

Claim Campus: A Survey of Outdoor Public Spaces on the UBC Vancouver Campus

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CLAIM YOUR CAMPUS

MAKE UBC CAMPUS
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Final Report for UBC Campus and Community Planning

Claim Campus: A Survey of Outdoor Public Spaces on the UBC Vancouver Campus

PLAN 515, 2014 Winter term 2

UBC School of Community and Regional Planning

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Abstract/ Executive Summary

The students of PLAN 515, 2014 Winter Term 2, embarked on a project to survey existing outdoor public spaces on the UBC Vancouver campus, by conducting interviews, and making detailed observations about the uses and numbers of users in each space. Our observations suggest that some spaces on campus are more lively and active than others, but improvements could be made to all spaces in order to encourage and accommodate heavier use. In particular, our interviews suggest that climate protection and flexible furniture, as well as minor provisions such as outdoor heating and way-finding, may be effective investments towards improving the social vibrancy of on-campus spaces.

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Introduction

This research seeks to contribute to the enhancement of community life on UBC-Vancouver campus by characterizing, inventorying and mapping places that contribute to social interaction, vibrancy and animation, and examining opportunities to improve existing spaces. The project looks to bridge the gap between formal and informal spaces, and identify which spaces have been most successful in establishing attachment, social vibrancy and memory.

Personal attachment to campus exists to varying degrees and is apparent in multifaceted ways, especially as UBC is a diverse campus utilized by students, faculty, staff, residents and other members of the public alike. The design of the space and its accessibility significantly impacts its use. Some places do not have a distinct identity, with generic designs they lack the uniqueness that would provoke interest and conversation. Some spaces are designed for a limited number of uses, such as circulation or service access. Others have been intentionally designed for social as well as functional purposes, with varying degrees of success. Furthermore, some places have developed informal uses vastly different from their intended uses.

All of this results in untapped potential on campus for place-making and social memory, including the formation of memorable place-based experiences at UBC. It is important to determine the use of formal and informal public spaces and how these uses create attachment and memory to campus. It is also important to understand how these spaces and uses contribute to the social life and vibrancy of the campus. By determining these two different kinds of uses and bringing them together, we can form a better sense of place and collective place-making for all users of the UBC campus that will help create social memory and attachment to place.

Research Questions

The study's research questions were as follows:

- How are the public spaces on UBC's Vancouver campus currently being used by students, faculty, staff, residents, and visitors?
- What place-making opportunities does the UBC-Vancouver campus have that could enhance its social interactions, place capital and character and support place-based community-building?

Literature Review

The History and Context of public space at UBC

The University of British Columbia was established in 1908; in 1914 the construction of the campus at Point Grey began, directed by a vision of a vibrant academic community. Construction was put on hold due to the start of World War I, and during this time a temporary campus was opened at Fairview “shacks”. After the war these facilities were unsuitable to accommodate the rising number of students, and in 1922 students responded with a “Build the University Campaign.” This movement “[marked] the beginning of active student involvement in the University’s development” and led to the opening of the Point Grey Campus in 1925 (UBC, 2015). The campaign was significant in that students vocalized their need for more than just rooms to learn in, but a place that would allow them to flourish both academically and socially.

UBC Campus Plans: Past and Present

One of the first plans to highlight UBC’s vision for a more vibrant community was the 2001 Mid-Campus Neighbourhood plan. This plan contributed to the definition of vibrancy at UBC by stressing

that it is a product of both the built and natural environment. The plan sought to create a complete neighbourhood through connecting housing complexes to open recreational areas. Community interaction was encouraged through the provision of gathering spaces, parks, pedestrian and cycling linkages to other areas of campus, and places that were “meaningful and distinctive” (UBC, 2001). The importance of having open space that could be used in creative ways by individuals and groups was a key feature of the plan.

Current campus plans also stress the importance of vibrancy at UBC. Important to the goals of the 2010 Campus Plan is an emphasis on the character of open spaces in nurturing the health and flourishing of the campus community which may be addressed through vibrancy. The Campus Plan's vision includes considerations for the campus to be a hub for community life; be beautiful, while reflecting the west coast setting; and be 'vibrant' in its campus life, as appropriate to the university context. The campus-wide design guidelines have a direct impact on campus vibrancy due to their requirements regarding sustainability, accessibility, architecture, open space, surface infrastructure, and site furnishings.

Cultural Context

When looking at the university's historical and contemporary interactions with space, and notions of place, it is important to critically consider the cultural framework that UBC has been built upon. For example, "Placemaking, Sites of Cultural Difference: The Cultural Production of Space Within a University Construction" (Archibald, 2004) draws on the importance of considering space as a culturally contingent place. The reader is challenged to consider that "the institutionalized spaces of the university are not experienced by all cultures in the same way. They are viewed as Western cultural constructs of space that differ from and are often incommensurable with cultures of difference." Within our own investigations of the "cultural vibrancy of UBC's public spaces," Archibald's piece reminds us to see notions of "space," "place," and "vibrancy" as cultural constructions that will differ depending on who is interacting with the space. For example, could a space that is tranquil and not very "full" of people, but full of life with trees and nature be considered vibrant? Even UBC's original spatial designs are based upon a Western-framework of design. As Archibald (2004) states, [t]he original design and planning for the

university was firmly located within a traditional British scholastic system" (p. 4).

Archibald's piece also asks us to challenge ourselves with respect to the ways through which our academic research has been colonized by hegemonic Western ideals of what constitutes "valid" knowledge. Quoting Thomas Markus (1993), architect and professor, she states "[a]rchitectural texts, such as 'stylistic prescriptions were a major export to the colonies of European countries'" (Archibald, 2004, p. 2). We are challenged to think about how, as researchers, we should aim to engage multiple ways of knowing and cultural difference; how are the notions of space that we consider "the norm" not the norm for other cultures? Finally, Archibald reminds us of the importance of remembering UBC's locality, the unceded territory of the Musqueam peoples, when conducting research. As we explore the question of how to make UBC "more vibrant" and the plans and tools that can be used to achieve this, Archibald's analysis of university's use of space and place is important to consider (Archibald, 2004).

Social equality and inclusivity on campus public spaces

Research and case studies help to determine what makes a neighbourhood

or university campus socially vibrant for all by placing emphasis on social components necessary for consideration in planning initiatives. All marginalized groups (e.g. people marginalized on the basis of race, ethnicity, gender, class, ability or sexual orientation) should be considered in planning for inclusive social vibrancy. Stebleton, Soria, Huesman and Torres (2014) discuss the issue of campus climate, especially pertaining to racism, and how it can affect minority students' perception of belonging in a university. For example, Caucasian students and students of color had different perceptions of campus climate and satisfaction. One of the themes described was the pervasiveness of whiteness in space, curricula, and activities. Their analysis found that campus climate is an important predictor of immigrant students' sense of belonging on campus, and that peer interactions had a stronger effect than faculty interactions; there was also a difference between "wave one" immigrant students and "wave two", who faced unique integration issues such as language and cultural barriers. The research suggests that support is especially needed for immigrant students who did not attend high school in North America. Thus, it is of vital importance to consider the needs of minority groups in planning social space, as well as the biased nature in

which social spaces may be designed and inhabited. With these considerations at hand, perhaps space can be a catalyst in encouraging inclusivity, belonging and social interaction.

Well-being in Public Spaces

Social space may also have implications for the mental health of its users. The 15-24 age range is the largest group of Canadians facing mental health problems (Everall, 2013). More than a third of undergraduate students at BC's three largest public universities reported that they had experienced severe depression and 8.8% said they had seriously considered suicide (ACHA, 2013). The association between quality public spaces and mental health is often asserted, but has not been thoroughly investigated by researchers. Public spaces are thought to affect mental health via two pathways. First, a direct positive effect on mental health from having access to nature; second, a more indirect protective effect on mental health from having more social interaction and a stronger sense of community (Francis et al., 2012a).

Correspondingly, one Australian study found a positive association between the quality of public space, measured with an objective audit, and mental health

regardless of whether the residents indicated that they used the space or not (Francis et al., 2012b). The other significant correlates were the use of public space for leisure, rather than utilitarian activities, and the perceived level of crime. Regarding the indirect pathway to mental health through social interaction, the presence and quality of local shops was found to have the strongest association with sense of community (Francis et al., 2012a). In the context of UBC this research supports the concept of mixed-use hubs throughout campus. However, despite their association with social interaction, many users of public space are there to be alone (Cattell, Dines, Gesler & Curtil, 2008). As such, in a university context, public spaces can be areas for quiet reflection as well as interaction with others.

Environmental Sustainability and Social Vibrancy

The City of Vancouver recently released the Greenest City 2020 Action Plan (City of Vancouver, 2009), a policy document that focuses on green development and improving livability in Vancouver. This Action Plan relates to the UBC sustainability goals of creating a vibrant community through environmental and social sustainability. Some examples that UBC can look to achieve alongside the

Greenest City Action Plan are as follows: developing a green economy, eliminating dependence on fossil fuels, creating a climate change adaptation plan, and improving active transportation infrastructure. Focusing on these targets will help to create vibrant social spaces and a sustainable environment.

Uzzell et al. (2002) examine two neighbourhoods in the town of Guilford, UK, looking at levels of place identification and social cohesion, and how these factors contribute to attitudes towards environmental sustainability. The authors look at the factors that produce place identification and identity, as well as the correlating levels of social cohesion within a community. They hypothesized that higher levels of place identification (how an individual identifies in relation to place—a combination of the physical and resource factors of place as well as lifestyle, attitudes, perception and evaluation of resources) and social cohesion in combination would tend to lead to stronger attitudes and behaviours in regards to sustainability. The authors concluded that place identification and social cohesion are important factors to be considered, but must also be placed within their broader social, political, economic, environmental context.

Campus Case Studies and Success Stories

Success stories of planning for social vibrancy and implementation of such plans can offer ideas and advice for best practice. In *Creative Community Builder's Handbook: How to Transform Communities Using Local Assets, Arts, and Culture*, Borrup (2006) discusses five ways that art projects can improve struggling communities. He looks at how civic institutions, as well individual artists, can play an important role in leading change to make our communities more inclusive and diverse. Borrup describes community building goals and offers success stories. The goals are: 1 - promote interaction in public space; 2 - increase civic participation through celebrations; 3 - engage youth in the community; 4 - promote the power and preservation of place; 5 - broaden participation in the civic agenda. These examples perhaps speak to the need for individuals to have more freedom to build community on campus. The success stories pertain to these goals and are diverse in the types of communities they were implemented in.

The Vancouver Public Space Network also has many success stories. This non-profit/advocacy organization has been working in Vancouver to enhance public

space since 2006. Their areas of activity that are of particular use in enhancing social vibrancy at UBC are: democratic spaces, parks and greenspaces, social use of public space, public art, safe spaces, and urban design and planning. They have success stories associated with all of these focus areas. The advocacy piece also appears to be important and this is communicated through their news and their blog. Such success stories can be looked to for models and strategies for enhancing public space at UBC.

Research Methodology

The research questions of interest to this “Claim Campus” project were addressed by organizing PLAN 515 class members into teams and developing a nested and phased use of mixed methods from both quantitative and qualitative research approaches. Mixed methods research (Hesse Biber, 2010, 2012; Morse, 2013) is a growing paradigm well-suited for interdisciplinary undertakings, such as this project. It may also be framed as a form of service learning or research consulting work, with UBC Campus Planning as main client. Coordination between the PLAN 515 course instructor was done in late fall of 2014 to explain the SEEDS program that will support the research project.

Early in the term, in January 2015, three UBC Campus Planning staff – Scot Hein, Carole Jolly, and Liska Richer -- came to visit the class to explain their ongoing projects and initiatives on place capital and place-making on campus and how their Office could benefit from collaboration with SCARP students and faculty members. Following their visits, the class developed a more detailed research proposal for review and feedback by the client’s representatives. The project implementation teams were organized to

coordinate the data collection and analysis process.

Project Implementation Teams and Research Process

Class members were assigned to one of the five Task Groups (i.e. Literature Review, Visual Data, Verbal Data, Communication, and Writing Groups), and to one of six Spatial Groups, with one member from one of the five Task Groups. The various Groups met together on a regular basis to ensure that the gaps and interstices between Tasks and Spatial Sections were covered in the data collection and analysis.

Six Spatial Groups collected observation and mapping data and analyzed the data collected within their respective specific section of UBC campus determined by the Visual Data Group using preliminary maps provided by UBC Campus Planning. The Visual Data Group members, most of whom have previous training in urban design, GIS or architecture, led the class training on Mapping and Observation followed by a Preliminary Walkthrough practice activity to familiarize the class members with their respective Spatial Sections (see Appendix 1). After the initial training, Visual Data Group members in each Spatial Group supervised and coordinated the work to ensure that

parallel and unique place-specific mapping and observation data are collected and analyzed properly in all Spatial Sections located on the UBC campus map. They addressed the Spatial Groups' needs and questions on using the Observation Guidelines (see Appendix 1) that they developed for the project.

The Verbal Data Group led the classroom training on the formulation and finalization of verbal data collection questions, indicating to whom, when, where and how they are asked. Guided by the overall primary and secondary research questions of this project, the Verbal Data Group developed data collection questions to address the research questions. The verbal data questions were formulated and organized into on-line survey questions, spot interview questions (see Appendix 4), focus group questions for families and other residents at UBC, and participant observation guide questions for the Photovoice data collection and self-analysis conducted by all class members. During class meetings, the Group coordinated the efforts of team members to ensure that the on-line survey questions are piloted and circulated widely and that parallel verbal data were collected and analyzed properly in all Spatial Sections.

Simultaneously, as mapping, observation and spot interviews were carried out in all Spatial Groups, the Literature Review Group determined the list of background documents that were read by all class members, and conducted an additional database search, identifying other relevant and appropriate materials that were assigned to the six Spatial Groups for review. The related bodies of literature reviewed from this project draw from a number of disciplines and perspectives. These include (1) previous works on the current demands and pressures on universities, such as revenue generation, increased competition, and internationalization (e.g. of the curriculum, student and faculty mobility, etc.), which require reconfiguration of campus places; (2) literature on social vibrancy and environmental sustainability linkages; (3) literature on public spaces, public life and mental health; and (4) case studies on campus neighborhood success. The class members also reviewed a broad range of background (historical and contemporary) literature about UBC to guide our further data collection and textual and discourse analysis of several documents.

The Communications Group took the lead role in doing a preliminary SWOT analysis

of UBC Campus Planning's current Communications Plan related to campus events and place-making. It also developed the Class Project's Communication Strategy using traditional (e.g. letters, posters, email) and social media outlets (e.g. Facebook, Twitter, Instagram) to ensure that potential research participants were contacted and recruited appropriately according to UBC's ethical guidelines. The Group also served as liaison with UBC Campus Planning to ensure that they were contacted at appropriate times during the course of the Project and that the results of the study were communicated properly, according to BREB Ethical Guidelines.

Finally, the Writing Group developed a tentative Final Report Outline that was circulated for discussion and approval by the class members. The Group provided the Spatial and/or Task Groups guidance on how their outputs should be written (e.g. voice, spelling, etc.) and referenced, along with a timeline for outputs for review, editing and collation into a Final Report.

Data Collection Methods

The data generated from documents and related data from UBC databases, spot interviews following direct observation, and an online survey provided insights on the demographics of campus public space

users. Empirical data and information on campus public space users' experiences were collected through direct observation of how people use public spaces on campus. Observation, mapping and tracing data were collected to determine some of the highest and lowest traffic areas on campus and identify where people congregate during which times of the day and night. Before observing the campus public space usage, the Spatial Groups did an inventory of permanent infrastructure, artifacts and traces of use that were left behind.

Additional information to support the observation, mapping and inventory data were gathered through structured spot interviews with public space users, especially when they were observed to be using public spaces in unexpected or surprising ways. While there were plans to do more detailed in-depth semi-structured interviews or focus groups with students, faculty/staff, people with disabilities, LGBTQ individuals, and campus residents on how they use public spaces or want their public spaces to be, due to time constraints only two Focus Groups with campus residents were scheduled to be conducted after the writing of this report.

Data Analysis Methods

The secondary and primary data collected were analyzed first, by collating and organizing the various types and forms of verbal and visual data to ensure that equivalent data collected for each Spatial Section were complete, and appropriately coded and organized for further analysis. Data were coded for thematic analysis, spatial groupings/clustering, spatial-semantic groupings, and Concept Mapping, identifying patterns, including causal, visual and relational, to find the “socially vibrant” spaces or spaces that have the potential to be “socially vibrant” on UBC campus. Data tables, figures, charts and other forms of visualization were created to interpolate and extrapolate those patterns, in order to establish relationships between demographics/ user-groups, places, weather, and other factors. After identifying public spaces on campus that were considered socially vibrant, the Spatial Groups analyzed the data to establish the components of those spaces that affect their success and vibrancy. They then compared those characteristics with the information, relationships, and patterns of sense of place, accessibility, programming and amenities found on other locations. They also compared the

original intent of the space and their actual usages.

Overall, the research process and interpretation of results were influenced by multi-disciplinary perspectives on and assumptions about human behavior, social memory and place-making borrowing from a number of epistemological traditions. Most notably, the research team borrowed from phenomenological and pragmatist-realist understandings of how people make sense of their social world and how they behave in social, shared, or public spaces. Understanding of people’s meaning-making and behavioral patterns were inferred from their experiences, self- and other observations of those experiences, and not from a prior knowledge of how they might behave (Gehl & Svarre, 2013). The research team also assumed that campus place-making, place-capital and community-building are not innocent agendas but rather rooted in and shaped by specific political, economic and cultural contexts of institutions of higher learning.

This project’s understanding of universities and campus spaces is also influenced by historical materialist views of how spaces within higher education institutions are also shaped by political and economic structures, ideologies and relations (e.g.

place capital, capital infrastructures) that lead to certain forms of social and cultural life. It is also informed by reflexive epistemological and methodological traditions, such as participatory, feminist and Indigenous research. Although this project is limited in its ability to fully engage all research participants as active co-designers, co-researchers and co-analysts, and to fully capture Indigenous, decolonized perspectives and gendered ways of campus-based experiences, gender-disaggregated data were collected from the surveys, interviews, and focus groups. Diverse voices from Indigenous peoples, people of color, women, self-identified LGBTQ community members, people with disabilities, children, and households, were also collected beginning with self-analysis and reflection, as PLAN 515 class members are also diverse despite common identity as graduate students. As co-researchers, self-reflexivity around individual and collective values and practices informed data collection, analysis and report writing. As campus users ourselves, we demonstrated reflexivity throughout the research process by asking what we do, why we are doing this project, or for what purpose, for whose benefit and on whose behalf, as we remain committed to contributing to social

vibrancy and positive change in public space usage on UBC campus.

Limitations

The "Claim Campus" research project has a number of limitations affecting the data collection process, data quality, and data analysis. It is limited by time constraints and ambitious scope. Time limitations were compounded by the dual challenge of meeting the broader learning expectations of a one-semester graduate seminar on qualitative research methods (which began on January 6 and ended on April 8, 2015) and delivering a well-focused and quality research output to UBC Campus Planning, the main client of PLAN 515 class. The class members had to fulfill other course assignments, such as individual seminar presentations and class exercises, in addition to this group project that forms the bulk of the course requirements, as well as doing their other assignments in other courses. The various research methods (e.g. interviews, auto-ethnography, mixed methods), triangulation and ethical considerations were being simultaneously taught, applied and developed by students through class readings and seminar presentations, but the class did not have a strong grasp of these concepts until halfway through the semester. Consequently the class began

collecting verbal data and observing and mapping campus space use much later in the term than originally anticipated. On top of this, the scope of the project is much too big to be undertaken by a one semester class, and will undoubtedly be continued by students in the summer and fall terms. As a result of this, we were not able to include in this report the entirety of the results and analysis that were carried out. In particular, we were not able to perform adequate focus-group research, nor were we able to incorporate the data obtained from our online interview or the photovoice survey into this report.

In addition, there are a number of limitations arising from the data collection process itself. For example, since observations made are place-specific and places can span over a wide space, there is expected selection bias and limited generalizability. Despite the researchers' best attempt at following the Observation Guidelines and Templates, there are also variations in the observers' different tactics of data collection, thus questioning inter-rater reliability. Concerns were also raised regarding observer interference that could make the observed become uncomfortable. The discomfort in most cases was shared by both observer and observed in the context of construction

projects taking place in almost all observation zones. Construction activities blocked off some of the observation sites that could have given more appropriate and relevant vantage point for direct and participant observation (e.g. grassy knoll outside of the Student Union Building). Observations of public space usage during various weather patterns were not optimal. As the research uncovered only snapshots of public space use in particular times, there was no meaningful time series data collected for analysis. An hour or an hour and a half of observation over one week did not allow opportunities for a more thorough exploration. Perhaps a more meaningful longitudinal analysis that could be done in the course of two semesters was sacrificed in favor of a more convenient, short-term cross-sectional analysis.

In terms of data analysis, the class struggled with the very key concept of social vibrancy, so central to this project. While place and well-being are conceptually linked (see Atkinson, Fuller & Painter 2012), the links between individual well-being and place-based social vibrancy, often understood in collective or public sense, are not well-understood. In one particularly animated class discussion, class members noted the pitfalls in mistakenly

applying the project's operational definition of the concept of "vibrancy" to others. Vibrancy is poorly defined and cheaply used in English. It is imbued with positive energy and sometimes defined as "a place with many people," but can a tranquil space of solitude and meditation also be considered vibrant? For people who desire tranquility for their well-being, a vibrant place might be considered a troublesome space. Our common-sense definition of vibrancy often excludes contemplative spaces. Hence, given differences in opinion within the class, our analysis recognizes the needs for diversity of spaces, and the importance of different campus hubs to accommodate diverse views on place-based vibrancy. (Focus Group, 18 March 2015).

Overall, the scope of the project seemed too ambitious to be undertaken within a semester by a large group of graduate students, many of whom are just beginning to develop their applied research skills. In hindsight, the course instructor and some team members feel they could have done better work by focusing on a smaller area than covering large Spatial Sections of the entire campus. Depth was sacrificed for breadth in the project's intention to provide preliminary data for future, more in-depth analysis by

other researchers. Clarification and recalibration of this project's original intention could have been communicated better to UBC Campus Planning sponsors early in the term. Compromises and constant negotiations are expected in applied social research work (Brown 2010). A dose of mutual over-estimation of time, resources, and skills availability was compounded by challenges in managing a huge research team of 29 members. A research project of this nature would have worked better if stretched over at least two semesters.

Observation Results

Spatial Observation Results

Overall

Outdoor public spaces such as those studied in our survey have the potential to animate, invigorate, and bring life to the UBC Campus. At the same time, they can function to instill pride in UBC students, as well as a sense of place and historical or cultural memory. However, given that public spaces in campus were described as being “in very poor condition” as recently as the year 2009 (UBC 2010d), our study focused on whether these spaces are currently meeting the social and functional needs of UBC students.

The 2009 UBC Public Realm Plan for the Vancouver Campus highlighted several key issues plaguing the public spaces on campus: these included the fact that a majority of public spaces were “used for walking through” and that “(the) social value of UBC’s public spaces for students, faculty and staff is impaired, and the pedestrian and cycling capability and experience is poor” (UBC 2010d). On the whole our observations suggest that the user experience of key public spaces on campus has improved, a large majority of the spaces are still primarily for pedestrian

circulation, and do not have a strong social function unless specific events are scheduled for the space. On the other hand, spaces that are outside of the academic core and which serve the family-oriented residential areas have higher traffic and greater “staying” versus “walking through”.

Spaces in the organising spines -

Main Mall and University Boulevard

Martha Piper Plaza

There is no doubt the fountain within Martha Piper Plaza is a vibrant space. Located at a major crossroad and the center of campus, its traffic levels are high regardless of weather-- especially during class change. Most users of the space are merely passing through in transit. However, in times of drier weather the fountain rim is used as informal seating for activities such as studying, eating, socializing, and reading. The fountain also acts as a landmark space for meeting friends or campus visitors. Tables are frequently set up in this location to advertise or recruit for campus activities. Examples of such booths observed were club displays, activity registration, and a bake sale.



Martha Piper Plaza: "Central, good people-watching."

Main Mall at David Lam

The David Lam "Plaza" is located adjacent to another high-traffic pedestrian intersection: Agricultural Road and Main Mall. The furniture provided (folding chairs and small, round tables) is used most, but not exclusively, in warm dry weather. Those activating the space are commonly patrons of the adjoining food services, though some chose the area as a destination for meetings or study sessions in better weather. The flexibility of the furniture allows this space to be used by both small and large groups, as well as those engaged in more individual pursuits such as reading. Furthermore, the tables and chairs are movable which provides users their choice of sun or shade.

Thunderbird Crescent

The Thunderbird Crescent space is less heavily used than its next-door neighbour to the South. Bordered by Thunderbird residence and the Forestry building, it is an

open and unstructured space, except for the amphitheatre-like seating, used during lunch hours. Besides that, it draws its users from the nearby buildings, as well as the daycare along Main Mall. The grassy field in the middle of this space has the potential to be used more heavily for sports and other physical activity, and students have been observed playing Frisbee in this space. However, owing to its exposed nature and lack of shelter, it is strictly a fair-weather space.

UBC Bookstore



UBC Bookstore: "[This space should] have better seating than the metal chairs by the table, create a covered area and a heated outdoor area during winter months"

One of the most vibrant areas was the node surrounding the bookstore, at the intersection of East Mall and University Boulevard. The recently re-designed bookstore is an area that attracts people to stay and use the space as well as to use as a main thoroughfare. As a central landmark on campus, close to many amenities such as the SUB and the UBC Bookstore, it attracts a diversity of uses including eating,

socializing and reading. This space provides a variety of furniture infrastructure that encourages individuals to utilize the space at different levels of proximity. It is important to note that despite the current presence of high levels of construction in the area, it is still very much frequented.

Large commons - Fairview Square,
Library Gardens, and SUB North
Plaza

Library Gardens

The area between Irving K Barber Learning Center and Main Mall is a high use area with a high diversity of uses. These uses include playing sports, contemplating, napping, conversing with friends, eating lunch, wandering, and passing by. There is consistent use midday and in the evening. The entire area is well used by a variety of users and for various functions. There is also ideal natural light, especially in the late afternoon. Amenities offer social and food areas as well as study locales and open grassy areas. There is formal and informal seating options (i.e. there is grass but also benches). This space is a central hub to the university that is close to many activities and uses on campus.

The space outside Koerner Library is a medium to high use area with a medium diversity of uses. Uses include eating,

waiting, sitting, studying, talking on phones, conversing and passing by between classes. There is low use in the evening with no real draw to the area aside from entering the library. There is significant north-south travel past the library on Main Mall. People gather outside the library doors and sit on the benches in the main terrace, but there is limited staying power aside from this. This area is used by a variety of people with different modes of transportation (walking, biking, skateboarding, etc).



Library Gardens – IKB: “quiet, secluded, peaceful.”



Library Gardens – Koerner: Descriptions: calm, open; varied: layered, beautiful, view, academic, charming

Fairview Square

The Earth Sciences area is located along Main Mall, between Stores Road and University Boulevard. Users of the space were observed reading, talking on the phone, skateboarding, and talking in pairs. The space was used very little during the evening observations, however was not significantly busier during the day. This area provides a variety of seating options which could be conducive to multiple forms of social interaction. Yet it appears underutilized during the day and in the evening. Perhaps this is because there is little connectivity between the space and its surrounding area and, as such, it appeared to be used mostly by patrons of the Earth Sciences building itself. All those observed passing through the space were coming and going from the building.



Fairview Square: "There is a lot of seating; it is sunny and open, and has green spaces"

SUB North Plaza

The Student Union Building (SUB) is a student hub operated by the Alma Mater

Society (AMS), located at East Mall and Thunderbird Blvd. The building contains several restaurants, two pubs, a bike co-op and several spaces used by student clubs and societies. The space outside the SUB has a diversity of uses, including people sitting, campaigning, smoking and slacklining. It is used mostly as a transition space, with students entering and exiting campus on mass past the SUB to and from the diesel bus loop.



Sub North Plaza: "construction is a problem, need more cut across space"

Outdoor informal social and learning spaces

Allard Hall

Allard Hall is located at Walter Gage Rd and East Mall. It houses the Faculty of Law, as well as the Law Library, various study spaces and a café. Outside of Allard Hall, there are several benches and some patio chairs for seating. This space sees intermittent intensity of use during lunchtime hours, and between classes. The

majority of people using the space at this time were students who were trying to catch a quick bite to eat, or have a cigarette before dashing back inside. The students seemed stressed, and had little time for our questions.



Allard Hall: "new, convenient, not crowded"

Biological Sciences

The Life Sciences area, at Health Sciences Mall and Agronomy Road, was most utilized during the day, specifically over the lunch hour. Observed was a trend towards using the space for physical activity. For example, many cyclists were observed moving through the area and students utilized the large paved area to play catch and frisbee. The space seems to lack visibility, surrounded by large buildings, resulting in its user population being mainly those who use the adjacent buildings.



Biological Sciences: "Good hangout space"

Buchanan Courtyard

Buchanan is a low use area. The diversity of uses includes eating lunch, moving from place to place, smoke breaks, talking with friends, and studying. Temporally, this area is busier during the day and especially busy in between classes. There is heavier perimeter use with people using benches and chairs, yet there is occasional heavy use in the corridor between classes. This public realm location is less popular when facilities are wet or there are low temperatures. More outlets and ashtrays were requested for the area.



Buchanan Courtyard: "benches, good light, not too crowded"

Spaces outside the academic core

Marine Drive Residences



Marine Drive Residence Courtyard: "Open, quiet, secluded."

In contrast to some other observed sites, the Marine Drive Residences' Courtyard was not a site of heavy pedestrian traffic. Rather, the space is a specific destination for a certain group: the Courtyard was frequented only by those living in the area and their guests. However, these users activated the space in a variety of ways including for sport, transit, and meeting. The ratio of building to space is comfortable and the central field is easily activated for the activities listed. There is little shelter from the weather in this space, and we assume that come warmer, dryer weather it is likely more users will chose to spend time in the courtyard. Additionally, with dryer weather it is likely the restaurant patio adjoining the courtyard will also become more vibrant bringing more than residents to the space.

Wesbrook Village - Save-on Foods and Norman MacKenzie Square

Wesbrook Village is being developed as a complete community at UBC, incorporating residential, recreation, entertainment, and shopping essentials. It is a well-used area of the campus, frequented by a wide range of users. Both areas are centred on water features that seem to be an attraction, especially for young families with children. The area outside of Save-On-Foods is predominantly used for eating, being most populated in the afternoon and early evening. It is also a very movement-oriented-environment with people constantly entering and exiting the grocery store.

The courtyard outside of Biercraft, Norman MacKenzie Square, is more of a recreational area with bikers, skateboarders, dog-walkers, and children playing. There is also a lot of people-watching going on in this space because of the plenitude of open seating around the edges. We found that the vibrancy of the spaces that we were observing was very dependent on weather. Because the spaces are entirely concrete, when they are shaded it can be quite cool and people were not staying for extended periods unless the sun was out. We also observed a significant difference between uses in

the early afternoon versus the early evening. At lunch time people seemed to be in a hurry and were only stopping to eat; conversely, at dinner time there was much more recreational and relaxed activity, with exception to grocery shoppers.



Wesbrook Village – Save-on-Foods: “[I] shop at save on foods and sit in the sun.”



Wesbrook Village - Norman MacKenzie Square: “convenient, quiet, clean”

The Old Barn

The Old Barn public space is a space that primarily serves the Hawthorn Place residential community – it is likely the only

truly public space that is shared by all. It is also relatively close to the Academic Core of UBC, hence there is a high amount of activity throughout the day. During lunch hour, the space is largely used by working adults and students from UBC, patronising the “Bean Around the World” café. However, there are also a few family groups or older residents there. During the evening, the space was bustling with families and children at play. This space can be divided into two main sections – the open field with a playground and a walking path, as well as a leafier and enclosed sitting area just bordering the Old Barn and the café. It also serves as a pedestrian thoroughfare, connecting to the Thunderbird Crescent space to the North. It is a versatile and welcoming space that accommodates the needs of multiple groups of users.



Old Barn: “I come here to caffeinate and study and enjoy the outdoor workspace.”

Acadia Park Commons

Acadia Park is far removed from the Academic core of campus and thus does not receive users other than the nearby residents of Fairview Crescent and the surrounding Student Family Housing of Acadia Park. The playground and open fields in this space attract children to play. The population of the surrounding residences are mainly older post-graduate students with families and young children, as well as the undergraduate students at Fairview – however, these students are not well represented as the spaces do not seem to serve their needs. Instead, the play areas are dominated by younger children from the nearby residences and even those coming from slightly further away, such as from around University Village, and from Hampton Place.



Acadia Park: "I bring my kids to the playground and the commons block when there are activities."

Iona Place

Iona Place is a parklet located on Iona Drive between Theology Mall and Chancellor Mews. The space includes a small playground, a grassy knoll and some benches. The space was fairly empty on both site visiting, with kids using the play structure during the evening site visit, and nobody using the space during the daytime site visit. There were beer cans on the ground near the benches, as well as lawn chairs around the space, indicating weekend use. The space generally displayed low diversity and low intensity of use.



Iona Place: "Improvements: More equipment for different age groups, better seating."

People Counts - Results and Analysis

A few general observations can be made from the summarised People Count data, while taking into consideration the limited time period of our observations and the limited number of samples. Firstly, the

spaces on campus can be divided broadly into several categories, which are denoted as blue ellipses in figures 1 and 2 below. A majority of the public spaces studied appear to be biased towards facilitating moving rather than staying – out of the 17 spaces observed, only 3 of them consistently had more users staying in place rather than moving through. Within these three spaces, there also seems to be significant variability between the lunch hour and the evening. In general, these spaces appear to be the ones that are in close proximity to residential areas on campus, and residences with families in particular. This can help explain the animation of these spaces beyond the typical class and work hours.

On the other hand, most of the other spaces studied had more users moving through rather than staying in place. Within this group, various levels of traffic can be identified – all-day, high traffic spaces such as Martha Piper Plaza, David Lam, and the SUB Plaza; daytime high-traffic spaces such as the Bookstore and the Library gardens between Koerner and Irving K. Barber libraries; and a more complex collection of spaces with generally lower traffic but also with some variability over the course of the day. In general, these spaces are more heavily used during

the day as compared to the evening, and this corresponds to the overall ebb and flow of the student population on our commuter campus. While it is clear that the public realm has been improved for pedestrian circulation, it is unclear if the goal of “(promoting) the sharing of ideas, creative expressions and interaction across disciplines”, in particular, has been met. On the whole it seems that campus spaces are primarily for moving through, rather than for staying within.

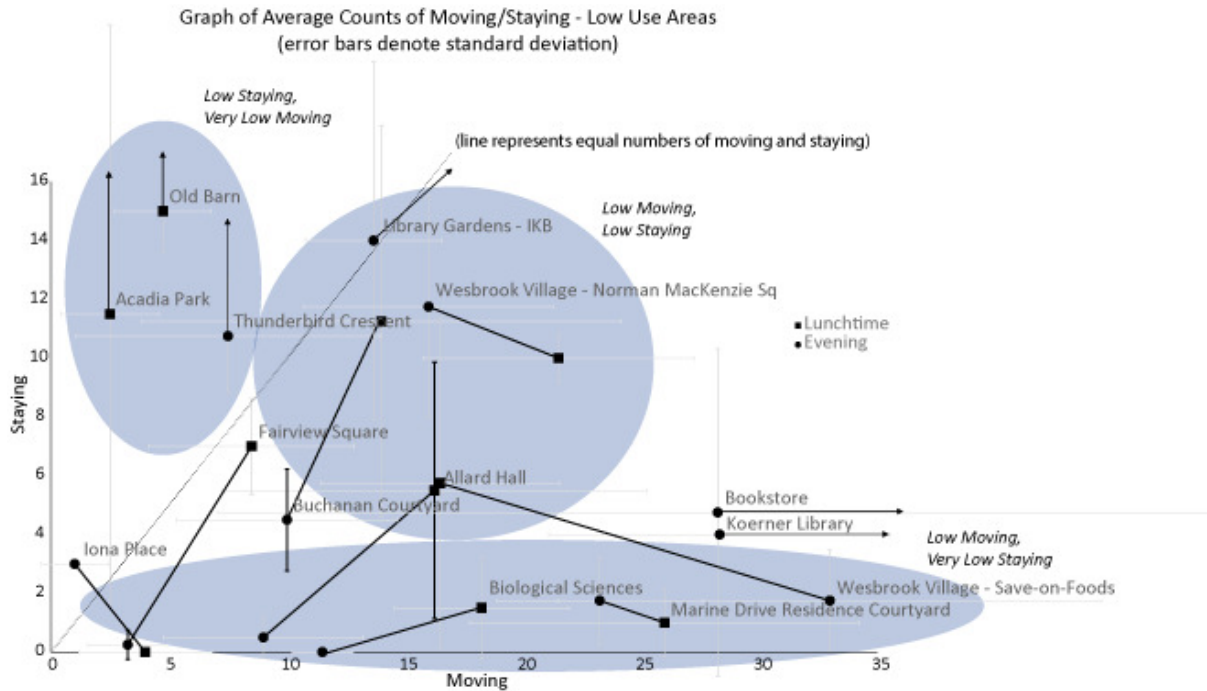
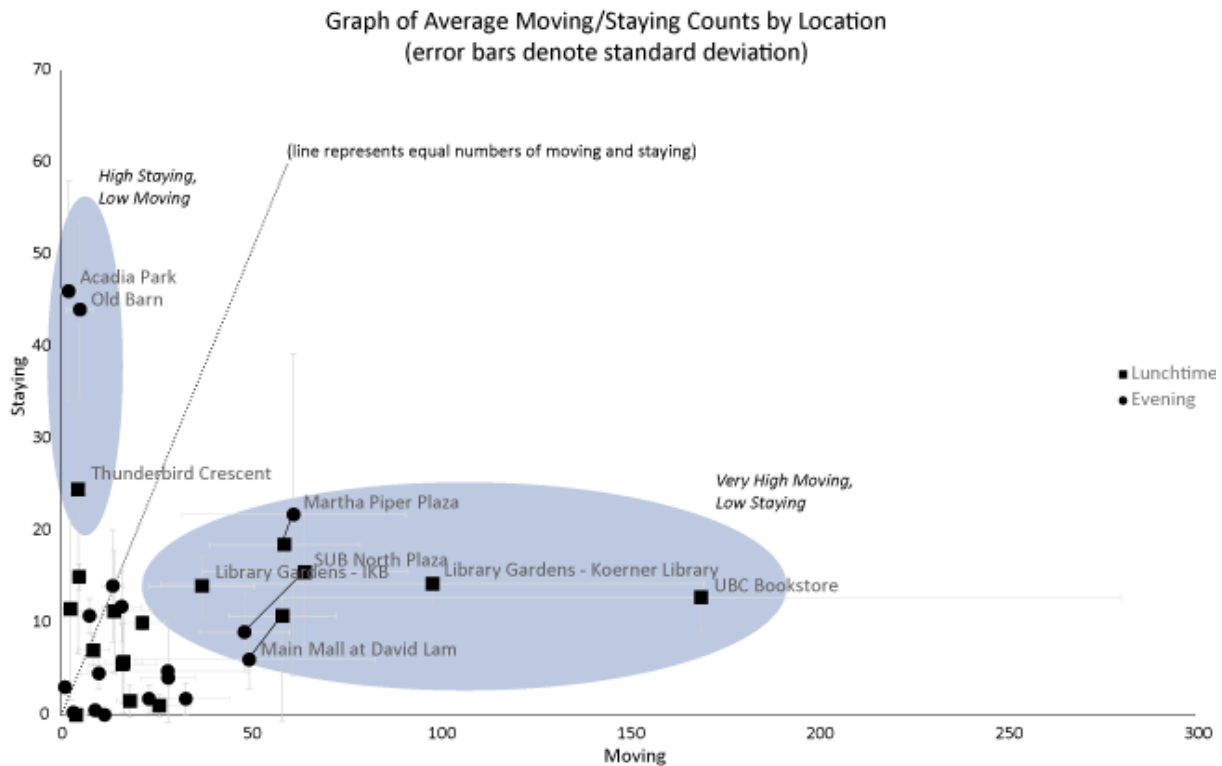


Figure 1 (above) Graph summarising average counts of moving vs. staying users (focus on higher traffic spaces)

Figure 2 (below) Graph summarising average counts of moving vs. staying users (focus on lower traffic spaces)



Spot Interview Data and Analysis

We performed a total of 82 spot interviews of people that were observed using the spaces studied. A large majority of the users were undergraduate students; most users visited the outdoor spaces during the week, and typically within working hours (about 8am to 6pm). A bulk of the use was during lunch hours, reflecting both the relatively good weather during our observation period, and the tendency for these spaces to be used as eating spaces.

Uses of space

Common uses of the outdoor public spaces included movement to and from classes, as well as having lunch, relaxing, and socialising. This was especially true of public spaces in the academic core, close to academic buildings and thus concentrations of students, staff and faculty. On the other hand, spaces closer to residential areas seemed to be used more for studying and play, depending on the target audience.

Favourable elements of public spaces

Many interviewees expressed a positive aesthetic opinion about most of the spaces, except those which lacked plants and flowers. The openness and relative quiet of some public spaces was also cited

as a positive. Proximity and convenience was also important.

Unfavourable elements of public spaces

A common gripe about the public spaces we studied was the lack of climate protection, specifically from the rain and the cold. Another was the lack of seating in specific spaces, and aesthetic preferences such as having less concrete and more green space. This suggests that outdoor public spaces are typically only used in sunny and warm weather, and for the purposes of enjoying nature or a quiet moment.

Recommendations for Specific Public Realm Improvements

This section provides a deeper analysis of the insights and implications of the research that were conducted. The discussion will identify the significance of the findings in regard to the research problem by outlining both site-specific and campus-wide recommendations for increasing campus vibrancy. These recommendations are based on the outcomes of both the spatial observations and the spot interviews conducted.

Specific recommendations

Martha Piper Plaza

The fountain at Martha Piper Plaza would most greatly benefit from additional seating. Though the fountain rim itself provides seating, that seating looks outwards only. Additional seating at the perimeter would allow for connections across and through the space, as well as allow for greater opportunity for passers-by to stay in the space.

Main Mall at David Lam

Though the David Lam space is a great example of the use of casual, conversational furniture, the space suffers

from lack of definition. Low fencing or planters, differentiation in concrete or a painted surface could easily re-invigorate this area as a welcoming "patio" space.

Thunderbird Crescent

Thunderbird Crescent requires changes to improve the vibrancy of the space - perhaps more clear programming of the space, and some enclosure with foliage would help make the space more attractive as well as provide shelter, although on sunny days the clearing is a good place for physical activities, tapping upon resident populations at the Thunderbird and Totem Park residences.

UBC Bookstore plaza

Though the area surrounding the bookstore offers a significant amount of seating, there is little seating that is protected from the environment. It seems it would prove beneficial to have more covered outdoor space. It would also be beneficial to have outdoor heating close to seating areas. Further, though the bioswale requires frequent maintenance, it may be useful to avoid maintenance during the space's busiest times. There also appeared to be a deficiency of bike racks, as most were very full.

Library Gardens

The Irving K. Barber Learning Centre is a well-used and heavily trafficked space. As such, the facilities provided should address the volume of students and visitors. We recommend more trash cans and ashtrays, bike racks, tables, and upgraded seating, and especially more outlet benches should be added. Also, it would greatly benefit the area to increase the coverage of the area for shade or shelter from the weather. This could be achieved through umbrellas, glass coverings, or tree canopies. Additionally, the area generally would be well served by another food services location, and greater space for physical activities such as Frisbee.

The plaza in front of Koerner Library is another well-used space. However, it also requires greater weatherproofing. Overall, the two main complaints were congestion - which could be solved with a dedicated bike lane on Main Mall - and the stark feel of the entrance. The space could be livened up and landmarked with more colourful landscaping and public art.

Fairview Square

Fairview Square outside the Earth Sciences building was observed to be well designed and inviting. However, it still seemed quite underutilized. Greater awareness of this

space could be created through the use of signage. In addition, placing visible public art closer to main mall may draw people into the space. It could also be a functional place to host events, as it has a large amount of green space, a plethora of seating and interesting landscape features.

SUB North Plaza

The SUB plaza is a large space with diverse uses; the new student union building, called 'The Nest', is being built. As a result, a large portion of the area is currently under construction, which has made it difficult to navigate. Additionally, the grassy bosque near the SUB gets very muddy when wet, and is unpleasant to walk on or through - direct paths mirroring desire lines are necessary to facilitate pedestrian movement through the unpaved spaces.

Allard Hall

The space outside Allard Hall is generally a vibrant space for academic pursuits. Students were using the space for studying, socializing, and eating. As observers, however, the site felt exclusive. There seemed to be little reason for someone who is not a law student to visit the space. The physical features of the space reflected this exclusivity, with the patio chairs outside the building being

chained down. It would be helpful to open up the space by unchaining the patio chairs, and allow for moveable furniture.

Biological Sciences

Initially, the large paved area in front of the Pharmaceutical Sciences Building felt uninviting, however it was observed that many had recreational uses for this space, for example, students playing catch or reading. Additional seating in a particular area of the space, while intentionally leaving other areas of the space empty, may help to create differentiation between these conflicting uses. A designated bike lane is also recommended given the large amount of traffic that moves through the space at peak times. Lastly, adding landscape features to the green space may prove to invite more people to use the grassy hill located in this area.

Buchanan Courtyard

The Buchanan Courtyard is a low-frequented area that has much potential yet to be realized, given that it serves a large population of students. This space would also benefit greatly from more tables, seating, ashtrays, and covered space. The Buchanan Courtyard also feels very heavy due to the concrete foundations and could be livened up with

glass, art, painting, or planters of colourful flowers.

Marine Drive Residence Courtyard

The spaces within the Marine Drive Residence Courtyard are formally separated and could benefit from additional casual furniture (such as picnic tables) to tie the areas and its activities together; for example allowing places for observing recreational activity in the field.

Old Barn

The Old Barn space is a very attractive and lively space: it appeals to multiple user-groups including families with children, students, and campus residents. There are many uses of the space and the landscaping provides shelter from the weather.

Acadia Park

Acadia Park is geographically dislocated from the campus core, and thus is unlikely to attract significant non-resident populations. As a family space, however, it serves its purpose well. Overall, it could use more lighting for nighttime use, and more amenities suitable for the undergraduate-age students staying next door in Fairview Crescent.

Iona Place

The playground and green space in Iona Place has the potential to serve the local community surrounding it. However, the playground could be improved to serve a diversity of age groups with more equipment. For example, there was only one baby swing and one adult swing, which does not lend itself to being used by groups of similarly-aged children.

Common themes in campus-wide recommendations

As found in observations, most of the spaces studied had more users moving through rather than staying in place. In order to bolster social vibrancy, spaces should encourage users to remain there. In regards to the physical aspects of campus, generally there is a desire for better wayfinding, improved furniture, including increased tables, moveable furniture, and more flexible layout, as well as more public art. Additionally, there is a need for more covered or weatherproofed outdoor areas for warm, wet days. A strong example of such seating would be the bus loop seats for the 4, 9, and 14 stop. These seats are covered but feel open due to the glass ceiling. These features would be helpful in encouraging users to remain in the area rather than exclusively transiting through.

Lastly, social vibrancy could be enhanced by increased the amount of flexible and programmable space for non-academic uses, for instance pop-up shops.

Beyond the physical elements of public space, there is also a need for further development of the uses of outdoor spaces on campus. For example, programmed activities or businesses that help link academic work from various disciplines can enhance the opportunities available for social interaction across faculties and disciplines. Additionally, UBC could designate sites where student groups have greater control over the use of the space, for example to host events, allowing for social vibrancy to develop from the bottom up. Lastly, communication of events and activities to students and users of campus space could be improved. Greater attendance of on-campus events create more engaged, informed and cohesive campus community, and would contribute to more effective use of on-campus public spaces.

Conclusion

In the literature reviewed, a strong connection can be established between public space and its contribution to campus life at UBC. The spaces studied in this project are not only culturally constructed but also culturally contingent places. They are influential in shaping equity and inclusivity on campus as well as the mental and physical health of its users. As a result, studying and understanding social spaces on campus is of the utmost importance.

Though each spatial area examined offers a unique space and experience to its varied users at the University, some major themes can be drawn in regards to the study's initial research questions. First, when examining how public spaces on UBC's campus are being used by students, faculty, staff, residents, and visitors it seems there are more users moving through spaces rather than staying. As such, though many of these spaces had much to offer, there is room for further efforts. Second, the observations and recommendations offered by the six spatial groups as well as the verbal data collected through spot interviews provides unique insight into the ways in which social interactions, place capital and character can be enhanced, as well as how place-

based community-building at UBC can be supported. As mentioned above, efforts may involve formal and informal social events and programming. This may be especially necessary for areas observed to be largely used by individuals occupying adjacent buildings and areas away from central nodes on campus. Other additions to spaces may prove fruitful in placemaking, these additions perhaps could be in the form of furniture, public art and shelter from the rain, among many other things.

Moving forward, further research would prove useful in deepening the understanding of social vibrancy and use of public space on campus. Acknowledging the temporal and spatial limitations of the present study, further research could contribute to the generalizability of the study's findings. As well, further research could be useful in translating observed vibrancy to UBC spaces and places that are underutilized. As such, suggestions for further research include collecting spatial and qualitative data over the course of all seasons of the year, at all sites. This is necessary as it is recognized that weather can have a significant influence on the uses of space. This could include time lapse photos and videos of spaces identified as vibrant. An additional suggestion is the

performance of a design charrette on campus. The collaboration and involvement that a charrette invites would enable the gathering of design ideas and solutions from a cross-section of individuals who occupy and make use of the public spaces at UBC. In line with the collaborative and participatory nature of the recommended design charrette, focus groups have already been planned to gather anecdotal information regarding social vibrancy and placemaking at UBC with targeted demographic groups. It is also recommended that the campus wide survey, implemented during this research project, is continued and perhaps even expanded upon. This will allow for further information-gathering as well as the time needed to reach a wider range of individuals at UBC.

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Appendix 1 – Spatial data methodology

Preliminary Sector Walkthrough Instructions

Identification of Observable Spaces

Due Date: **Wednesday, March 4** (before next class)


OBJECTIVES:

To familiarize yourself with your sector.

1. Document a comprehensive inventory of candidate spaces in your sector, from which a limited number will later be selected for detailed observation in a latter stage.
2. Gather some early information that may lend to a discussion of the campus as a whole.

TASK:

In your Spatial Groups, conduct a preliminary walkthrough of your assigned sector.

- A skeletal map of your sector will be provided by the mapping team for recording.
- Record any spaces that may later be selected for observation. Denote their location and basic type using the symbology specified below. We are only looking at outdoor spaces. Identification procedures are advised in the following sections.
- Write down any outstanding characteristics or dynamics of the space that may later assist your group's selection for observation or successive discussion.
- Document any construction that may disrupt the flow and access of pedestrian traffic in your sector. Use this symbol: .
- Record the date, time, and weather conditions at the beginning of your walkthrough.

HELPFUL HINTS:

The walkthrough will likely take 1.5 to 2 hours.

- Try to have as many members of the group participate as possible.

- Bring some coloured pens and notebooks for additional notes.

WHAT MAKES A GOOD OBSERVATION SITE?

There are no strict criteria that make up a good observation site: Sites will vary in character and size depending on where you are on campus. Remember, you are not committing to study these sites in detail at this point, so correctly identifying a “vibrant” space is not required.

This list is by no means exhaustive and is simply meant as a guide to help get you started.

Look for:

- Spaces that appear designed for lingering
- Areas with seating (formal or informal, such as ledges, slopes, railings, stairs, etc.)
- Beautiful scenery and pleasant spaces (especially areas with nice sunlight!)
- Places where people sit/stand to watch/look at something (other people, a view, etc.)
- Vibrant areas with lots of action
- Calmer spaces that juxtapose this vibrancy, such as places of escape and tranquility.
 - These areas will not be observed in detail, but they contribute to the final discussion on what makes a successful campus space
- Open spaces that could be used for sunbathing, casual athletics, and general relaxation
- Spaces near food vendors/cafes

Determining observation sites is an *intuitive process*. Ask yourself questions like:

- “Would people tend to gather here?”
- “Would I like to sit and relax here?”
- “Would I come here with friends to eat lunch?”

Borrowing partially from Kevin Lynch, we have outlined three types of space defined by their relation to pedestrian traffic flows. Recording discovered spaces as one or a hybrid of these may help aid selection and discussion:

- **Nodes:** obvious intersections or confluences of traffic, both pedestrian and vehicular.
 - Are often transitory spaces, but regularly have seating to exploit people-watching opportunities.
 - May have been programmed by its designer as a place of importance or gathering.
- **Landmarks:** Points of interest that help give identity and are useful for navigational purposes.
 - Ex. fountain, flagpole
- **Pockets:** Often calmer, peripheral spaces off the beaten path such as the Rose garden or Nitobe garden.

* *Note:* these are not firm definitions; places may impress as more than one type

SYMBOLOLOGY TO USE:

Construction: 

- Nodes: **N**
- Landmarks: **L**
- Pockets: **P**
- Food: **F**

Supplement these markers with qualitative comments on anything that makes them stand out. Make a few notes about the potential observation sites. Why do you think they would be good?

NEXT STEPS:

- Later, we will **select** the nodes at which to perform detailed observations (using your preliminary walkthrough notes).
- Then, the actual **site observation** will commence, ideally concurrent with surveys and interviews.

Observation Guidelines

You will be observing **three areas** during **two times of the day**.

You will need to schedule two 2-hour sessions to observe sites with as many people from your group as possible. The two observation times will be from 11am-1pm and from 5pm-7pm on any weekday (they can be on separate days). We are excluding weekends, *as well as Friday evenings*, due to time constraints.

During each observation session you will rotate between locations, doing two rounds of rotations. Before your initial observation time of each area, you will take an inventory of the area, noting the location of seating, food vendors, and other things of note in the space, including any artifacts you notice (This will only be performed once per area).

Below is a sample observation schedule:

First Round	Area 1	10 minutes	Inventory of area, collection of artifacts
		10 minutes	Observation period
	Area 2	10 minutes	Inventory of area, collection of artifacts
		10 minutes	Observation period
	Area 3	10 minutes	Inventory of area, collection of artifacts
		10 minutes	Observation period
Second Round	Area 1	10 minutes	Observation period
	Area 2	10 minutes	Observation period
	Area 3	10 minutes	Observation period

This process will take approximately two hours, including walking time between areas. Therefore, start the process as close as possible to the start of the time allocated. You don't have time to go get lunch or coffee during these periods!

The times were selected to maintain consistency across groups, capture some variance across each time period, and examine two distinct time periods with distinct uses.

Recording

For each recording session, the visual data team will provide a base map of each area that has been selected for study, along with two pieces of tracing paper attached on top of the map.

On the base map you will record your inventory of permanent features of the space. On your first round of observation note your observations on the *top* piece of tracing paper. On your second round of observation use the *bottom* piece of tracing paper.

Note the time, date, and weather for each observation.

You will make your own legend and annotations on the map during your observations considering the diversity of information that may be gathered across groups and areas. Make sure that the annotations make sense to someone else – if your map and observations don't make sense to us, you will need to do the observations again! If people are switching roles between observation periods, make sure that everyone uses the same legend of shapes and colours—consistency is key.

To indicate that multiple people are interacting in a group, link each person (eg. represented with a square or circle) with a line.



Inventory and Artifacts

Before observing the usage of the space, take an inventory of permanent infrastructure and artifacts/traces of use that are left behind.

If you know that this space is used for certain uncommon activities but you don't necessarily observe it at the moment, write it down in the inventory (eg. slacklining).

Do anything spatial in the inventory on the base map, and write down any additional observations on the back of the map or a separate piece of paper.

The inventory can include, but is not limited to:

- Nearby buildings
 - Where the doors are

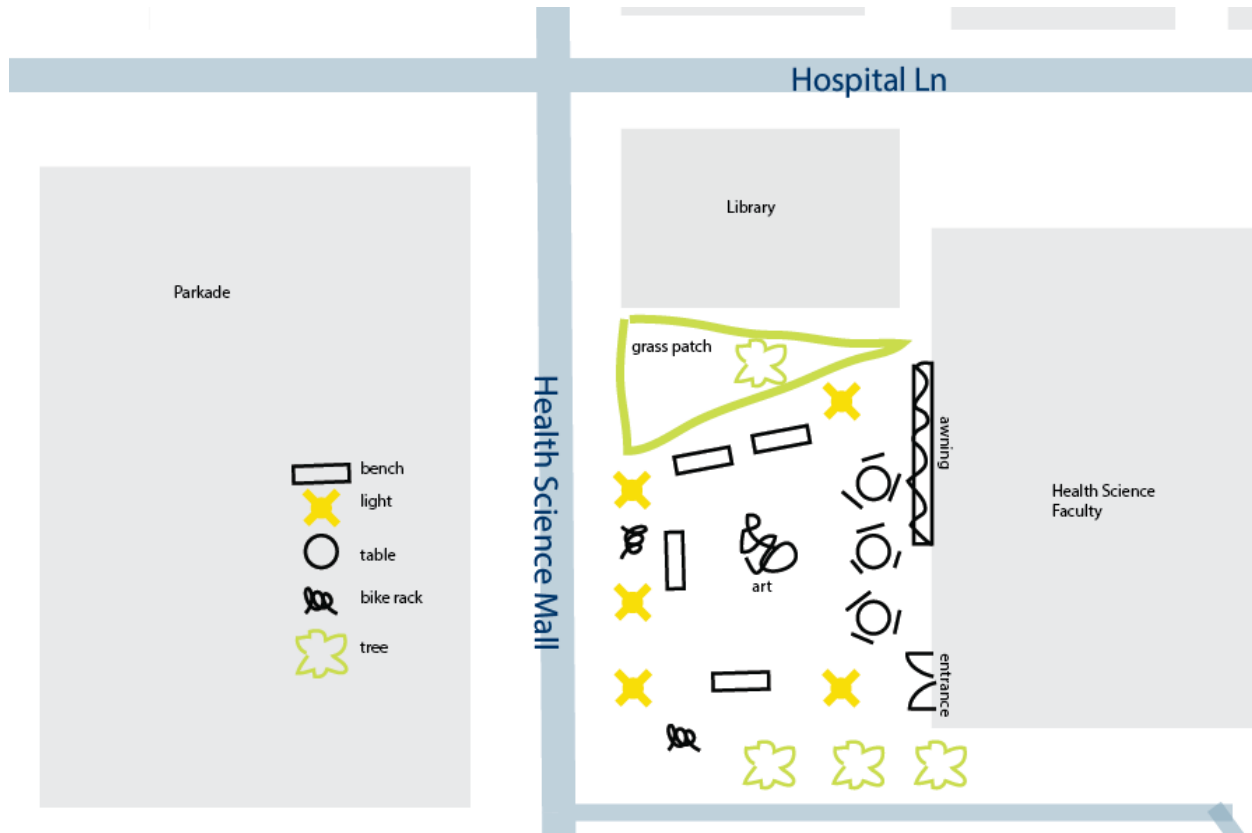
- How they contribute to the space (if people are coming into the space from the building, if there is a patio, etc.)
- Lighting
- Public vs. private space
- If it is fenced in or not
 - “defensible” space
- Permeability of space
 - Physical permeability – can you get from one side to the other?
 - Visual barriers
- Amenities
- Infrastructure
- Food
- Seating and benches
- Open space for laying on grass, sporting, Frisbee, etc.
- Visual features
- Sounds – what you are hearing and how loud it is
 - Vehicle sounds, water features, construction, birds, dogs, babies, etc.
- Distinct smells
- People watching opportunities
- Hard vs. soft surfaces (impervious surfaces vs. green space)
- Cigarette butts
- Footpaths and worn trails
- Other traces of use

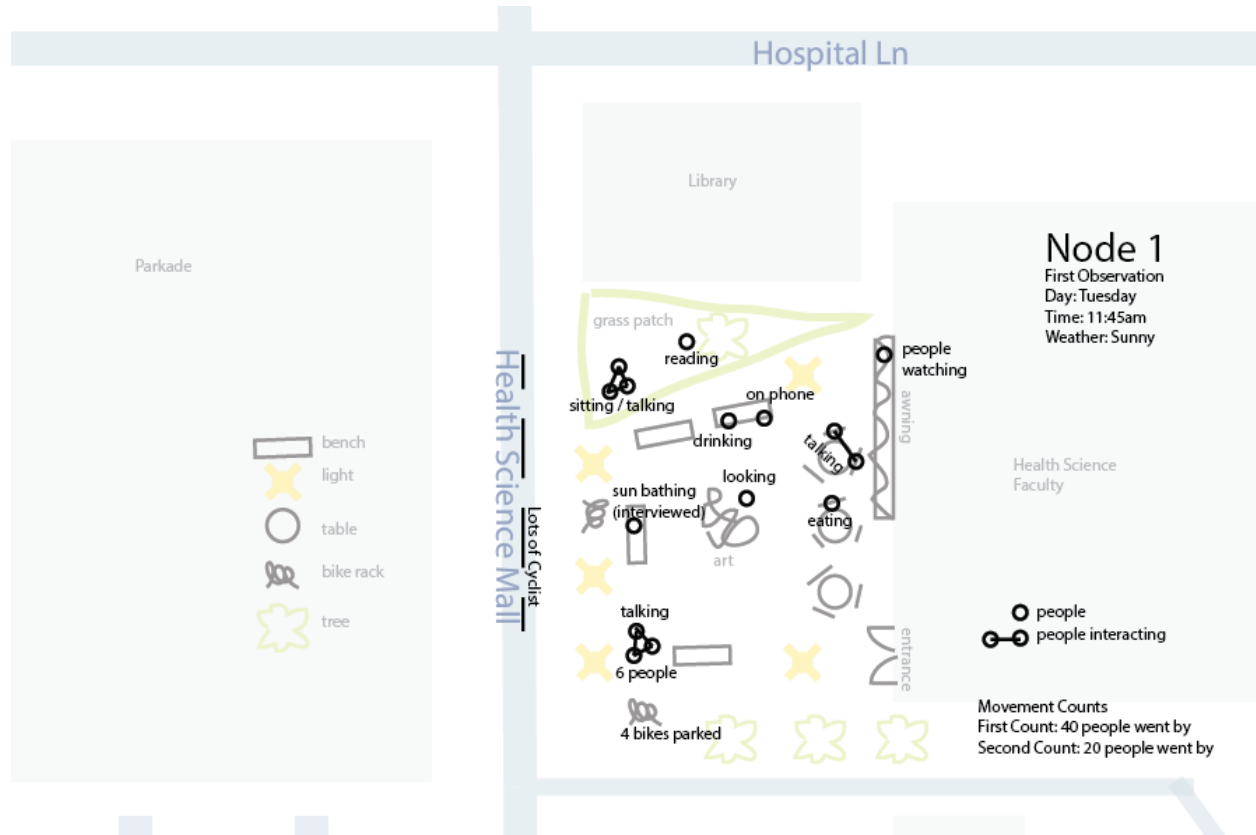
Observation Guidelines

There are four distinct roles during each observation period:

- Counting:
 - For two minutes, count the number of people *moving through* the space. You do not need to distinguish between modes – just the total number. If an area has a significant volume of other modes of mobility aside from walking, just make a note of it in your annotations.
 - Next, for two minutes, count the number of people staying in the space.
 - Distinguish between people who are there individually vs. people in groups.
 - Describe what they are doing (eg. five people drinking coffee individually), but ensure that you don't associate people who are not sitting together (people may be drinking coffee by themselves – don't associate them so that it reads that they are in a group)
 - Repeat this process so that you are doing each count twice each observation period.
- Spot interviews:
 - If there are people using the space in a way the space was not programmed for or in an unusual manner, do a quick spot interview with them.
 - Otherwise conduct the proposed questionnaire.
- Two people doing qualitative observations of the space
 - Note any qualitative observations
 - Include the main activity and/or program of the space, any diversity of activity (the number of activities and what they are)
 - Note the size and relative feeling of the size of the space
 - Does it feel too big? Too small? An awkward arrangement? What is working and why?
 - Note the feeling of the space
 - Formal? Safe? Organic?

- The general demographics of the people using the space, and how they may be using the space differently – a general impression of who is using the space
 - Perceived gender, age and other demographics of note
- Any uses that are not uses the space was programmed for
- Take a photo of the space as a snapshot to assist with the interpretation of the mapping. I feel this should be mandatory as it will help other members of the mapping team to help interpret the results, in case he/she hasn't visited the site.
- Work on the map, feel free to work together





Appendix 2 – Campus map showing study sites



Appendix 3 – Table of count data

Table 1 – Lunchtime observations

Lunch Observation (11 to 1)	Count 1	Count 2	Count 3	Count 4	Average Moving	Count 1	Count 2	Count 3	Count 4	Average Staying
UBC Bookstore	72	76	245	284	169.3	8	13	17	13	12.8
Biological Sciences	14	18	18	23	18.3	3	3	0	0	1.5
Fairview Square	12	12	7	3	8.5	5	7	7	9	7.0
SUB North Plaza	35	48	87	88	64.5	17	4	18	23	15.5
Allard Hall	9	8	25	23	16.3	2	2	11	7	5.5
Iona Place	6	2	-	-	4.0	0	0	-	-	0.0
Buchanan Courtyard	6	7	28	15	14.0	5	6	17	17	11.3
Library Gardens - IKB	45	53	25	26	37.3	10	18	14	14	14.0
Library Gardens – Koerner Library	170	150	39	34	98.3	14	17	14	12	14.3
Wesbrook Village - Save-on-Foods	13	14	15	24	16.5	9	12	1	1	5.8
Wesbrook Village - Norman MacKenzie Square	17	17	23	29	21.5	9	10	10	11	10.0
Martha Piper Plaza	30	64	68	74	59.0	19	17	20	18	18.5
Main Mall at David Lam	53	79	55	47	58.5	1	1	18	23	10.8
Marine Drive Residence Courtyard	35	31	19	19	26.0	0	0	2	2	1.0
Old Barn	7	5	5	2	4.8	15	17	14	14	15.0
Thunderbird Crescent	5	7	4	2	4.5	40	40	9	9	24.5
Acadia Park	5	2	3	0	2.5	20	20	3	3	11.5

Table 2 – Evening Observations

Evening Observation (5 to 7)	Count 1	Count 2	Count 3	Count 4	Average Moving	Count 1	Count 2	Count 3	Count 4	Average Staying
UBC Bookstore	49	11	44	9	28.3	3	1	13	2	4.8
Biological Sciences	10	13	11	12	11.5	0	0	0	0	0.0
Fairview Square	4	5	3	1	3.3	0	1	0	0	0.3
SUB North Plaza	40	57	-	-	48.5	12	6	-	-	9.0
Allard Hall	12	6	-	-	9.0	1	0	-	-	0.5
Iona Place	2	0	-	-	1.0	3	3	-	-	3.0
Buchanan Courtyard	9	4	12	15	10.0	3	4	7	4	4.5
Library Gardens - IKB	17	12	12	-	13.7	17	18	7	-	14.0
Library Gardens – Koerner Library	32	33	20	-	28.3	4	4	4	-	4.0
Wesbrook Village - Save-on-Foods	31	20	48	33	33.0	1	4	2	0	1.8
Wesbrook Village - Norman MacKenzie Square	13	11	23	17	16.0	11	16	13	7	11.8
Martha Piper Plaza	93	80	41	32	61.5	8	6	41	32	21.8
Main Mall at David Lam	87	68	19	25	49.8	10	7	3	4	6.0
Marine Drive Residence Courtyard	27	27	20	19	23.3	4	1	1	1	1.8
Old Barn	9	7	2	2	5.0	42	32	55	47	44.0
Thunderbird Crescent	17	6	4	3	7.5	12	8	11	12	10.8
Acadia Park	2	0	1	5	2.0	57	54	31	42	46.0

Appendix 4 – Spot interview questionnaire

PLAN 515: Spot Interview (for use during site observations)

Instructions:

Give the person a quick explanation of the project and why we want to speak to them. You can inform them that they are free to skip any questions or stop whenever they want.

Questions:

What is your age? _____

What is your gender? _____

What your role on campus? *Ask each individually – can mark down more than one.*

____ Undergraduate student

____ Graduate student

____ Postdoctoral fellow

____ Staff

____ Faculty

____ Resident

____ Other: _____

How do you use this space? _____

How often do you use this space? _____

What time of day do you usually use this space? _____

What day of the week do you usually use this space? _____

What do you like about this space? _____

In three words or less, describe this space? _____

Briefly, how would you improve this space? _____