#### From Vision to Sense

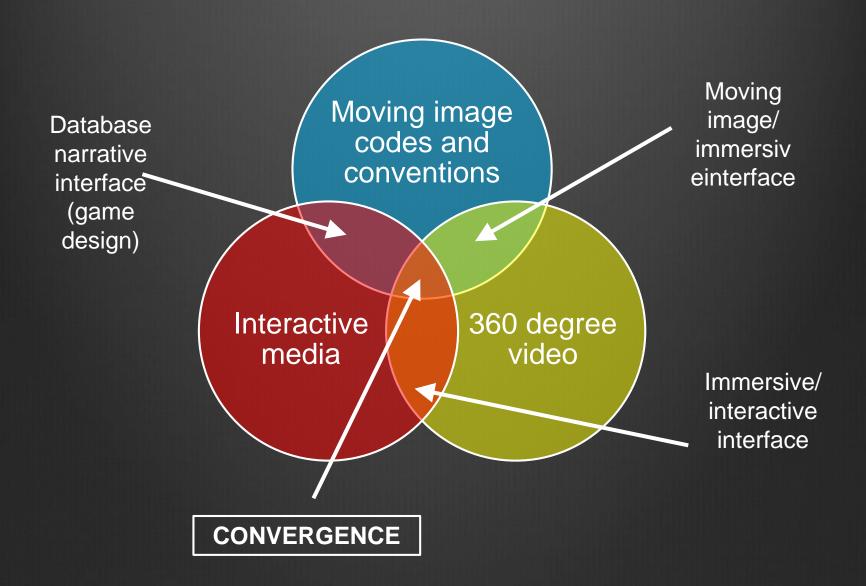
When TV becomes a Game

Presented by Joe Citizen

#### Introduction

- Brief description of the scope of the overall research project that attempts to explore the convergence of interactive video games, cinema and emerging immersive technologies.
- Introduction to the collaborative practitioners.
- Brief overview of research to date.
- Why is it important for art educators?
- Brief survey of current theoretical discourses in the field and how it has informed current research.
- Preliminary findings of research to date.
- Possible implications and directions.

## Scope of project



## What is convergence?

"A word that describes the technological, industrial, cultural and social changes in the ways media circulates within our culture... Perhaps most broadly, media convergence refers to a situation in which multiple media systems coexist and where media content flows fluidly across them. Convergence is understood here as an ongoing process or series of intersections between different media systems, not a fixed relationship." (Jenkins, 2006)

"Convergence looks at three subsidiary convergences: content (audio, video and data); platforms (PC, TV, Internet appliance, and game machine); and distribution (how the content gets to your platform)." (Belton, 2002)

## Collaborative project



Joe Citizen
Co-producer/
project development manager



Pranesh Lal 360 degree interactive video



John Mandelberg Co-producer/ project development manager



Philip Baker Information technology



Simon Nicholls
Interactive installation
and construction



Bjorn Arntsen Sound design

## Importance for art educators

- Moving image/interactive convergences already apparent in popular culture, particularly in the interdisciplinary field of video games.
- Wideogames "give a glimpse of how we might create new and more powerful ways to learn in schools, communities, and workplaces—new ways to learn for a new information age. Look at video games because, although they are wildly popular with adolescents and young adults, they are more than just toys. Look at video games because they create new social and cultural worlds: worlds that help people learn by integrating thinking, social interaction, and technology, all in service of doing things they care about." (Shaffer, Squire, Halverson and Gee, 2004)
- Wideogames can be used to "support workplace training, product promotion and education." (McGuire, 2010)
- External pressure on higher education institutions to change their traditions, values and infrastructures - "the pressure is for reduced costs, for greater scale and scope, and for innovation through technology." (Laurillard, 2002)













**Mediarts**° mportance for:

School of Media Arts, Waikato Institute of Technology
Hamilton, New Zealand

Current degree programme offers: digital media design, graphic design, moving image, sound, painting and sculpture (and other majors) all of which offer some learning about interactivity - but there is no major that currently specifically addresses videogame production or 3D interactive installation design.

#### Importance for me

- Current research is an extension of my Master's study which was interested in: Moving image as simulacra: The changing relationship between narrative and spectacle in the age of convergence. (Citizen, 2008)
- How can I stay current in an age when interactive entertainment technologies have become increasingly prevalent? (Wii, Xbox 360 Kinect etc.)
- "Expected to do more with less" (Laurillard, 2002) Can I recombine existing resources to meet these research goals?
- "Innovation through technology" (Laurillard, 2002) What are the implications of this for me as an arts educator?

## Ongoing 'action-research'

- Engaged in study of existing literature on interactive narratives, immersive environments, videogames and other convergent forms of moving image and interactivity.
- Discussed feasibility of interactive processes that could be made as part of existing 3<sup>rd</sup> year moving image curriculum with John Mandelberg, Simon Nicholls, and Philip Baker. Discussions centred around voice recognition, existing camera technology and haptic event triggers. (Using movement and/or touch.)
- Wrote an interactive multi-camera narrative and shooting script (*Vortex*) for final output to iPhone and web.
- Collaborated with local actors, 3<sup>rd</sup> year moving image students, fashion designer Hanne Dunsterwald and others for a multi-camera shoot.
- Currently in post-production of Vortex project.
- Engaged in on-going evaluation and reformulation of ideas.



From theory to practice – project needed to simultaneously act as research whilst meeting student learning outcomes.

## Additional questions

- Is narratology (study of story telling) or ludology (study of games) more (or equally) important when researching interactive narratives, immersive environments, videogames and other convergent forms of moving image and interactivity?
- Can existing moving image codes and conventions be used to make achievable interactive experiences?
- Technological determinism or social production? What critical tools are needed to engage with convergence? Does haptic interaction reinforce visual culture and what are the implications for representation and simulation? What is the role, and what are the implications for audio?
- How can this work inform the convergence of moving image and interaction with new immersive technologies such as a 360° video camera?

#### Digital interaction & video – both new media

- Lev Manovich (2001) describes new media as having five basic operations:
- 1. Continuous data (analogue) is sampled and assigned a numerical representation within a defined range, within a database.
- Modularity these elements can be copied, combined or modified without losing their independence.
- Automation the processes involved in numerical representation and modularity can be automated. Individual user attributes can be generated on the fly. Games can generate complex characters, simulate movement or process strategies.
- 4. Variability Multiple copies can exist singly or simultaneously, with potentially infinite versions.
- 5. Transcoding translation from one format to another is easily interchangeable. For Manovich, this includes cultural categories and concepts.

#### Database narrative

"A narrative that fully utilizes many features of the database organization of data." (Manovich, 2001)







Scenes from Dragon's Lair (1983)

"At each of the 800 decision points in the storyline, the player must use either the joystick or the sword button to direct the on-screen Dirk to make a move. If it's the correct one, the laserdisc scans to the next part of the game. If it's the wrong one, a death scene is displayed and the player loses a life... Dragon's Lair consists of a total of 27 minutes of animation, or 50,000 drawings. Played straight through without making a mistake, playing time is a total of six minutes." (thedoteaters.com, 2007)

## iPhone adaption



Console or phone-based games therefore seem to be a good platform for simple database narratives

## Can existing moving image codes and conventions inform an interactive narrative?

- Clarke & Mitchell (2001) believe that film conventions that help inform audiences about character, genre and mise en scene may help inform existing or help to develop a set of conventions for interactive narratives, despite differences in having a continuous view of events and are commonly seen from the viewpoint of a main character.
- They point out however that the continuous first person perspective of videogames became popular after the advent of first person shooters such as *Doom* around 1992/3
- Consequently, they believe that videogame conventions can, and do, change and that other film conventions such as montage, jumps in time and space, character conventions and editing could inform other types of interactive narrative.

## Ludology and narratology

- "Computer games are not narratives... Rather the narrative tends to be isolated from or even work against the computer game." (Juul cited in Jenkins, 2002)
- "Outside academic theory people are usually excellent at making distinctions between narrative, drama and games. If I throw a ball at you I don't expect you to drop it and wait until it starts telling stories." (Eskelinen citied in Jenkins, 2002)
- "...the pleasures of video game *play* are not principally visual, but rather kinaesthetic." (Newman cited in Apperley, 2006)
- Service Jenkins (2002) suggests that despite the "application of film theory to games can seem heavy-handed and literal minded... there is a tremendous amount that game designers and critics could learn through making meaningful comparisons with other storytelling media."

#### Emerging videogame genre conventions

"Milieu [can be] used to describe the visual genre of the video game. Several distinct established game genres of milieu exist: science fiction, fantasy, and horror being prominent." (Apperley, 2006)



# Writing a database narrative

- What moving image codes and conventions could be used to help inform game-play?
- What elements of game-play need to be maintained to ensure playability?
- Is it achievable with existing resources?

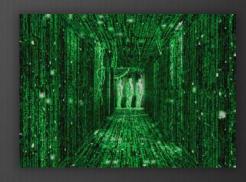
### Influences



A science fiction



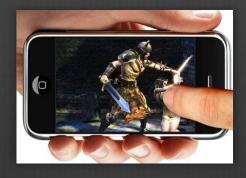
With a femme fatale



Where nothing is real



Set in a puzzle-maze



With haptic interface



With existing resources

#### Kinesthetic cinema?

Bruno (2010) links cinema, movement and architecture together: "When urban culture – a haptic geography – thrives on tangible interactions and the transitory space of intersubjectivity, it filmically extends its inner perimeter. In the city, as when travelling with film, one's self does not end where the body ends nor the city ends where the walls end... The filmic city, finally, can be charted as a tangibly moving landscape: a map of experiential situations, an emotional cartography... The act of joining architecture and cinema, not optically but haptically, has been aimed at corroding oppositions such as immobilitymobility, inside-outside, private-public, dwelling-travel."