

# G54GAM Games

New Gaming Paradigms

Pervasive Games

# Huizinga on Play

- The Magic Circle of Play
- A voluntary, contractual structure that is limited in time and space
- Defined before the game, or changed as part of the **social** gaming process
- Games are played...
  - In certain **spaces**
  - At certain **times**
  - By certain **players**

# Pervasive Games

- Not to be confused with **mobile games**
  - Normal games that are played on a mobile device (phone, console)
- Systematically extend, expand or break the magic circle
  - A pervasive game is a game that has one or more salient features than expand the contractual magic circle of play socially, spatially or temporally [Montola 2005]
  - A qualitative, not quantitative framework
- Make use of **ubicomp** technologies
  - But not necessarily
- Changes may be explicit, or implicit and unknown to players
  - Deliberately disrupt the conventional definitions of **player**, **play session** and **play space**
  - Exploit the ambiguity of expanding beyond the boundaries of the conventional magic circle as a form of game play itself
  - Create the illusion of games not being games
    - Am I still in the game?

# Spatial Expansion

- The socially constructed **location** of the game is expanded, unclear or unlimited
  - Many locations simultaneously
  - Games in unconventional places
  - Reclaiming public spaces
- It is often unclear where they are actually played
  - Uncertainty on which locations are actually gaming areas makes the game interesting
- The spatial context of each player affects the game
  - In relation to physical places or other players

# Spatial Expansion

- Make use of physical spaces
  - Use location tracking technologies to determine spatial context (GPS, Cell ID)
  - Use features of the physical environment as game objects
- Combine physical and virtual spaces
  - Augment the physical environment with digital content (augmented-reality)
  - Combine physical and virtual players (mixed-reality)
- Extend the virtual play area
  - Play across multiple websites (ARGs – Alternate Reality Games)
  - I Love Bees

# Can You See Me Now? (2001)

- A chase game played **online** and **on the streets**
- Online players
  - Play from anywhere, embodied in a virtual model of a real city
- Street players
  - Performers on the streets of the real city, with GPS tracked PDAs
- All players can see, communicate and play with one another in the hybrid shared environment
  - Mixed Reality city
  - Text, audio
  - “Catching” players – based on spatial context

# Can You See Me Now? (2001)



# Mixed Reality Space

## Presence



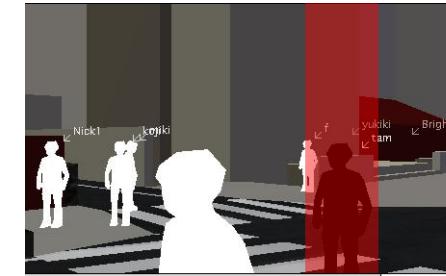
Location in physical space

Location in virtual space

Audio from physical players

Text from virtual players

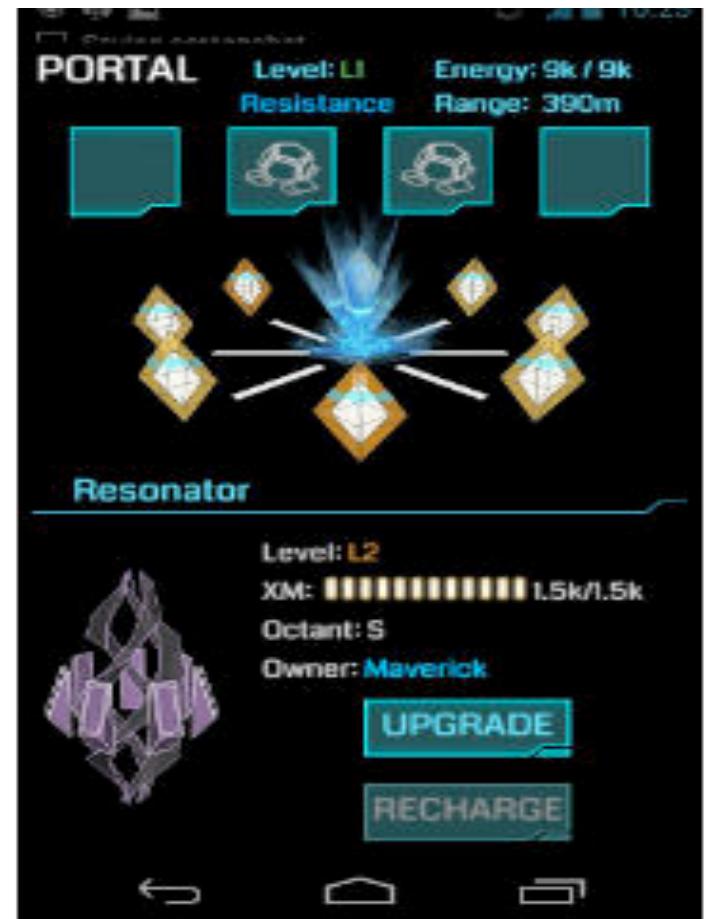
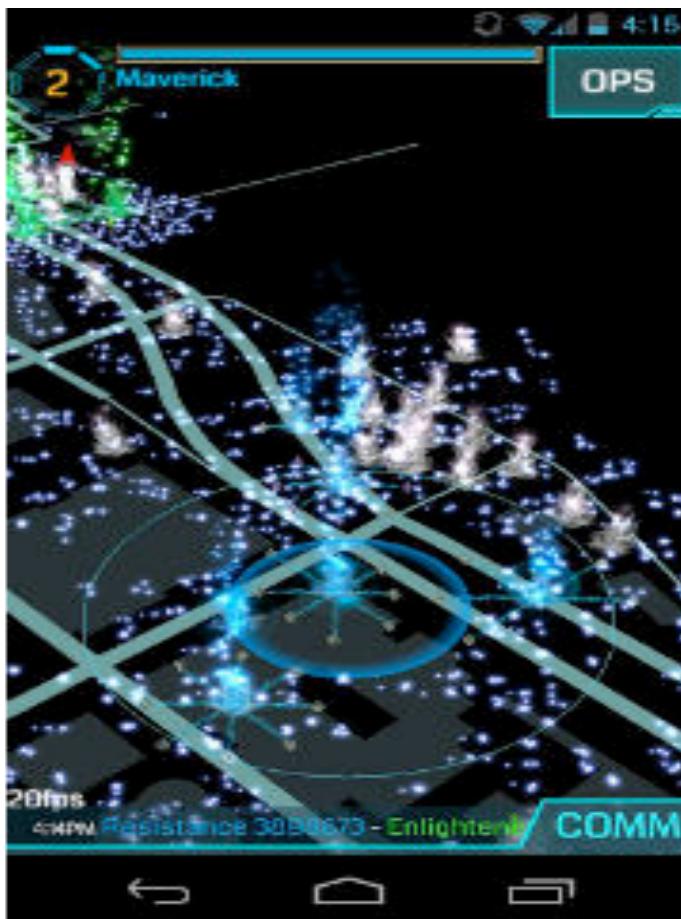
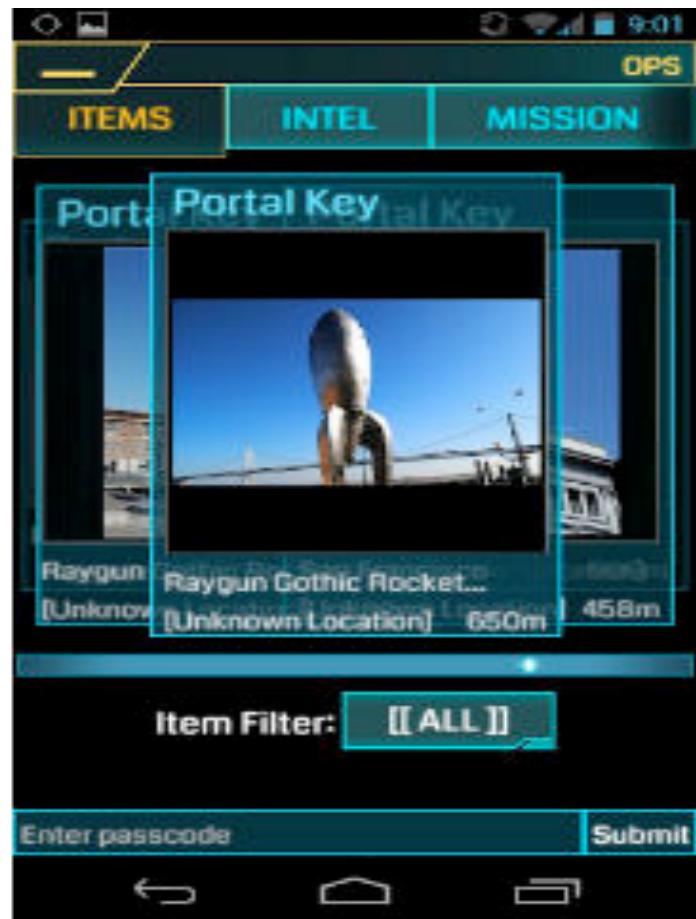
## Communication



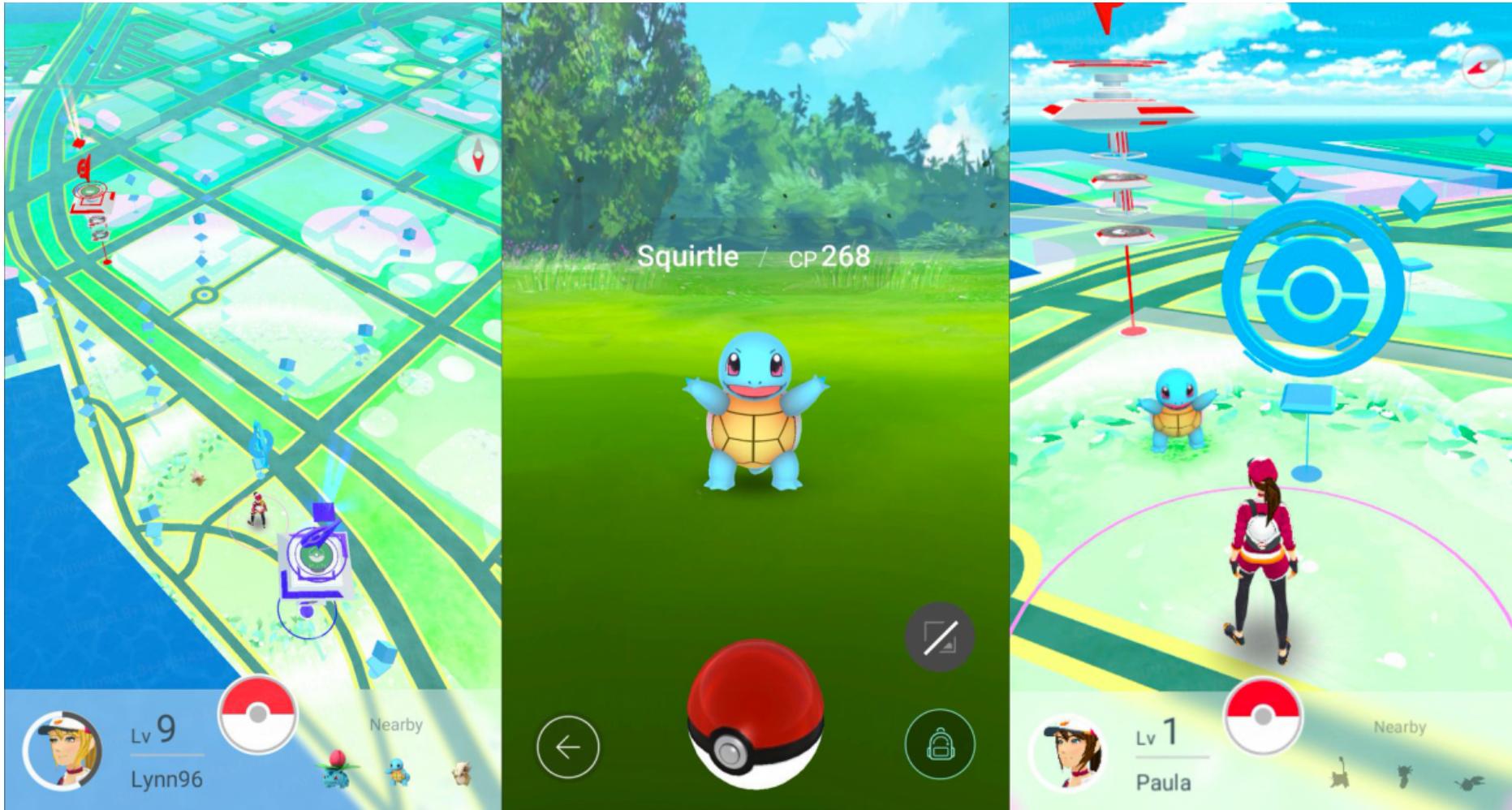


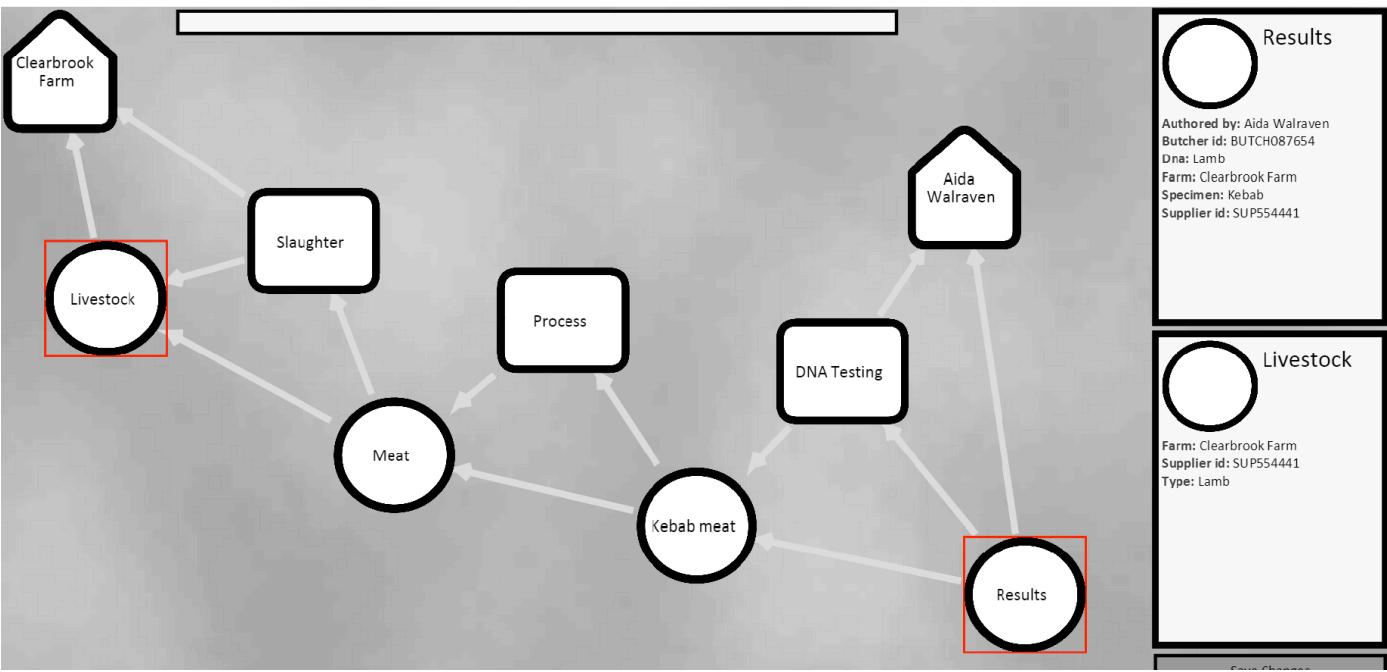
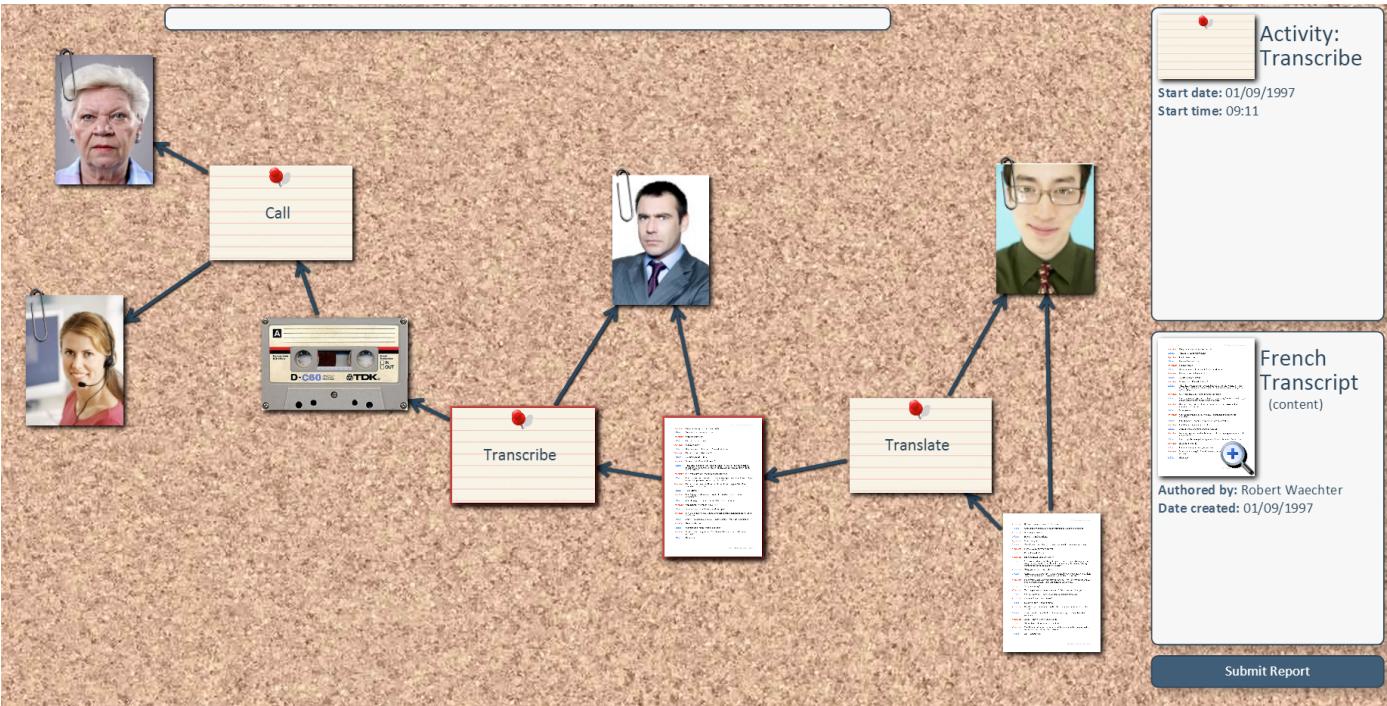


# Ingress (2012)



# Pokemon Go (2016)





[control centre](#)

Citizen Helper: Winston Smith  
 Identifier: ORCHID-UGTA-7G3X5F8M  
 TRUST: 65 (promotion at 500)  
 Credits: 0

[logout](#)[24 unread message\(s\)](#)

## Blank Forms

### Forms you can use

Unit	Form	Type	Identifier
fill in	MOPADM Request Blank Form	request form	AD-MOPADM-DV3TXOO
fill in	MOPHEA MOPHEA Document Request	request document	DC-MOPHEA-TTH9LMM
fill in	MOPREC MOPREC Document Request	request document	DC-MOPREC-45FLSCR
fill in	MOPTRA Request MOPTRA Document	request document	DC-MOPTRA-G3X5GPA
fill in	MOPREC MOPREC Document Submission	submit document	SU-MOPREC-6ACXAEP
fill in	MOPTRA Submit a MOPTRA document	submit document	SU-MOPTRA-RKKY5AT
fill in	MOPCOR Ask MOPCOR for Help	ask for help	XX-MOPCOR-G3X5FRP

### Forms you still need to acquire

Unit	Form	Type	Identifier
request	MOPADM Form for Administrative Document Requests	request document	DC-MOPADM-J8UDXMA



### Guidance

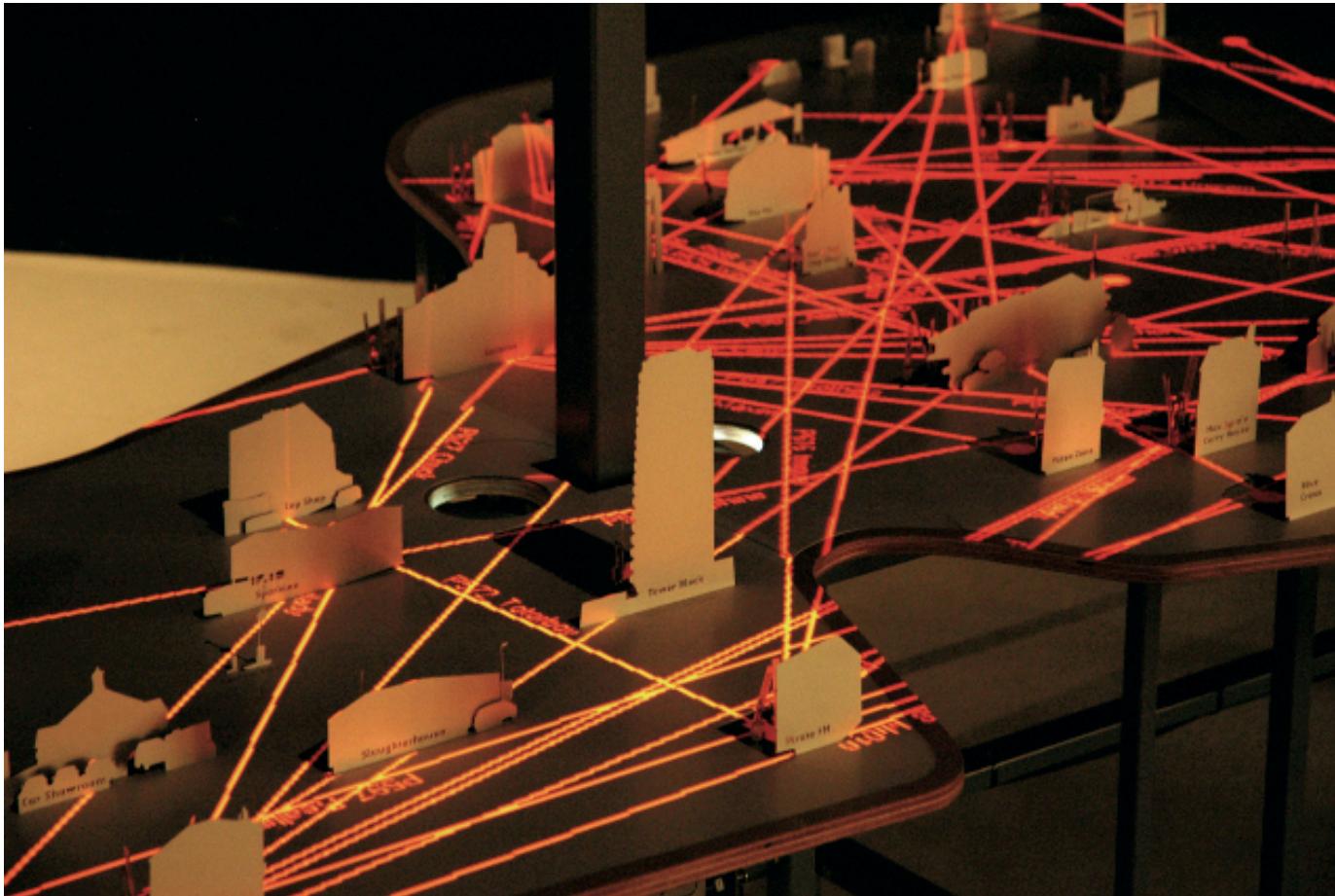
There's no information without a form!

If you can't find the blank form you need, perhaps you need to request it first via the appropriate form to request new forms. Check the [Guidebook](#) for more information about forms or use the quick reference here to find out about forms you are still missing.

# Temporal Expansion

- The explicit play session is expanded temporally
  - “We are playing the game now”
- Interlace and intermix the game with everyday life
  - Game stays dormant for long periods of time
  - Alert the player into playing at any given moment
- Enhance boring moments of life
  - The journey to work on the bus
- When might I be interrupted to play the game?

# Day of the Figurines (2006)



# Day of the Figurines

- A multiplayer text adventure game (MUD)
- Played using text messages (SMS)
- Set in a fictional town that is littered, dark and underpinned with steady decay
- Unfolds over a total of 24 days, each day representing an hour in the life of the town
- Up to 300 players at a time

# Day of the Figurines

- Received **12:06** GMT Thu 21 Dec

09:57pm, you've arrived at the Trafalgar Sq, Italian football is on the telly. BERNARD, EVE and SUCHDA are here. There are many PINTS here.

- Sent **12:09** GMT Thu 21 Dec

**Use pint**

- Received **12:13** GMT Thu 21 Dec

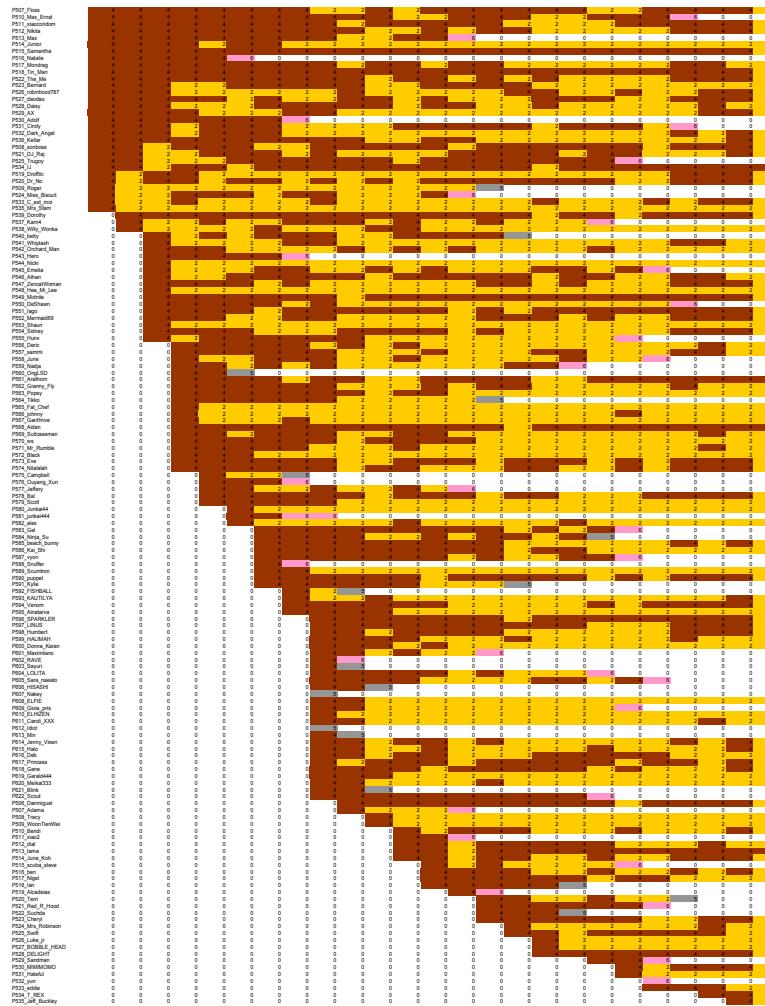
09:57pm, you down the pint of Vale leaving a modest foam moustache on your top lip. You are feeling well.

# Day of the Figurines

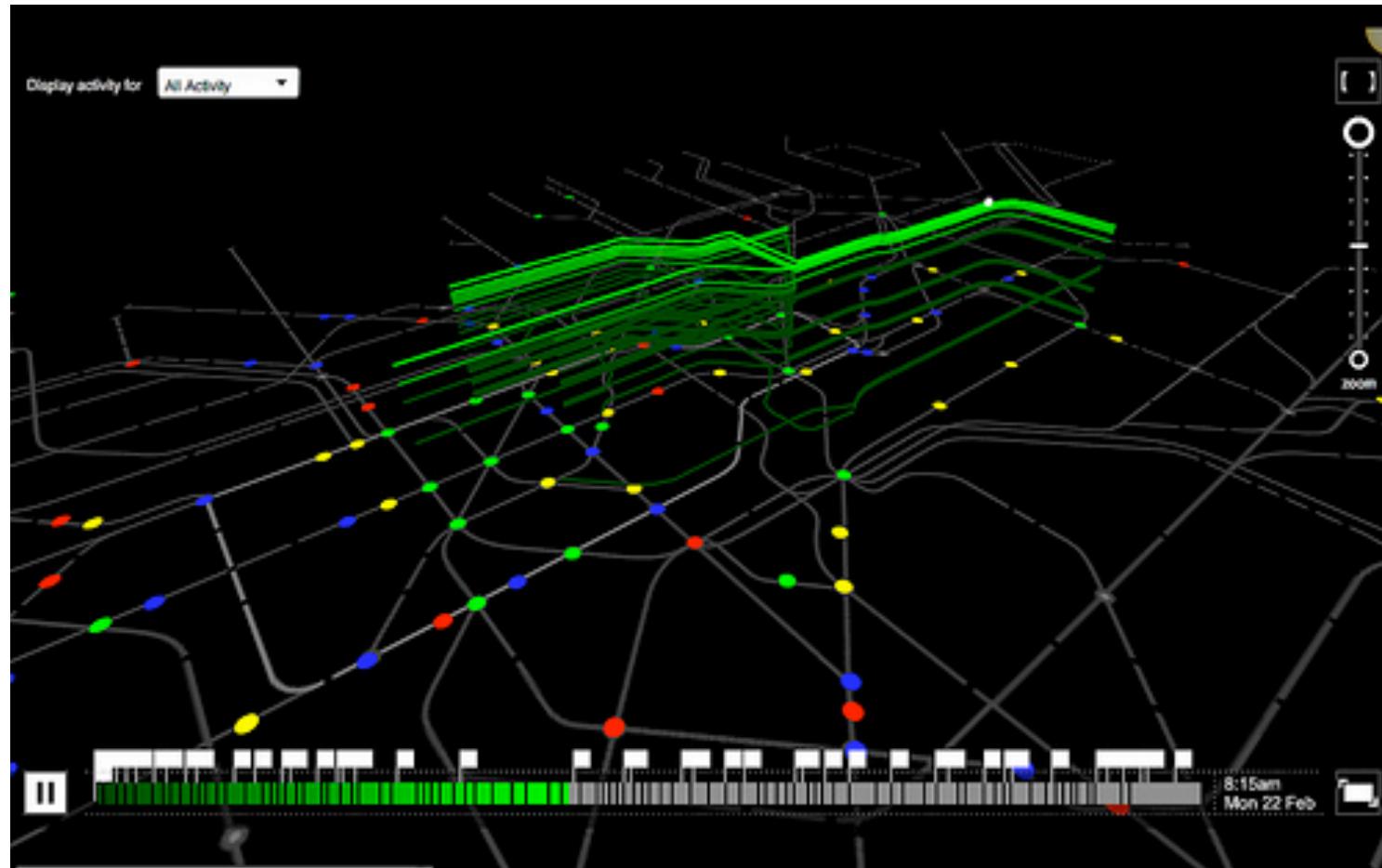
- Received **06:38** GMT Fri 29 Dec  
05:23am, MIDNITE said: "delight why not?"
- Received **06:51** GMT Fri 29 Dec  
05:24am, DELIGHT said: "THERE'S A HELICOPTER COMING THAT'S SUPPOSED TO SAVE US"
- Received **07:14** GMT Fri 29 Dec  
05:27am, CHERYL said: "its not time yet."
- Received **07:16** GMT Fri 29 Dec  
05:27am, DELIGHT said: "is the game ending today?"
- Received **07:29** GMT Fri 29 Dec  
05:28am, CHERYL said: "yeah. Thats what i thought too. I think it does at9 in the night."

# Day of the Figurines

- SMS
  - Each message needs to be carefully crafted, costs money and we only have 160 characters
  - Lowest common denominator technology
- Availability
  - When a player interacts with the game, we know they're in a position to play
- Interruption
  - Interrupt daily life because something has happened in the game
  - Make it interesting, make them want to play



# Chromaroma (2010)



# Social Expansion

- Perhaps the most controversial, and the most interesting expansion
- Obfuscating the social boundary of **playing**
- Playing in unexpected places and at unexpected times leads to **unexpected people** making a difference to game play
- Observing the game indirectly may lead to playing a minor role, without knowing
  - Who are the other players?
  - Who are the spectators?

# Uncle Roy All Around You

- Takes place in a shared mixed-reality environment
  - Online players in a virtual environment
  - Street players in the physical environment
  - Collaborating using text and audio messages
  - Players have to collaborate to find “Uncle Roy’s office” – a location both physical and virtual
- Who is playing the game, and by what rules?
  - Are people I meet on the streets playing?
  - Are online players really trying to help me?

# Uncle Roy All Around You (2004)



# Uncle Roy All Around You

- Receiving ambiguous messages from Uncle Roy (“the game”)
  - “Look for a woman with black hair, turn and follow her”
- There is no woman with black hair, although most players thought there was
- Most online players try to help, although some don’t
  - You have a greater sense of responsibility to players who are out in an unknown city with just a PDA (and they’ve paid money to take part)

# Uncle Roy All Around You

- Pushing the boundaries of “acceptable” social behaviour through social expansion
  - Made acceptable by the perceived boundaries of the game
- Dilemmas
  - Getting into a car with a strange man
  - Trusting information from anonymous online players
  - Making a commitment to a stranger
- Empowerment
  - Going into an office building and demanding to see Uncle Roy

# Your food could be their next **weapon!**

**TFT Biotechnology** is producing a secret range of dangerous GM crops, they call these dangers '**benefits**' or '**targeted traits**' but we know the truth that they and the government don't want the public to discover - but we need to prove it.

Become a part of AMBER  
and help us to get the  
evidence needed to  
expose the guilty.





# **WHOSE HOLY GRAIL?**

**A talk by world renowned Dr Solomon Baxter**

Dr Baxter has more than 20 years experience writing features and news stories for some of the world's most respected environmental publications. He has covered everything from climate change and wind farms, to oil spills and the decline of honeybees.

This is a unique opportunity to meet Dr Baxter and hear first hand his latest findings. Discover how they will impact on you, your children and the entire planet. This free event is not to be missed.



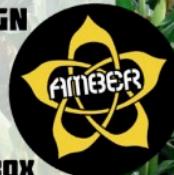
## **FIND OUT WHAT 'THEY' DON'T WANT YOU TO KNOW!**

**NOTTINGHAM CONTEMPORARY NG1 2GB - 0115 948 9750  
MONDAY 15TH OCTOBER 6.30 - 7.30 P.M IN THE SPACE**

**THE NATIONAL CENTRE FOR CRAFT AND DESIGN  
SLEAFORD NG34 7TW - 01529 308710  
TUESDAY 16TH OCTOBER 6.30 - 7.30 PM**

**DERBY QUAD DE1 3AS - 01332 290606  
WEDNESDAY 17TH OCTOBER 6.30 - 7.30PM IN THE BOX**

**PHOENIX SQUARE LEICESTER LE1 1TG - 0116 242 2800  
FRIDAY 19TH OCTOBER 6.30 - 7.30 PM**





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## Dr. Solomon Baxter

3rd

Freelance Environmental Journalist

London, United Kingdom | Writing and Editing

Current Self Employed

Education University of Cambridge

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From Adam Sporne ★

Subject kidnapping

To Me <martin.flintham@nottingham.ac.uk> ★

Been kidnapping people today, most fun ever!



The Malthusian Paradox – AMBER Agents Discussion

<https://www.facebook.com/groups/299501523483479/>

The Malthusian Paradox – AMB...

write a comment...

**Katya Senior**  
17 112418132414 1424 25092614172426  
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22241614:  
17 0125 11181709260716 08171415 01 110923232408  
0113092614 081524 1716 1726 14151716 1101050903242421  
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**Katya Senior**  
17 08092614 1424 25090914 141509 172611241825012614  
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1424 130914 1714 241214 2411 16011707 032414142309,  
0800 08002614 24121416170700 1624 17 0524122207 0300

Chat (7)

# The Role of Technology

- We haven't been talking about pervasive games based on the technology that they use
  - GPS, mobile, PDA, AR
  - Doesn't necessarily require a hi-tech device
  - Many pervasive games are technology demonstrators, "technology for technologies sake"
- Pervasive games should suggest rather than require certain technologies
  - Mixed-reality gaming
    - Physical and virtual
  - Trans-reality gaming
    - Physical, virtual and mixed-reality
  - Adaptronic gaming
    - Virtual adapts to measured changes in physical reality
  - Crossmedia gaming
    - Played across different media – handheld, tv, internet, cameras, streetlights, outside events etc

# Design Strategies

- Ubicomp technologies are not absolute
  - GPS and mobile data connections are not infallible
    - What happens to your mobile phone conversation on a train when you go into a tunnel?
    - GPS is inaccurate
- People / players are unpredictable
- Leads to complex design scenarios
  - Uncommon in conventional games
  - The designer no longer has absolute control over the environment

# Design Strategies

- Design for ambiguity
  - Allow emergent game play
  - As a performer I can use ambiguity to enhance game play (I've just appeared from nowhere / take advantage of the fact that my PDA has crashed)
  - As a player it changes the dynamic of the game (are other players ignoring me, I'm not where they think I am)
- Design appropriately
  - Cannot sensibly author content for all physical locations
    - Discrepancy between real/virtual = game play
  - Network disconnection should be assumed
- Design for performance
  - Insert live content without breaking the fiction of the game
  - C.f. "Games master" from table-top RPG

# References

- Blast Theory  
<http://www.youtube.com/user/blasttheory>
- Montola, Markus (2005): *Exploring the Edge of the Magic Circle. Defining Pervasive Games*  
<http://users.tkk.fi/mmontola/exploringtheedge.pdf>