

Design:

Designing for Spatial Expansion

Mobile and Ubiquitous Games

ICS 163

Donald J. Patterson

Content adapted from:

Pervasive Games: Theory and Design

Experiences on the Boundary between Life and Play



BotFighters

- Location-based mobile game
- Pervasive Game
- Technologies
 - Cell-tower based localization
 - Text Messages
 - Web Browser Interface
- Game Play...

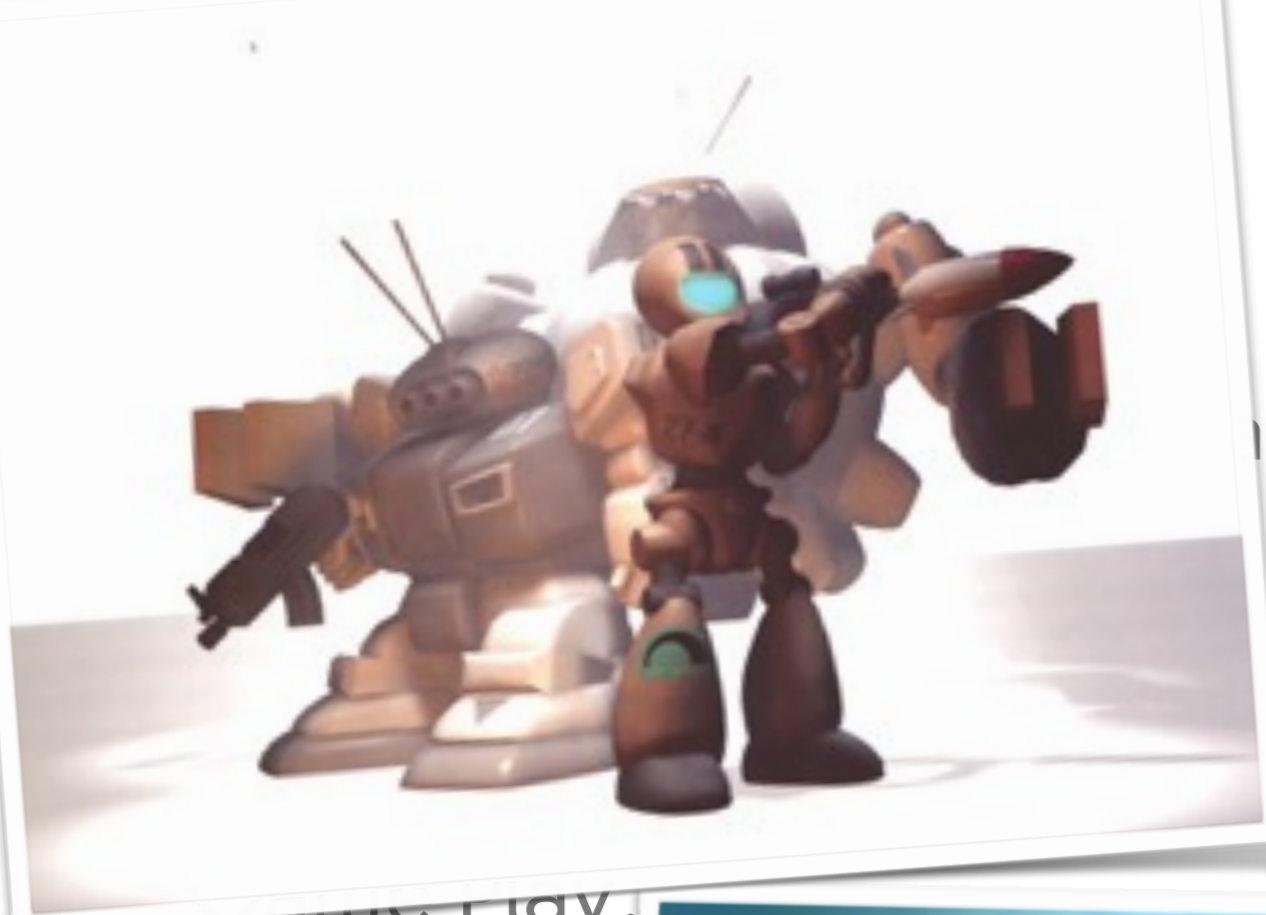
BotFighters

- Location-based mobile game
- Pervasive Game
- Technologies
 - Cell-tower based localization
 - Text Messages
 - Web Browser Interface
- Game Play.



BotFighters

- Location-based game

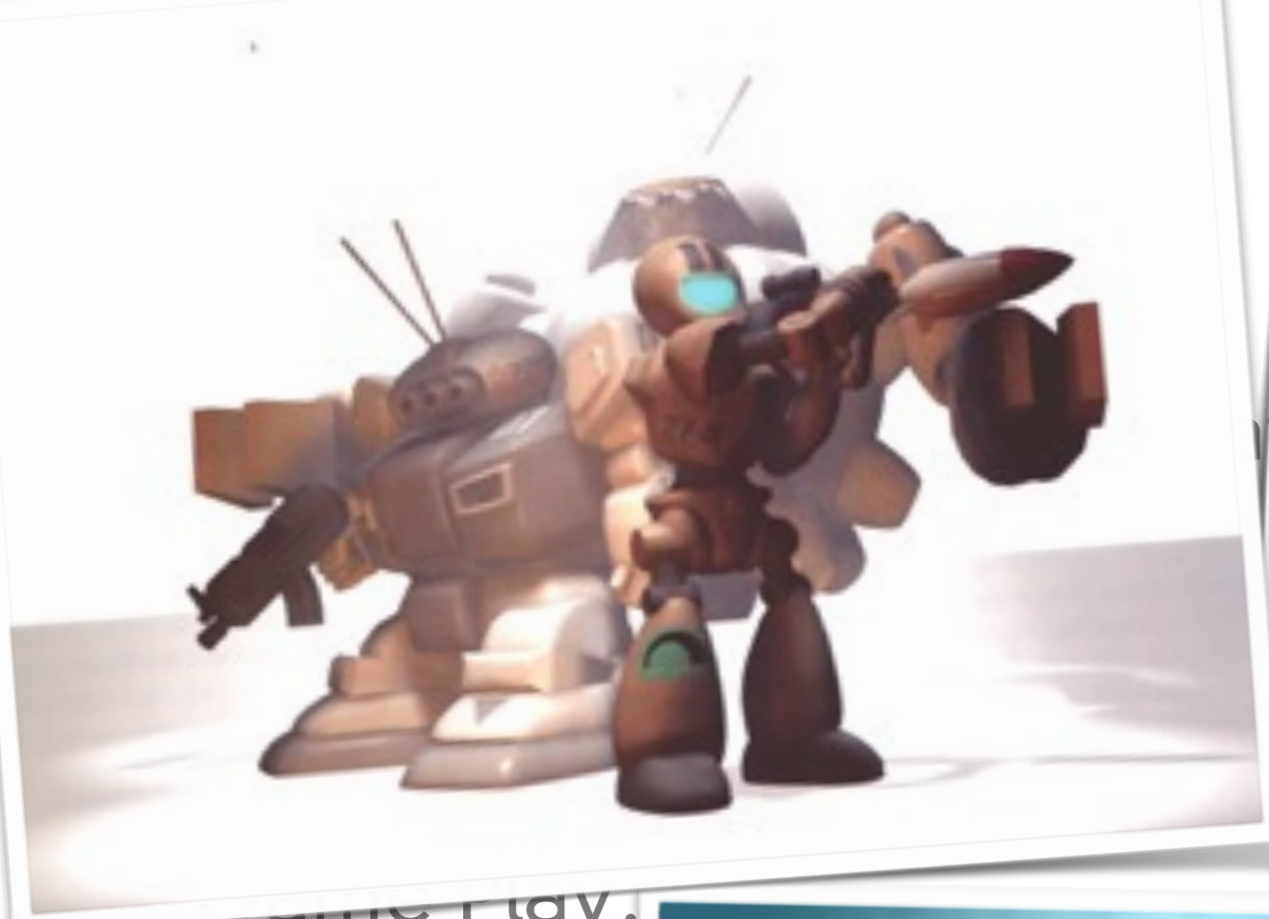


Game play.



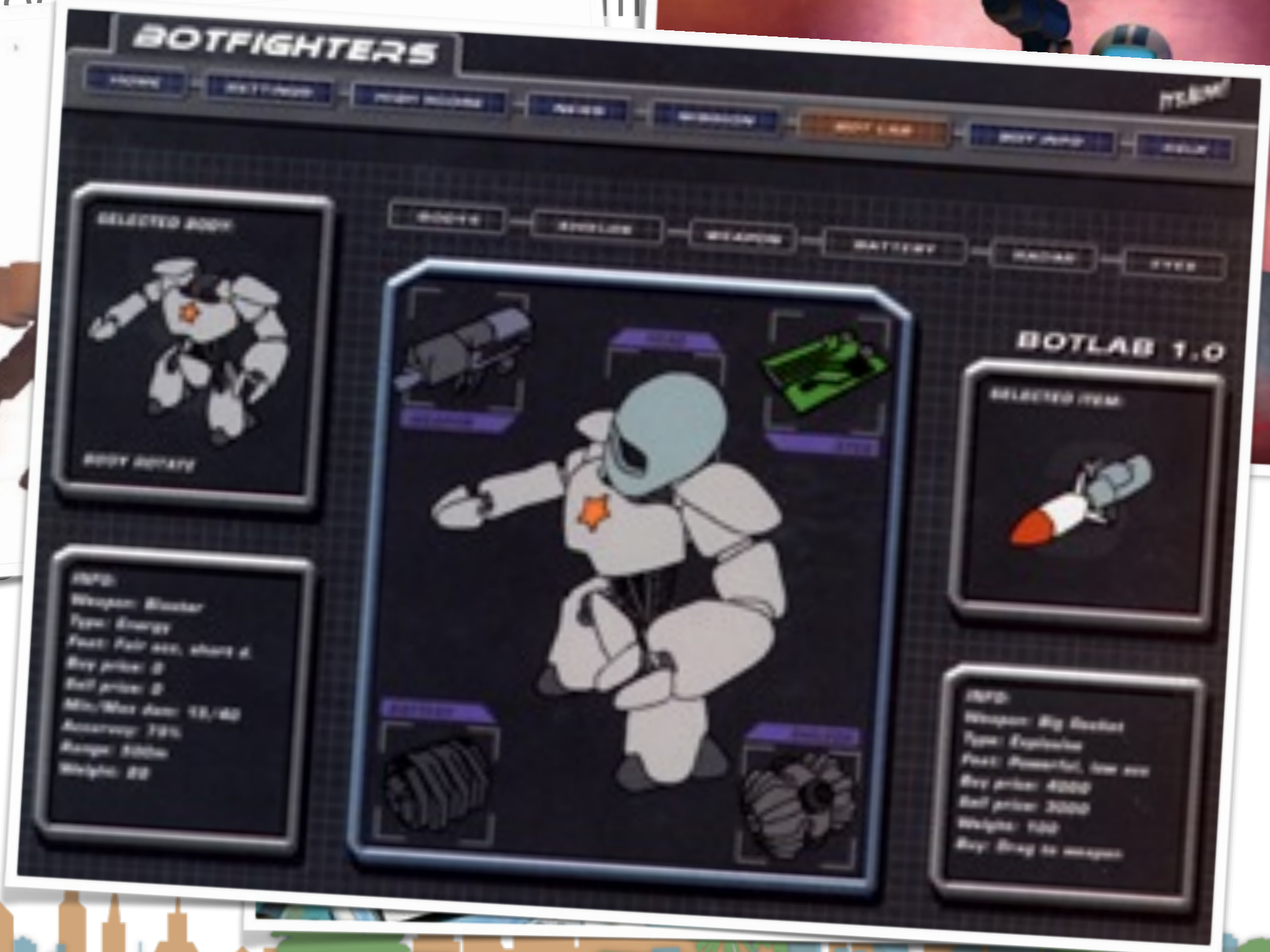
BotFighters

- Location-based game play.



BotFighters

- Location-based mobile



BotFighters



BotFighters



BotFighters



Designing Spatial Expansion

- Playing in Public
 - Public space is socially arranged
 - Sometimes laws enforce social arrangements
 - e.g., bicycling on the sidewalk
 - Sometimes convention determines norms
 - No dancing in crosswalks
- space is **appropriated**
- space is **transformed**



Designing Spatial Expansion

- Abstract Tours Berlin
- “parody of the idea of a sightseeing tour”



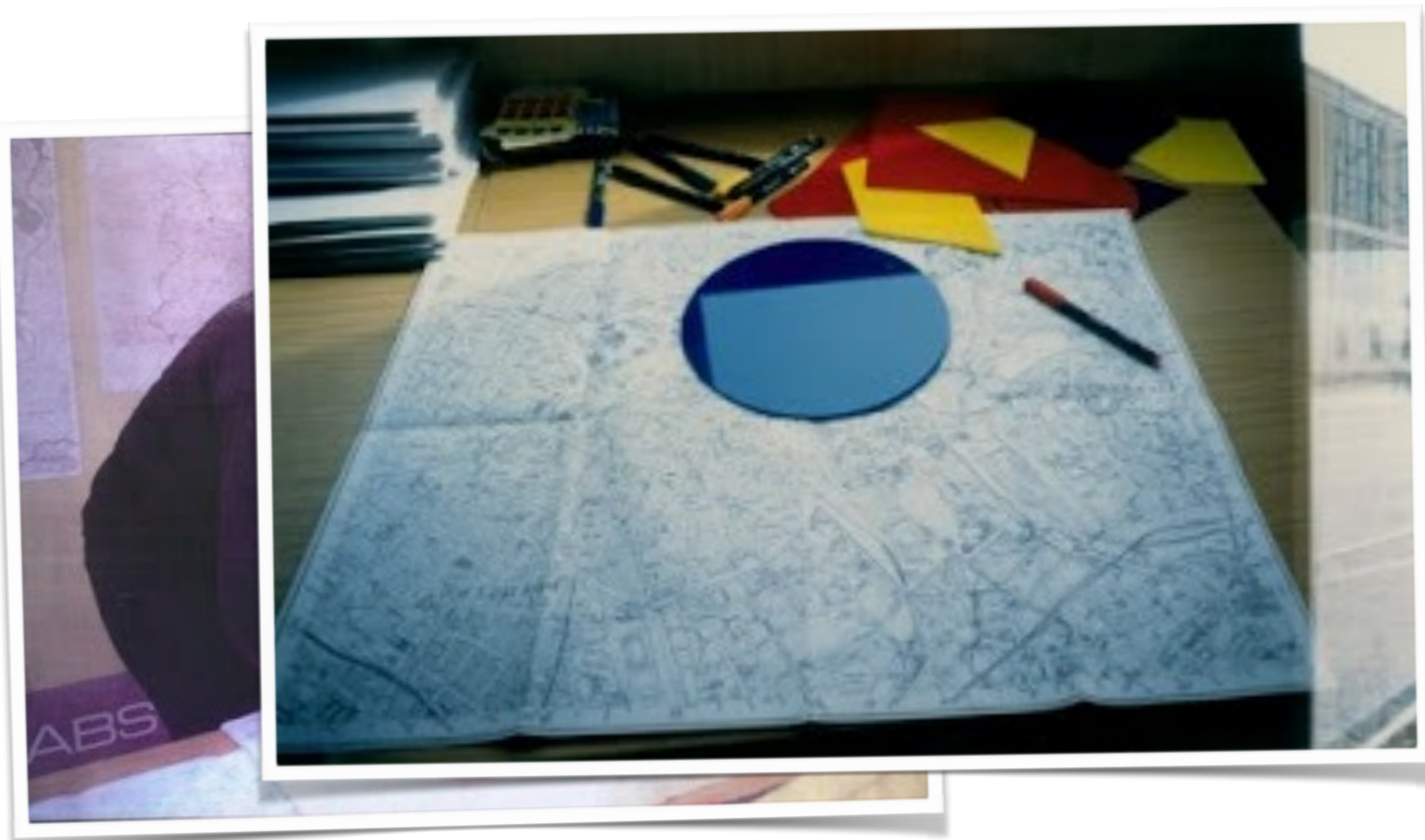
Designing Spatial Expansion

- Abstract Tours Berlin
 - “parody of the idea of a sightseeing tour”



Designing Spatial Expansion

- Abstract Tours Berlin
- “parody of the idea of a sightseeing tour”



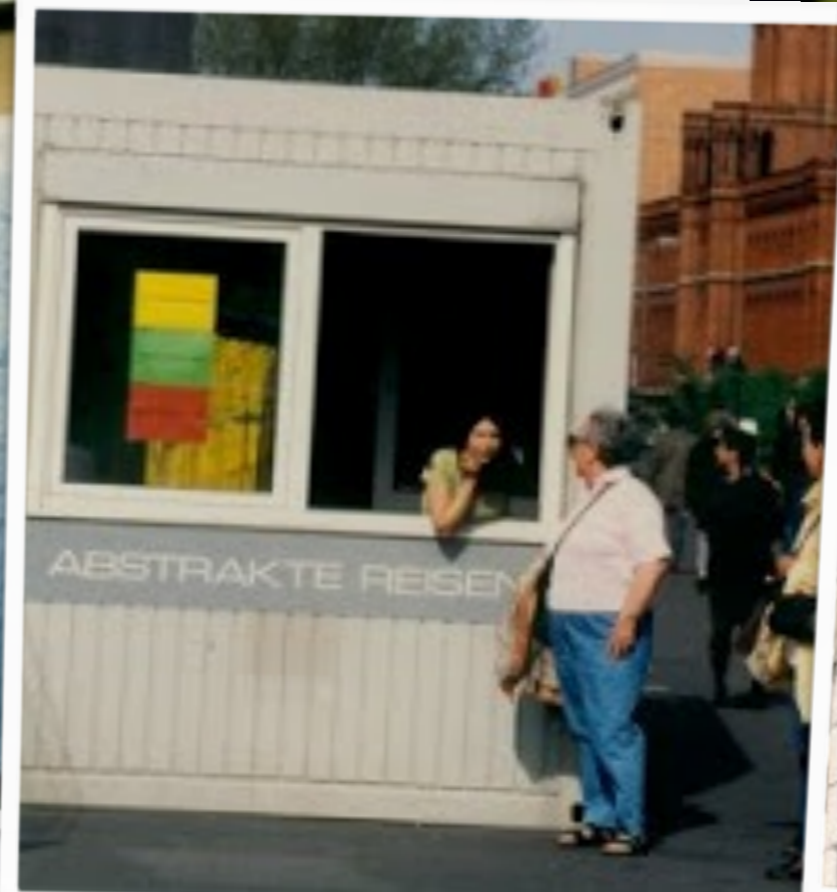
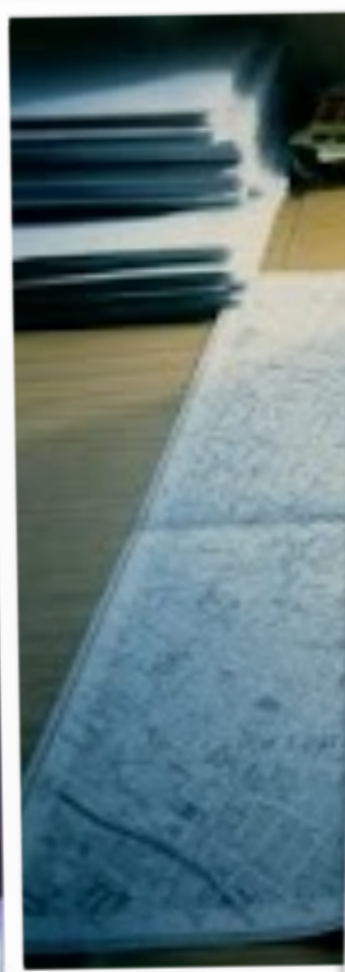
Designing Spatial Expansion

- Abstract Tours Berlin
- “parody of the idea of a sightseeing tour”



Designing Spatial Expansion

- Abstract Tours Berlin
- “parody of the idea of a sightseeing tour”



Designing Spatial Expansion

- Abstract Tours Berlin
- “parody of the idea of a sightseeing



Designing Spatial Expansion

- Sightseeing and Local History
 - However, games make a great mechanism for sightseeing
 - for new visitors
 - for residents
- Interactions with non-fiction space
 - Secret store discounts
 - Visiting points of activism
 - Homelessness



Designing Spatial Expansion

- Challenge with scaling
 - Is your game site-specific?
 - Is your game location-free?
 - Mobbles
 - Is your game site-adaptable?
 - Murder mystery parties



Designing Spatial Expansion

- Challenge with scaling
 - Is your game site-specific?
 - Is your game location-free?
 - Mobbles
 - Is your game site-adaptable?
 - Murder mystery parties



Designing Spatial Expansion

- Challenge with scaling
 - Is your game site-specific?
 - Is your game location-free?
 - Mobbles
 - Is your game site-adaptable?
 - Murder mystery parties



Designing Spatial Expansion

- Playing in Prepared Locations
 - Support more elaborate game play
 - Special surveillance equipment
 - Special technical installations
 - Detailed knowledge of geography and terrain
 - Long-term engagement



Designing Spatial Expansion

- Urban, Suburban and Rural
 - Urban areas are more accustomed to diverse people and uses of public space
 - Suburban spaces are more controlled, but challenged by sub-cultures like skateboarding



Designing Spatial Expansion



[YouTube link](#)

Designing Spatial Expansion

- Playing on the Move
 - “Having a large or unlimited area for gaming means that players have to move and are sometimes even required to travel long distances. **This is the exact opposite of the classic idea of portable games**, which is to fill idle moments of daily life with interesting game content. Spatially expanded pervasive games can use the opposite philosophy: Instead of making travel less bothersome and waiting less boring, many pervasive games require players to do additional traveling or waiting in order to succeed.”



Designing Spatial Expansion

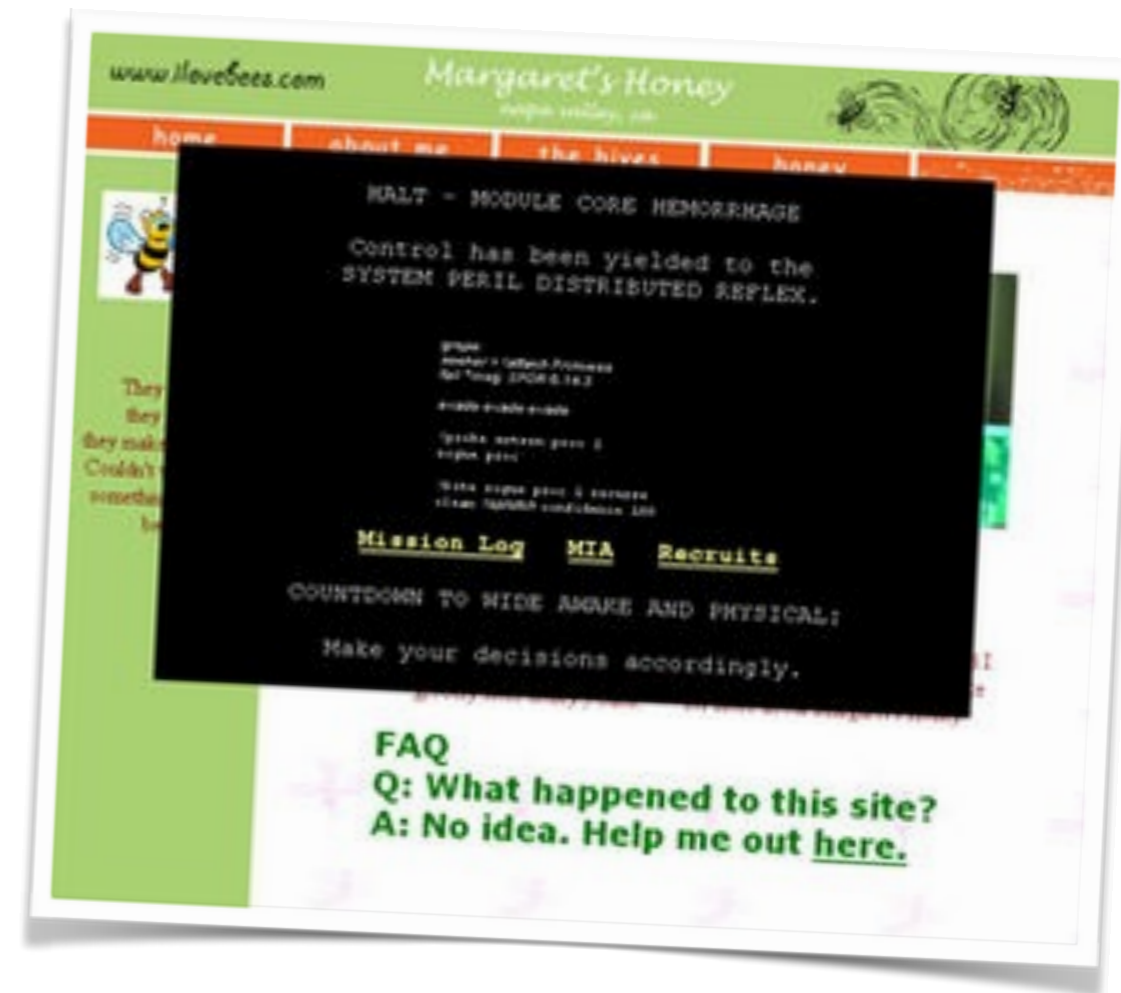
- Traffic and Transportation
 - Physical movement takes time
 - Learning to move efficiently is often part of a game
 - “Players caught up in the thrill of the moment take more risks than they would in their ordinary lives”
 - Designs that divert players attention [while driving] are even more risky

Design options: **move to play** or **play while moving**



Designing Spatial Expansion

- Global Gaming
 - I Love Bees
 - Fun to coordinate globally
 - Expensive/Exclusionary if travel is required
 - Difficult to get a community built
 - Allowing a global audience for local world-wide events takes some of the magic away



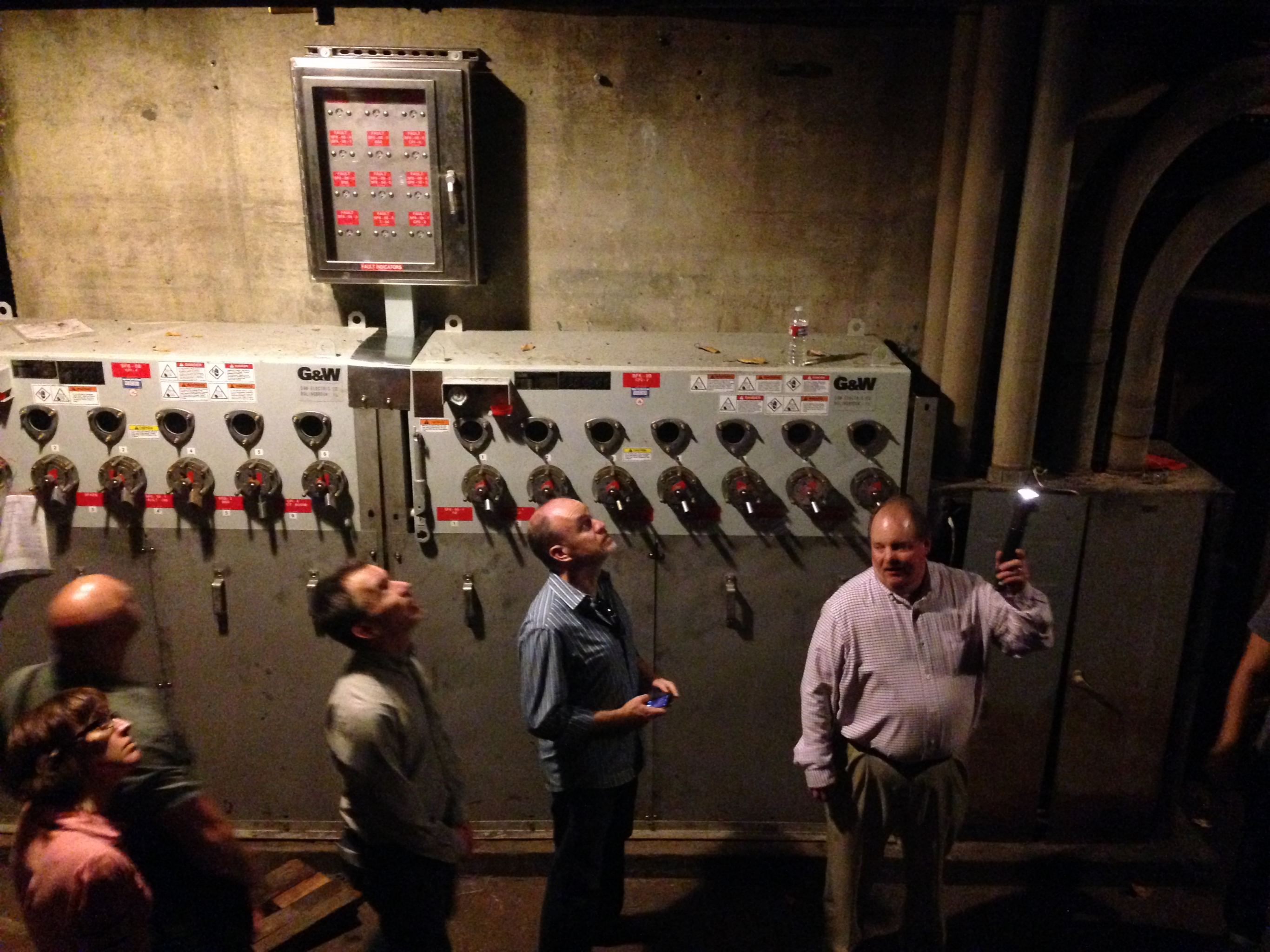
Designing Spatial Expansion

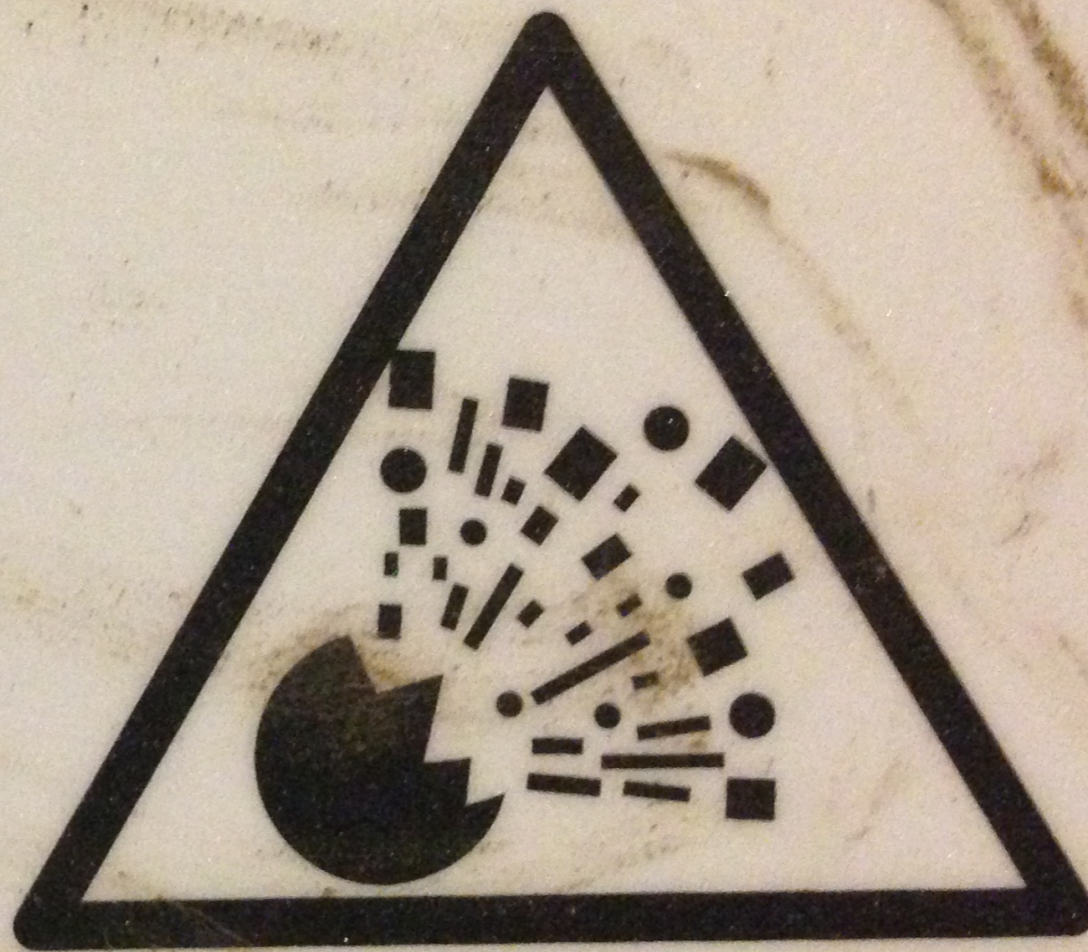
- Urban Exploration
 - Dangerous
 - Possibly illegal













EPRI

Designing Spatial Expansion

- Rural Exploration
 - Geocaching
 - Orienteering



Designing Spatial Expansion

- Exergames



Designing Spatial Expansion

- Exergames



Designing Spatial Expansion

- Exergames

The screenshot shows the website for 'Zombies, Run! 3'. At the top, there are navigation links for 'Shop', 'Blog', and 'Support', along with 'Login' and 'Register' options. The main header features the game's logo and a silhouette of runners against a sunset background. Below this, a large section titled 'Get Fit. Escape Zombies. Become a Hero.' includes a video player and text describing the game's premise: 'Join 800,000+ runners on an epic adventure that motivates you to run further and faster than ever before - whether you're a beginner or an expert!'. To the left, a smartphone displays the game's interface, showing a 'Home' screen with options like 'Back Once Again' and 'Resume', and a notification about a 'Zombie attack!'. Below the phone are 'iOS' and 'Android' download buttons. To the right of the phone, there are two product cards. The first is for 'Zombies, Run! 3: The Epic Adventure - \$3.99', listing features such as 'Up to 160+ gripping missions', 'Zombie Chase interval training', 'Run with your own music', 'Play outside or at the gym', and 'Build up your own base'. The second card is for '5k Training - \$1.99', described as 'Ideal For Beginners', and lists features like '8 weeks of structured training', 'Devised by running experts', 'Audio instructions at every step', 'Training mixed in with gripping story', and 'Workout to your own music'. At the bottom of the page, there is a quote: 'Zombies, Run! is a great way to spend a few easy runs. With brief periods of terrified sprinting.' and logos for 'lifehacker', 'RUNNERS WORLD', 'WIRED', and 'BBC NEWS'.

Shop Blog Support Login Register

ZOMBIES, RUN! 3

Get Fit. Escape Zombies. Become a Hero.

Join 800,000+ runners on an epic adventure that motivates you to run further and faster than ever before - whether you're a beginner or an expert!

Zombies, Run! 3
The Epic Adventure - \$3.99

Available on the App Store | Download on the Google play

- Up to 160+ gripping missions
- "Zombie Chase" interval training
- Run with your own music
- Play outside or at the gym
- Build up your own base

5k Training
Ideal For Beginners - \$1.99

Available on the App Store | Download on the Google play

- 8 weeks of structured training
- Devised by running experts
- Audio instructions at every step
- Training mixed in with gripping story
- Workout to your own music

WALKING

START WORKOUT

“ Zombies, Run! is a great way to spend a few easy runs. With brief periods of terrified sprinting. ”

lifehacker RUNNERS WORLD WIRED BBC NEWS

Designing Spatial Expansion

- Exergames



Shop Blog Support Login Register

ZOMBIES, RUN! 3

Get Fit. Escape Zombies. Become a Hero.
Join 800,000+ runners on an epic adventure that motivates you to run further and faster than ever before - whether you're a beginner or an expert!

Zombies, Run! 3

The Epic Adventure - \$3.99

Available on the App Store | Available on Google play

- Up to 160+ gripping missions
- "Zombie Chase" interval training
- Run with your own music
- Play outside or at the gym
- Build up your own base

5k Training

Ideal For Beginners - \$1.99

Available on the App Store | Available on Google play

- 8 weeks of structured training
- Devised by running experts
- Audio instructions at every step
- Training mixed in with gripping story
- Workout to your own music

1 WALKING

START WORKOUT

iOS Android

"Zombies, Run! is a great way to spend a few easy runs. With brief periods of terrified sprinting."

lifehacker RUNNERS WORLD WIRED BBC NEWS



Designing Spatial Expansion

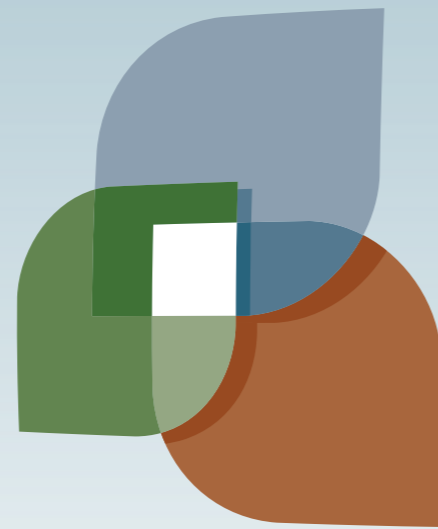
- Cyberspace
- Repurposing games
 - Scavenger hunts in WOW
 - “Players of **Sanningen om Marika** appropriated the playgrounds of another game, which led to a form of virtual social expansion as well.”
 - Meet ups in online game space for secondary purposes



Designing Spatial Expansion

- Virtual Space and Mixed Reality
 - Virtual Tour Guide example
 - Mapping Audio to the real world
 - Using real-world events to affect in game behavior
 - Real world weather affect in game ballistics





L U C I

