Roam

interplay between children, devices, and wildlife

Teresa Almeida

Lecturer/Coordinator Interactive Art LASALLE College of the Arts Singapore teresa.almeida@lasalle.edu.sg

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Introduction

Roam is a set of sharing devices that intend to support young riders in a public bus to establish closer contact with the environment.

- Amplify visual and audible surroundings in an informed way
- Make possible to draw children closer to the local wildlife

Method

1. Looking from a distance

Roam devices invite users to participate in a narrative from which they had been foreclosed (Greenfield, 2006).

- Attempt to enhance the young rider's experience
- Engagement with technology in a spatial context

2. Locality and Iteration



. Banff > Banff National Park > Canadian Rockies

figure 1. Roam's token

- Less than 4 km square in size
- Surrounded by mountains and wilderness
- The community shares its space with the wild-life (Banff, 2009)

figure 2. Roam's bus stop downtown Banff, GPS display

3. Banff's public transit system Roam



figure 3. Roam bus (Elk)

- Highly sophisticated service
- Four environmentally conscious hybrid electric buses
- Promotes the local wildlife: the wolf, the mountain goat, the grizzly bear, and the elk.
- Latest GPS technology

4. Roam devices are:

Playful explorations
Enhancement of features
Repurpose of existing technology
Augmentation of surrounding wildlife

Results and Discussions

Some experiments were conducted with a 7 years old child.

Sharing Devices



figure 4. Device I: to see through

To see through

the looking glass
digital fabrication
perception
optics
environment's information
wildlife

Sharing Devices

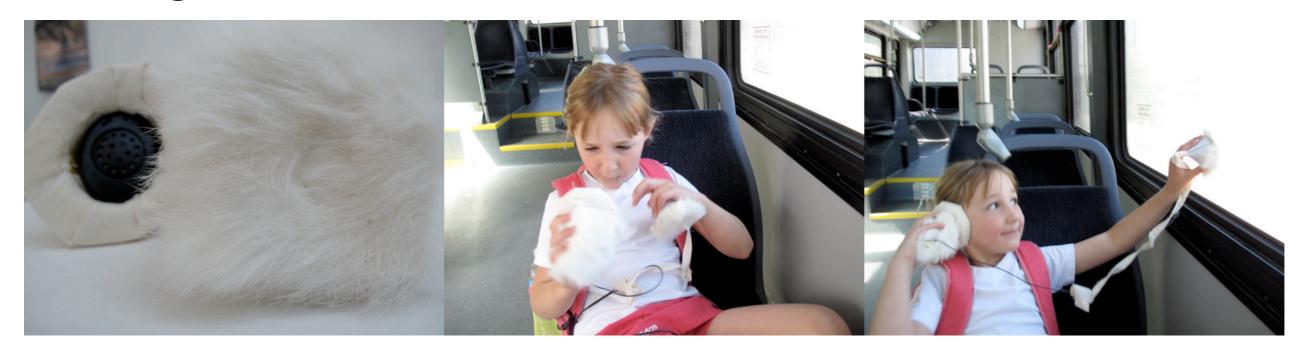


figure 5. Device II: to hear through

To hear through

location awareness
GPRS/GPS
radio collars and ear tags
real-time audio
wildlife nearby?
microphones? sound transmission
listen to a bear?
roaming

Conclusion

Roam is about a place, how we perceive it, and how children may learn from it in a playful way. By exploring hedonic aspects of interaction, combining our senses, the local culture and infrastructure, this experiment results in a set of novel devices designed with new technologies, for the amusement and learning experience of the young.

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References

Greenfield, A. (2006) Everyware, The dawning age of ubiquitous computing. Berkeley: New Riders, USA.

Roam. Available at http://www.banff.ca/locals-residents/public-transit-buses/roam.htm [Accessed 30 September 2009]