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Using Peoplemap Technique to Elicit and Broadcast Sense of Place

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ABSTRACT: The population in Geelong Region is expected to keep growing. In order to work towards a better future of the region, it is essential to understand the feelings and needs of local communities and empower them in the community affairs. This study used an innovative technique – peoplemap – to investigate local communities’ sense of place. The primary objective of the investigations was to reveal the sense of place of Geelong Region.

Local residents (N=166) in Geelong Region were interviewed face-to-face about how they identify themselves, what they love, what they want, and how empowered they feel. This paper reports the sense of place of three areas of Geelong Region: Ocean Grove, Bannockburn and Teesdale, and Corio-Norlane. Thematic analyses revealed the sense of place of these three areas, and identified their similarities and differences. The results of this study have several implications for government policy makers, planners and designers. This study contributes to the sense of place research, in that civic action was found to be a valid dimension of sense of place.

Conference theme: Urban Studies  
Keywords: Geelong Region, Sense of Place, Peoplemap

INTRODUCTION

Geelong Region is located in south-western Victoria, Australia; between 75 and 160 kilometres from Melbourne (as shown in Figure 1). It has a population of around 270,000 people and covers 8,972 square kilometres (G21, 2011). Framed by water, the region is one of the spectacular landscapes. It is well known for its Great Ocean Road and some of the best surfing beaches in the world. The name “Geelong” is derived from the aboriginal word of “Jillong”, which means “bay”, “ocean”, or “a place of the sea bird over the white cliffs” (intown, 2011).

Estimated by G21 (Geelong Region Alliance), the population of Geelong Region is expected to grow at an annual rate of approximately 1.6% from 2006 to 2031. It is estimated that there will be around 400,000 people living in the region in 2031. Therefore, an additional 57,240 households will be required to accommodate the population growth (G21, 2009).

The population growth will place pressure on the region’s ecosystems. In addition, Geelong Region is facing the challenge of climate change including sea level rise and temperature increase. The regional, state, and national organizations have been working on strategic frameworks to help the region overcome the challenges and move towards a sustainable future (G21, 2011).
However, these strategic frameworks were sometimes made based on political and monetary benefits, while overlooked the community preferences and social welfare outcomes. This limitation was caused by a knowledge gap on sense of place of Geelong Region. In fact, there is little information on local residents’ cognitive, emotional, physical and behavioural bonds with their environments.

Understanding the deepest feelings of the residents associate with Geelong Region is essential to the success of these strategic frameworks. In order address this issue, a peoplemap project has been conducted to elicit the sense of place of Geelong Region. The peoplemap project was initiated and sponsored by Deakin University, Geelong Performing Arts Centre and Barwon Water. The aim of the peoplemap project was to elicit and broadcast the sense of place of Geelong Region.

1. LITERATURE REVIEW

The definition of sense of place varies based on disciplinary perspective, and is a topic of debate in the current literature (e.g., Qian, Zhu & Liu, in press; Scannell & Gifford, 2010). Drawing on the literature from environmental psychology and human geography, this study defines sense of place as the cognitive, emotional, physical, social, economic, cultural, spiritual, and behavioural meanings that individuals or groups associate with a place (A Dictionary of Geography, 2009; Sharpley & Jepson, 2000; Jorgensen & Stedman, 2006; Tuan, 1974; Tapsuwan, Leviston & Tucker, 2011).

Jorgensen and Stedman (2001; 2006) proposed three dimensions of sense of place: place attachment, place identity, and place dependence. These three dimensions are probably the most widely adopted dimensions in the sense of place literature. They have been used in many empirical studies and have generated a large number of interviews and surveys (e.g., Halpenny, 2010; Qian, Zhu & Liu, in press).

Many other dimensions of sense of place have been investigated, such as economic dependence (Cross, Keske, Lacy, Hoag & Bastian, in press), sense of community (Pretty, Chipuer & Bramston, 2003), and place affect (Halpenny, 2010).

The investigation on sense of place in this study adopts the three dimensions that Jorgensen and Stedman proposed, while including an additional dimension of civic action. The four dimensions are defined in the paragraphs that followed. The rationale for including civic action as one dimension is also given below.

Place Identity. Place identity is a component of self-identity (Proshansky, 1978), and has also been referred to as people’s place-based identities. As people live, work, and recreate in places, they develop identities that are associated with their experiences in that place.

Place Attachment. Place attachment refers to the emotional bond between people and place (Altman & Low, 1992). It often exists in the form of love or sense of rootedness (Qian, Zhu & Liu, in press).

Place Dependence. Place dependence (also referred to as the functional attachment to a place) reflects the ability of a place to meet the needs and goals of individuals (Cross, Keske, Lacy, Hoag & Bastian, in press; Halpenny, 2010; Williams & Vaske, 2003). William and Vaske (2003) conceptualise place dependence as embodied in the physical characteristics of an area (such as accessible rock climbing routes). We want to extend their conceptualisation of place dependence to the physical, social, economic, and cultural characteristics of an area.

Civic Action. Civic action takes many forms and can be defined in many ways. In this study, it is defined as individuals donating their time, effort, and resources to the areas they live (in light of the definition of civic action by Payton, Fulton & Anderson, 2005).

There are two reasons for including civic action as one dimension of sense of place. First, there are empirical evidences showing that people’s civic actions connect with their sense of place. For example, individuals who strongly identify themselves with a particular place may take action on behalf of that place. They may take actions to remedy problems that already exist there or to prevent forms of negatively interpreted changes from occurring (Stedman, 2002). In addition, people who have strong place attachment and people who feel strong connections with nature may undertake pro-environmental behaviours (Devine-Wright & Clayton, 2010).

Second, several scholars include “behavioural dimension” in their definitions of sense of place (e.g., Tapsuwan, Leviston & Tucker, 2011). However, the behavioural commitments are not reflected in the three dimensions of place identity, place attachment, and place dependence. From the definition outlined in previous paragraphs, we could see place identity reflects the cognitive dimension, place attachment reflects the emotional dimension, and place dependence reflects the physical, social, economic and cultural dimensions of sense of place. This study fills the gap in the literature by including civic action as one dimension of sense of place, which reflects the behavioural dimension of sense of place.

2. PURPOSE AND AIM
The purpose of this study was to reveal and present the sense of place of local residents in Geelong Region. The results of this study will be useful to the regional governments, research organizations, planners, and designers.

3. METHODS

3.1. Overall Research Design

The research was designed as five sessions of peoplemap interviews, conducted in five research sites in Geelong Region. Peoplemap is an innovative research tool that designed to obtain people’s opinions. It adopts the “vox populi” interview format (or “Man on the street” format, please refer to “Vox Populi”, 2011) and aims to obtain people’s spontaneous responses to several prepared questions.

3.2. Sites

Five sites in Geelong Region, Australia were chosen for study because they represented a general contingent of Geelong Region residents who used their neighbourhoods actively in their spare time. More specifically, the sites are Geelong Performing Arts Centre, Ocean Grove Shopping Centre, Corio Shopping Centre, Geelong West Town Hall, and Bannockburn Shopping Centre. They are located in the suburbs of Geelong, Ocean Grove, Corio, Geelong West, and Bannockburn, respectively.

3.3. Procedures

At each research site, a research team (including one interviewer, one technician and several research volunteers) set up a stage before conducting the interviews. Then the research volunteers invited people who walk pass by to participate, and explained the research purpose and procedures to the people who were interested. For the people who wanted to participate, the interviewer asked each participant several prepared questions, and the technician recorded the interview conversation using both a video recorder and a voice recorder. Depending on the interview progress, each research session lasted between four to six hours; and attracted 30 to 50 respondents.

Each respondent, after talking to the research volunteers and expressing the interest in participating, was given a consent form. The participant filled out the name, address, and age group information on the consent form and signed the agreement. After filling out the consent form, the participant was invited to come to the centre of the stage. The participant could choose to turn off the video recorder (so that his or her image will not be recorded), but could not choose to turn off the voice recorder.

The interviewer firstly introduced him/herself to the participant and asked questions such as “How are you today?” to warm up the conversation. After that, the interviewer asked the four framing questions to the respondent to hear his or her stories. It took each respondent around three to five minutes to answer the four questions. Most respondents were interviewed individually one after another (as shown in Figure 2; the respondents' faces are mosaic covered to protect their privacy). There were a few respondents who chose to be interviewed with a family member or a friend.

3.4. Interview Questions

A structured interview protocol was followed, and four questions facilitated the investigation. In particular, the questions were: (1) Where do you live? (2) What is the best thing about (where you live)? (3) How could your experience of (where you live) be even better? And (4) What could you do to make (where you live) even better?

In questions 2 – 4, (where you live) is the respondent's answer to question 1 "where do you live". For example, if a respondent answered "Ocean Grove" to question 1, then question 2 would be: “What is the best thing about Ocean Grove?” and question 3 would be “How could your experience of Ocean Grove be even better?”

The design of the questions was guided by the dimensions of sense of place reviewed in a previous section. Question 1 explores how the respondent identifies him/herself as the resident of a specific place (place identity). Question 2 explores the affective emotional bond between the respondent and the place (place attachment). Question 3 explores how the place meets the needs of the respondent (place dependence). Finally, Question 4 investigates how the respondent wants to do, or what the respondent has done, for the place (civic action).

3.5. Data Preparation
The research team interviewed 209 respondents but were only manage to record 188 interviews. Excluding the 22 respondents who came from areas outside Geelong region, there were 166 valid Peoplemap respondents.

The video-recorded or audio-taped interview conversations of these 166 respondents were transcribed. After that, participants were de-identified in the transcriptions, which provided the content for thematic analysis.

4. DATA ANALYSIS

After preparing the data, the qualitative information was inputted into NVivo. Each respondent was created as a case; therefore, 166 cases were created. NVivo provides a platform for qualitative interpretation of the concepts in the interview transcripts. It enables us to code and index the concepts, and makes it easy to navigate through the data to find excerpts of text relating to specific concepts.

The background information of the respondents (gender, age group, and suburb) was coded and inputted into SPSS. SPSS Frequencies was run to describe and present the pattern of respondents’ background information.

4.1. Geographic Distribution of Peoplemap Respondents

The 166 peoplemap respondents came from 46 suburbs of Geelong Region. Three suburbs have the largest numbers of respondents: Ocean Grove, Corio, and Bannockburn (see Table 1).

<table>
<thead>
<tr>
<th>Suburbs</th>
<th>Respondents Number</th>
<th>Respondents Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocean Grove</td>
<td>25</td>
<td>15.1</td>
</tr>
<tr>
<td>Corio</td>
<td>21</td>
<td>12.7</td>
</tr>
<tr>
<td>Bannockburn</td>
<td>17</td>
<td>10.2</td>
</tr>
<tr>
<td>Belmont</td>
<td>9</td>
<td>5.4</td>
</tr>
<tr>
<td>Lara</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>Teesdale</td>
<td>7</td>
<td>4.2</td>
</tr>
<tr>
<td>Newcomb</td>
<td>6</td>
<td>3.6</td>
</tr>
<tr>
<td>Jan Juc</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Newtown</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Sutherlands Creek</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Bell Post Hill</td>
<td>4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Source: (Original table by the authors)

Corio and Norlane are located geographically next to each other, and share many features in common. They were treated as one area in many neighbourhood regeneration programs (i.e., Corio-Norlane School Regeneration Program, as introduced in the website of Department of Education and Early Childhood Development, 2009). Therefore, these two suburbs were treated as one area in the analyses that followed. Bannockburn and Teesdale were also treated as one area due to similar reasons.

4.2. Background Information of the Three Areas

The analyses in the following paragraphs compare the sense of place of three areas: Ocean Grove (N=25), Bannockburn and Teesdale (N=24), and Corio-Norlane (N=24). These three areas differ greatly in their geographic locations, socio-economic characteristics and environmental features. They represent three different types of communities in Geelong Region. Ocean Grove represents the coastal towns, Corio-Norlane represents the urban suburbs, and Bannockburn and Teesdale represent the rural areas.

**Ocean Grove** is the largest town on the Bellarine Peninsula and has the largest shopping centre on the peninsula. The area offers surf beaches, fishing, bushwalking and other outdoor activities. It has a resident population of approximately 10,000. During the school summer holidays, the population may swell to four times this number as tourists from Melbourne, Geelong, interstate and overseas flock in ("Ocean Grove, Victoria", 2011).

**Bannockburn and Teesdale** are both rural towns in the Golden Plains Shire, around 20 – 30 kilometres from Geelong. The Golden Plains Shire has a strong tradition of wool and grain growing, as well as intensive animal farming. It is also featured of the natural beauty, with the Brisbane Ranges National Park, Enfield State Forest and Moorabool River popular for their wildlife flower displays, koalas, scenic drives, walks and picnic grounds. In addition, it is well-known for many gourmet food producers and wind industry such as the Moorabool Valley (Golden Plains Shire Council, 2007).

**Corio-Norlane** located 7 – 9 kilometres from Geelong central business district. Corio and Norlane are both suffering severe socioeconomic disadvantages, but there is a range of government projects (e.g., education and housing regeneration projects) that try to improve the living standard of the community members (G21, 2011). The public...
transportation is convenient in Corio-Norlane. There are bus services run to Geelong, and there are freeway and railway that link to Melbourne and Geelong. There is also a range of facilities available in these two suburbs, such as shopping centres, swimming pools, parks and ball games facilities (“Corio, Victoria”, 2011; “Norlane, Victoria”, 2011).

5. RESULTS

Residents from the three areas (Ocean Grove, Corio-Norlane, and Bannockburn and Teesdale) were compared across the four dimensions of sense of place.

5.1. Place identity: Where do you live?
Place identity differs in scale. A person may identify him or herself as the resident of a large variety of places, such as his or her room, the home apartment, the building, neighbourhood, district, city, country region, states, etc. The usual focus of environmental research is on neighbourhood, which is the midpoint of the scale of place continuum (Lewicka, 2010).

The vast majority (61 out of 73, or 83.6%) of respondents from the three areas identified themselves to the neighbourhood. Their answers to the question “where do you live?” were the suburb names, such as “Bannockburn” and “Corio”.

A small amount of people (7 out of 73, or 9.6%) identified themselves as residing in a particular place in the neighbourhood. For example, “I live in the Bannockburn township, right in the town centre”, “In Corio near the trotting track”, and “Teesdale, left bridge road”.

A few people (5 out of 73, or 6.8%) identified themselves to their houses. Their answers were their home address, such as “85 Quay Drive, Corio” and “44A Bannett Street, Bannockburn”.

5.2. Place attachment: What is the best thing about (where you live)?

Thematic analysis of 25 interviews from Ocean Grove revealed that “the beach and the ocean” was the best thing about Ocean Grove. Responding to the question “what is the best thing about Ocean Grove”, 21 out of 25 interviewees answered “the lovely beach”, “the ocean”, “being by the sea”, etc. For example, Ron said, “Ah, just the lifestyle, the beach...In general, it is a nice place to live”. “People and community” (N=7) and “Lifestyle” (N=6) were the other two best things mentioned by Ocean Grove respondents.

Thematic analysis of 24 interviews from Bannockburn and Teesdale revealed that the “country atmosphere” was the best thing about Bannockburn and Teesdale. More specifically, 18 out of 24 people mentioned “a small little country town”, “horses everywhere”, “nice and quiet”, etc. For example, Robert said, “It’s country atmosphere actually, and the friendly people that live here, generally speaking”. “People and community” (N=14) was the other best thing mentioned by Bannockburn and Teesdale respondents.

Thematic analysis of 24 interviews from Corio-Norlane revealed that “close to everything” was the best thing about Corio-Norlane. More specifically, people mentioned “the (Corio) village is close”, “we have access to shopping centres”, “you’ve got everything here”. For example, Geoffrey said, “Its handy to Melbourne, its 45 minutes, its um, and its 15 minutes to Geelong and with the ring road now you can get to Ballarat in sort of 55 minutes so its handy to everything...yeah”. “People and community” (N=10) and “The transport” (N=5) was the other best thing mentioned by Corio-Norlane respondents.

5.3. Place dependence: How could your experience of (where you live) be even better?

Ten out of 23 respondents from Ocean Grove thought that the area “was pretty good at the moment”. Seven respondents wanted “a few more local facilities”, and three wanted “better transportation”.

Ten out of 24 respondents from Bannockburn and Teesdale thought that the area was “good the way it is”. Seven respondents wanted “better facilities”, and five wanted “better public transport”.

Four out of 24 respondents from Corio-Norlane thought that the area was “good”. Five out of 24 respondents from Corio-Norlane wanted “better facilities”, four wanted “youth programs”, four wanted “better community spirit”, and four wanted the area to be “safer”.

5.4. Civic Action: Is there anything you can do to make (where you live) even better?

Eleven out of 25 respondents from Ocean Grove said that they “could get more involved in the community”, and four said that they have “already been involved in the community organizations”.

Nine out of 24 respondents from Bannockburn and Teesdale said that they “could get more involved in the community”, and seven said that they have “already been involved in the community”.

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45th Annual Conference of the Architectural Science Association, ANZAScA 2011, The University of Sydney
Nine out of 24 respondents from Corio-Norlane said that they wanted to “be part of the community”, three said that they could keep “being a good citizen”, three said that they “could be more positive”, and three said they “don’t know”.

6. CONCLUSIONS

6.1. Sense of Place of the Three Areas

**Place Identity.** Most respondents from the three areas (83.7%) identified themselves as the residents of their neighbourhoods. This result is consistent with the literature, in that the focus of the place identity research is at the neighbourhood level (Lewicka, 2010).

**Place Attachment.** Comparing people’s answers to the question on place attachment, we could see that the most attractive things of the three areas are different. “The beach and the ocean” is the best thing about Ocean Grove, “country atmosphere” is the best thing about Bannockburn and Teesdale, and “close to everything” is the best thing about Corio-Norlane (as in Figure 3).

![Image of map with place attributes](Source: (Original photo by the authors))

Figure 3: What is the best thing about (where you live)?

The second best thing remains the same across the three areas: People and community. More specifically, 28% respondents from Ocean Grove (7 out 25), 58.3% respondents from Bannockburn and Teesdale (14 our of 24), and 41.7% respondents from Corio-Norlane (10 our of 24) said that people and community is the best thing in their areas.

**Place Dependence.** Comparing people’s answers to the question on place dependence, we could see that people from Bannockburn and Teesdale are more satisfied with the area, followed by people from Ocean Grove. People from Corio-Norlane are less satisfied with the area. More specifically, 41.7% people from Bannockburn and Teesdale (10 out of 24), 40% people from Ocean Grove (10 out 25), and 16.7% people from Corio-Norlane (4 out of 24) said the area is pretty good the way it is.

People from Ocean Grove, Bannockburn and Teesdale raised the issue of public transportation and facilities; and people from Corio-Norlane raised the issues of facilities, youth programs, community spirit and safety. Public transportation seems to be satisfactory in Corio-Norlane, because no respondents from Corio-Norlane raised the issue of public transportation, and there were five respondents said “transportation” was the best thing in the area.

**Civic Action.** Comparing people’s answers to the question on civic action, we could see that people generally are willing to get more involved in the community affairs. More specifically, 44% respondents from Ocean Grove (11 out of 25), 37.5% respondents from Bannockburn and Teesdale (9 out of 24), and 37.5% respondents from Corio-Norlane (9 out of 24) said that they are willing to get more involved in the community.

The actual involvement differs significantly across the three areas. We can see that 29.2% of the respondents from Bannockburn and Teesdale (7 out of 24) and 16% of the respondents from Ocean Grove (4 out of 25) said that they were already involved in the community. However, no one from Corio-Norlane indicated that he or she had been involved in the community organizations.

6.2. Similarities and Differences across the Three Areas

Summarising the sense of place in these three areas, we could see that respondents of Geelong Region share
several elements of sense of place: They identify themselves as the residents of their neighbourhoods, they value the people and communities in their areas, they want better facilities, and they are willing to get more involved in the community affairs.

The identified differences on sense of place across the three areas have three aspects. First, the best things of the three areas are different, which reflects the different characteristics of the three areas.

Second, the satisfactions towards the areas are different: People from Ocean Grove, Bannockburn and Teesdale are more satisfied with the area, while people from Corio-Norlane were less satisfied. This is possibly caused by the socio-economic disadvantage of Corio-Norlane area (G21, 2011).

Third, the civic engagements of the three areas are different: People from Bannockburn and Teesdale are most actively involved in the community affairs; people from Ocean Grove are less involved; while people from Corio-Norlane have little involvement in the community affairs.

7. DISCUSSION

7.1. Implications for policy makers, planners and designers

The findings have several implications for policy makers, planners and designers. First, the characteristics of the three areas are different. We need to work out strategies to help the coastal areas (such as Ocean Grove) overcome the challenges of pollution and sea level rise, therefore, people can keep enjoy the lifestyle of going to the beach. People from the country towns (such as Bannockburn and Teesdale) prefer the area to be nice and small, and they are concerned about over-development. We shouldn’t plan to promote fast and large-scale development in these areas. It is probably a good idea to focus the development in urban areas (such as Corio-Norlane), where the public transportation is already well developed and people enjoy the lifestyle of close to everything.

Second, people from the three areas all want better facilities. They want more parks, better footpaths, more shops, more doctors, more bike paths, more parking facilities, etc. As identified by Geelong Region Alliance, there are a range of government-funded projects to improve the infrastructures of Geelong Region (G21, 2011). More projects should be initiated to target people's needs revealed from this study.

Third, the coastal areas (such as Ocean Grove) and rural areas (such as Bannockburn and Teesdale) in Geelong Region are not well-connected by public transport. Responding to this issue, the State and Federal Governments have agreed to improve the transport links within the Geelong Region as well as the transport links from Geelong Region to Melbourne. There are planned projects such as developing a Regional Rail Link and upgrading the road link (G21, 2011). It is hoped that the issue of public transportation could be solved in the future.

7.2. Contributions to the Theory of Sense of place

This study included civic action as one dimension of sense of place. The result revealed that civic action is closely connected to place attachment and place dependence. For example, people in Bannockburn and Teesdale are most involved in their community affairs, and they are most satisfied with the area. In addition, they are most likely to consider their people and community as the best thing of the area. People in Corio-Norlane are least involved in their community affairs, and they are least satisfied with the area. Therefore, the investigators argue that civic action should be included in the sense of place research in the future.

ACKNOWLEDGEMENTS

The authors thank the residents of Geelong Region who participated in this study. Appreciation also goes to Melissa Stephens, Stephanie Asher, Jon Mamonski, David Holroyd, Jenny Gretgrix and Matthew Woods for organising, conducting and recording the interviews.

REFERENCES


of place. *Landscape and Urban Planning*.


Intown (2011) Geelong - a brief history. intown: Geelong’s online entertainment, leisure, tourist & city guide.


"Vox populi", (2011) *Wikipedia, the free encyclopedia*.