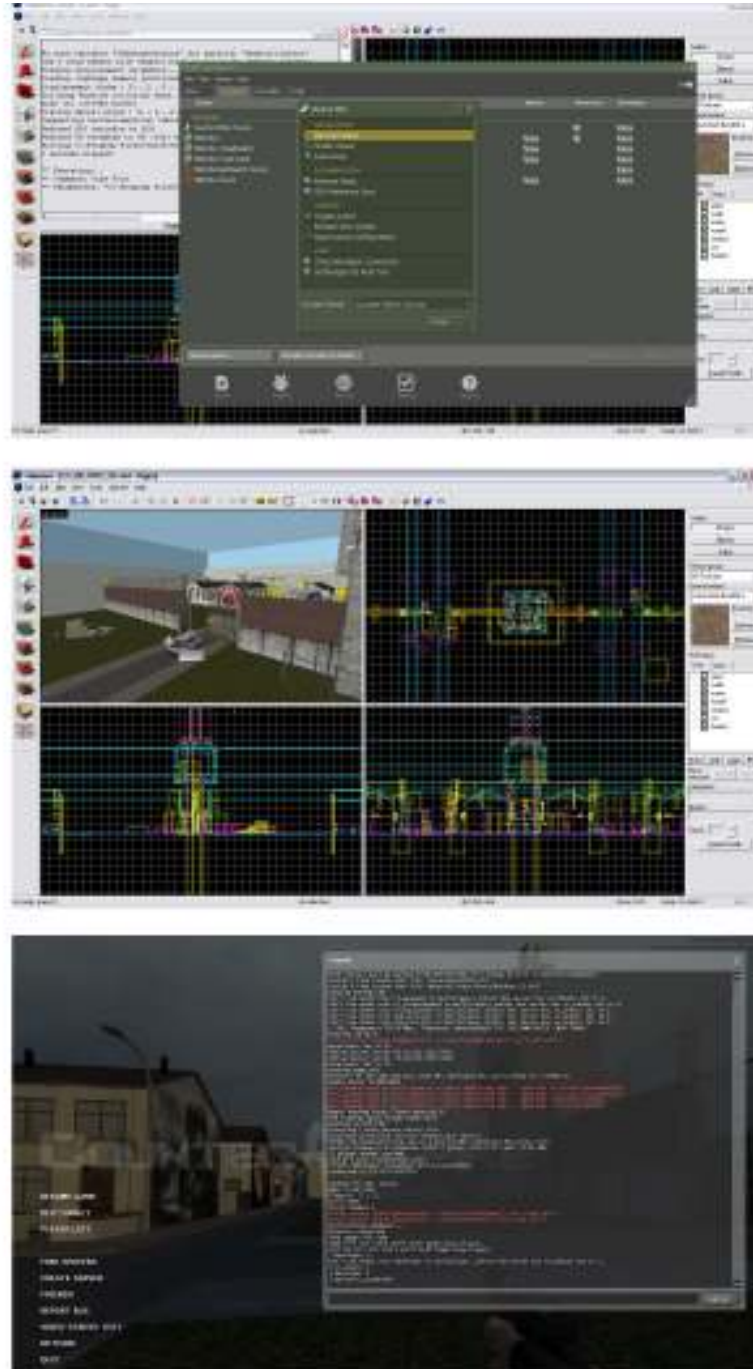

Image 3: Hammer & CS Console Screenshots.
Front Top:
- Steam Source windows clients
- Hammer: Map creation tool
- CS:S in-game developer console.

CS & Hammer

Reference images and memory were used as guides for scale and detail, and textures were custom built from photographs. The skybox, ambient lighting, and rain are intended to replicate Irish weather. Models are included to add details such as fencing, cameras, satellite dishes and aerials, and vehicles.

The map layout is derived from four main subjects: The Northern Irish housing estates, their peace lines, Long Kesh Prison (and its H Blocks), and the spiritual labyrinth/ confusing maze. Dimensions and scale in the estates is kept generally true to life (roads are more narrow to minimise travel time around the map). The two 'communities' are separated by the 'peace line,' a large wall with lockable access gates between areas of frequent conflict. These walls can often have a police station or guard house stationed beside or on top of the boundary. Churches, being centrally located within the communities, can be found close to these borders. In Block H the church and the guardhouse have been melding into a single symbolic entity that overlooks both sides of the fencing.

The game objective revolves around planting or defusing a bomb on the cross of the observation tower/church. As the game forces a hard coding of the terrorist and counter terrorist sides, it was decided to allocate the nationalist estate as 'Terrorist'. This is simply because outside of Ireland, the vast majority of people when asked to name an Irish terrorist group, name the republican, IRA. While it would be ideal from a conceptual point-of-view to have this Terrorist/Counter-Terrorist Team allocation as a random selection each time the game is loaded, as it is currently operates this factor makes little difference in-game and may be modified in the future. The game is developed from a politically neutral perspective, and as such does not espouse preference or cast judgement on either side of the Northern Irish conflict, or any other.

Image 4: Textures created during map building process

Inside House (Block H)

Many of the themes explored in CS:BH carry on into the subject matter of the "Inside House" section. In this section the user is given a shift in decision demands by having only a single button available to interact with. Although the audio and video change when the user chooses, what they change to is randomised to further decrease the sense of control when compared to the projected section. The audio and video meander and interweave. They do not move or sound like we are used to perceiving them in the conscious natural environment.

Using recognisable political and public people from both Northern Ireland and the rest of the world I have obtained pre-shot images from sources including print media, television and other analogue captures and screengrabs, and the internet. Custom-shot images such as macro facial details series' are composited with pre-shot source footage. The morphing relationships are initially planned according to the appealing connotations provided by particular pairings e.g. Ian Paisley and Pope Benedict XVI or the Queen and the Virgin Mary. It is my intention to stress the often homogenous sentiments argued by opposing sides and suggest that of the signal to noise ratio in the broadcasting of programmes and advertising, it is the latter that is by far the dominant characteristic.

Linear animation sequences are optimised for dynamic playback and designed to maintain an impression of succession between frames moving forward and back. The type of visual content displayed on the television screen reacts to and juxtaposes with the generated ambient audio. The video content is made up of an assemblage of frames generated via collage, retouching and morphing into composite frames. The final result is a video made of many separate (interconnected and independent) frames.

The prepared audio files are collections of phrases and statements that have been edited and normalised before being meta-tagged for final sequencing. Original audio sources include CD's & DVD's, television, and various internet archives and databases.
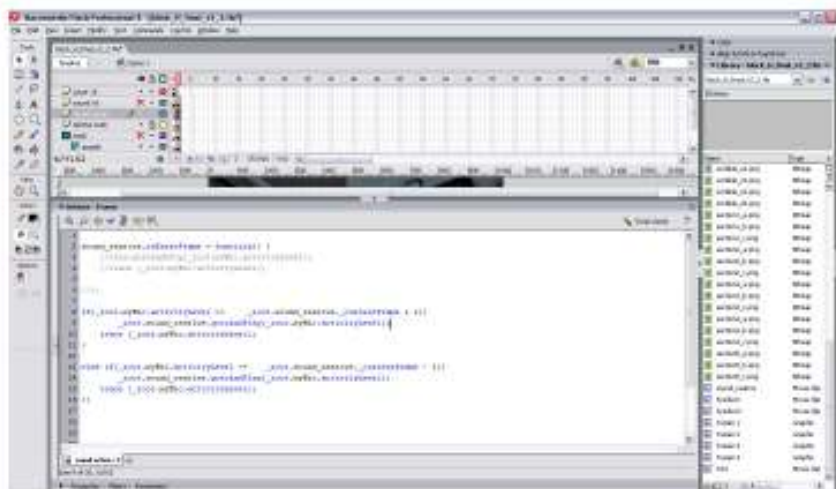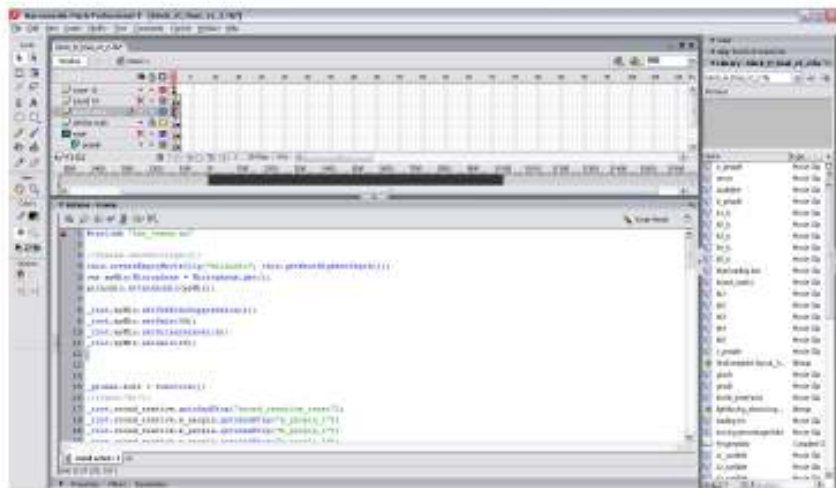
Image 5: Flash Development Screenshots.
Demonstration of Flash GUI and code for audio-in triggers.
The audio amplitude values correspond to frame numbers,
which in turn respond with visual commands.

Flash, Director, and MAX/MSP

Where the MAX/MSP developing environment is primarily modular, the Flash/ Director model is timeline based. Both sets of applications deal the introduction of randomness and audio-visual inputs in different but effective ways. The Director/ Flash timeline does not force linearity by any means; it is merely a form conducive to the development of complex interactivity while using temporally linear elements such as musical notes or video clips. In fact the timeline can in theory be ignored completely (although this would fail to avail of the benefits of an IDE/ GUI).

Flash & Director powerful are video sequencers that have a well built scripting knowledgebase for interactive audio/ visual applications. For installation purposes Director may be particularly useful as it can integrate Flash within itself. It also can be programmed to manipulate audio pitch in real-time, and copes with high resolution video manipulation better than flash usually does. Flash can operate audio-in sensing and graphic manipulation simultaneously but on occasion with a sacrifice in performance. A combination of Flash audio-in sensing that is easily parsed to a Director sequence controller has proven successful.

The video work comprises most of frame-by-frame retouching and compositing techniques using software such as Photoshop, AfterEffects, and proprietary morphing software. Reference images of main subjects were used along with purpose-shot photography for final images. The varied angles and style of the composites add a disjointed and surreal quality during dynamic playback.

The audio-sensing programming correlates the amplitude of the audio source input with timeline based triggers for sequences, frames, and commands. The audio is picked up by either stereo-in directly or microphone indirectly. This correlation can sometimes result in the visual illusion of lip synching the visual output with the audio. This is significant not only in that it links the audio and video in a kind of tertiary kineticsm, but also in that it echoes the themes of control and perspective that originated from an awareness of the phenomenon of political figures voiced by actors on British television in the late twentieth century.

Max/MSP offers the potential of dynamic audio as you have a greater flexibility and modularity in using patching techniques to assimilate media. Its strengths in synchronized audio sequencing and programming are what drew initial interest in employing MAX/MSP in the project. As with Director is supports Quicktime video, and although it is more limited in its treatment of this and other graphic formats, Jitter offers further visual flexibility to MAX/ MSP.
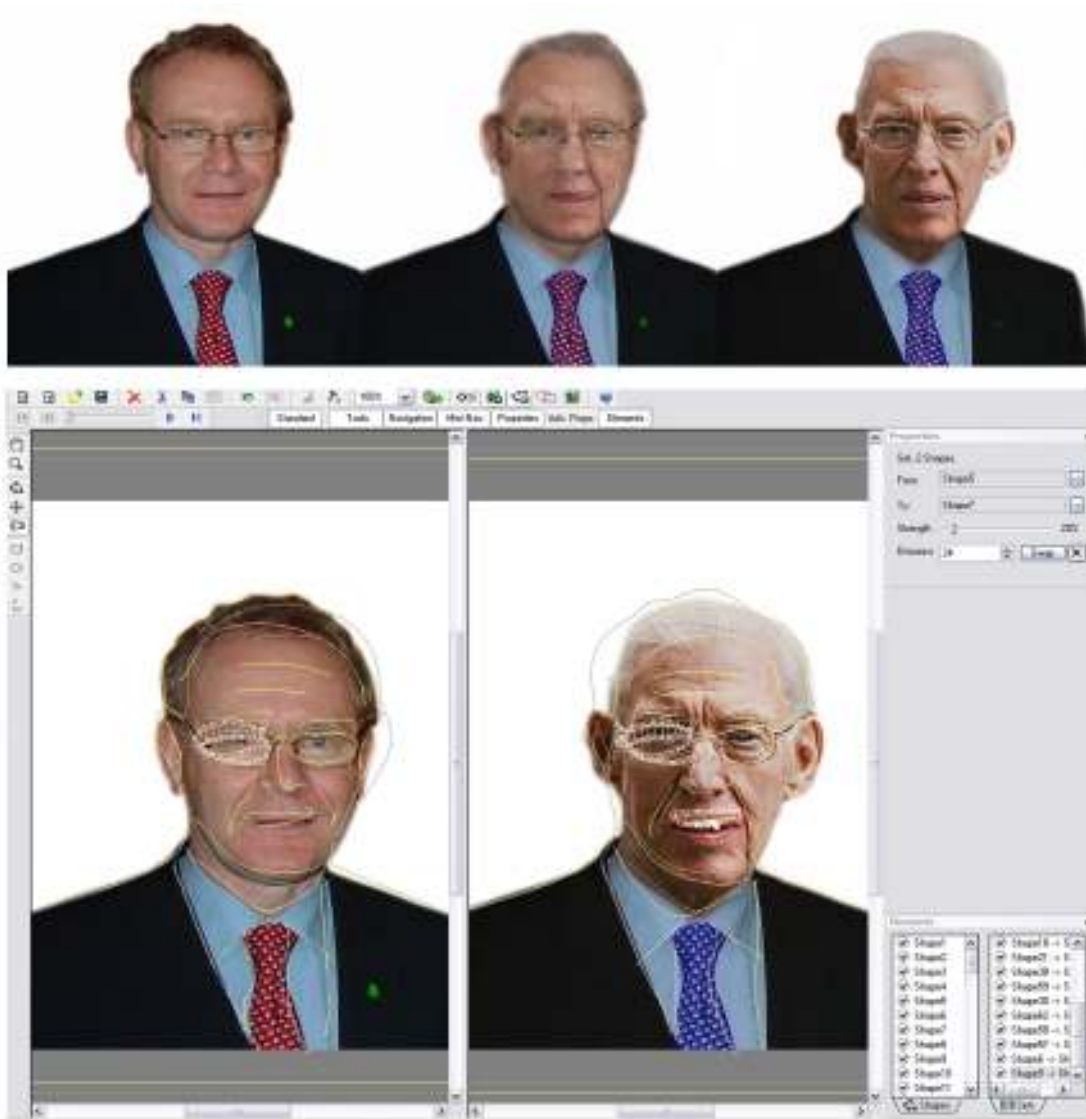
Image 1: Morphing Demonstration

Image Sequences

I have investigated combinations of techniques in image retouching and manipulation, blending elements into single frames, and compositing multiple moments in time into single frames. Morphing recognisable politicians and people from Northern Ireland with other well-known leaders (both cultural and political) such as Castro and the Pope it is my objective to stress similarities and query differences between opposing ideologies.

Image 2: Time Displacement Demo

Time Displacement

Wanting to survey the fracturing of time that the photographic implies and the continual elastic tension between the past, present and future, I have been experimenting with Time Displacement in After-Effects. Sections of the footage run at different speeds depending on the strength of the effect applied. It serves to create a splintered representation.

Projected Surfaces

I projected images and video onto a variety of materials such as lenticular plastic, brick, brushed aluminium, coated and translucent papers. I have subsequently decided to use the matte bright surface of the shed and no longer require translucent material properties.

Games

My investigation of game engines led me to evaluate *America's Army, Solider of Fortune, Medal of Honour, and Battlefield 1942/ Vietnam*. I decided to use *Counter-Strike* which is built using the same *Valve Source* engine as *Half Life*. The development notes that follow outline some of the benefits of using this as a base development tool.

The Installation

Exterior Projections Array

As the game divides into two teams, there will be 2 consoles. These will be set opposite each other and projecting onto the outside the left and right walls of the house structure (this is likely to be a modified tent or shed). Each console is to be made up of a keyboard, mouse and set of headphones connected to a concealed PC. An omniscient POV (Point Of View) sound feed of the game will be available as one of the audio channels for the "Inside House" section.

The concept of projections on walls itself operates as a simulation of the aesthetic and political mechanisms of the Northern Ireland murals themselves.

The display can split to an isolated monitor, as well as run out to its assigned projector. This isolated monitor out can be used for a single channel display inside the house, as well as for administration purposes. The two exterior displays of the game offer perspectives from both terrorist and counter-terrorist.

House Interior

One table with a television to be placed at the back, with another placed in the centre in front of a chair.

The live audio and its varying amplitude is simultaneously assessed by a purpose built (software) image/video sequencing application, which outputs the affected visual content to the television screen.

My intent at this stage is to develop the remote control to have a single button, which on pressing will change the screen to a random image sequence and the sound to a random audio sequence. In terms of content these sequences will be deliberately unconnected. Instead they will syncopate abstractly by means of measuring and interpreting the audio amplitude. This single choice is meant as a direct contrast to the many control keys and mouse movements needed for CS. It is indicative as a form of imposed censorship acting also an icon of the illusion of media choice; it is in a sense a more honest remote control.
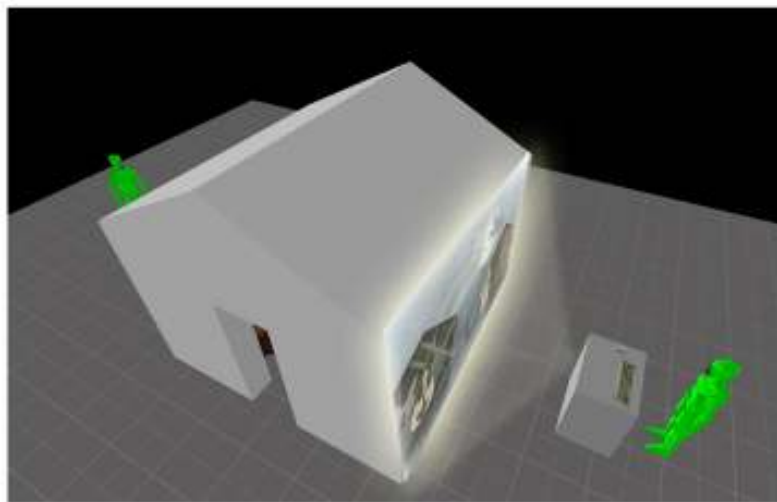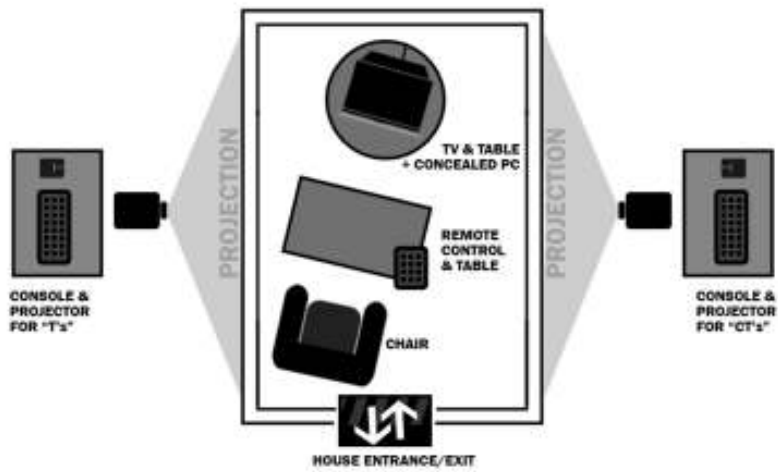
Image 6: Installation Space Layout & 3D Visualisations.
From Top:
-Layout diagram of inside and outside elements.
-3D model visualisation of exterior elements.
-3D model visualisation of interior elements.

Outcomes

It is my aim to demonstrate that the fear of impotency is at the origin of all violence. Communities are suppressed just as much by themselves. There are human experiences that can be valuable and productive.

In engaging the installation 'user' with immersive content, I hope the project offers a valuable experience of abstracted real world (plausible) situations, while promoting consideration of state and media formulations such as the notions of 'terrorist' and 'counter-terrorist' on a local and global level. I am looking to call attention to the similarities shared by the opposing sides. Where the external world represents direct aggression and conflict, the interior offers the same world albeit a more understated and furtive version. From our sitting rooms it is easy to be dispassionate about the world's broadcasted war zones, so long as they don't look like our neighbourhoods. However once the images depict houses that could be our own, the threat of violence is intensified.

Future Possibilities

Distribution
A website will be online by exhibition launch. It will make available files, media, and information on the Block H project. The Counter-Strike Map/ Modification is easily distributed existing online communities and their public archives. It could also be potentially hosted by a dedicated games server, where players can download the necessary files and then play it online/ locally. This online networking could also foster collaborative expansion and development of the "Block H" mod.

Deployment
The full project (outside projections and interior television elements) could also be installed in a variety of public spaces such as outdoor squares and municipal libraries, as well as private spaces such as galleries, new media institutes, schools, colleges, and community centres.

Development
While still maintaining the exterior and interior areas, the elements found inside the room can be altered or replaced to suit both installation environment and audience. The CS game motive can be modified to focus on more narrative driven content. A type of interactive film could be developed under this archetype, and the Source Engine already technically facilitates different user inputs and their sequencing. As previously stated, the CS game can be made available to be developed further by others, but before the map source files are made publicly obtainable an appropriate system to manage development should be worked out such as a clear articulation and agreement of intended use, project objectives and timeframes.