Slide 1

Attractor Maps — Example Using URU

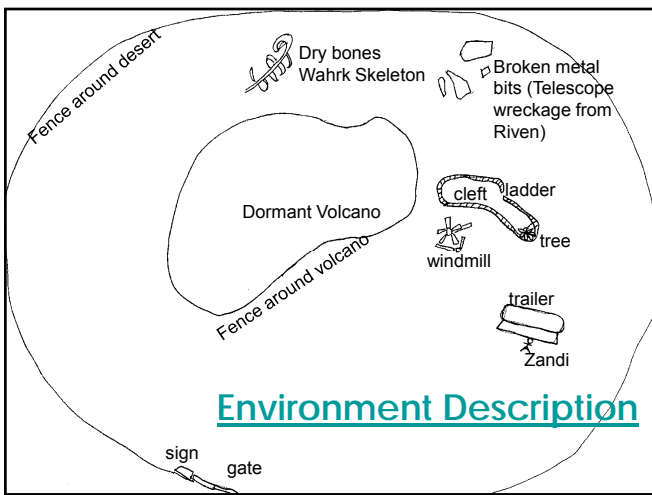Charlene Beirowski and Edwin Blake

Slide 2

This is an attempt to understand how designers draw a player through an environment, using the computer game URU, Ages Beyond Myst.

Clive Fencott's use of perceptual opportunities has been explored. This attempt has considered the player at different positions throughout the Virtual Environment and at these positions, the player is exposed to different competing attractors.

This example however, is actually backward engineering. Instead of designing a virtual environment using perceptual opportunities and then creating it, this example takes an existing interactive game and images what the designer was designing for. A lot can be learnt this way, but much more when people try and document using powerpoint mock-ups as they design, such as what we expect in the Honours Course:

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Slide 3

For 10,000 years, the D'ni™ people thrived underground, building a civilization that, on first examination, appeared almost perfect. Thirty-four kings ruled over the empire, moving it forward, shaping it, and honing it to understand and master the wonderful art of writing Linking Books to unlimited Ages.Then it died. Now, over 250 years later, it's been rediscovered, this time by explorers from the surface who are uncovering its mysteries and hearing its stories. Many feel called to restore D'ni, to find all it has to offer. But the rebuilding and restoration may not be as straightforward as they first seemed, for D'ni may not be as dead as it was thought. Secrets of the past must be uncovered. Secrets of the present must be understood. Secrets of the future must be revealed. The D'ni Restoration Council (DRC), a present-day group of archaeologists, engineers, and other scientists, was formed and funded for the sole purpose of restoring the physical world of D'ni.The DRC's cautious methods are meticulous; some say to an unnecessary extreme.

Yeesha, the eccentric daughter of Atrus and Catherine, was born nearly 200 years ago. She has left recorded messages that have something to say about the restoration. She believes that her purpose is to shape the restoration, yet her vision of the goal is quite different than that of the DRC.Yeesha's understanding of D'ni history and mastery of D'ni skills have given her a sense of rescue that is far beyond the surface-only focus demonstrated by the DRC. In fact, her commitment to true restoration is what motivates her to test the resolve of each visitor.

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Slide 4

So here you are: now what?

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Slide 5

Fence around desert

Dry bones Wahrk Skeleton

Broken metal bits (Telescope wreckage from Riven)

Dormant Volcano

cleft   ladder

windmill   tree

Fence around volcano

trailer

Zandi

Environment Description

sign   gate

Slide 6

Here is a map with annotations of the different places in the game.
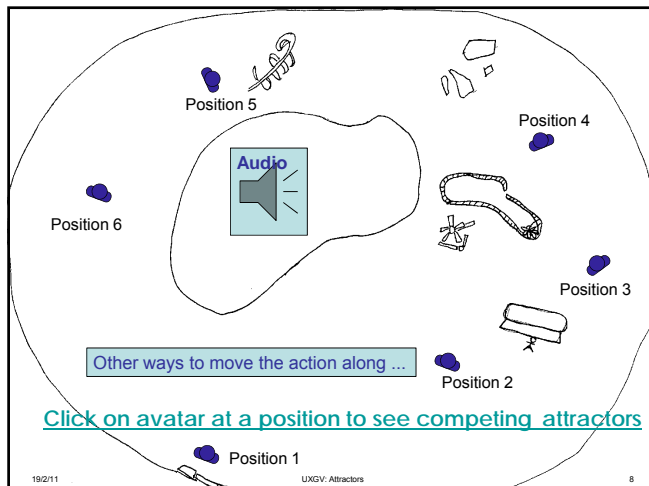
Not drawn to scale obviously! The different objects or areas of interactions are labeled and the boundaries for the environment are set (fence around desert and fence around volcano).

But this map is not the whole story: how do you get a person to move?

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Initial Concept Painting

Josh Staub's (art director for URU) "2D Conceptual Matte painting of the cleft desert area" (Photoshop)

Position 5

Position 4

Audio

Position 6

Position 3

Other ways to move the action along ...

Position 2

Click on avatar at a position to see competing attractors

Position 1

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This is the attractor map showing the player at certain possible and likely positions the player might go.

Clicking on the blue avatar icon shows the attractors for that particular position. Showing how the attractors change between positions is tricky. I just did an alternate slide for each of them but you then cant really compare positions.

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Click on ◆ to see flow chart.
Click on ▦ to see attractor

1

5

4

3

attractors

2

Back
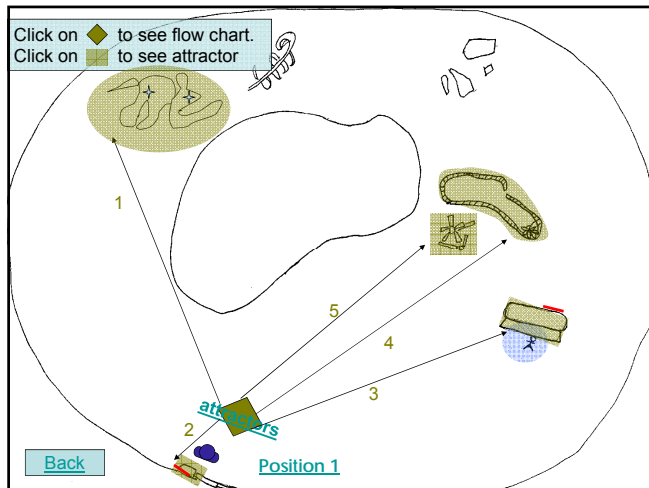
Position 1

Here is the player at the starting position.

In all those 5 directions, there are various attractors that would draw the player to the appropriate retainer. The designer weights the attractors with the intention of drawing the user to that one first. Here the user sees the windmill and cleft tree in the distance and then the trailer. Behind the player, there is a cloth on the sign, the player could be attracted by the sign and find the cloth. There is also the animation of the vultures in the distance but the player would have to be very observant to notice those. The player might than follow a particular attractor and move position. Moving position changes attractor weights and descriptions. It is most likely that the player will move in the direction of the 5,4 and 3 attractors. There are many of them pulling him toward that part of the environment. As he gets closer, the player would have to choose which of the 3 he is first going to explore.
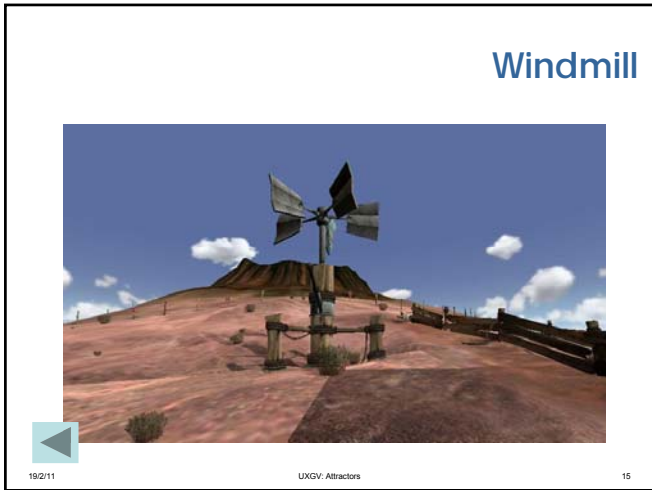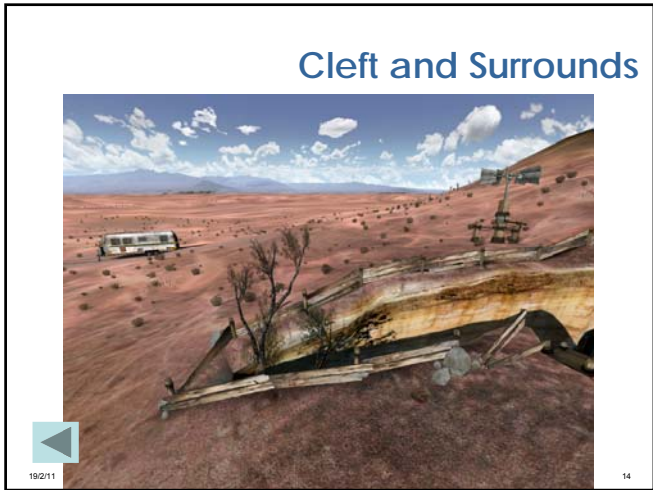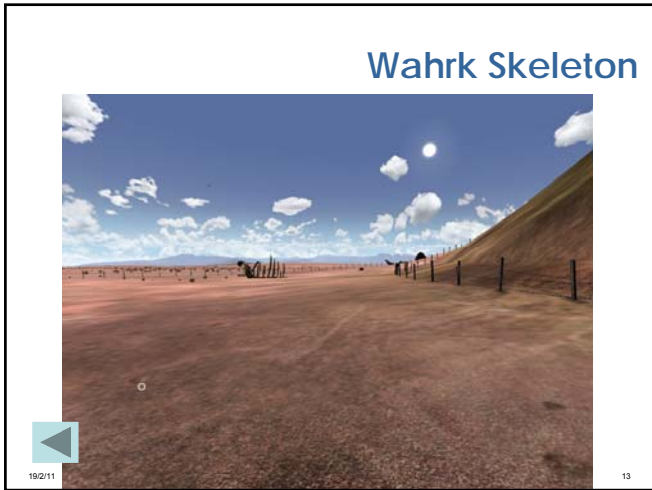
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Gate

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Wahrk Skeleton

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Cleft and Surrounds

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Windmill

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Zandi — Interactions
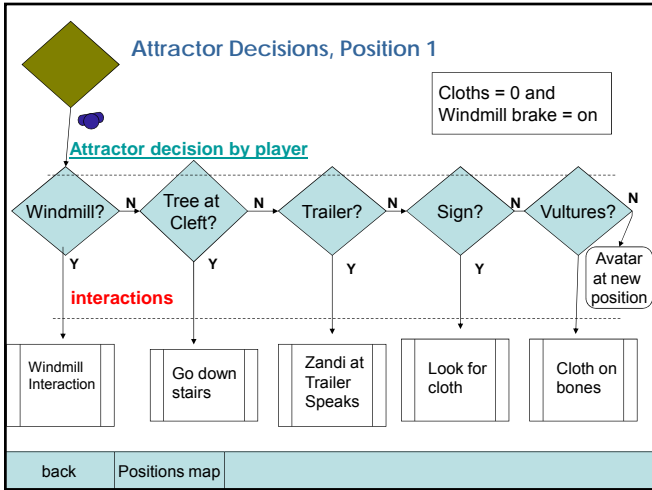
To Trigger Dude (Zandi) to talk → walk into his area

Click is used to interact with objects.

Can click on:
- Clothes
- windmill brake
- windmill lever
- water bucket lever
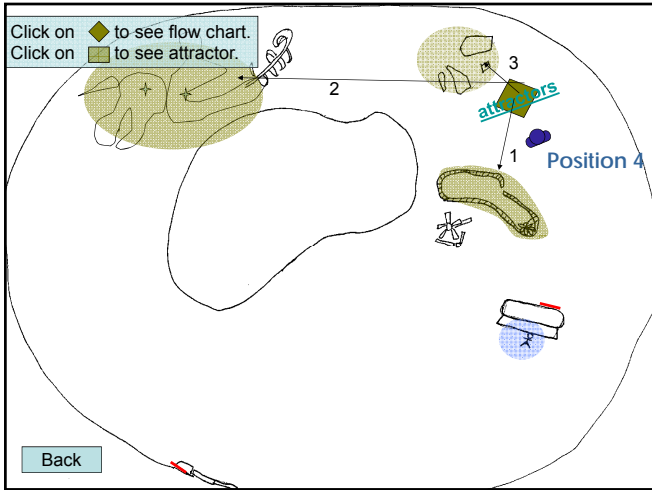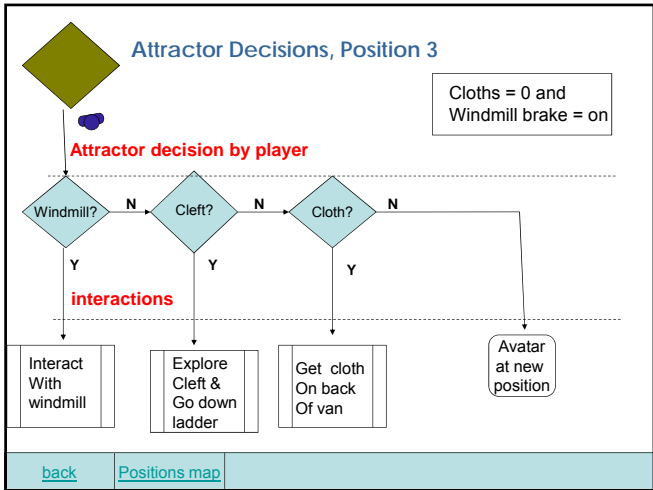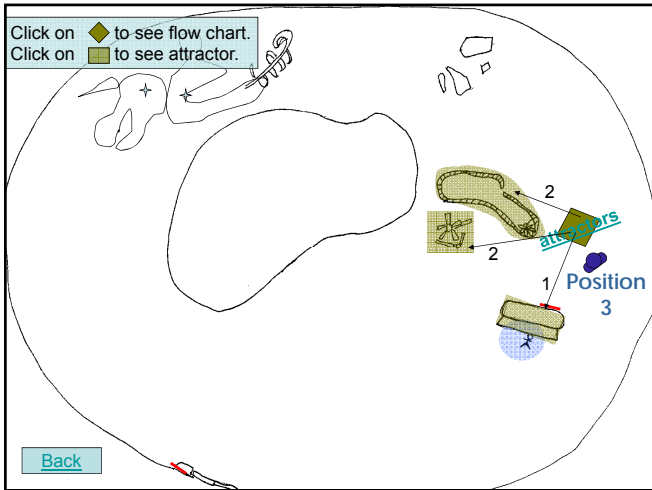- to pick up letter

Positions map

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Attractor Decisions, Position 1

Attractor decision by player

Cloths = 0 and
Windmill brake = on

| Windmill? | N → | Tree at Cleft? | N → | Trailer? | N → | Sign? | N → | Vultures? | N → |

interactions

Y (Windmill?)
Y (Tree at Cleft?)
Y (Trailer?)
Y (Sign?)

Avatar at new position

| Windmill Interaction | Go down stairs | Zandi at Trailer Speaks | Look for cloth | Cloth on bones |

back | Positions map

Decision by player at start time.

Following a certain attractor (the windmill, cleft, trailer, sign or vultures) would open up the player to different opportunities or areas of interaction. This is indicated in the process block. Sometimes by a player just following an attractor, he would trigger an event – as in the music playing and Zandi speaking by the trailer. Other times, the user is presented with an interaction that he could do. Like clicking on the windmill level (which will do nothing if the brake is off). If none of the attractors are followed the player must go on to a new position.

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Panel 1 (top-left)

Click on ◆ to see flow chart.
Click on ▨ to see attractor

2
1
attractors
3

Position 2

Back

Panel 2 (top-right): Attractor Decisions, Position 2

Attractor Decisions, Position 2

Cloths = 0 and
Windmill brake = on

Attractor decision by player

Zandi at trailer? —N→ Windmill? —N→ Tree? —N→

Y (down from Zandi)   Y (down from Windmill)   Y (down from Tree)

interactions

| Radio music, Zandi speaks | Interact With windmill | Explore Cleft & Go down ladder | Avatar at new position |

back   Positions map

Panel 3 (middle-left)

Click on ◆ to see flow chart.
Click on ▨ to see attractor.

2
attractors
2
1
Position 3

Back

Panel 4 (middle-right): Attractor Decisions, Position 3

Attractor Decisions, Position 3

Cloths = 0 and
Windmill brake = on

Attractor decision by player

Windmill? —N→ Cleft? —N→ Cloth? —N→

Y   Y   Y

interactions

| Interact With windmill | Explore Cleft & Go down ladder | Get cloth On back Of van | Avatar at new position |

back   Positions map

Panel 5 (bottom-left)

Click on ◆ to see flow chart.
Click on ▨ to see attractor.

3
2
attractors
1
Position 4

Back

Panel 6 (bottom-right)

Telescope wreckage from Riven

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Attractor Decisions, Position 4

Cloths = 0 and
windmillbrake = on

Attractor decision by player

Metal bits? —N→ Vultures? —N→ Cleft? —N→

Y ↓   Y ↓   Y ↓

interactions

| Cant do much | Go to Bones & Get cloth | Explore Cleft & Go down ladder | Avatar at new position |

back | Positions map

Position 5

attractors

1

2

Back

Click on ◆ to see flow chart.
Click on ▨ to see attractor.

Attractor Decisions, Position 5

Cloths = 0 and
windmillbrake = on

Attractor decision by player

bones? —N→

Y ↓

interactions

| Cloth on bones | Avatar at new position |

back | Positions map

Wahrk Close Up

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attractors

Position 6

2

1

Back

Click on ◆ to see flow chart.
Click on ▨ to see attractor.

Attractor Decisions, Position 6

Cloths = 0 and
windmillbrake = on

Attractor decision by player

vultures? —N→ sign? —N→

Y ↓   Y ↓

interactions

| Leads to Cloth on bones | Leads to Cloth behind sign | Avatar at new position |

back | Positions map

AUDIO ATTRACTORS

Audio

Vulture1
Vulture2
vulture3
vulture4
vulture5

grasshopper

katydid

cicada1
cicada2
Cicada3

Desert ambient loop

Main wind loop

Wind anim loop

Back

OTHER WAYS TO MOVE NARRATIVE ALONG ...

Game Rules

Brake for windmill: push lever in room 1, brake → off
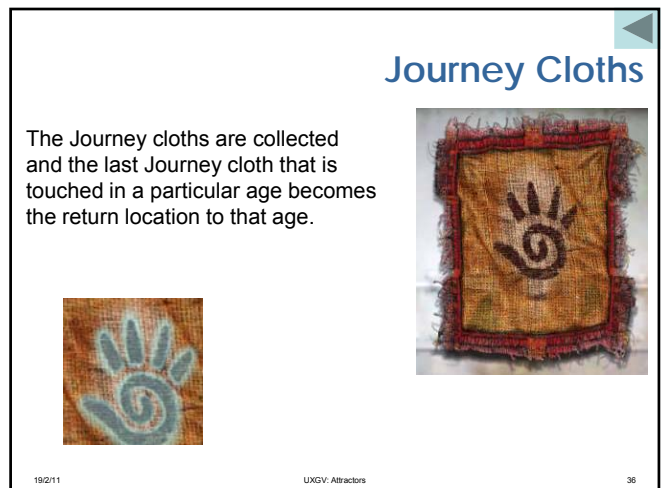Windmill lever: if brake = off, and lever pushed, windmill → on

While figuring out these game rules, I realised that they were actually quite simple.

A good and enjoyable game may not be on the complexities of the game rules or the amount of them, but rather on how they are used to enhance the story and solve the mystery. Outside of the cleft the only thing the player can interact with are the cloths, Zandi and the windmill. There are 7 cloths in total. 3 of the cloths in the desert and 4 of them inside the cleft. Each time the user clicks on the cloth a part of the hand design on the cloths lights up – showing the player that there are more cloths to collect. 3 of the cloths cannot be obtained until the windmill brake is turned off and the windmill is pushed on – all these cloths are in the cleft. The windmill brake is turned off by clicking on the lever in room 1. Then you have to go up to the windmill and push the lever to turn it on. After this has been done, the player can proceed with other interactions.

Journey Cloths

The Journey cloths are collected and the last Journey cloth that is touched in a particular age becomes the return location to that age.

Game Rules   II

Cloths (7) collect to progress to next narrative state.

Cloth locations:
1. Behind sign at start
2. Side of Trailer
3. Dinosaur bones
4. Room 3 on wall
5. Room 2 on wall: windmill = on & combination = correct & blue com = pushed
6. Room 2 on door: windmill = on & door 2 = closed & door 1 = open
7. Water bucket: brake = off & foot pedal = pushed
8. If Cloths ≡ 7, and click on tree, go to next narrative state

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Game Rules   III

Message in room 3
- Wall puzzle: enter in combination; press button
  - ▶ Yisha comes to life and tells a message
  - ▶ at this time room cloth appears on wall

Game Rules   IV

Water bucket contraption: Lever of the bucket must be pressed and then water bucket will move down, iff the windmill is on.

Game Rules   V

Once all cloths are obtained and player has message, then can proceed to the next narrative state
- entered via tree: same design as the cloth logos.
- this ensures that the player makes the association between the cloths and going through the tree
- Clicking on the tree won't work, until all cloths taken