

Persuading using Pervasive Games

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ICS 60

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What's a pervasive game?

What's a pervasive game?

Some examples:



Botfighters!

It's Alive! (2001)



Pac-Manhattan

NYU (2004)
Cheok et al. (2003)

www.ilovebees.com Margaret's Honey napa valley, ca

home about me the hives home-scene fun stuff!



They they they make Couldn't v something be

HALT - MODULE CORE HEMORRHAGE

Control has been yielded to the SYSTEM PERIL DISTRIBUTED REFLEX.

```

grape:
seeker > !attach Princess
fail *msg: SPDR-5.14.3

evade evade evade

!probe extern proc 1
rogue proc

!bite rogue proc 1 recurse
clean !spitoch confidence 100

```

Mission Log MIA Recruits

COUNTDOWN TO WIDE AWAKE AND PHYSICAL:
197969:20:39:15:062

Make your decisions accordingly.

A: No idea. Help me out here.

nd I like

site aesthetic by aunt margaret

I Love Bees

42 Entertainment (2004)

Pervasive Game: Definitions

“Pervasive Games are no longer confined to the virtual domain of the computer, but **integrate the physical and social aspects of the real world**”

- *Magerkurth et al. 2004*

“Pervasive gaming implies the construction and enacting of augmented and/or embedded game worlds that reside on the threshold between tangible and immaterial space... in order to facilitate a 'natural' environment for gameplay that **ensures the explicitness of computational procedures in a post-screen setting.**”

- *Walther 2006*

“A pervasive game is a game that has one or more salient features that **expand the contractual magic circle of play** spatially, temporally, or socially”

- *Montola et al. 2009*

The Magic Circle



All play moves and has its being within a play-ground marked off beforehand either materially or ideally, deliberately or as a matter of course. ... The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc, are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart. - Huizinga 1955

Expanding the Magic Circle

- Spatial Expansion

Expanding the Magic Circle

- Spatial Expansion



Expanding the Magic Circle

- Spatial Expansion



Expanding the Magic Circle

- Spatial Expansion



Expanding the Magic Circle

- Spatial Expansion



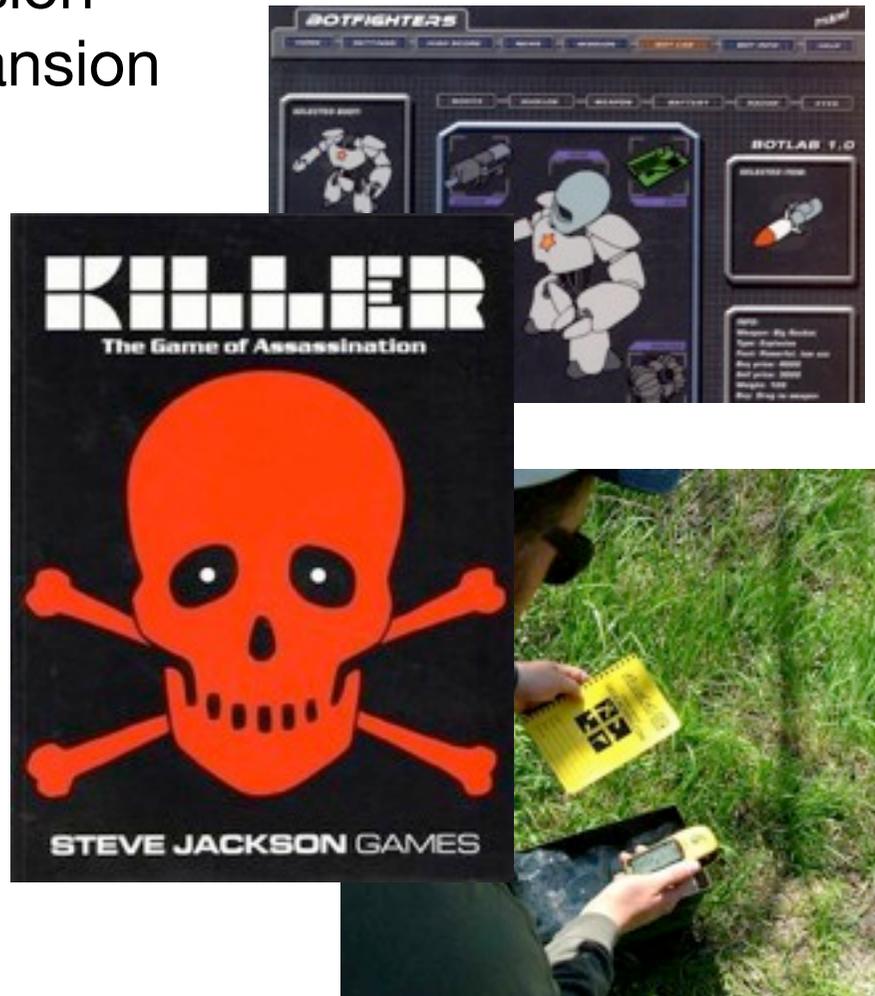
Expanding the Magic Circle

- Spatial Expansion
- Temporal Expansion



Expanding the Magic Circle

- Spatial Expansion
- Temporal Expansion



Expanding the Magic Circle

- Spatial Expansion
- Temporal Expansion



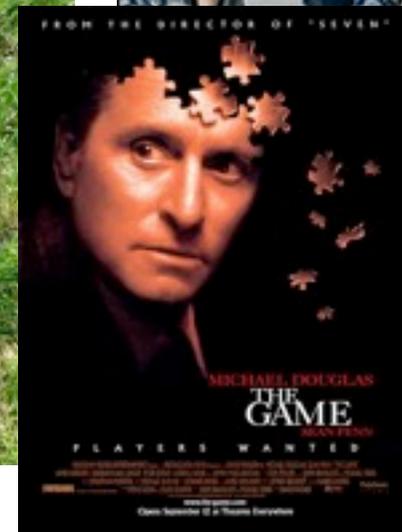
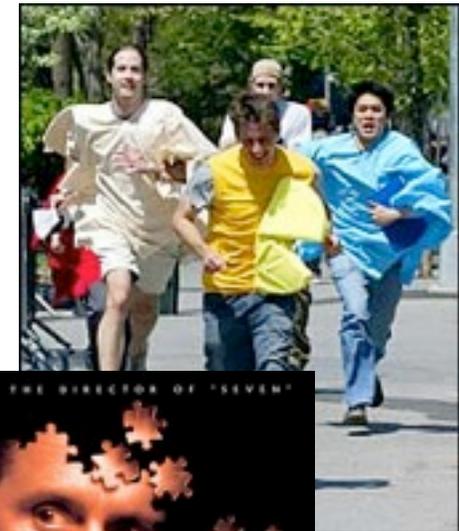
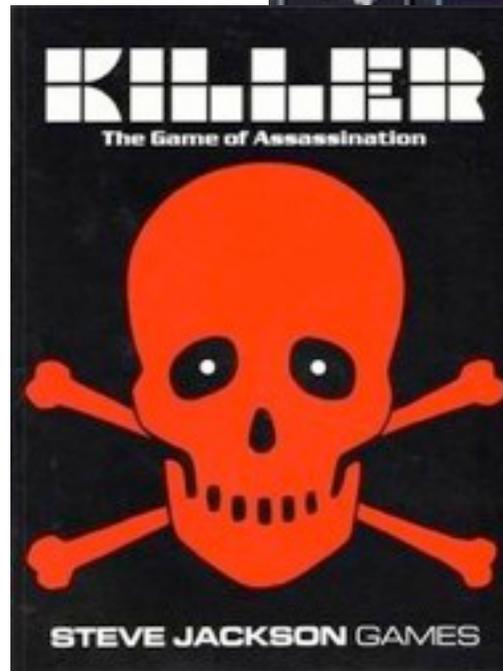
Expanding the Magic Circle

- Spatial Expansion
- Temporal Expansion



Expanding the Magic Circle

- Spatial Expansion
- Temporal Expansion
- Social Expansion



Expanding the Magic Circle

- Spatial Expansion
- Temporal Expansion
- Social Expansion



Expanding the Magic Circle

- Spatial Expansion
- Temporal Expansion
- Social Expansion



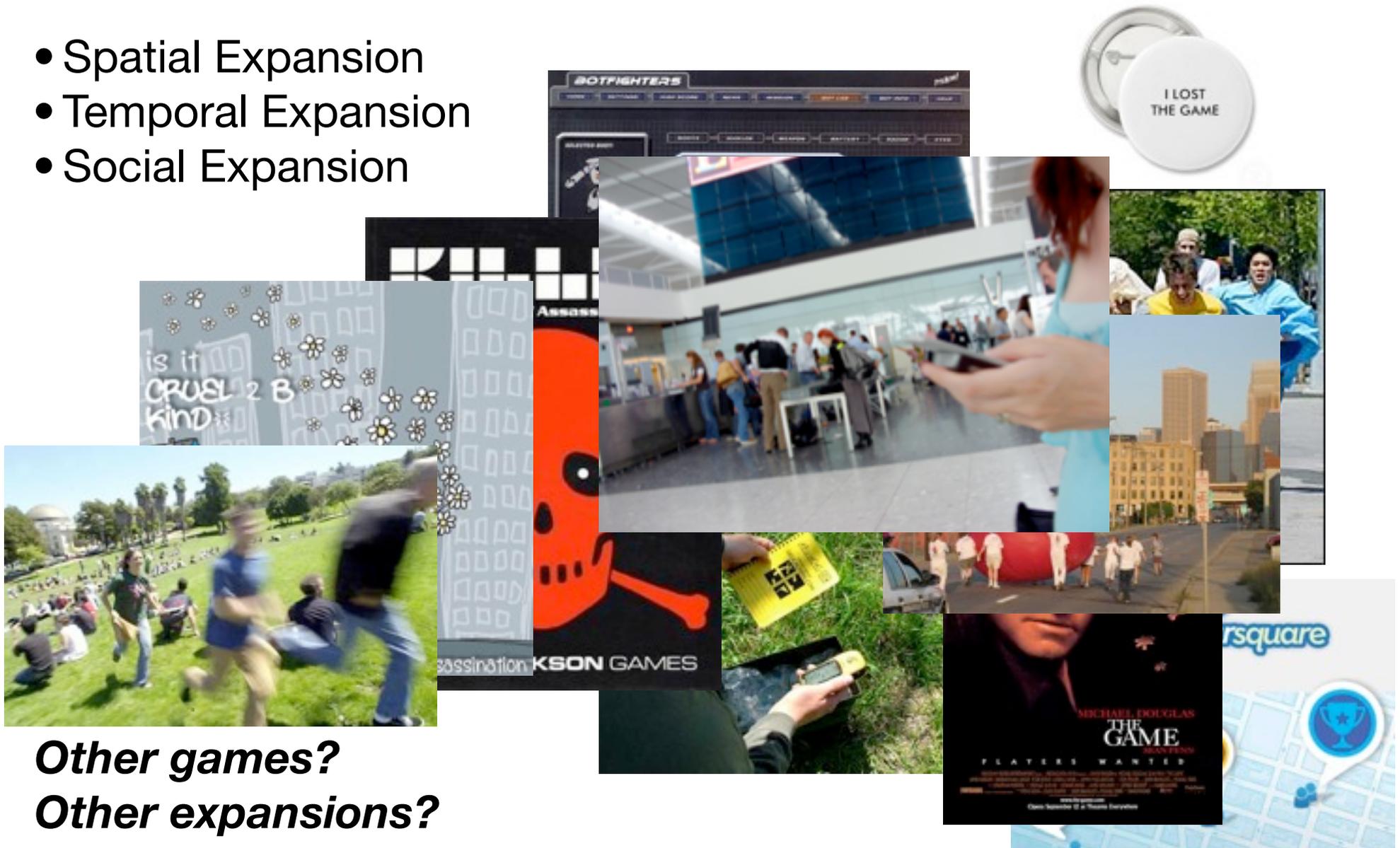
Expanding the Magic Circle

- Spatial Expansion
- Temporal Expansion
- Social Expansion



Expanding the Magic Circle

- Spatial Expansion
- Temporal Expansion
- Social Expansion



Other games?
Other expansions?

Boundaries of a Game

- Pervasive games are about pushing boundaries
- Defined in terms of the “magic circle”

At what point does it stop being a game?

What happens without the protection of the magic circle?

Pervasive Games vs. Video Games

- Pervasive Games usually have technological components
- Often involve digital media
- Games that move beyond the virtual/fictional

**Can we have pervasive, expanded games
that are not digital?**

Why make a game pervasive?

What are the benefits?

- Fun
- New Experiences
- Engagement
- Other?



Why make a game pervasive?

What are the benefits?

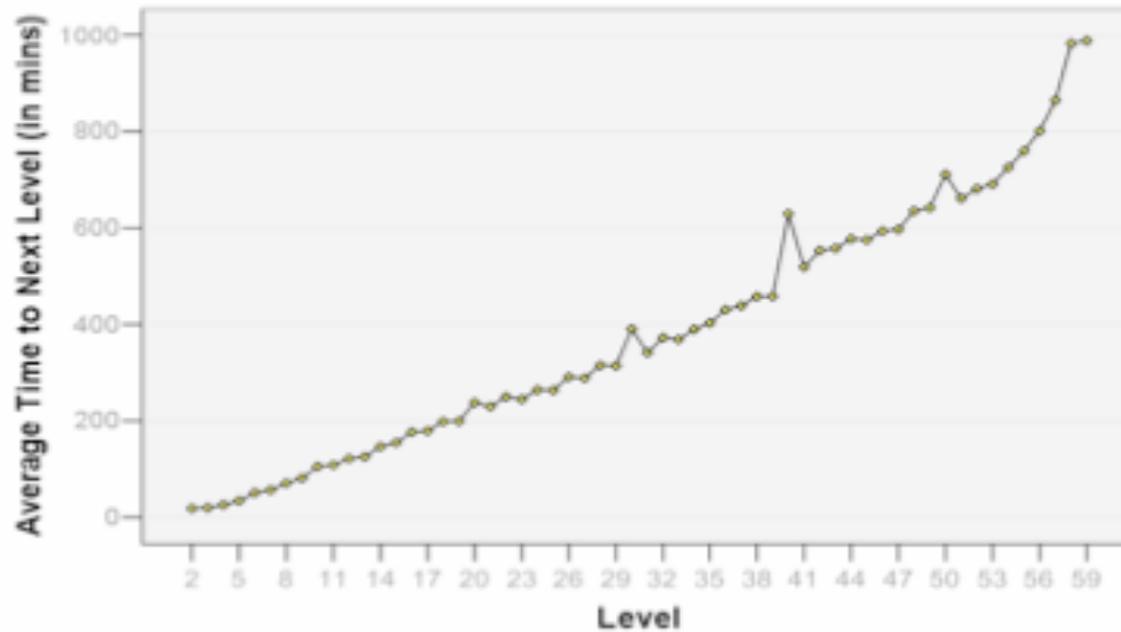
- Fun
- New Experiences
- Engagement
- Other?

Get people to do things ***beyond*** the computer or the console!



Persuasive Games

All games persuade...



Time to level in WoW
(Ducheneaut et al. 2006)

...at least to get you to keep playing!

Persuasive Games: Serious Games

Serious Games: games with a goal beyond just entertainment

Games can persuade people to...

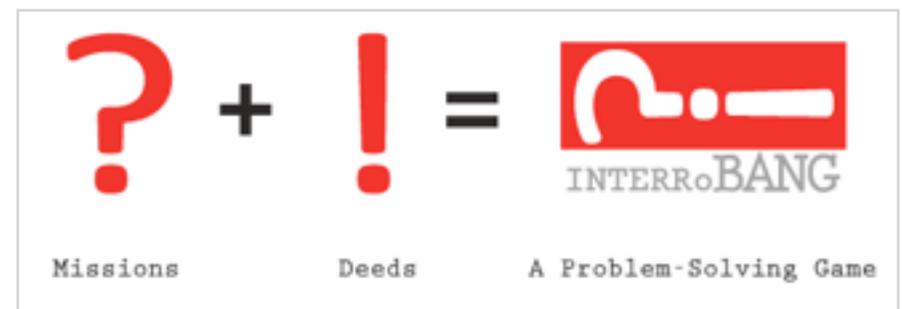
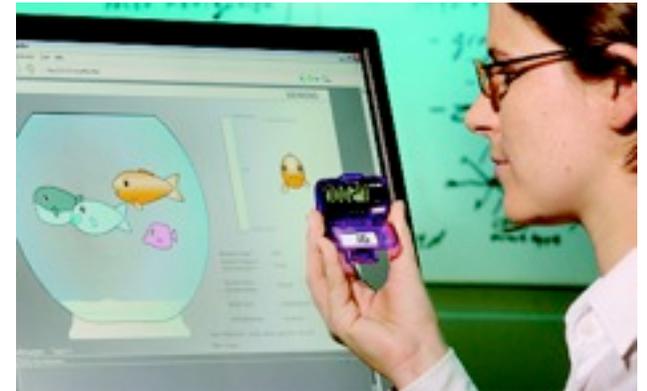
- Provide money or information (Farmville)
- Do cognitive work (Foldit, ESP Game)
- Think differently about a topic (Darfur is Dying)
- Learn a skill (America's Army)
- Other?



Persuasive Pervasive Games

Pervasive Games persuade outside of the gaming context

- Exergames
- Schell's "brushing teeth" example
- Ubigreen
- Interrobang
- Other?



How are Pervasive Games Good at Persuading?

- Persuasive Technology Tools (Fogg 2003)
 - *Self-monitoring*: tracking performance or status
 - *Tunneling*: directing/guiding through an experience
 - *Conditioning*: i.e., operant conditioning
- *kairos*--be at the right place at the right time
- Apply social norms
- Reach new contexts
- Other?

Pervasive Games as Direct Action Games

Motivation:
In-game outcomes or rewards

- GTA
- WoW

Motivation:
Social or civic outcomes

- Free Rice
- Urgent Evoke
- World Without Oil
- A Force More Powerful
- Peacemaker
- Critical Mass
- Reclaim the Streets
- Darfur is Dying
- Rosario Habitat

Actions:
In-game, rehearsals for future

- Interrobang, Akoha

Actions:
Real world, immediate

- Scouting
- Relay for Life
- March/Rally

Google docs of 21 Actions <http://www.google.com/presentations/new?docId=67681302856wd>

STEVEN BUNNING
TRACY HALLERTON
BENJAMIN STOKES

Wait a second!



Just because we can make a pervasive persuasive game, does that mean we should?

Persuasive Games for Evil

A simulated world has a simulated morality (designer bias)

Examples:

- *crime in GTA*
- *mining in Starcraft*
- *taxation in SimCity*
- Other?



Conceptual design by Goldie, Li, and Western (Fogg 2003, p231)

Dangers of Persuasive Pervasive Games



Think back to Jesse Schell's DICE talk:

Is his vision wonderful or terrifying? Why?

Dangers of Persuasive Pervasive Games

- Pervasive games can question social norms and boundaries

ex: hitting people in the face

- Pervasive games blur the line between fantasy and reality

“it was just a game” as an excuse

- Other dangers?

Moral of the Story

Need to be aware of:

- **who** games are persuading
- **what** they are persuading
- **how** they are persuading
- **why** they are persuading

Both as game designers and game consumers

Conclusion

1. Pervasive Games are games that have expanded and blur into everyday life.
How can we move games beyond the magic circle?
2. Pervasive Games can be persuasive games for change *because* they bleed into everyday life.
How can games influence people to take real action?
3. But need to consider the dangers in any persuasive technology (both pervasive and non-pervasive games)
How can we develop pervasive games responsibly?