AMS Nest Revitalization Analysis: Fourth Floor Circulation & Lounges

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University of British Columbia

PLAN 522

March 17, 2017

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THE PEAK LOUNGE

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Executive Summary

The fourth floor of the Alma Mater Society's (AMS) Nest offers a variety of areas for lounging, studying, socializing, and club spaces. The AMS is looking to improve social animation throughout the entirety of the Nest. Specifically, the fourth floor circulation and lounge areas are of interest for this study as they provide alternative spaces for informal learning and quieter socializing that are often more calming than animated. The data collected for this study will work to inform the researchers and the AMS as to existing usage of the spaces in question and potential interventions that may help to improve the space. Analysis of the data collected has suggested that the connotation of liveliness associated with social animation may not accurately represent the space on the fourth floor of the Nest. The key findings from this data collection are as follows:

- Need to maintain quiet spaces for reflection and study
- Need to maximize seating arrangements and options in this space
- Need for other smaller-scale, unobtrusive, interventions to improve aesthetic and functional appeal without impeding circulation or existing atmosphere

This report therefore focuses on the relationships between social animation and the overarching concept of placemaking, which allows for more unobtrusive interventions in informal learning spaces. This paper is concluded with recommendations for 'quiet-space' interventions that can improve the overall atmosphere and functionality of the fourth floor circulation and lounge areas.

Introduction

Context and Purpose

Following the rapid increase of students enrolled at the University of British Columbia (UBC), the old Student Union Building (SUB) proved to be lacking essential work space, club space, and a place to gather for UBC's student body. As a result, UBC's Alma Mater Society (AMS) completed a lengthy consultation process to determine the needs of students, and as a result of this, the AMS opened the doors of the new Student Nest in 2015. The purpose of the Nest is to accommodate the needs of students on campus by offering students space for studying, socializing, club space, food outlets, and a providing a hub for activity for the student body. Almost two years after opening its doors, the Nest has been identified as not reaching its potential for social vibrancy and animation, and therefore the School of Community and Regional Planning (SCARP) has been recruited to research this phenomenon and provide recommendations for positive change to the AMS. The Nest's areas of study have been divided into seven sections, each tackled by a different group of student researchers. The areas studied this report are the fourth floor circulation and lounges at the AMS Nest, , as shown in Figure 1.

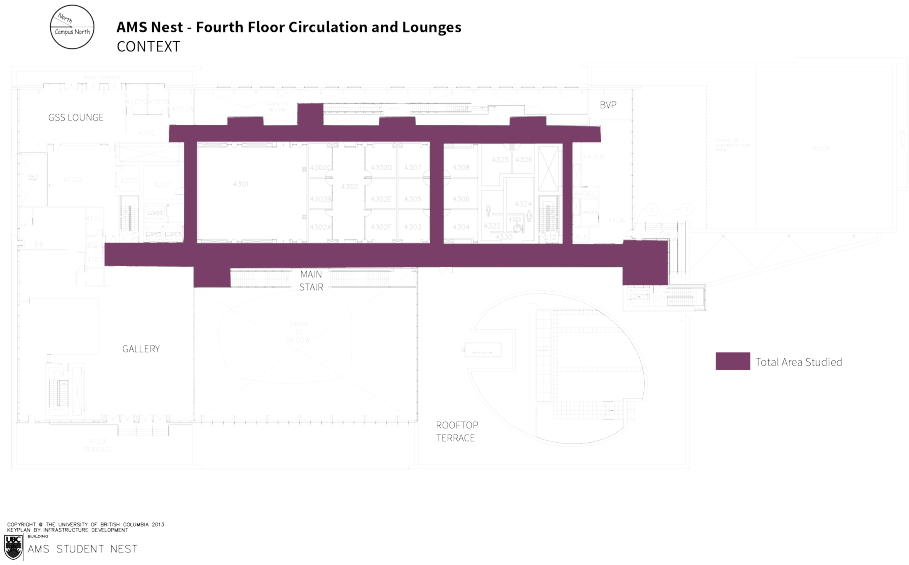

Figure 1: Total area studied on the fourth floor of the AMS Nest

The area of study was then separated by 'zone' based on characteristics including atmosphere, function, and ambiance of each of the spaces. This allowed the researchers to observe the differences and interrelationships between the fourth floor zones.

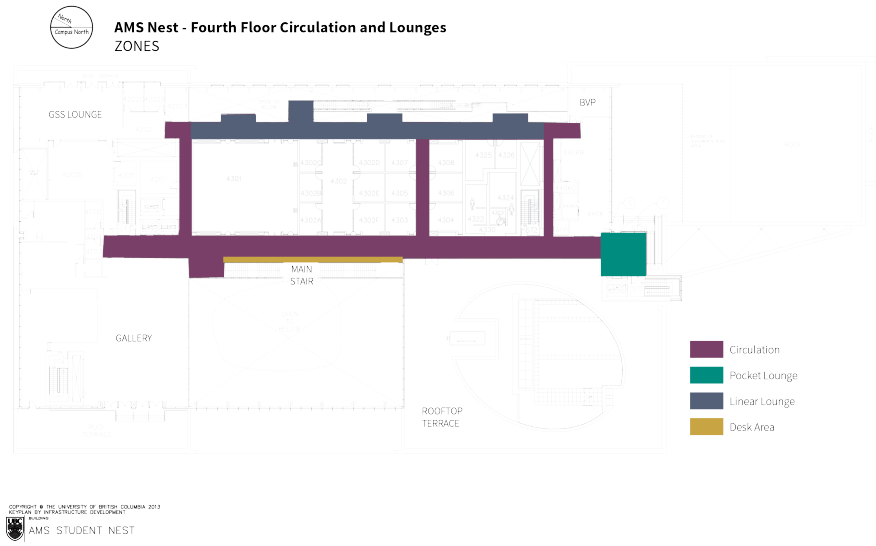

Figure 2: Total area studied on the fourth floor of the AMS Nest, by zone

The prime aspiration for this space is to be more welcoming, comfortable, and pleasant. Given that this study will take place in a building that is already being utilized, the researchers employed a Post-Occupancy Evaluation (POE) for the basis of analysis. This holistic approach allows for analysis of not just the facility itself, but also the agencies that influence the space (Priser, 2001).

The Purpose of this research report is to inform the AMS and Social Ecological Economic Development Studies (SEEDS) about user perceptions of the Nest's fourth floor circulation and lounge areas and to provide potential interventions for 'social animation' in the space.

Financial Considerations

The approved recommendations resulting from this project may be financed by the the AMS Animation Fund, currently at $42,000 (Chris Scott, AMS VP Administrator). It is important to clarify that these funds are to be shared amongst the selected recommendations from all the SCARP students participating in

this project. Each area of study is designated $7,000. The researchers are mindful that some of the recommendations may be over budget, but they could be implemented over a period of time or through partnerships with other UBC organizations.

Statement of Research Problem: Social Animation on the Fourth Floor of the Nest

Due to some concerns over the Nest's "mall-like" feel, the AMS is exploring ways to increase the vibrancy and animation of the space; this will be the main research problem that SCARP will answer. More specifically, responses to the current use, frequency, opportunities for improvement, and potential physical interventions for the space will be examined.

Research Question and Objective

Research Question: Does the fourth floor circulation and common spaces at the AMS Nest reach its potential in terms of vibrancy, animation, and usage?

Sub Questions:

- How is the common/circulation space on the fourth floor at the Nest currently being used?
- Which spaces are most/least active and what are their physical characteristics?
- What are the options for interventions that can increase vibrancy and activity in these spaces?

Primary Objective: To devise recommendations for the AMS to increase the social animation and vibrancy of the fourth floor at the Nest.

Defining Social Animation and Vibrancy

For the purpose of this project, the researchers have defined social animation and vibrancy as a means to bring life and vivacity to a space by fostering a sense of place and belonging that encourages participation and engagement. Indicators of social animation include, but are not limited to, number of users, types of uses/activities, length of stay, interaction between users, and utilizing information from other channels for feedback. Elements and characteristics of social animation for the purposes of this report comprise a sense of place, community, or belonging, encouraged participation and engagement in the space, a feeling of liveliness and happiness, features (lights, sounds, seating, smells, activities, etc.) conducive to well-being, they are interactive, and they are accessible, equitable and safe for all users.

Issues with Social Animation Research Framework

Throughout this research, the researchers have determined that the overarching concept of social animation that supports the goals of the AMS and SEEDS, and informs much of the work on other nest sections, does not truly capture the nature of uses of the Fourth Floor. The concept of Placemaking more relevant to the space in question. It incorporates all aspects of social animation while not having a connotation of being overly energetic. Therefore, though other spaces in the Nest may require increased programming of activities and other bold or active interventions to foster social animation, actions taken on the fourth floor, especially in relation to social animation indicators of interaction between users and types of activities, may be limited to those that are unobtrusive.

Placemaking on the Nest's Fourth Floor

Placemaking is defined as "the recollection of patterns of life lived in a particular building or space that creates the cornerstones of mental association and gives such places the patina of affection." (Flemming, 2007, p. 14, as quoted in Harrop & Turpin, 2013). The concept of metal association of affection do not have to generate patterns of life that are overly intrusive or affect the existing ambiance in an overly ostentatious way. Placemaking on the fourth floor, as informed by the data collected for this research, should embrace the quiet, studious nature of the lounge areas and work to intervene in a manner that improves mental association of affection through inconspicuous means.

Relevant Literature Review

Context

The initial part of the literature review provides a briefing on the expected uses of the Nest as per the the Schematic Design Program commissioned by the AMS during the SUB Renewal Project consultation process. The second part will highlight the theories and frameworks of post-occupancy evaluation (POE), engagement and social animation, environment impacting behaviour, and concepts of placemaking in informal learning spaces. Moreover, strategies within these concepts will be documented and analyzed to provide insights on potential methods of implementation and intervention that the researchers have found to be pertinent to the study. The focus of this review is to identify processes of building evaluation, as well as

establishing possibilities for intervention on the fourth floor of the Nest, specifically the circulation and lounge areas. The scope of review is limited by the specific fourth floor site. Although analysis of POE and social animation inform analysis of the Nest as a whole, post-data analysis the researchers have found it necessary to also include concepts of placemaking and unobtrusive animation within informal study spaces. Moreover, there is a limited amount of literature on quiet-space or informal learning space animation to inform this analysis, so funding longer-term studies would be beneficial for future intervention.

AMS Schematic Design Program

The *'Embodiment of a Place to Enrich Student Life'* is an essential component of the Schematic Design Program that is very much in line with the goals of social animation and placemaking for the fourth floor. This embodiment depicted the purpose of the Renewed SUB (now the Nest) as a space that reflects and supports the needs and aspirations of students and in turn provides them with a sense of belonging. Furthermore, the embodiment recognized that in order to support UBC's diverse student body, the new SUB ought to offer a variety settings for the varying needs of students. As the AMS notes their research for the SUB Renewal Project, the space should include "settings that are exciting and connective as well as settings that are calm and conducive to study and contemplation, settings that are social as well as those that invite solitary comfort, settings with specialized purpose as well as settings with flexibility for multiple uses…" (Cornerstone Planning Group, 2009, p. 21).

Theories and Analytical Frameworks

Post-Occupancy Evaluation (POE): Given that this study will take place in a building that is already being utilized, a POE approach will be employed. POE is a systematic research process that assesses how the needs of a building are being met by its users (Riley et al., 2010). Priser (2001), describes the POE process as a holistic approach that allows for analysis of not just the facility itself, but also the agencies that influence the space (Priser, 2001).

Engagement and Social Animation: According to literature analysis performed by Scott-Webber et al. (2013) on student interaction in classrooms, understanding engagement requires knowledge of the components involved. These may include cognitive, affective, and behavioral elements. It is these components that enabled the identification of indicators of

engagement and social animation on the fourth floor. In their article on public space animation at the University of Waterloo, Glover et al. (n.d.) state that public space animation works to enliven and positively transform public space. This concept has informed the definition of social animation for this project, where social animation aims to bring life, vivacity, to a space by fostering a sense of place and belonging that encourages participation and engagement. Glover et al. (n.d.) insist that by supporting social animation projects, public spaces can be reshaped, allowing for increased interaction.

Environment Impacts Behaviour: This analysis of the AMS Nest's fourth floor is further supported by the vast amount of literature theorizing that a building's environment impacts behaviours (as outlined by Scott-Webber et al., 2013). It is this understanding that will enable us to search for interventions that can help alter the existing built environment to affect how the space is used.

Placemaking and Informal Learning Spaces: The concept of placemaking was largely made popular by Jay Walljasper and his Project for Public Spaces (PPS) based in New York. The goal of the placemaking concept was to enable communities to engage in the improvement and revitalization of neighbourhoods, especially through public space interventions in community centres and elsewhere (Walljasper, 2007). There are eleven principles of placemaking, number one being that the community is the expert and should be involved in all aspects of intervention and redevelopment (Walljasper, 2007), specifically, placemaking "inspires people to collectively reimagine and reinvent public spaces as the heart of every community." (PPS, 2016, p. i). This concept works to inform the understanding of the Nest's Fourth Floor, allowing for an understanding of 'place' and 'vibrancy' as not necessarily contributing to increased animation in a bold or active sense, but in a sense of mindful engagement in the space that fosters feelings of belonging and ownership.

Placemaking in informal learning spaces is not necessarily a new concept but it is definitely one that requires more research. Harrop and Turpin (2013) describe their analysis as utilizing "[a] body of discourse on informal space design [that] is drawn from learning theory, placemaking, and architecture, with a need for understanding of the synergy between the three." (p. 58). The authors identify a need to understand how to maintain the relevance of informal learning spaces, defined as "non-discipline specific spaces frequented by both staff and students for self-directed learning activities [both] within and outside library

spaces" (p. 59). For Harrop and Turpin (2013), their main findings involved a need for increased seating for both individuals and groups, as well as unobtrusive 'screening' interventions that separated quieter spaces from group-oriented and corridor spaces without creating too much of a barrier.

Key Insights from Previous Studies on POE

There are over 150 POE methods, many of which focus exclusively on Higher Education (HE) buildings (Riley et al., 2010). Previous POE of HE buildings have assessed different elements from technical and functional (Hassanain et al. 2015), to design, comfort and health (Candido et al. 2016). Given the purpose of this research project, examples from previous studies will be utilized to guide the 'social animation' assessment.

Scott-Webber et al. (2013) highlight a study done by Jankowska and Atlay (2007) which found that creative and flexible spaces (classrooms specifically) with a unique atmosphere and inspiring aesthetics lead to more engaged and interactive participation by its users, which is the motivation behind animating the Nest. A case study by Hassanain et al. (2015) presented a model of POE, a '*Framework Model for Post-Occupancy Evaluation of School Facilities*' that are considered to be valuable for and applicable to this project. The five-step sequence of this framework is to: (1) Identify the performance requirements for the school in question; (2) Conduct an observation evaluation and a focus group discussion; (3) Design/implement a user satisfaction survey; (4) Analyze the collected data; and (5) Provide recommendations.

As recommended by Brown (2015) in four POE studies of residential buildings in Toronto, both quantitative and qualitative data were collected with the purpose of result triangulation, providing an opportunity to provide tailored feedback for outreach. Additionally, Candido et al. (2016) propose a set of Indoor Environment Qualifiers (IEQ) to guide the data collection process. These explore the following dimensions: "spatial comfort, indoor air quality, personal control, noise distraction and privacy, connection to outdoor environment, building image and maintenance, individual space, thermal comfort and visual comfort" (p. 214). These parameters are in line with the 'social animation' study and as such they will be considered in preparing the data gathering tools.

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Implementation and Methods of Improving POE Analysis

Continually, the studies in question are missing a key component: whether an intentional design has influenced outcomes in the occupied space, and how to demonstrate the potential outcome(s) to stakeholders (Scott-Webber et al., 2013). This is especially beneficial in student spaces, as student engagement is reflective of spatial designs, and connecting the evidence to support these design decisions can aid students in their wellbeing (Scott-Webber et al., 2013).

As the Planning profession moves towards developing proper frameworks and methods for POE practices, it is essential to keep in mind its implications for implementation. As POE standards are legitimized and become standard practice for designing and occupying buildings, implementation may prove to be a continual barrier (Zimmerman and Martin, 2010). Currently, there is no legislation requiring compliance for POEs, and repeatedly, designers are not held accountable for interventions after occupancy; this proves to be a barrier to compliance (Zimmerman and Martin, 2010).

This conflict presents a potential opportunity to incentivize between the developer and owner, as if a larger organizational goal was outlined, costs and benefits for both would be realized (Brown, 2015). As a possible interveners wanting to see this necessary change come to fruition, the British Columbia Buildings

Corporation (BCBC), a government agency, has developed an outline for "best practices" for POE to be implemented within the wider property sector (Zimmerman and Martin, 2010).

This study of POE, social animation, and placemaking informed both the processes of information and data collection of the AMS Nest, specifically how spaces on the fourth floor are now being utilized post-occupation, as well as identifying potential conclusions and recommendations for how the spaces may better engage with the wider UBC community. Specifically, the analysis of POE greatly informed the methodological processes undertaken for this study.

Methodology

Context

An underlying component of this research methodology was its adherence to the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS). This researchers ensured to respect all participants engaged in the study and protect their confidentiality.

As previously described, while Post-Occupancy Evaluation (POE) was the primary method for data collection, this was complemented with a mixed methods research (MMR) approach, which included the below activities (explained in further detail under 'methods of research'):

- A literature review of the history and design of the Nest, and an exploration of animation and engagement interventions in quiet or informal learning spaces;
- Mapping exercises for the identification of specific zones within the fourth floor based on physical attributes
- Walkabouts of the area for gathering verbal-textual and visual-spatial data to identify user groups, frequency of use, amount of people that use the space, time of use, and how students are using the space;
- Individual and focus-group surveys to fourth floor lounge users;
- Triangulation of the results from all data collection methods.

Delimitations

The study was confined to interviewing individuals or groups who are in the AMS nest fourth floor circulation and lounge areas.

Limitations

As mentioned, there is limited research that has been done into how 'quiet' or 'informal learning/studying' spaces can be animated. Funding research into this matter is suggested. Further, this research was limited in terms of time, including the availability and willingness of participants. Lastly, limiting data collection to the fourth floor allows for analysis in a short period. However, this limits us to data from those who already use the fourth floor, at least on one occasion. Further studies could expand to different club spaces and/or other floors within the Nest to gather data from those who may have not been to the fourth floor before or don't go there often.

Timeline

The scope of this project was limited by the condensed 10-week timeframe that was allotted for completion. On January 4, 2017, the researchers were first presented with the project and the required deliverables by Chris Scott, AMS VP Administrator. On January 11, the research proposals was presented to instructors Leonora Angeles and Penny Gerstein. By January 18, literature reviews had been completed and research teams refined their methods of data collection and analysis. Between January 25 and February 15, the researchers conducted interviews and administered the focus group. Data analysis took place largely between February 15 and February 22. On February 22, all research teams presented the final projects to AMS Council members and SEEDS program officers. The final report was submitted to the instructors on March 17, 2017.

Methods of Research

Verbal-Textual

The verbal-textual data for this project was collected via structured interview questions (see Appendix A) and semi-structured focus groups (see Appendix B) to participants within the designated research area (see Figure 1). Respondents were

primarily undergraduate students from a variety of departments. There was a mixture of male and female respondents, most of whom freely shared their feeling about the space. In general, most spoke positively about the space.

The interviews were conducted over three days at various times of day in order to get a broad spectrum of respondents. During the focus group, the researchers used the floor plan (see Figure 2) to assist with ensuring that participants knew the exact area in question. Additionally, participants were asked to draw happy, sad, or neutral faces on the map (see Figure 5) to indicate feelings and levels of happiness in the different spaces. The categorization and aggregation of this exercise provided a visual map of the areas that would require most attention.

The final data was analyzed through a coding process. According to Attride-Stirling (2001) "coding [and data reduction] is regarded as a helpful, though by no means unique or indispensable, technique in qualitative analysis." (p. 390). This technique is employed in this study to enable the researchers to develop common themes or narratives in relation to the space in question. Attride-Sterling (2001) provides a six-step process for this method: 1) Code Material, 2) Identify Themes, 3) Construct Thematic Networks, 4) Describe and Explore Thematic Networks, 5) Summary of Thematic Networks, and 6) Interpret Patterns. Steps 1-3 were completed as part of the initial data collection analysis, and once all data had been coded, steps 4-6 enabled the researchers to identify areas of concern through pattern interpretation. This further informed the final recommendations for intervention. See Appendix C and D for a copy of the the coding framework and the thematic analysis matrix, respectively.

Visual-Spatial

The visual-spatial data collection for this report was collected through *complete participant observation* and *photo-voice coding*. In both case, the researchers did not interact with the observed participants. The goal of these approaches was to expose the researchers to activity, behaviour and other phenomena that may not reveal themselves via other data collection methods (PLAN 522 Lecture, Week 4). The researchers were able to observe the general atmosphere and social interaction occurring in particular 'zones' of the fourth floor (see Figure 4) over ten-minute intervals at different times of day. These zones were delineated due to their individual characteristics that make them independent of one another.

Data from the *complete participant observation* was compiled and structured in an 'observation chart' (see Appendix E). The researchers also included data on the number of people, via headcount, moving through the circulation spaces (see Figure 4).

The observation was further supported by *photovoice* using a modified version of Carrie Wang (1999)'s SHOWED guide for coding photovoice. The application of this tool is explained in detail under the 'Analysis' section.

A final component of the visual-spatial data collection was a social mapping exercise (see Figure 3). This activity was a complement to the interviews from the verbal-textual methods and as a result it involved interacting with the participants. Interview respondents were provided a copy of the social map and asked to indicate (via happy, sad, or neutral faces) how certain spaces on the fourth floor made them feel. Out of all 10 interviews and one focus group, five such maps were collected.

Results

Verbal-Textual

Verbal-textual data was collected through interviews and focus groups with participants on the fourth floor. The following quotes, as illustrated in Figure 3, show some of the results from participant interviews and focus groups.

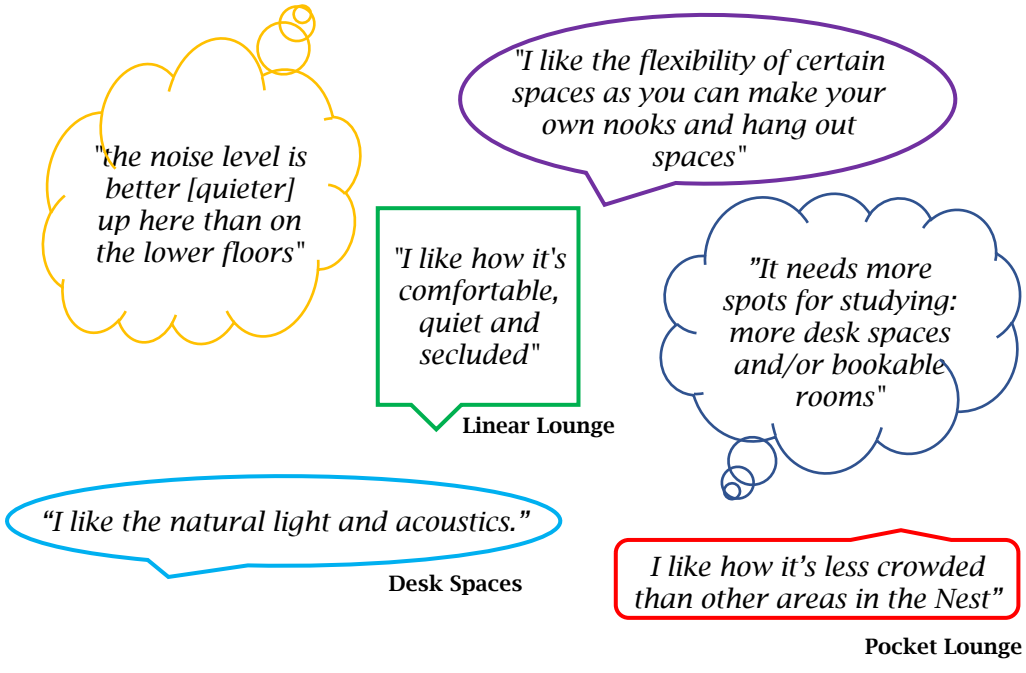


Figure 3: Samples of quotes from participants; gathered by interviews and focus groups

The interview and focus group answers were then coded to address the issues and themes gathered from the data collection; this was completed by using the Coding Framework outline in Appendix C. The coding exercise allowed for themes to be established from the interview answers, where they were further analyzed and separated into basic themes, organizing themes, and finally, the global theme for analysis. The following organizing themes and global theme, as shown in Figure 4, were gathered from the data and captured in the Thematic Analysis Matrix, which can be referred to in Appendix D.

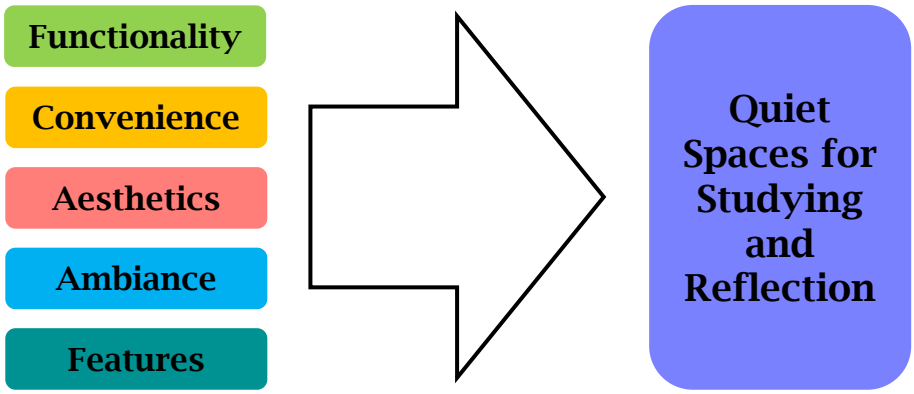


Figure 4: Organizing themes and global theme, as directed by verbal-textual results

The sum of the visual-textual results established the overarching theme of "quiet space for reflection and study". This theme is the foundation for the recommendations provided at the end of this report.

Visual-Spatial

Visual-Spatial data was collected by complete observation (Appendix E), walk-abouts, reviewing floor plan records, and taking photos. Data was intentionally gathered at different time points on different days to compare how the space was being used at different times. Mapping exercises were completed to gain insight on how the space is currently being used. Lastly, a modified version of Carrie Wang (1999)'s SHOWED guide for coding photovoice was also employed. Given the analytical nature of the photovoice results, these are presented in detail under the analysis section. The variety of data collection tools served to triangulate the data to ensure validity in the recommendations outlined at the end of this report.

In the focus group exercise, a blank 'happiness map' was given to participants to associate feelings with the spaces on the fourth floor. Seen below in Figure 5 is the amalgamation of results, showcasing areas where participants think need improvement, or where they have feelings of happiness. This happiness map indicates general feelings of unhappiness in the desk space/stair area, feelings of indifference in the pocket lounge, and feelings of happiness in the linear lounge.

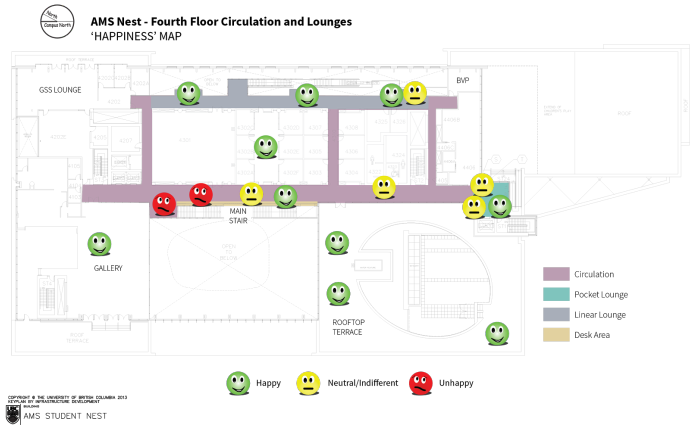


Figure 5: Results of happiness mapping exercise completed in focus groups

Collected by observing each area in 10 minute intervals, Figure 6 below indicates the foot traffic flow in each area of the fourth floor. The traffic flow map below indicates where usage of the space occurs, and provides some understanding as to why certain areas are preferred over others. Here, for example, it shows that perhaps the negative feelings from the happiness map above are associated with higher traffic flows and with that, noise, in the desk area/stair area.

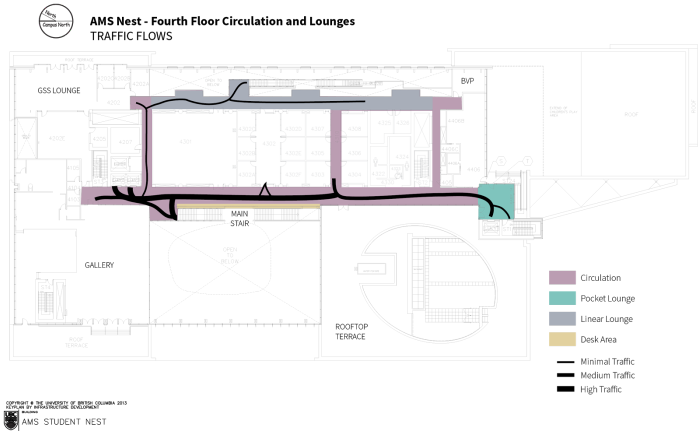


Figure 6: Results of foot traffic mapping observations

Analysis

The data collected for the fourth floor circulation and lounge areas has proven that animation in this space may simply be portrayed by improvements in visual and aesthetic appeal, as well as improved functionality of the space to maintain or elevate the existing feelings of happiness and comfort. 'Happiness' is what the AMS representatives suggested was their definition of animation. This is especially true in the case of the fourth floor, where animation should not necessarily mean increased activity and vibrancy.

Further analysis was achieved through photovoice by answering a modified version of the SHOWED guide for coding photovoice. This exercise answered five key questions: 1) What do we SEE here?, 2) What is really HAPPENING here?, 3) How does this relate to OUR goal of social animation or placemaking?, 4) WHY does this situation EXIST?, and 5) What can we DO about it? The figures and analysis below will answer the first four questions (SHOW), and the last question, 'what can we DO about it?', will be answered within the recommendations section.

LINEAR LOUNGE

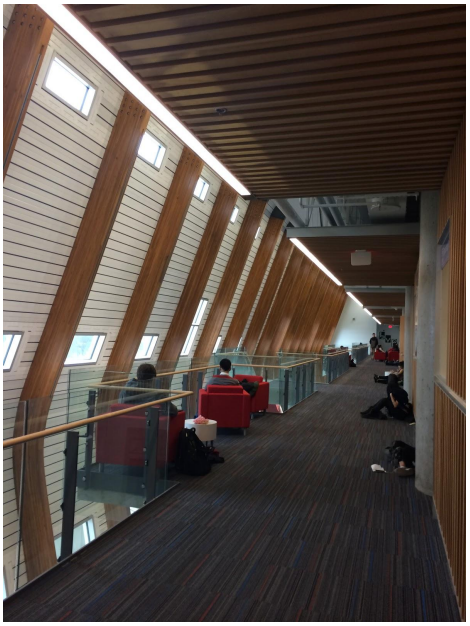


Figure 7: Linear Lounge looking south

Photovoice Analysis:

This photo shows students using the space at a peak period – lunch time. Here, the undersupply of chairs is noticeable, as students are using the floor to sit because all the chairs are full; they are also moving to the walls to use the electrical outlets to plug in their computers. This photo represents the disconnect observed between the fourth floor and the goal of placemaking, as it is creating a space that is relatively unfriendly and uncomfortable (for those sitting on the floor).

The linear lounge is characterized as a quiet space with less traffic, that usually accommodates individual study, eating, and relaxation. Some group activity does occur here, but it is always relatively quiet. It appears that people who use this space are

aware of their neighbours and the quieter ambiance found in this space. As heard through interviews, and as observed on the majority of occasions, this area needs more seating to accommodate more students. It is important that this additional furniture is multi-functional to accommodate the diverse needs of students. Lastly, both the existing and new furniture should be on wheels so it can be easily moved without damaging the rug.

Desk Area

Photovoice Analysis:

Here, the desk spaces at full capacity can be observed. Many students are using headphones in this space to cancel out ambient noise from the floors below. This photo relates to the goal of placemaking as it provides students a quieter, but animated, space for reflection and study.

Figure 8: Desk Area looking south west

The desk spaces are described to be conducive to studying. Although this space does have ambient noise from the floors below, it does not seem to bother the students, as they are often using headphones to drown it out. Students like the openness and brightness of this space, as it provides ample natural light. Primarily, the desk spaces are used eat and study for short periods of time. Data collection has also rendered this space as needing more capacity, as it is usually full.

Pocket Lounge

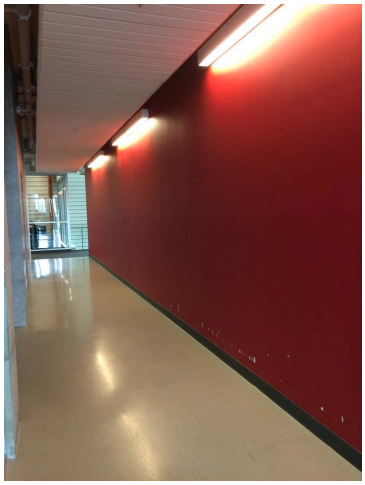
Figure 9: Pock Lounge looking south

Photovoice Analysis:

This photo captures the versatility of the pocket lounge, as students are studying, socializing, and lounging. This photo is a good representation of the indifference feelings experienced in the pocket lounge, as it is neither quiet nor socially animated. This eclectic situation exists due to the location of the microwave and the stairs/elevator across from this space, as it provides an area of refuge for waiting or overflow seating.

The pocket lounge proved to be the most difficult to characterize, as students don't really have any ties to this space. It is often used for only short periods of time while waiting, and it is being underutilized due to its transient qualities and lack of outlets. This space would benefit from utilizing the abundance of natural light (a quality that students like) by adding some type of greenery, adding more desk spaces, and providing outlets so students can be accommodated for longer.

Circulation Area



Photovoice Analysis:

Shown in this photo is a wall in the north hallway on the fourth floor. Here, nothing is really happening, which is part of the issue, as this space does not provide any aspect of placemaking or welcoming. This situation exists due to the small space that this hallway provides, so there is not much room or reason to provide any type of placemaking solution.

Figure10: Wall in north corridor

The circulation areas did not provide any type of character on the fourth floor, as students were just passing through this space. The aesthetic appeal of the walls and pillars in the circulation area could be improved by artwork and engaging competitions for said artwork, which will be discussed in the following 'Recommendations' Section.

Key Findings

The analysis of the four spaces has revealed three key findings that should be considered when implementing improvement strategies:

- Need to maintain quiet spaces for reflection and study
- Need to maximize multi-functional furniture arrangements and study options in these spaces
- Need for other smaller-scale, unobtrusive, interventions to improve aesthetic and functional appeal without impeding circulation or existing atmosphere

Recommendations

Linear Lounge

Repurposing Counter Space: During the observation process and various informal visits to the Nest, it was noticed that the existing counter space is rarely used. It is recommended to repurpose this space to provide more flexible and functional uses.

More Multi-Functional Furniture: During peak hours, the existing eleven red chairs are used at maximum capacity and some people end up sitting on the floor. Exploring multi-functional furniture for this space is recommended. Some of the options considered are: foldable tables placed along the wall. These can be closed when not in use to allow for unobtrusive traffic flow. Additionally, the tables should allow for different height-settings to accommodate both sitting and standing preferences.

Outlet Location: Outlets are only available on the wall side. This is not only inconvenient, as some people are obliged to move the the chairs by the wall, but also a safety hazard as some other people simply extend their devices' cables from the wall to the glass railing.

An immediate recommendation - furniture on wheels: The researchers are mindful that the above recommendations may take time to plan and implement. In the meantime, it is recommended to add wheels to the red chairs so that these can be moved more easily without risking damaging the rug. An example of furniture on wheel can be seen in the main lobby of the Irving K. Barber library.

Desk Area

More Seating: The desk area is often used at maximum capacity. It is recommended consulting experts to find the best way to add additional seating in this or other spaces.

Wider desks: People found the desks to be too narrow to accommodate a computer in addition to other items like textbooks, food, drinks, and among other. It is recommended to explore alternative options that would allow for wider desks.

Noise Mitigation: While users of this space enjoy the vibrancy, views and natural lights, they sometimes find it a little loud, especially when an event is taking place above 'The Egg'. The researchers recommend exploring the possibility of adding noise mitigation methods to this space.

Pocket Lounge

Additional Study Areas + Power Outlets: This area may serve to accommodate the overflow of students from the desk area. This would require providing power outlets -as there are none at the moment- as well as updating the existing furniture to provide more multi-functional options.

Repurposing Coffee Table: Throughout the observation process, it was noted that the white coffee table is rarely used as a table, instead it is mostly used as a foot-stool. Once again, investing in more functional furniture as well as a better use of the space is recommended.

Greenery: Given the spaciousness and brightness of the pocket lounge, this would be an ideal space for greenery like a green wall or hanging planters. This can serve as an opportunity to socially animate the space in an unobtrusive manner. Additionally, this intervention could also serve to promote placemaking by involving interested groups like the club Roots on the Roof and the Daycare Centre that operate on the same floor.

Circulation Areas

Artwork: Like the greenery recommendation, artwork is another way of animating the space in a subdued way, while at the same time promoting placemaking. This recommendation can be achieved by having a mural competition to decorate the cement pillars along the circulation walls. While the competition should be opened to all, the AMS should leverage this event to encourage the participation of UBC's indigenous community as well as other groups who may not be using the Nest on a regular basis. Some of the themes that can be proposed as a starting point may be reconciliation, inclusion, equity, sustainability, and youth and women empowerment, among others. This recommendation can be further developed and implemented in partnership with the Hatch Art Gallery, the First Nations Studies Student Association as well as other interested groups.

Environmental and Health Considerations: Update the automated toilet flushing system so it operates more accurately, saving water and maintaining clean and healthy bathroom facilities.

Noise Consideration: While the Black Vinyl Project (BVP) only allows 'jam sessions' with amplified instruments after 5:30 P.M. on weekdays, the loud noise may be a deterrent for anyone considering using the fourth floor for study or relaxation at the same time. It is recommended to consider investing in noise-cancellation options to maintain the calm ambiance of the fourth floor. Additionally, this can also provide more jam-session time for the BVP users.

Reiteration: As the student body using the Nest is transitory, a reiteration process is suggested every 3-5 years to identify the needs and perceptions of new users.

Conclusions

There is still a need for further research into 'quiet-space' or unobtrusive interventions in informal learning spaces. The suggested interventions, though not all academically supported, provide ample opportunity for improving the aesthetics, ambiance, and functionality of the AMS Nest fourth floor circulation and lounge areas without impeding the existing atmosphere. Placemaking, usually undertaken in spaces where social animation is key, is one concept which works to inform the ideas stated in this report. However, the analysis draws heavily on the unobtrusive nature of certain placemaking interventions that allow for a mental connection to the space: generating feelings of ownership and belonging.

It has therefore been determined through this analysis that the fourth floor circulation and lounge spaces of the Nest do currently contribute to vibrancy, animation, and usage but to the extent that sense of vibrancy and animation are limited to unobtrusive placemaking in informal learning spaces. With these findings, further subtle interventions are recommended to continue to foster a calm and quiet environment for study and relaxation. Simultaneously, these recommendations, particularly those done collaboratively with Nest users (clubs and its members) and the greater UBC student body, will strengthen users' 'mental association of affection', encouraging unobtrusive engagement with the space.

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Appendix A - *Interview Sequence*

Warm Up

1. What brought you to campus today?

Main Body

2. What do you like about the Nest as a whole?
3. Which spaces in the Nest do you use?

a. *If use of space is not obvious, use this prompt: What do you use each space for?*

4. How often do you come up here?
    a. If not often, why not?
    b. If never, skip to Question 7.
5. What, if any, activities do you partake in on this floor?

a. *Prompts: studying, socializing, relaxing, eating, meetings (coworkers, students, mentors, faculty members, etc.), other? Please specify)* b. How long do you typically spend doing this activity?

6. What features do you enjoy about this space?

a. *Prompts: light, silence, seating, etc.*

7. What would you change about this floor in order to make the space a more desirable place to be?

a. *Prompt: plants, music from the in-house radio station, artwork displays, etc.* b. *Prompt: can you think of a lounge area in Vancouver or elsewhere that you enjoy spending time in?*

Cool-off:

8. Do you have anything further to add?
9. Would you be interested in participating in a focus group concerning the existing and

future fourth floor lounge and circulation spaces? [*if yes*, please write your email on the consent form. We are to take a second picture of the form to capture the email address.]

10. At the beginning you said you were here for 'school, work, visit, etc.' Do you mind sharing...

    *If student or faculty: In which faculty or department do you study/work?

    *If staff: Where do you work on campus?

Closure

Thank you for your time. We appreciate your participation! Again, if interested in looking at the final report, it will be available on the AMS website as of [approx. date TBD]

Appendix B - *Focus Group Sequence*

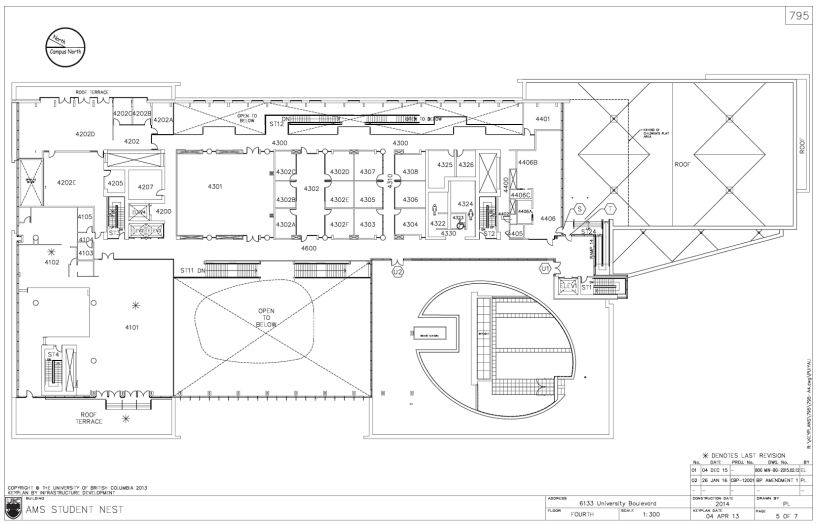
1. What elements of the fourth floor circulation and lounge spaces do you like?
2. What elements of the fourth floor circulation and lounge spaces would you change?
3. Please describe your level of satisfaction with the categories below (Li, J. et al., 2015; Prieser, 2002):

   Note: the focus group facilitator/s will use the qualitative characteristics describing each category (in brackets) to guide the conversation.

   - Function/use of space (single use-multi use)
   - Space ambiance/feel (dull-lively)
   - Space appearance (indistinctive-distinctive)
   - Length of stay (short-long) | [5-15 min] [16-30 min] [31-60 min] [61+ min]

   - Space capacity (crowded-spacious)
   - Lighting (discomfort-comfort)
   - Acoustics (noisy-quiet)
   - Temperature (unpleasant-pleasant)
   - Maintenance/Cleanliness (unpleasant-pleasant)
   - Safety (not safe-safe) o Personal o Belongings

We will use the floor plan below to assist with the focus group to ensure that participants know the exact area in question. Additionally, we will use red, yellow and green dotted-stickers to indicate feelings of unhappiness (red), neutrality (yellow), and happiness (green) in certain spaces. This categorization will provide a **visual map** of the areas that would require most attention.



Appendix C - *Coding Framework*

Question	Codes	(Issues Discussed)	Themes Identified
1. What brought you to campus today?	- Class		1) Space is used for activities before or after classes
2. What do you like about the Nest as a whole?	- Openness - Multi-functional - Contemporary	- big - lots of places to sit and eat - central location - feels new - close to all of my classes - feels more open and spacious than the old sub	2) Building feels open and spacious 3) Provides spaces for a variety of activities 4) Liked more than the old SUB 5) Building is centrally located for those who use it
3. Which spaces do you use in the Nest?	- Seating - Ambiance	- window seats - desk spaces - couches - quiet spaces - secluded	6) A variety of seating options is preferred to accommodate a range of activities and desires
4. How often do you come up here?	- Habituation - Episodic	- about three times a week - pretty often, I'll come up here [the fourth floor] first to see if there are any seats - most days for the microwave	7) those who come to the fourth floor do so regularly
5. What, if any, activities do you do on this floor?	- Studying - Club activities - Eating		8) space is used for a variety of activities
6. What features do you enjoy about this space?	- Lighting - Noise	- how bright it is - good lighting - needs more spots for studying - noise level is better up here - quieter up here - nice lighting - it's bright	9) space is conducive to studying because the lighting and noise levels are good 10) studying is limited in the space because there is not enough seating
7. Given the social animation focus of our assessment, we are interested in knowing what kind of	- Habituation - Episodic	- usually once a week - for about an hour - group projects - club events - hanging out and eating between classes	11) space is somewhat conducive to group work or other forms of socialization 12) Not much time is spent on the fourth floor

Appendix C - *Coding Framework - Continued*

activity you do here as a group. Do you mind sharing that with us?		- for the microwave - chatting with friends	participating in group activities
8. What would you change about this floor in order to make the space a more desirable place to be?	- Noise - Seating	- too open sometimes - the sound can carry - really liked the wooden blocks at Irving for hanging out - as long as it's quiet I like it - nothing, I like it a lot	13) space does not necessarily provide adequate spaces for long-term group work or group socialization 14) desires for limited noise and activity for those who study and relax

Appendix D - *Thematic Analysis Matrix*

Basic Themes	Organizing Themes	Global Themes
1) Space is used for activities before or after classes	Functionality	Quiet spaces for reflection and study
2) Provides spaces for a variety of activities		
3) A variety of seating options is preferred to accommodate a range of activities and desires		
4) space is somewhat conducive to group work or other forms of socialization		
5) Building is centrally located for those who use it	Convenience	
6) those who come to the fourth floor do so regularly		
7) Building feels open and spacious	Aesthetics	
8) Liked more than the old SUB		
9) space is conducive to studying because the lighting and noise levels are good	Ambiance	
10) desires for limited noise and activity for those who study and relax		
11) studying is limited in the space because there is not enough seating	Features	
12) space does not necessarily provide adequate spaces for long-term group work or group socialization		

Appendix E - *Participant Observation Matrix*

Where on the fourth floor: a) Lounge b) desk spaces c) red seating	# of people observed	Time observed	Movement	Individual or group	Noise	Aesthetics/ Furniture	Activity	Comments
c - red chairs	12	3:45-3:55	3 people walking through the hallway towards grad lounge; no people walking to the BVP;	many seem to come here on their own; transient space? several (4) chairs emptied in ten minute period with one person entering	quiet in this space, but noise from floors below is obvious (people talking);	11 chairs, 4 small coffee tables; people have moved them to different parts of the hallway/into different spaces;	most are studying or on their phones, a few (4) are chatting quietly; 7 sitting in chairs, 2 on the floor; 3 people walking through the hallway towards grad lounge	
c - red chairs	5	4:00-4:06	Few ppl (2 so far) have used the back stairs to come up.	All but two ppl seem to be hear by themselves. The group of three is sitting on the far S end by the BVP room.	space is mostly quiet although some noise from the club's hallway can be heard. at the moment, the clubs don't seem to have too many people (indicate approx #) but when that is the case the noise from the that space will easily travel to the red chairs area.	I counted 11 red love seats? 9 of them distributed equally between the three balconies, and 2 other ones aligned along main wall: one on the N and another on the S side.	ppl mostly using their computers and phones (one reading from a book).	4:04 two more ppl came in to sit and study/read 4:05 two more ppl came in to take pics. gut taking pic pf girl with the siding panel/windows in the background.

Appendix E - *Participant Observation Matrix Continued*

Desk spaces	14	03:45:00-3:55		All seem to be here individually, other than one affectionate couple	-the desks/chairs area is quiet but noise from the lower floor/s (event above theater) and atrium flows in the air. Yet, this does not seem to bother the 'students' much as only a few of them (4) are wearing head phones - although this may be because they don't have any or forgot them at home.	hallway behind desks and desks are kept clean.; - outdoor climate (which can be seen through the panoramic windows) is grey. I wonder if when a sunny day the bright light causes any comfort/discomfort. -desks are properly light with overhead? light and equipped with multiple plug-ins/charging stations.	All seem to be studying or using their computers for other purposes; side events happening at the moment: bake sale on the space above the theater (name?)	15/16 chairs are taken. wifi works uninterruptedly.
b - desk spaces		3:56 - 4:05	there is lots of movement throughout space as people come and go/are on the quest for seating.	People are using the corridors to come and go in groups and individually.	this area definitely has a lot of noise coming from the floors below but it is still relatively quiet (more of a background noise that doesn't seem to be affecting anyone).	the chairs around the desks are all full now, indicating some space constraints for desk space/seating in this area.	everyone is on their own device with the exception of one couple.	it seems as though a lot of people are getting distracted/are observing the sorority event happening in the space below

Appendix E - *Participant Observation Matrix Continued*

b - desk spaces	15	4:06-4:16	high traffic area much louder than lounge and red seat area; some (3) people heading from the main outdoor courtyard; several (6) heading to elevators, 3 seen entering the Gallery; one person travelled through hallway on a motorized scooter/wheelchair towards the lounge area; at least 4 people seen going into the club lounge spaces	mixture: most at desk spaces are by themselves. Those walking through the space are often alone but sometimes in a group	someone yelling at someone else on the floor below;		all people on their own devices except for one couple;	
a - lounge area	4; 2 people sitting together on a couch and 2 sitting separately on couches	3:45 - 3:55 pm	some people coming and going to use the elevator or stairs; low 'traffic' area with some couch spaces still available.		- very quiet areas where 2 people were lounging,		one seems to be studying on his computer, and one woman is on her phone;	
a - lounge area	3: two on opposite couches and 1	3:56 - 4:06	Elevator traffic (13) people walked right	mostly individual work	pretty noisy when people get off the elevator	seating for at least ten people on couches with 1	no one from the elevator stopped in the lounge space but	one person arrived just as I was leaving to

Appendix E - *Participant Observation Matrix Continued*

	recently arrived		through the space,			large coffee table; no one has rearranged the furniture here;	sometimes were speaking very loudly; two people here on their phones; one person on laptop with headphones in; no one is talking;	do group work with another person who is already sitting here