Abstract Feature Representation as a Cartographic Device

(For Mixed-Reality Location-Based Games)
Location Based Games
Mixed Reality
HEAD-DOWN GAMEPLAY
HEAD-UP GAMEPLAY
Pac-Lan is a Mobile Radicals project which utilises RFID technology to create a mixed reality mobile phone game.

For more information about the project please visit the About section.

News

15th February 2006

A 3rd trial of Pac-Lan took place on the 10th of February (we actually had some sunshine this time!). Photos and a video of this trial are now available.

2nd February 2006

Conducted another full-scale trial of Pac-Lan today. Take a look in the Media section for videos and photos.

29th January 2006

Yesterday (28/01/06), the Mobile Radicals team, conducted the first full-scale trial of Pac-Lan. Everything went well, although we were all surprised how tiring the game turned out to be (our game area was 300 metres square).
TIMES HAVE CHANGED...
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DESIGN
Design Goal:

1. Promote immersion into the game through the use of a suitable aesthetic
Design Goal:
2. Perform well in the context of a mixed reality LBG (running, outdoors)
Design Goal:

3. Encourage players to navigate ‘head-up’ rather than ‘head-down’
ABSTRACT
FEATURE
REPRESENTATION
20m
FREELY AVAILABLE TEXTURE MAP TILES

Grass (Background)
Dirt (Paths)
Water (Water)
Stone (Buildings)
Lava (Hazards)
Tree (er, Trees...)
RPG-Map
Sketchy Map
Anti-Glare Map
Test
Actual Time Spent Looking at the Map

31.2%  37.5%  43.9%  46.5%
BUT
“Little need to look around”

“Easy to read”

“Too easy”
“Best suited to a game”

“Right level of difficulty”

“Made me look up often”
“Did not need to stare at the map”

“Challenging enough to keep it interesting”

“Pleasing on the eye”
“Very hard”

“Frustrating”

“HORRIBLE. UNUSABLE.”
Interaction with Surroundings

Level of Feature Abstraction
Interaction with Surroundings

Level of Feature Abstraction
SAT-NAV
TOURISM?
LEGIBILITY?
GEOCACHE?
MUSEUM?
READY TO PLAY...?