

Measuring a Sense of Place in Colliery Dam Park, Nanaimo

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Measuring a Sense of Place

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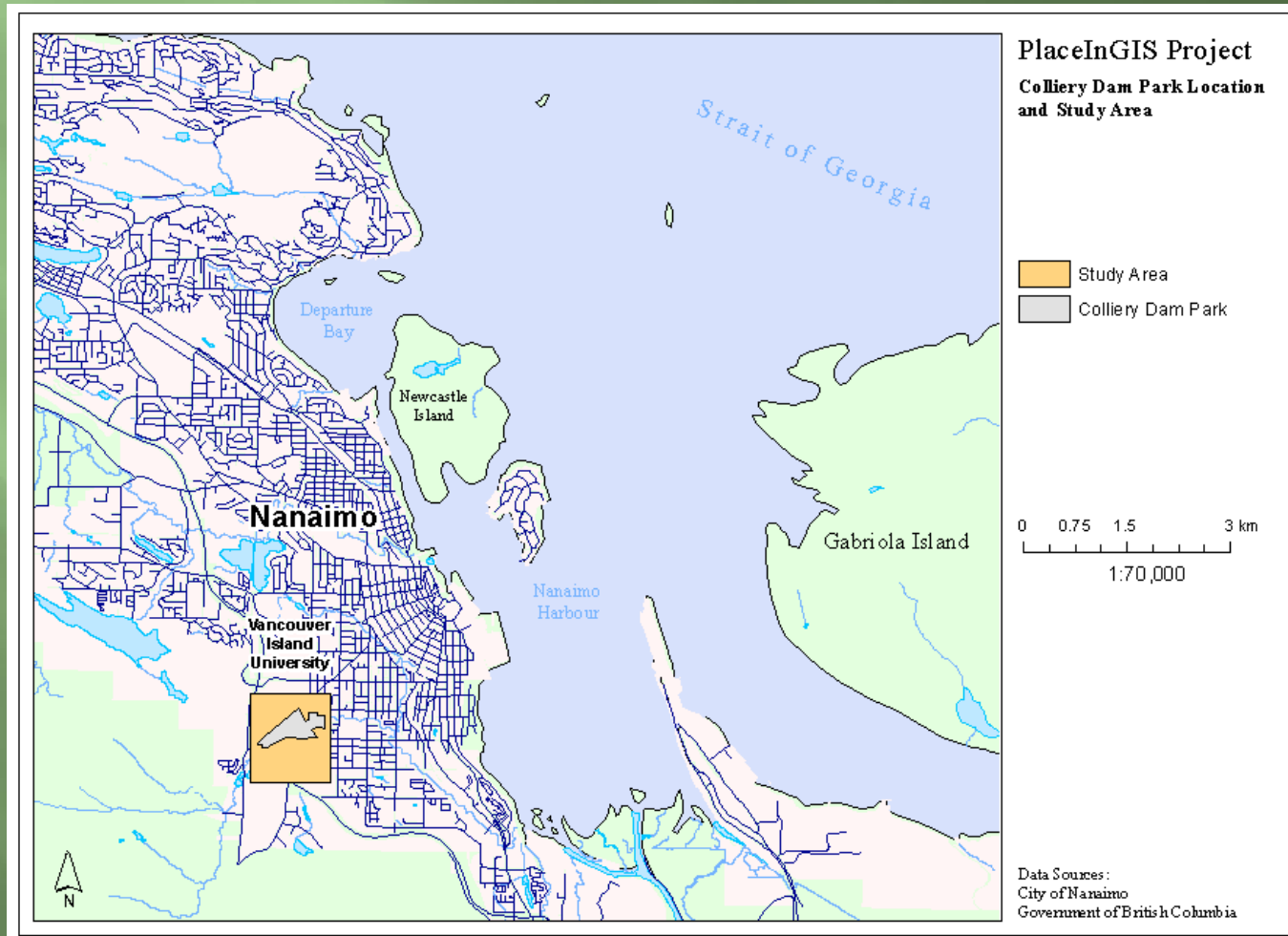
Project Overview

- Trying to understand the dynamics of a place
- Survey of park users about what features they like, and why
 - Qualitative and Quantitative Information
 - Emotion associated with feature
 - Logical importance assigned to feature
 - Awareness distance surrounding feature
- Processing of responses using a Geographic Information System (GIS) to represent each respondent's perception of place



Project Overview

- Study performed at Colliery Dam Park, Nanaimo





What is a Place?

- Henderson, 2009 has classified work in place into 3 categories:
 1. Place as a stable anchor for human perceptions and emotions;
 - Tuan: "Places are centers of felt value where biological needs, such as those of food, water, rest, and procreation, are satisfied" (Tuan, 1977, p. 4)
 - Augé: Places as authentic or manufactured (Augé, 1995)



What is a Place?

2. **Place as a dynamically changing entity**
 - **Pred: Place as a dynamic, everchanging system (Pred, 1984)**
3. **Place as defined by relationships with other, potentially distant places.**
 - **Cresswell: "Place as an event is marked by openness and change rather than boundedness and permanence" (Cresswell, 2008, p. 40)**
 - **Massey:**
 - **Place is a process,**
 - **Place is defined by the outside,**
 - **Place is the site of multiple identities and histories, and**
 - **Place is defined by its interactions with other places (Massey, 1997)**



What is a Place?

- Few efforts to go out and measure place
 - Lynch is the notable exception
 - Looked at Jersey City, Boston, and Los Angeles
 - Exceptionally complicated mental mapping project
 - 1 ½ hour long interviews with a small number of participants
 - Large amounts of effort to organize and process the results
 - “Clearly, a retest with a larger sample is needed, and this required more rapid and precise methods.” (Lynch, 1960, p. 152)
 - The PlaceInGIS Project aims to build the computer tools to make this analysis more accessible.



Project Status

- **Proposal Completed August 2011**
- **Approval by VIU REB Sept. 13, 2011 and UBC Behavioural REB Aug. 25, 2011**
- **Data entry software complete; analysis software undergoing testing**
- **Camera contest closed Sept. 30**
 - **Waiting for winner to log in....**
- **All website data to be entered by Oct. 31**

Data Collection

- Collection from Oct. 20, 2011 - Sept. 29, 2012
 - 302 responses
 - Wide variety of people
- 226 have been entered and partially processed
 - 62.7% random sampling
 - 30.2% voluntary
 - 7.1% invited by researcher



At booth with Chris Mueller, Student Research Assistant

Data Collection

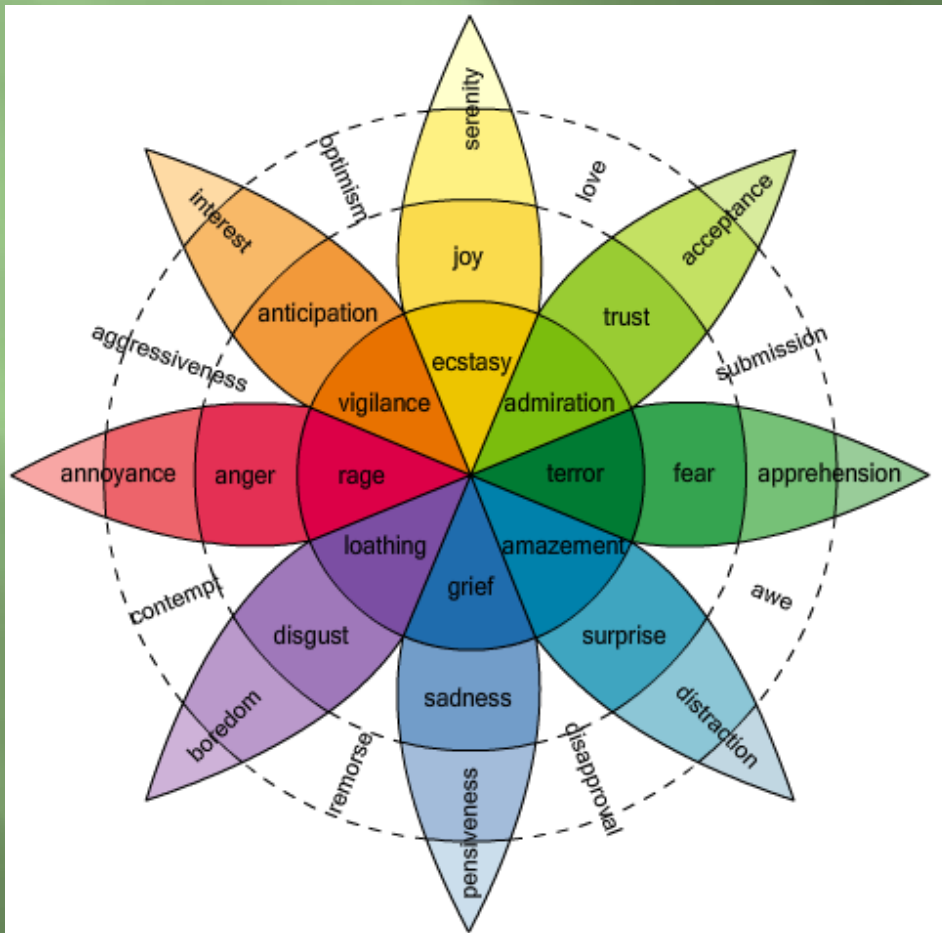
- **Joint UBC-VIU Project**
- **Financial Support by VIU**
 - **Data Collection Costs assisted by VIU Work-Op money**
 - **Stuart Dixon, Oct. – Dec. 2011**
 - **Chris Muller, Jan. 2012 – Apr. 2012**
 - **Missed call for Summer, 2012 (when it was needed the most)**
 - **Professional Development money to purchase booth, equipment**



“Low Carbon Research Initiative”

Data Entry

Plutchik's Wheel of Emotions



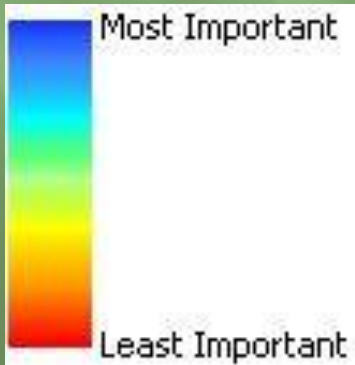
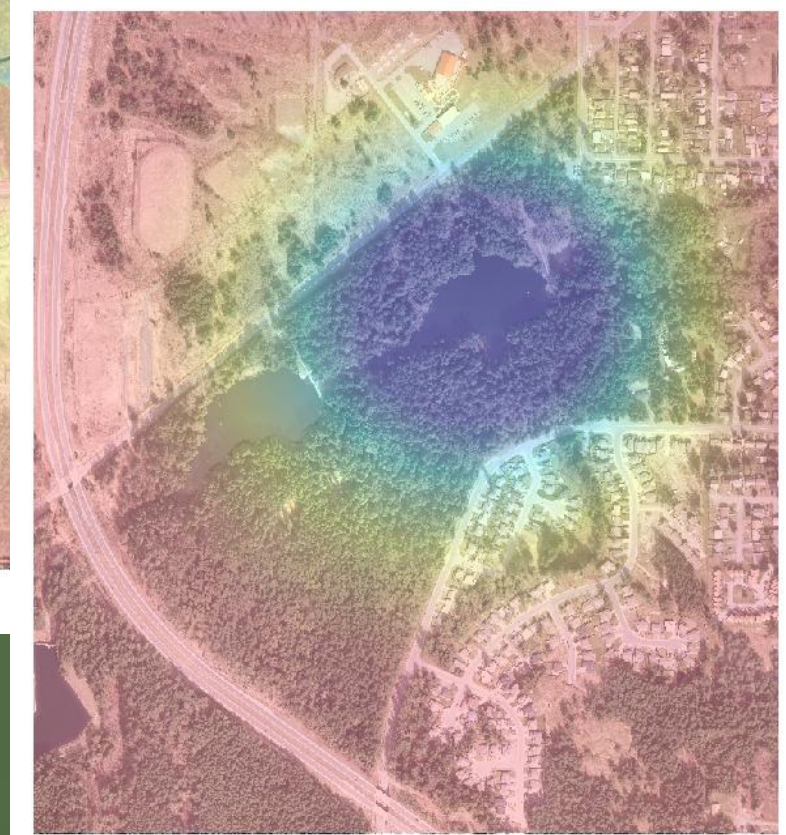
Plutchik, 1962	
Emotion	Intensity
Acceptance	4.00
Admission	4.16
Amazement	8.30
Anger	8.40
Annoyance	5.00
Anticipation	7.30
Apprehension	6.40
Astonishment	9.30
Attentiveness	5.86
Boredom	4.70
Calmness	3.30
Dejection	6.26
Disgust	7.60



Data Preprocessing

- Produces importance surface from features identified on form
 - Focus has been on getting a draft surface onto website for review by participants
 - Ignores visual distances, for example at present time
 - Final surface method still to be devised and programmed
 - Current focus is on processing buffers and getting surfaces that make “sense.”
 - Using standard interpolation techniques instead of custom surface
 - Future incorporation of “visual distances”
 - Surfaces produced can now be exported directly to project website (www.PlaceInGIS.com)

Different Ways of Viewing Colliery Dam Park





Website

- **Website is now running**
 - **General project information**
 - **Display of information recorded for each participant**
 - **Draft importance surface now available to user**
 - **Feedback form about appearance of surface**
 - **Support for camera contest**
 - **Capturing ID of winning participant when he/she logs in and informing them that they won**
 - **Papers (hopefully) as they are published**

Data Analysis

- ▣ Combining surfaces to get overall view of all interviewed park users
- ▣ Determining most, least important parts of park
 - ▣ Understanding may help planning activities





Data Analysis

- Calculation of surface parameters
 - Surfaces are more complex than I expected
- Clustering of users by surface parameters
- Analysis of surface parameters by demographic variables, weather conditions, season, day of week....



Dissemination of Results

- **Five papers planned:**
 1. **“A Method for Modelling Place in GIS”**
 2. **“Natural and Artificial Boundaries of Place”**
 3. **“Clusters in the Perception of Place”**
 4. **“Demographic and Environmental Factors”
Affecting the Perception of Place”**
 5. **“What Makes a Place: Components of Place
Perception”**



Looking Forward

- Continued refinement of software
- First paper is a technical paper on the design of the collection and pre-processing software
- Second paper examines legal boundaries versus boundaries according to the features that people have described
 - Very relevant question now that construction of a new water reservoir has now begun in the park.
 - Planning before the plan has been drawn up, rather than afterward (Appleton and Lovett, 2005)



Questions



References

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