

Prowling & Privacy:
Observing Student Behavior in a Library Computer Commons

Tamara Marnell
tmarnell@indiana.edu
December 14, 2010

Abstract

Information professionals and members of the public generally operate under the assumption that an individual's work and activities on library computers should be considered private. However, most discussions of security in the digital age have focused on the handling and protection raw data, and neglect the effect of the physical space *around* computers in public places. In this study, I examine how the blurred intersection of private (virtual) and public (physical) spaces in a university computer commons affects the individual and interpersonal behavior of patrons. For three one-hour periods at the end of the 2010 fall semester I observed students and other visitors to the East tower of the Herman B Wells library at Indiana University, focusing on the behavior of and interactions between patrons "prowling" for and using computers. I find that behavior between strangers is exaggeratedly asocial and recommend several changes to policy and architectural layout that could improve user experience.

Introduction

Most of the literature written on the clash of technology and privacy in libraries has focused on the virtual content accessed or produced by users. For example, Fifarek (2002) wrote on the ways librarians could protect patron information and prepare patrons for safe information seeking in the wake of the PATRIOT Act of 2001. He urges librarians to thwart prying law enforcement agencies by establishing transparent policies on patron privacy and continuously wiping usage information from computers. Magi (2010) discussed the nature of 27 online database vendors' data collection policies and found them to fall short of "the standards articulated by the librarian profession...for the handling and protection of user informatio" (p. 267). Sturges (2002) contrasted the historical use of physical space to protect patron privacy, like placing desks in secluded areas, with the open community atmosphere cultivated by modern libraries. He contended that "privacy is still a crucial concept in modern librarianship" (p. 211) advising librarians to protect it through written policies and by properly organizing patron data to "prevent misuse of the system" (p. 213).

Though Sturges (2002) flirted with the subject, papers like these overlook a key issue regarding patron privacy: the interface between a virtual space and the physical place around it. This interface has been examined by social scientists outside of library science (see Kaya, 1999; Li and Li, 2007). These researchers studied the behavior of citizens at Automatic Teller Machines (ATMs). Both teams found that the amount of personal space desired by users to protect privacy was less than the actual space left between customers. Kaya recommended specific alterations to the physical space around ATMs to better protect privacy, such as marking the start of the waiting line on the floor or orienting the screen away from waiting customers. Rensel, Abbas, and Rao (2006) addressed this issue as it relates to library computers directly. They described a model of factors that influence patrons' willingness to engage in e-banking, a sensitive and private activity, on public library computers. They pinpointed many factors, but one of particular interest is the effect of "the physical environment surrounding a computer in a public library" (p. 30). They hypothesize that the visibility of computer screens, proximity to other patrons and general atmosphere of crowdedness affects patron willingness to engage in "transactional use of Internet connections in public places" (p. 27).

In this study, I observe the students and other patrons at a library computer lab in a large public university. I focus on the behavior of "proglers" (patrons looking for open stations in the area), the interaction between former and anticipated users of a station during "claiming," and the demeanor of students in conspicuous areas like printing stations. I find that concern for the privacy of others using the computers may influence students to act asocially in this inherently social space.

Setting and Methods

Observations took place in the Herman B Wells Library at Indiana University Bloomington, a university in southern Indiana with approximately 32,000 undergraduate and 10,000 graduate students. The Herman B Wells library is comprised of two towers, East and West, joined by a central atrium. The ground floor of the West tower contains an Information Commons with 250 computers for student use. Additional floors provide group study areas, presentation practice rooms, and the Undergraduate Core collection of "current titles and high-use materials." The West tower also provides access to the basement, where Media and Reserve

services, the food court, and administrative offices are located. The ten-story East tower houses the stacks, government documents and maps, and technical services. On the ground floor sit group study tables, Copies 'n More, reference and circulation services, and 20 computers (both Windows and Macintosh boxes) for student use. Each cluster of computers is arranged around a support pillar and printing stations are located on the eastern side of the four northern-most clusters. Diagram 1 (Appendix I) illustrates the layout of the room.

My observations were limited to the ground floor of the East tower in the cluster of computers. I chose this site because the Information Commons of the West tower was much too large for a single person to observe, but smaller specialized labs around campus with 10 or fewer stations were too small to observe a substantial amount of activity. Observations took place on November 18 from 3:45 to 4:45pm, December 1 from 1:00-2:00pm, and December 8 from 12:45 to 2:05pm. These dates were towards the end of the semester, when library activity peaked before finals. My first observation was from the northwestern-most cluster, the second from the center western cluster, and the final from the center eastern cluster. I continuously took notes by typing into a Word document. During the second two observations, I spoke to two people in the area about their activities, for a total of four unstructured interviews. Per the recommendations of Browne (1978), I did not tape-record or take notes during these conversations, but summarized them directly after the fact. At the end of each observation I summarized my impressions and preliminary conclusions from the hour, included in appendix II.

During the observations, I did my best to “blend in with the library surroundings and unobtrusively document events happening in the space” as exemplified in Given and Leckie (2003, p. 377). I adopted some of the suggested strategies for appearing unobtrusive, such as “appearing to look elsewhere in the room, while stealing glances at the individual being observed” and “giving the appearance of doing work akin to that being done by other patrons.” However, some individuals did make eye contact with me or “steal glances” in return when they saw me looking around, which may have inadvertently affected patron behavior.

Results

I. “Prowling”

The majority of people entering the computer area entered from the atrium on the southwestern corner of the room. They tended to take one of two paths. The dominant choice was directly through the center of the clusters, walking northwards. The second choice was to walk along the western wall, cutting to the center aisle after passing the second cluster. Students walking along the eastern wall, next to the reference desk and group study tables, were almost always headed for the reference room instead. These paths are illustrated in Diagram 2 in Appendix I.

The pillars in the center of each cluster, necessary to support the many tons of materials housed on the higher floors, pose a significant obstacle to efficient prowling. During my first observation, it was necessary to crane my neck around one to observe half of the room. People looking for computers had to peer around corners to find empty stations. A few stations were so obscured from view that only those who deviated from the primary central route could spot them. Most students dealt with this by leaving the center aisle to look around the sides or tottering on one leg to see rows behind the pillars.

When students were “prowling” alone, they exhibited a range of behaviors. During the first two observations, students’ actions were very reserved. The standard course of action was to

pace slowly through the aisles, turning the head from side to side. Some would yawn, drink, eat, or check the screen of a cell phone while walking. Some, who were especially determined to find a station, would sit on the group tables or in empty chairs along the wall to watch and wait. If multiple students were eyeing the same open station, the person closer to it would take precedence and the other would try to avoid conflict by looking or stepping away.

During the claiming process, student actions were mostly antisocial. People claiming a computer on the opposite side of the room would walk slowly or take an inefficient route to the target, presumably to avoid looking too eager. (Exceptions arose during the third observation, as discussed in section VI). Students would not directly approach others logging out of a station, but would stand at least one station away and wait for the person to fully rise and exit the area before placing their belongings down and sitting. Some would take impressive (and bizarre) pains to look like they were uninterested in the former user's computer. For example, my field notes describe:

- [A girl] is printing things. An Asian man with a coffee cup walked towards her computer, then turned away as she returned to log out. She rises to leave...he about-faces and sits down, placing his backpack on the ground. (*Observation 1*)
- A middle-aged man in a ponytail with a beard... spies someone rising to leave. As the student rises to exit, the man heads the opposite route around the pillar to reach the newly empty terminal. (*Observation 2*)
- An Asian girl is sipping from a cafeteria cup and standing stationary. The girl behind her is getting up to leave, but the Asian starts spinning in a circle, not looking at her. When the girl rises and leaves, the Asian sidles over to the machine, still sipping from her cup, and casually places her coat over the chair. Sits. (*Observation 3*)

Students rising from stations would almost never make eye contact with the student waiting to claim the seat, turning in the opposite direction or walking along a different path than the one his/her replacement stood on. When sitting down to a newly claimed computer, students would rarely look around at neighboring patrons. Some would tend to personal belongings or the music on their iPhones before logging on. While accounts loaded, they would take out notebooks and papers, fidget, look around purposelessly or stare at the loading screen as if it displayed meaningful content.

II. Printing

Though prowling was primarily asocial, behavior at the printing stations was more pronouncedly so. In order to print documents from the computers in this library, students must send jobs to the central system and then "release" them at stations located next to the printer. When individually releasing and waiting for jobs to complete, students appeared uncomfortable. Most would fix their gazes on the pages coming out of the machine, not at the people around them or other things in the room. Many would stretch, fold arms across the chest, play with hair, tap feet or make other nervous movements while they waited. After completing jobs, students would immediately return to their stations or move away to the stapler at the reference desk rather than check their papers in front of the printer.

During my three hours of observation, I never witnessed two students with independent printing jobs who stood at the same station speak to one another. The few groups who made conversation were obviously friends, moving around the room together and almost always

leaving after one had finished printing documents. Otherwise, the following excerpt is typical of the interactions that took place at printers:

“A girl with her hair in two-braids wearing a fancy red velvet blouse is printing things. She stares at the papers coming out. A girl with blond highlights and a poufy white jacket ...comes up next to her. She does something on the release station. She stares at the papers coming out of the printer. Looks at the station again, then the printer...now away behind the girl with the braids. The girl with the braids just stares silently. Highlights is adjusting her jacket, smoothing her hair, pulling at her fingers, folding her arms...takes out her cell phone to look at. The girl with the braids picks her papers up and smiles [*nervously*] as Highlights reaches for her own papers printed after them.” (*Observation 2*)

Despite the existence of less than a foot of space between the girl with the braids and the girl with the highlights, the two studiously avoided eye contact with one another. This was typical; very rarely did I see one person look directly at the other while printing. On multiple occasions, I witnessed a student walk towards the printer, but turn his/her back and wait on the opposite side of the aisle for someone to complete a printing job before using the release station. Some students would avoid interacting with each other entirely by spying on the print station from their seats and waiting for others to finish before they rose (though, as one interviewee pointed out, this may simply be because they do not want to waste time standing and waiting). In these respects, students tended to behave as the subjects in Li and Li (2007), in which people waiting to use ATM machines left three feet or more of space between them in an attempt to preserve privacy.

III. Marking Territory

Personal belongings play a powerful role in marking a user’s computer as “claimed.” When a person first settles to a computer, one of their first actions is either to hang a jacket on the back of a chair and place bags on the floor or table next to the station. While this is of course partly for convenience, the overt exploitation of belongings by several patrons indicates a secondary purpose of territory marking:

- “The owner of the backpack in front of the ‘abandoned’ computer has finally returned...it guarded his workstation for at least a half hour.” (*Observation 1*)
- “The apparently free computer has notebooks and pencils in front of it. The monitor shows the log-on screen.” [Several students approach but do not sit down to this computer over the next 20 minutes]. “[The owner] has finally returned. She looks around...and sits down at “her” computer to log on again. Removes her jacket and gloves [*she must have left the building*].” (*Observation 3*)
- “A middle-aged woman in an expensive-looking green long-sleeved blouse puts her jacket on the back of a chair and looks around. She sits and logs on...She leaves her belongings at the station and exits the room...” [About 10 minutes pass]. “The woman in the green blouse returns with a coffee cup in one hand and settles back into her chair. She’s smiling.” (*Observation 3*)

Though prowling and printing behaviors were asocial in the sense of unwillingness to interact with others, this kind of behavior is asocial in the sense of harming others. In the first example, a simple backpack at the foot of a chair deterred other potential users for upwards of half an hour. In the second example, I counted seven students who moved to use the computer in

the twenty-minute interim that the student operating it had left the building. The pencils and notebooks were an adequate deterrent to keep other patrons from attempting to use it, despite seeing the log-on screen.

Belongings were not the only way to mark a station as unusable or undesirable. Some students would leave the library without successfully securing a computer rather than approach a group standing and talking in front of an open one. Some students claimed computers with their own bodies: reading papers, using electronic notebooks or sleeping in front of a station rather than using it. I saw one male student enlist an acquaintance to sit in a chair (and operate his iPod rather than the computer) while he temporarily left the room.

IV. Reported vs. Actual Behavior

For my four interviews, I spoke to two males and two females. One of each sex was enrolled as a student at Indiana University, and the others were middle-aged. One woman worked as a staff member in the East Tower.

One pattern I found from these conversations was that actions were inconsistent with reported behavior. My first interviewee, the middle aged man, spent some time sitting on the tables and walking through the room, looking for an open computer. During this time, he did not speak to any of the other prowlers and frequently changed locations to find an improved vantage point. When he found a computer, he was so focused on claiming it that he abandoned his coat and hat on a table at the other side of the room. Yet when I spoke to him, he said he tried to help others find computers and did not have a particular strategy for locating one (he believed “people just take the first one they see”).

My third interviewee, a female student in the School of Public and Environmental Affairs, simply laughed when I asked whether she had a strategy for finding open computers. However, a few minutes later, the user of the station directly next to where we were standing started to gather his things. She said, “This person is getting ready to go,” as if this were a happy coincidence, which it probably was not.

V. Privacy

Though patron actions while prowling, printing, and claiming seem to indicate a respect for the personal privacy of others (or at least the importance of appearing to respect it), individuals displayed very little concern for their own. The computer monitors in this area were large enough to see clearly the activities of individuals on the other side of the room. Though anyone walking behind my back during the observation periods could have seen me “spying” and describing others in detail, the absence of any confrontational protests implies that nobody did. Yet, while they trod carefully around *my* personal data, I witnessed nobody take actions to protect their own. The undergraduate male interviewee observed that “people didn’t really seem to notice” if others saw the information displayed on their screens. Students boldly watched videos and opened personal profiles on social networking sites for all to see. Many hindered their awareness of passersby by listening to music on headphones. In essence, the issue of privacy appeared to act as a catalyst for social awkwardness, but was not an obvious concern for users.

VI. Changes over Time

The behaviors exhibited by computer users during my first observation were very different from the behaviors during my second and third observations. As time passed, users became increasingly outgoing. In the first and second observations, people claiming computers

never interacted with other prowlers or with the previous user of a station (with the exception of established friends). But during the third observation in “Dead Week,” the week before finals, students stood closer to the former user, made eye contact and even spoke with each other. A male student asked a female student if she were “done”; another male student asked me if I was looking for a computer as I stood looking for interviewees.

Behaviors also became increasingly “rude.” During the first observation, a single student left his back-pack to mark a station while leaving the area. During the third observation, I witnessed multiple patrons mark stations with belongings within the hour. In the first observation I saw one or two students with covered drinks next to their computers. By the third observation, every other patron had a cup of some kind in his/her hand, and students were eating full meals at the tables despite the “No Food or Drink” sign standing at the entrance of the East tower.

There are two possible explanations for these changes. First, the concentration of people in the room may have affected behavior. When the number of available computers decreased proportional to the number of users and the importance of completing assignments increased as the semester drew to a close, students may have begun acting differently than they would in a less pressurized setting. The total number of prowlers described in my observations rose with each observation period, supporting this reasoning.

However, an alternative explanation also emerges from my notes. The word “Asian” appears 22 times in my first observation, 15 in my second, and 17 in my third when the total number of students described was highest. Since I did not adjust my habits for description, it seems that the population in ground floor of the East tower became increasingly Caucasian over time. The number of domestic students of Asian descent enrolled at Indiana University is less than 5%, but during my first observation, I described an approximately one-to-one ratio of people with East or South Asian appearances to other people of other ethnicities. Thus, it is highly probable that many students who usually use the East tower computers are international.

Since these computers are located beneath the stacks, it is also probable that there are usually more graduate than undergraduate students. American undergraduate students likely gravitate towards the West tower Information Commons, where the Core collection and group study floors are located. However, during busy weeks at the end of the semester, the Information Commons may not be large enough to accommodate the influx of users and those excess undergraduates may come to the East tower instead. Asian cultures are generally more indirect and rule-oriented than Western ones (Pan, 2007), so the increase in direct behaviors may have resulted from an adjustment in cultural make-up in addition to the increase in population density.

Conclusions and Recommendations

Some considerations may temper the conclusions I have drawn from this study. The observation period was very short and, as discussed above, the sample population may have been different from the norm. The observations also took place in an unusually high stress environment, and behaviors may have reflected this. Most importantly, my description of these behaviors as asocial, created by the intersection of public and private space, would be negated if this behavior is the norm for the people I observed. For confirmation, it would be necessary to observe the same or similar groups in other areas of the library without computer access. Nevertheless, based on these preliminary findings, I recommend several courses of action for librarians to consider below.

Although two of my interviewees claimed the area needs no adjustment (saying, for example, “I don’t see anyone getting in fist fights over computers”), some improvements could be made to smooth the experience of users. Firstly, one interviewee mentioned that it would be nice if the library provided chairs for people waiting to sit in. The prowlers I saw would stand in the center of the aisle, sit on tables, or pull out chairs from the STC Build computers to wait for an open station. Providing additional seating would avoid the mistreatment of furniture and a shortage of chairs under computers where they are needed.

Secondly, the monopolization of unused computer stations by jackets and book bags (and the occasional sleeping body) was clearly injurious to many patrons. Other institutions of higher education avoid this (as well as unauthorized use by outsiders) by automatically logging off of an account that has been inactive for a specified number of minutes. However, this would not entirely resolve the issue, as people will avoid open stations with others’ things scattered in front of them. The library might consider prompting staff members to move items away from a seat that has been empty for a good length of time.

Thirdly, although students are not engaging in “fist fights” and have a generally established order for claiming computers, the uncertainty, competition and apparent shame in prowling detracts from the user experience. Currently, users can enter the open area from any angle in the room. Setting up an established entrance and waiting area would eliminate the need for competitive prowling. It would also reduce awkward behaviors like hovering around another student who appears to be finishing and spinning in circles to appear unconcerned.

Finally, the visibility issue posed by the support pillars could be solved by the use of an existing (and under-advertised) application developed by the University Information Technology Services: the Seat Finder. This software displays how many seats are currently open in each “lab” on campus. Erecting one of the ubiquitous display screens used for department promotion around campus at the entrance and displaying this feature, modified for display of the East tower exclusively, would drastically reduce the time wasted by fruitless prowling the area.

Bibliography

Browne, J. (1978). The used car game. In M.P. Golden (Ed.), *The research experience* (pp. 60-84). Itaska, IL: F. E. Peacock Publishers, Inc.

Fifarek, A. (2002). Technology and privacy in the academic library. *Online Information Review*, 26(6), 366-374.

Given, L.M., & Leckie, G. J. (2003) "Sweeping" the library: Mapping the social activity space of the public library. *Library & Information Science Research*, 25(4), 365-385.

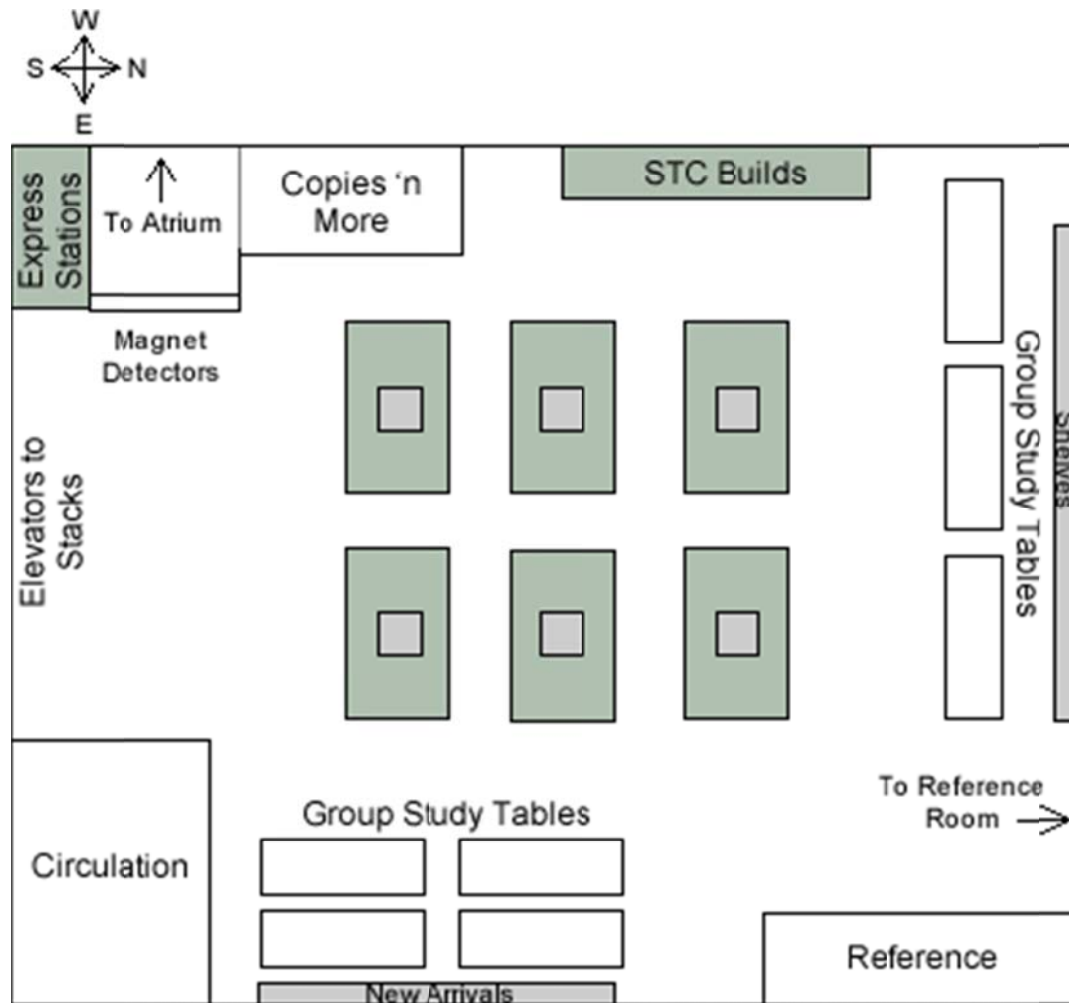
Kaya, N.A.Z., & Erkip, F. (1999). Invasion of personal space under the condition of short-term crowding: A case study on an automatic teller machine. *Journal of Environmental Psychology*, 19(2), 183-189.

Li, S., & Li, Y.M. (2007). How far is far enough? A measure of information privacy in terms of interpersonal distance. *Environment and Behavior*, 39(3), 317-331.

- Magi, T.J. (2010). A content analysis of library vendor privacy policies: Do they meet our standards? *College & Research Libraries*, 71(3), 254-272.
- Pan, Y. (2007). The role of sociolinguistics in federal survey development (Survey Methodology #2007-1). Washington, DC: Bureau of the Census. Retrieved August 13, 2009, from <http://www.census.gov/srd/papers/pdf/sm2007-01>.
- Rensel, A.D., Abbas, J. M., & Rao, H. R. (2006). Private transactions in public places: An exploration of the impact of the computer environment on public transactional Web site use. *Journal of the Association for Information Systems*, 7(1), 19-51.
- Sturges, P. (2002). Remember the human: the first rule of netiquette, librarians and the Internet. *Online Information Review*, 26(3), 209-216.

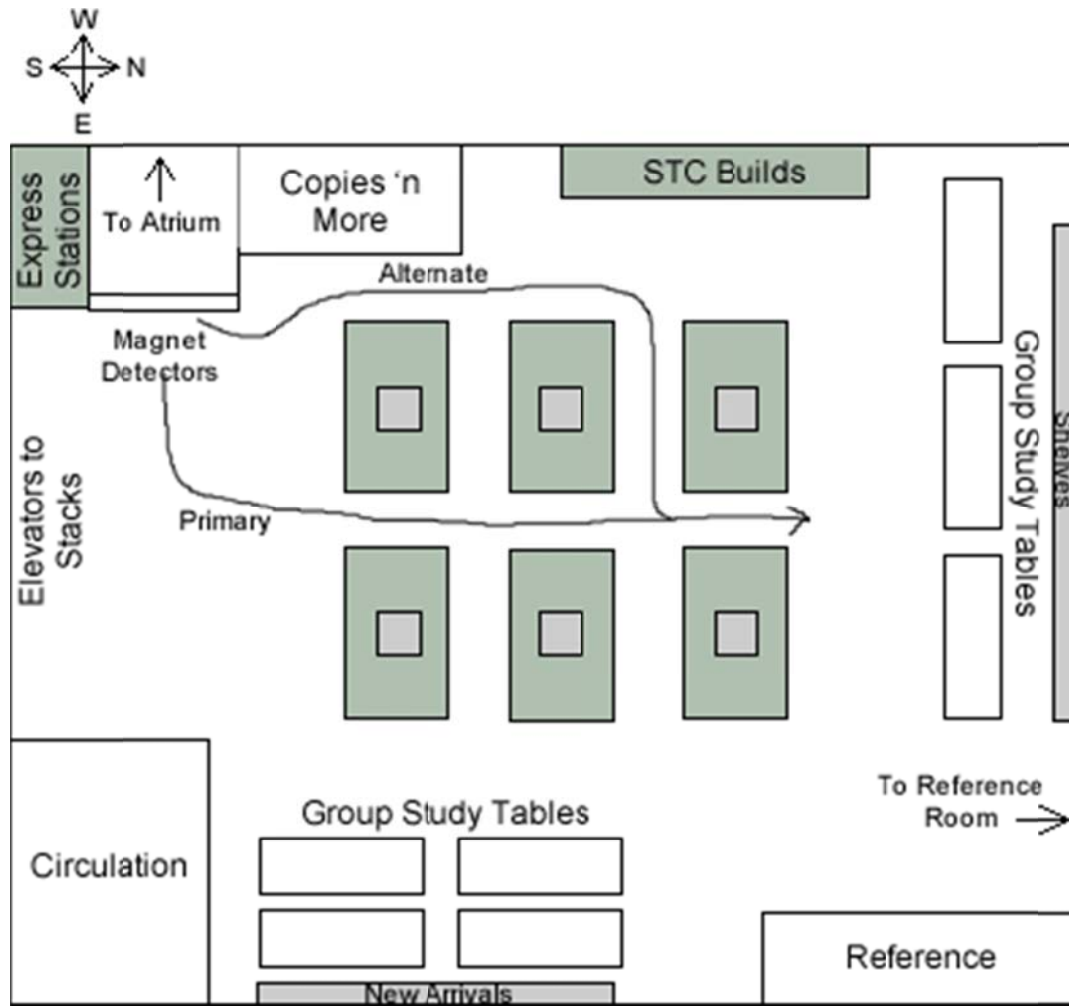
Appendix I: Diagrams

Diagram 1: Ground Floor of the East Tower



Note: Drawing is not to scale; the gray rectangles in the center represent computer clusters.

Diagram 2: Most Popular Prowling Paths



Appendix II: Observation Notes

Observation 1: November 18, 3:45-4:48pm

A group of undergraduates is working together in the back on tables. Computers are generally occupied. Asian male stretches and looks bored while printing papers. A short Asian girl *[in trendy clothing]* prowls for a computer, hesitating as she looks around at potentially empty screens. An Asian male talks quietly on a cell phone as he works on the computer...not in English.

A *[scruffy]* male hovers on the right side of the room, looking over the workstations and pacing. He's wearing a hoodie and backpack *[maybe waiting for someone?]* A man in a baseball cap looks around briefly, circles quickly, and leaves the wing. As the Asian with the cell phone rises from his seat, a brunette in black saunters *[nonchalantly]* towards his seat and claims it with a loud clunk of her backpack on the table.

A black man with headphones looks over the workstations, skirts the perimeter, then turns around and leaves the wing. An Asian male stands over a friend, looking at the computer screen. A large male gets up with his backpack. A pretty Asian girl walks passed his empty workstation towards the reading room.

Everyone around has possessions on the desk. The girl next to me a purse and water, the man next to me various papers and folders, and a scarf. An Asian girl with an open cell phone looks from left to right while walking towards the empty station left by the large male. Another Asian girl with long curly hair meanders through the desks with a bag of food in her hand, *[appears to be prowling but enters the reading room instead...potentially because she could not find a free station.]*

An adult continuing learner in a T-shirt with folders in her hand takes a strange path through the computers, looping around to talk to an older man at one of the stations. She stands still talking to her acquaintance. As an Indian-looking girl with a braid stands up, a blond takes her spot *immediately* and the Indian girl waves and whispers "bye." *[They're probably friends...the blond may have used her friendship to secure the workstation.]* The large male's computer is still free. A young man with a five o'clock shadow, dress shirt and tie looks over the shoulder of a skinny girl with highlights and a lot of eye makeup. They stand in front of the computer but look away, engrossed in conversation. *[There appears to be a problem; they both have serious looks on their faces.]*

A man in a polo shirt and backpack sips a cup of coffee while walking very quickly around the room. He approaches to the side of another student and inserts a USB into the computer, conversing in what sounds like an Eastern European language, and then runs over to the free computer left by the large male and logs in. He's standing while using it, with his body angled with his feet near the printer. *[He's probably in a hurry to print something for class.]* He logs out even before stooping over the print release station. His spot was free for about 30 seconds before claimed by a bespectacled Asian man who looks around *[furtively?]* at the other students in the room.

A young man in a long-sleeved white shirt puts his hand over his hair and scans the room while walking towards the reading room. A young Asian swinging two bottles of beverages also enters behind him. Two Asian students stand very close together, faces almost touching...the girl grabs

his arm and they smile. Hands wave frantically in the motion that “it’s hot in here.” The male walks towards the center of the computer hub, then stops and withdraws. *[He changes tactics]*, strides towards the center but looking in the opposite direction. The couple progresses through the room, stopping to talk to each other while looking around. They head towards the exit but gravitate towards friends at the group tables near the circulation station.

A man wearing a baseball helmet and track suit stands in front of the print station with another girl. He crosses his arms and stares at the machine while it whirs. The girl looks anywhere but at him directly...towards the opposite side...past his back...down at the workstation. *[They might be in the embarrassing situation that one person has to print many, many pages, while the second waits a turn.]* The man leans *[in an attitude of unconcern,]* with his hand hovering over the printing pages, peering occasionally at the machine *[as if there’s something wrong with it, though there obviously isn’t].* When the whirring stops, the girl dives in and grabs a single piece of paper. She sits down and is quickly replaced by a blond ponytail in a form-fitting shirt and rolled-up sweatpants. *[She looks like she did not stand up until she saw the other pair leave, so she would not be caught in the same situation.]* She monopolizes the print station, with one hand on the mouse and the other stretching across to the printer to grab pages.

There are no empty computer stations, but a few empty chairs. The chairs have personal possessions “claiming” them...one a backpack on the floor in front of the computer, in the way of the chair, another a piece of paper and writing utensil on the desk next to the keyboard.

Two adults have been standing talking for a while...apparently one of them logged off the computer because a blond male with long hair, a plaid shirt, and a bottle of Squirt soda cautiously pulled out the rolling chair next to the standing man. He hunches over, glancing around at people but NOT the couple one foot away. His hand is combing his forehead, chin, upper lip...taking a swig of the soda...as his browser loads.

The Asian girl next to me just rose and left, and her spot was usurped <1 minute afterwards by someone from behind. The new person is in a long black trench coat, with glasses and boots. She slaps papers onto the table and looks at them while her account loads. Coughs into her sleeve. She logs into some things and opens a document.

The man in the biking helmet who printed many pages approaches the reference desk...he does not ask for reference, but struggles with the complimentary stapler. A tall Asian girl with a pink backpack and striped stockings is walking through the room, tilting her head around the end rows, looking from side to side *[with a look of slight annoyance...not quite a frown, but a “put-upon” look.]* An Asian male snaps gum and listens to an iPod while printing pages. Uses his fingers to comb his hair. Stares at the printer...makes eye contact with no one.

A girl with very short hair and a trendy jacket and scarf looks around while heading towards the group tables on the side. The woman talking to the standing man from earlier rises and prints some papers *[she seems more at ease than the other people in the room.]* Two girls, one with a head covering, are prowling together. The one without a head covering approaches the express workstations, and the one with a head covering takes the “free” chair. They roll the chair together to look at one screen. *[Is this because computers are sparse, or because they’re working together?]* They open a word document *[it’s probably the latter.]*

A man working across from me has a Coca-Cola cup from the food court on the desk next to them. *[I don’t think the “No food or drink” sign in front of the entrance is enforced.]* That

calm-looking woman is still printing things. She has short hair, old-fashioned glasses with red rims, pearl earrings, an upscale-looking sweater, white jeans, and clean brown boots. The Asian who printed things while stretching things more than twenty minutes ago just approached the printer and made the exact same stretching motions while his papers printed.

Three men and a woman enter the library. The men have darkish skin and beards, wearing turtlenecks, one with a winter cap on his head [*but not over his ears, which defies the point*]. They're walking in the same direction, but looking independently. One of them (with the beanie) approaches a group working in the back, and the other walks very slowly to join him. The one with the beanie opens his arm towards the other and says "My friend..." to the man who stood from the table. The two resume their prowling, with the beanie-less one still looking around but the other apparently giving up. They leave the wing.

This is the first time I've seen the calm-looking woman sit down. [*She is probably not an undergraduate, based on both age and demeanor.*] An Asian girl with a ponytail and elaborate jacket catches me looking around. She's standing stationary, looking around at people, but not moving. [*Is she waiting for someone? Or has she found a good place to watch over the crowd for signs of movement? Here's a chance to see*] An Asian man just stood up and picked up his coffee cup. She began moving immediately [*but slowly*] from the opposite side of the room...and she's there. Sat down...logging in.

The calm-looking woman appears to have finally signed out. A tall man with ill-fitting jeans and a female acquaintance [*close acquaintance...friend, significant other, etc...because she's leaning in very closely as she sits on a wooden chair*] looks at the same screen. The computer was open for one minute or less, as far as I could see. However, the calm-looking woman is still here, talking to the same person she was before only at *his* workstation. The stack of papers in her arms is impressive. She's wearing a wedding ring (saw it when she used her hand to brush her hair back). [*Definitely in a relative position of power...at least graduate assistant or more.*]

The owner of the backpack in front of the "abandoned" computer has finally returned. I think that backpack guarded his workstation for at least a half hour. The girl beside me got up to print something, but her PDF is still on the screen. These screens are very large, so I can see at a glance which programs people are using without seeing anything with content. A middle-aged Asian woman is here. She walked passed a computer next to a printer, then doubled back to claim it [*probably assumed it was a release station*]. The married calm woman is still, stapling her many papers.

The girl with the computer-hunting strategy is printing things. An Asian man with a coffee cup walked towards her computer, then turned away as she returned to log out. She rises to leave...he about-faces and sits down, placing his backpack on the ground. The girl next to me is leaving. When I look around, I see a lot more people working in twos on computers than I thought I would. The man with the tie, who was previously talking to a blond girl, plops [*hurriedly*] in front of a computer. His shoes are black and shiny, but I think too large for him. He's tapping them with great energy. His mouse is plopping loudly on the table as he picks it up to use it [*I think that computer was his to begin with, so he's probably just an impatient-type person*].

A blond man with a long necklace, hands in his pockets, strolled towards the reading room a while ago. He kept his head turned away from the computers as he walked [*with an air of detachment, apparently staring at the wall above the Reference desk*]. However, I just spotted

him on the other side of the room (OPPOSITE the way he was walking), sitting down in front of a computer. *[Was his gait all show, or did he change his mind and circle around?]*

An Asian woman with short hair is printing things. Her arms are folded and she's looking at the papers coming out. A man with a tear in his jeans back pocket approaches *[confidently]* and takes over the release station. The girl ducks her head and turns away. She scurries away to the stapler, and he takes his papers and walks *[commandingly]* towards the group tables. The computer next to mine was claimed by someone who just entered the room and skirted the edge. He has a coffee cup and stirs it while his screen loads...he's looking at the groups, his possessions...but nowhere with an obvious purpose.

A muscular man in a tank top is looking directly at me. *[He scares me.]* He's glaring at his screen now, head on his hand...now down at his iPod.

An Asian girl with long hair and bangs in a long pink coat walked quickly around the room *[looks a bit like a nervous mouse]*...she claimed a computer in the back. A man with a beard and mustache carrying books in a "cool" leather jacket and dark-wash jeans walks past her *[I think the girl took his target]*. He moves towards the specialty station but decides against it. Returns to the same center T-spot, looks around, and then approaches the reference desk.

A boy with a Macintosh computer is working next to a windows computer. *[Transferring things?]* He's taking the workstation up without using it *[could be on purpose, or could be oblivion]*. The bearded man with books is striding out. The older couple working together (with the woman on the wooden seat) is rising to leave. *[4:44...let's see how long it takes for someone to claim their station. It could be tricky, because a group of two is working right next to them...an Indian-looking male and a petite brunette.]*

Pink coat & bangs girl gets up to print something, but she doesn't head directly to the release station. She stands behind the person currently in front of the printer, looking away and not acknowledging his existence. He turns around with his papers and sees her, side-steps. She does not make eye contact and stoops to use the station as she walks away. New blood is no longer entering the library *[probably because it's close to dinner time]*. So that computer is still free as of 4:49. A girl with an umbrella walking through the room looked towards it...her gaze still on it as she walked passed, but decided on pink-coat's former seat instead. *[Possibly because of the huddling couple? Or the desirability of a corner station?]*

A man in "Indiana" pajamas with a book bag strapped across his torso passed the free work station with the couple next to it, around to the other side to a different station. This time it is NOT a corner station, *[so I think that couple really is detracting from the real estate of that spot]*. An Asian male just walked through the center divide looking for a station *[either failed to see or ignored the free one]* and left.

Thoughts from Observation 1:

For a supposedly public place, people were surprisingly antisocial. Behavior at the printers was especially so, with students avidly avoiding eye or physical contact with people standing next to them, even going so far as to pretend to be doing something else. People approaching computers (not previously occupied by friends) never did so when the person leaving could see, and even people sidling into unoccupied computers tried to do so without the notice of people standing or sitting nearby (especially if those people were groups or people in conversation). People scouting for computers were sometimes obvious about it, but often looked away (like the especially sneaky young man with the necklace staring at the empty wall) or glanced around at other stations when they clearly had a target established. Only one student was bold enough to stand still and scan the area without engaging in conversation or “looking busy,” and she still took a slow, meandering path to her target.

Reasons for this behavior? Possibly, the “public space” does not extend to the space around computers, because they are assumed to hold “private” information (the conflicting fact that the computers, and the log of all activities performed on them, are owned by the university notwithstanding). Some speculative reasoning:

Judgment: if people are not doing schoolwork, it would disturb the social balance if others saw and “looked down on” the Facebookers. If doing schoolwork, people from other disciplines or higher on the academic ladder could also pass judgment.

Plagiarism/Theft: For those doing schoolwork, it is most likely new intellectual content that could be stolen by onlookers. For those doing other activities, personal information on social networking accounts (or in extreme cases, online banking etc.) could make one subject to identity theft.

Image: Students may avoid making a beeline for free computers so as not to appear selfish. They may look around aimlessly while logging on or printing so as not to appear too eager or bookish; this would essentially be displaying a ‘weakness’ to the room given the modern ideals in American culture.

It may be that students are more concerned with these while prowling and claiming than they are while actually using the computers; nobody seemed concerned at all that their “personal” information was on a gigantic screen readable from the other side of the room. But that isn’t the main concern of this study. In order to determine whether these speculations have merit, I’ll have to rely on the four informal interviews coming up in future observations.

Notes for future observations:

- 1) Observe whether people put their things down *before* or *after* sitting in seats
- 2) Find a station that does not have an enormous pillar to crane my neck around; this made it harder to look like I wasn’t doing anything remiss
- 3) Try to determine the “real estate” of different types of stations.

Observation 2: December 1, 2010, 1-2pm

A female student with her fringe pinned up in a “bump” came into the library and watched an older male with bleached hair standing and picking up his things. The man noticed her watching and she gave an *[awkward]* grin...he moved his things over to finish packing and she took the seat and signed in. The two of them didn't look at each other further.

The girl beside me picked up her things and left; an Asian male with glasses and two layers of hoodie jackets strode over and took the seat as soon as her back was turned. I had planned on swapping chairs because mine did not have adjustable height (the lever was broken); when he saw me looking at the chair he hesitated and didn't sit down until I had turned away to find another seat to steal. A young couple wearing matching bright red shirts (the male a sports-type jersey and red beanie) jogged over to the printing station. The girl (very petite, with trendy makeup) is smiling while talking to him and using the release station. The printer makes whirring noises and the male bobs his head to the sound *[as a comedy act for his companion]*. He helps her with her coat as she shuffle through papers. Their gestures are exaggerated and affectionate. They leave the library.

A thin middle-aged woman with very short hair and glasses, wearing dark-washed jeans and a cardigan, is talking to a blond girl and looking around. She points to various computers, then singles out a young man at a work station. Words are exchanged; the girl takes the computer and the woman directs the young man to a computer on the other side of the aisle. *[A claiming conflict?]* The woman appears to be a staff member here.

Two Asian students in plaid and hats, one male, one female, enter the library. They exchange words in a language other than English. The girl heads towards the center of the computer area, looking around, *[probably prowling]*, while the young man heads for the group tables in back and watches her. A young man with a beard listening to an iPod comes in takes the standard path through the center of the computers. He looks around...makes eye contact with me, then turns on his heel and walks out. Another young man with a beanie and red backpack strolls down the center, looking around *[but not too energetically. He appears to have already given up and is just taking a last look while heading for the exit.]* A tall male student in a black jacket with backpack is also strolling and looking *[half-heartedly]*. He takes up a position near the center of the terminals and stands, stationary, while looking around (his feet don't move, but his head does.) *[I think we have another strategist prowler]* He looks at some change in his hand. Fiddles with chairs nearby. Finally *[gives up and]* heads for the exit.

An older Asian lady with an expensive-looking bag headed down the aisle while looking around, then took the same path backwards and out to the exit. The Asian male who sat down next to me has left; his computer station is free as of approximately 1:15. It's one on the end of the row, and for some reason the table is lower than those around it. *[I didn't notice it was there when I came in...will others?]* A pillar blocks it from the view of the popular central path *[so it's likely to be missed...the tall male in the black jacket didn't notice it, nor did the middle-aged Asian lady]*. We have another prowler now; a thin young woman in a gray hoodie and Uggs. She's holding papers and took the standard center path while looking for a station...missed the open one next to me and left. Finally, a taker...an African American male with a hoodie, large backpack. He's bobbing his head to the loud sounds coming from his iPod...takes it out to adjust what's being played while he logs in. He didn't take any of his things off; still wearing the backpack after sitting. *[The music is apparently second in priority after claiming a seat.]*

A short profile of the students currently using computers: almost everyone around me is working independently on the computers. Behind me, a female and male discuss things while looking at Excel files on their individual screens *[they're probably in a group or at least the same class]*. Across from me, an Asian male in a plaid shirt with glasses and a leopard-print bag is sitting close to a female in a striped shirt. The two of them are taking one computer station, but neither of them are using it. They're both reading paper words on print *[...at least I thought so until I took a good look at the male.]* He's actually asleep on his hand, not reading the paper at all! He hasn't moved for at least five minutes...and the girl, who's using a tiny electronic notebook, isn't interacting with him at all.

An Asian girl in a wool skirt with leggings is standing in the center, looking around *[for a computer]*. The female student with the "bump" began to rise. The Asian girl watches *[boldly]* as the girl picks up her things and leaves, though they don't make eye contact and the girl turns away from the direction of the Asian and takes a path different from the standard central one (where the Asian is standing) to the exit. The African American student next to me rose to print things. His seat was open...a male strolled *[languidly]* past it and gave a prolonged look at the screen while continuing to move. It has been a couple of minutes since the Asian girl took over bump girl's seat, and she's just now taking her coat off, plopping it next to her bag on the table, and exhaling audibly.

The sleeping student just woke up. Without saying anything to the girl not one foot away from him, he leaned down to read more papers. Leaning...leaning...and his forehead is almost on top of his forearms. *[If he tilts much more his glasses are going to push into his face and he'll wake up with embarrassing marks.]*

The African American next to me left after printing things. Two girls in jeans...one with bright-blue eye shadow, approached *["pranced over"]* and took the station. The one with the eye shadow dragged a wooden chair over and the two are talking *[excitedly, but in relatively quiet tones]*. The commotion woke the sleeping student with a start...he looked over with wide eyes and readjusted *[as if to settle down and work seriously]*. Half a minute later, he's asleep again. The girl next to him uses her hand to pat him on the cheek, support his chin playfully. *[That explains the lack of communication despite the appearance of group work...they're probably in a romantic relationship.]*

A well-dressed young man skirts the edge of the computer group. He turns around and exits. A gangly, middle-aged man in a ponytail with a beard, in a gaudy track suit, is standing in the central location, peering around with his right hand in a pocket and his other holding a backpack. He watches a young man with a beanie and rock t-shirt print things. Another male passes the edge, tapping his book loudly as he looks around. *[I don't know whether he's trying to be more or less conspicuous about his prowling by doing that.]* The man starts spinning to look around at computers...he spies someone rising to leave. As the student rises to exit, the man heads the opposite route around the pillar to reach the newly empty terminal.

A man with gray-white hair is looking around at the people in the area. *[He doesn't appear to be prowling, so I have no idea why he's looking with such a stern look on his face.]* A male with his hair gelled up like Fonzie strolled through the center aisle, then turned on his heel to exit. The older man with the gray hair is heading in my direction. He places his things on a table behind me and leans against the chair, still watching. Now he's sitting on the table. *[Another strategist?]*

As an older person, he may be more comfortable watching obviously...not engaging in the usual distracting behaviors.]

Two girls with heavy makeup, one with bleached hair and a cup of coffee in hand, walk very slowly through the center aisle. Gray hair gets up from his table and walks towards them to look around again. *[Cutting off the competition maybe?]* He's sitting on a table near the center instead, placing his hands on his head with his elbows sticking out, crossing his arms and puffing his cheeks out in an expression of belabored patience. Now he's pacing up and down the aisle. A male student in a Cream & Crimson shirt printed some documents. Now a girl with long blond hair in a headband is printing documents. A male student in a blue Pi Kappa sweatshirt comes up next to her to print. They ignore each other, but when another girl walks by the male student waves. The blond is staring at the papers coming out of the printer. The male is looking away at other people, not touching the release station. When she takes her papers and leaves, he finally approaches the computer to print his own documents.

The man with the gray hair found a computer and is logging in. He left his jacket on the table over here. *[Should I give it to him, or would that be too much interference? No...this is a good opportunity to interview.]*

Notes from Interview 1:

I opened by handing his jacket and hat to him. The man with the gray hair is very friendly. He said he doesn't feel awkward at all looking for open computers, and if he sees anyone else prowling he tries to direct them to make things easier. He said it would be nice if the library had a row of seats where people could watch and wait for open work stations. He thinks most students who come in here usually just take the first computer they see, and don't have a strategy for finding stations. He asked why I was conducting research in the library...I explained that I was in a research methods course for the MLS program and I was observing computer labs in a library setting. He said the current setup seems to work okay: "I don't see anyone getting in fist fights over computers [laughs]".

Returning to observation.

The girl beside me rose and left the library, and her computer was taken almost immediately by two male students. One sat and took command of the mouse...the other is standing and pointing to the screen as he does things. The one standing did not remove his backpack, but did place some papers and spiral-bound manuals on the table. A tall male in several layers with glasses walked through the center aisle, looking for a station. It took him a while to spot the one behind me, on the corner. He claimed it *[slowly, but not awkwardly]*. The one operating the computer next to me rose, and his standing partner promptly set down his backpack and sat in the seat. He's ignoring the screen, though...fiddling with his iPod. The male student comes back and asks whether his documents should be double-sided before leaning over to print things. *[Was the companion acting as a human place-holder?]*

An Asian male in a plaid shirt, holding a winter coat and slinging his backpack over one shoulder, is walking up and down the center. He heads for the back and looks down the side. He hesitates and looks back. He heads for a computer and stares at it *[did someone rise to print something and leave a deceptively empty seat?]* A girl with her hair in two-braids, wearing a fancy red velvet blouse, is printing things. She stares at the papers coming out. A girl with *[excessive]* blond highlights and a poufy white jacket...the girl who was actually next to me with

the one with the blue eye shadow...comes up next to her. She does something on the release station. She stares at the papers coming out of the printer. Looks at the station again, then the printer...now away behind the girl with the braids. The girl with the braids just stares silently. Highlights is adjusting her jacket, smoothing her hair, pulling at her fingers, folding her arms...takes out the cell phone to look at. The girl with the braids picks her papers up and smiles [*nervously*] as Highlights reaches for her own papers printed after them.

During that time period, the male student next to me came back, and Mr. Placeholder is now operating the computer [*dully*]. The one who had it originally is giving all the orders on what to print and how [*the one operating it is more interested in the phone in his hand than the task they're performing together*]. The original guy smacks gum as he releases his print jobs. He takes the time to sign out of the release station before coming back. A male student in a red hat and hunting-type jacket walks down the center aisle, looking around, but turns back towards the exit before making it all the way to the end. An African American student with a tiny Mohawk took a novel path through the computers, walking up the side, cutting through the center, circling around the other side and heading for the exit. The Asian male in plaid who was previously deceived is still wandering around looking for a station. He pulls out one of the chairs by the DataStream SDC Platinum stations and sits, facing the computer area. He props his chin on his hand and looks languidly at the previously sleeping student, who rises and forfeits the station to his companion [*presumed girlfriend*].

A few minutes after sitting, a woman in a cardigan with short hair and glasses (who appears to be staff, by the nametag) comes over to talk to Mr. Plaid. She approaches a young man who appears to be watching videos and asks him to move. The young man gets up and leaves the computer. After he leaves, Plaid takes his place. Two older Asian men enter and wait on the side, looking around. They approach the tables in the back, but are still looking. [*Perhaps they will take my seat when I rise to leave...now.*]

Aftermath:

I must have been exhibiting "about to leave" behavior, because the two older Asian men started heading for my seat before I had even signed out or picked up my things. As I turned my back, I noticed one of them *jogging* to claim my computer before a female student in the vicinity. The two of them were hard at work by the time I reached the opposite side of the room to interview the staff member who previously upended the video-watcher.

Notes from Interview 2:

The woman explained that they normally do not interfere with the computer prowling process, but she did "just for the scanner." She said there are prowlers (my term) usually only during peak hours, though she hasn't memorized exactly which times those are. "Lunch times are pretty quiet," and "it's especially busy at the beginning of the semester when everyone's printing their stuff." But otherwise, like informant #1, she doesn't think prowling is an issue. She seemed anxious to get on with her work, ending with, "Do you have any other questions, or..." then seizing a stack of blank paper to fill a printer.

Thoughts on Observation #2

It seemed that the space was more crowded and busy this time, with fewer (usually no) computers open at any one point during the hour. In consequence, it seemed that people were pushier about claiming computers than they were during my first observation. The older man I interviewed was not the only one staring obviously at the students on computers, and the men who claimed my computer after I finished flat-out *jogged* to claim it. From my point of view, prowlers walked a little faster in general and were less embarrassed about approaching people leaving their seats, though they still did not make direct contact with them. I also saw a lot more “rude” behavior by people using the computers (e.g. the student sleeping, the classmate sitting in a seat to claim it while his acquaintance left) and the room was louder in general.

People did not appear to behave any differently at the printers than they had during the first session. Students who did not know each other would rather look at anything other than the person standing less than a foot away from them while printing, going so far as to twist their necks to look *behind* the person or at points that have no real value (the floor, the walls, the screen of a phone they checked just a short time ago). This may be an extension of the public/private gray area, like waiting to withdraw money from an ATM machine, as the content of the printed documents are considered personal. Even if a printing student’s behavior inconveniences another, such as the girl with two braids printing a very long document while the girl with blond highlights waited impatiently, the student will not encroach on that personal information (i.e. highlights would not look directly at the papers being printed to see if it would be finished soon).

A new aspect I discovered while interviewing people: they either do not realize how they are behaving or are willing to lie about it. The older man I talked to claimed he often helped others find computers if he noticed them looking, but he ignored other prowlers and even gave the appearance of cutting some off. He also believed people just took the first computer they saw, which from my first round of observations is clearly not the case. People might spot an open computer, but they will walk slowly towards it or take a meandering path, all the while looking around for other options.

Observation 3: 12/8/2010 12:45-2:05 pm

When finding a computer of my own, I prowled the side of the computers while looking around. Another prowler, an older woman with frizzy black hair in a green sweater, was prowling simultaneously, a little ahead of me. A female student was rising from her computer as we approached the back. The other prowler, who was in front of me, stopped at the opposite end of the desk and turned around to look at the floor. Assuming she had marked that computer, I respectfully moved on to the center aisle to look for other options. When the female student had left, the other prowler looked at me [*hesitantly*] before taking the seat, though I was careful not to make eye contact or look like I was ready to fight for it.

Another female student in a pink hat and white scarf was prowling for computers near the center aisle. I claimed a computer by approaching an Indian student (with headdress) as she rose from her computer. She smiled [*nervously*] several times and I bowed slightly in thanks as she left [*it may have been unusual for me to make direct contact*]. I am seated on the right row of tables, once again on a corner computer. The girl using the computer next to me rose and logged off soon after I had settled down to observe. She turned in the opposite direction of an Asian girl [*obviously waiting to take over*], making no eye contact. The Asian girl claimed the seat before the computer had completed logging off. Several minutes later, the computer appears to be frozen...the log-off screen is still present and it's doing nothing. [*It might be my civic duty to restart the machine so someone can use it, but I wonder how people will interact with it.*]

An Asian male with glasses in khakis and two layers of sweaters just claimed the seat. The log-off screen is still whirring. He waits for a few minutes, then holds the shut-down button to restart. He plays with his lips with his fingers while looking down at the desk, and around at other people (but not directly at me). He restarts the computer and brushes his hair with his fingers, plays with his lips some more. He's staring at the "Starting Windows" and log-in screens as if there is actual content to be seen. Sometimes his head turns towards the New Books shelf, but not towards me.

Across the way, someone is signing on to a computer that was left a while earlier. [*His neighbor appears to be a friend*]; they're talking together un-self-consciously. His friend has a bright streak of red-dyed hair on a Mohawk-style cut, wearing iPhone earbuds. They continue talking well after he has signed on. A girl with a fur-lined bubble coat and headband strolled through the center line straight to the back. She's chewing gum. She sat at a computer in the back, and logged on. [*Unusually*] she actually looks around at other people while she logs in, stretching and settling down.

The Asian male next to me shut the machine down again, then noticed someone on the opposite side of the desk leaving their computer and rose quickly to claim it. He's displaying the same lip-picking behaviors, but appears to have been successful as he's moving the mouse and his eyes are moving around the screen. [*He spotted me looking, so I'll pick someone else to observe.*]

A male student with natural red hair and a prominent mustache has claimed the computer next to me. A female with what looks like two sticks of bamboo sticking out of her backpack walked slowly towards the back down the center line, and took the computer of the girl who was previously bold enough to look around at people. The red-haired male next to me didn't turn the computer on and left within a minute. He was supplanted by another male with a buzz cut wearing a simple white t-shirt. This student put his things down and removed several notebooks from his backpack before turning the computer on. He reads over the "safety mode" screen

before selecting an option. While the computer boots he removes papers from a loose-leaf folder and shuffles through them. A friend comes up and he says, “Hey buddy, how you doin’?” They talk about finals and papers that need to be done. “I’m freakin’ stressed today. I have this paper due in like, *pf*, I dunno” etc. They part by saying “Yeah, I got some work to do,” “Yeah, see ya.” The friend moves away from the computer area to parts unknown.

On the other side of me are three students. A blond girl in a fuzzy bright red fleece, a male student in a suit complete with red tie, and another male student with darker skin and a mustache are sitting side by side looking at the same screen [*they’re probably collaborating on a project*]. The one in the suit is operating the computer. The other two talk as the girl rises to leave. She leaves her backpack in the chair [*I assume it belongs to her, since it’s pink*]. The male next to me who talked to his friend is rising...the welcome screen is stuck. Another male student in several layers of sweaters tries to claim it; the student turns to say “Yeah, that one wasn’t working,” “Oh, thanks.” Less than a minute later a tall woman with short hair and heeled boots walks by and shakes the mouse. She heads to the New Books shelf, then looks at the screen for the specialized display computer in the group work area.

In the back left corner, a female Asian is rising from her computer. A male student in a polo shirt carrying a jacket stands one chair to the left and behind her. Another prowler sees the computer too, but walks behind the student in the polo to look elsewhere. [*I believe they are operating on the same principles as me and my fellow prowler before sitting to observe.*] In the front left corner, a student has just risen and gathered her things. Her computer is open as of 1:15 pm. The girl in red with the pink backpack returned to grab a card from her bag. She exchanges words with the student in the suit, who is the only one left in his group [*the other male’s jacket is still on the chair...he must have gone somewhere temporarily too*].

The male with the layers of sweaters who tried to take the computer next to me approaches from the back of the room to claim the computer in the front left at 1:16. He logs in before putting his bag down and removing a manila folder...opens a Microsoft Word document. A much older man with dark, wrinkled skin and gray hairs rose from a computer in the back left and walked to the print station at the end of his grouping. He sat in the chair, looked at the printer [*and presumably realized it was different from the others*], then moved to the printer in the next grouping forwards. A student approached the computer next to me, noticed it was off and pressed the button. He left before it turned on. Another male student with big headphones (not earbuds) sat down in the chair and placed his things down, removing a book and loose-leaf folder from his bag before he’s fully logged in.

The male student in layers has left his station. An Asian girl with a big cap and thick-rimmed glasses approaches quickly, but does not sit down. She puts her backpack on the chair, then looks around...walks to a trash can on the other side of the room before coming back, moving her bag and hat and fluffing her hair out. She finally logs in and combs her hair with her fingers some more as her account loads.

The partner of the suited student next to me has returned with a sandwich and chips. He opens both, eats a chip, and picks up the sandwich. They talk [*casually*] about the cafeteria he bought them in. A girl across from me with brunette hair in a black bubble jacket and leggings (no real pants) stands at the print station. Though I’m looking directly at her, she avoids my head even while looking around aimlessly. After she leaves, a tall male student rises to use the same printer.

He runs his hands over his head while his papers come out...unlike the girl, he makes direct eye contact with me, but quickly breaks it to look around.

A girl in a long red coat has entered. She strides down the center aisle directly to the back, looks in both directions, then comes back looking from side to side and heads straight back to the exit. A male with glasses and a green hand bag uses the printer at the ends of my table. Another brunette with a metal circlet necklace stoops over the release station and operates it without making eye contact. The male picks up his papers and moves towards the table with the stapler. The girl takes her papers and passes within inches of him, neither of them looking at each other. Another male with a red cap uses the print station and looks over everyone's heads with his hand under the sheets produced. A male student with long curly hair and an orange bandana looked like he was about to use the printer across from me, but moved around to the one at my unit. He sat down to use the release station, placing his backpack on the floor. Then he picked his backpack up and put it on the table next to the printer...placed the papers directly in the bag when they came out.

Two people are talking while printing. A girl with short hair and a red shirt is standing in front of the printer...she was the one with the bamboo sticks in her bag. She talks to a dark-haired, bearded male as her papers come out. She hands some papers to him, shuffles through hers. When she returns to her computer, he follows, and the two talk. The two leave the library together, she checking her phone while walking...talking quietly.

Across from me, a male in a pale blue sweater with the words "Indiana University Dance Marathon" is settling down to a computer. He looks over everyone's heads before sitting down. Places his backpack on the ground...removes some items. He opens a folder and pulls out a sheet of paper. Adjusts his shoulder and stretches his neck. Straightens the keyboard. Finally, he takes the mouse and looks at the computer. *[His account may have been loading while he performed those rituals.]*

To the left of me, the suited student appears to have left. His Doritos-eating partner has moved his jacket to the center chair and took command of the mouse. A male student carrying a Coke bottle walks in a circle around the computers. Another male in an orange dress shirt and tie holding a coffee cup walks down the center line, then around the side, looking around. He heads towards the exit. A male in an overcoat with a cafeteria cup walks halfway down the left side, then turns around to exit. A male with pale-washed jeans, a hoodie over his right shoulder, walks down the side, then to the center of the back. He looks around, notes a girl getting up to use the printer and starts to walk. He continues walking down the center line and stops to make conversation with a male wearing big head phones in the bottom left corner. Walks down the line again and makes a left to claim a computer in the grouping to the side of me. He puts his backpack down, then looks around at people (no eye contact, though) before fully sitting.

An Asian girl walks quickly down the side, through the middle, back down the center to the exit. A male with sunglasses over his hat walks down the side and stops to talk to another male. The user of a computer has risen and left the library. Next to the empty station, a brunette with a large bag is standing and talking to someone working. A male with a beard and glasses who was walking around stops in the center and strides towards the computer; he talks to the girl using the station next to it. She rises and removes her jacket, chewing gum. Apparently the computer directly across from me was free, because a blond girl came in and sat down. She looks around at nothing in particular, down at some papers.

There are now two computers free in the back right section. A girl with a ponytail and two scarves claimed the one I didn't expect...the one with the girl standing next to it. *[Is it because the one next to the other one is occupied by a male with a beanie and a "\$3 Thursdays Patron" t-shirt? No...]* The apparently free computer has notebooks and pencils in front of it. The monitor shows the log-on screen, but personal items are very clearly marking the space as someone else's *[probably the gum-chewer's]*.

A girl in a leopard-print shirt walks down the center and heads for the gum-chewer's computer. She stops before taking more than a step down the divergent aisle, and looks at the back shelf of books instead. An Asian male also heads for the computer but stops prematurely, then heads for the exit. Leopard-print walks to the very back and eyes the screen of a computer. She raises her eyes and looks around, turning her head from side to side. Yawns. She's standing still, but not looking around at options. Her eyes are towards the reference desk, then down the center aisle. *[Is she trying not to look like she's looking? What could she be staring at?]*

Another male student comes into the library wearing what looks like a high school Varsity jacket. He stops at the center line, looking at the computer with the log-on screen and personal items, then turns back. A male with a large beard, glasses and beanie is sitting on one of the tables. He's not actively looking over the crowd...his eyes are fixed somewhere in the direction of Copies 'n More. *[Since I don't believe there's anything of interest over there, he may be lying in wait.]* An older Asian woman with an expensive handbag enters the library and heads for the gum-chewer's machine. She stops before walking away from the center aisle and heads to the back, then turns around and walks down the center aisle to the exit. A male in a big black coat and backpack is standing in the center, looking around with his hands in his pockets and his mouth slack open. He stands in front of the print station, paces slowly. He closes his mouth with his lips tucked in and looks at the other side. His eyes settle on the gum-chewer's machine and he paces towards it, then looks away and stops before changing directions. Heads to the left side. A student in shorts and a USC sweatshirt takes the traditional route down the center aisle, then crosses to the side and moves around the perimeter. He passes the student with his hands on his pockets and looks at the gum-chewer's machine without stopping his walk away from it. Leaves the library.

The blond across from me has risen and the student with his hands in his pockets approaches her. He asks "Are you done"? And she says "Mhm" while walking out of the library, quickly, without making eye contact with him. He says "Thanks" to her back and settles down. A student in a t-shirt with a cafeteria cup in his hand is standing in the center aisle, drinking from it. His body doesn't turn, but his head does. An Asian girl with long straight hair walks down the center to a back table, sits and looks at some papers. The male drinking puts his papers down at a print station and stands, wiping his forehead with the back of his hand. He stands in the center again.

The gum-chewer has finally returned. She looks around *[bored-looking]* and sits down at "her" computer to log on again. Removes her jacket and gloves *[she must have left the building]*. The student with the cafeteria cup takes over a computer in the cluster next to me, sits in the chair but does not look at the machine. He reads his papers and a spiral-bound book. Checks his phone. Looks up at two Asians (a male and female) who entered the library and strolled down the center line. The Asians approach the SDC platinum computers on the side. Cafeteria cup has his elbows propped on the table and is looking alternately down at his phone, pressing buttons with his thumbs, and up at the screen. The student in the suit has returned, but the girl with the pink backpack has not. His Dorito-eating partner is still controlling the mouse. Dorito says "I think

it's pretty much done, man." "Dude, she would have just automatically given us a bad grade on that, dude." "I mean, honestly, I didn't even read the directions...I thought we were just going straight at it but who cares."

\$3 Thursdays Patron rises and picks up his things. After he reaches the center aisle, two Asian girls who were standing directly behind his chair approach and take the machine. One puts her coat on the chair, the other puts her coat on the table, and one sits. The other inserts a USB key into the machine. An Asian male eating snack mix walks down the center aisle. Eats a cracker. Turns around and leaves. A middle-aged woman in an expensive-looking green long-sleeved blouse puts her jacket on the back of a chair and looks around. She sits and logs on. Looks around some more while it loads and fiddles with her belongings. She leaves her belongings at the station and exits the room.

In the cluster next to me, a male was hovering around the printer (not using it). He moves to the printer in my cluster. Another male comes up behind him and stands on the other side of the aisle until the previous one moves away. He approaches the release station, but stops [*is something wrong with that station?*] He does not approach the same printer as the previous male, but goes to one further away. On the opposite side of the aisle, an Asian girl is sipping from a cafeteria cup and standing stationary. The girl behind her is getting up to leave, but the Asian starts spinning in a circle, not looking at her. When the girl rises and leaves, the Asian sidles over to the machine, still sipping from her cup, and casually places her coat over the chair. Sits.

The woman in the green blouse returns with a coffee cup in one hand and settles back into her chair. She's smiling [*looks relaxed and pleased with herself—completely oblivious to the trouble she may have caused others*].

Thoughts on Observation 3

This was my busiest session yet, probably because it was during the week before finals. People also acted the rudest they had yet: marking computers with belongings without using them for upwards of half an hour (which shows the power of the personal boundary), talking loudly, and eating full meals despite the “No Food or Drink” sign at the entrance. People were much more daring about talking to each other, too. I saw people actually speaking briefly to those logging out of stations. When I personally finished observing and rose to choose people to interview, a tall male student asked me whether I wanted the computer before taking it. After a few minutes, a second male student asked me whether I was looking for a station too.

The sudden rise in confidence levels may be due to two things:

- 1) Crowd concentration was the highest, and with the skewed ratio of supply to demand people may have adjusted their behavior, as people on buses would adjust their expectations of ‘personal space’ as more riders squeeze into the aisle.
- 2) The cultural make-up of the users changed. During my first interview, the word “Asian” appears many times...the cluster appears to be a hub for international graduate students. But around finals, American undergraduates who usually occupy the West tower Information Commons may have spilled over to the East tower, bringing more outgoing norms with them.

As I wrote after the second observation period, people were likely to lie about their behavior. The interviewee with the pink headress laughed when I asked about her strategy, but it was too great of a coincidence that the person we were standing directly next to rose soon after.

Interview 1

I approached a young woman wearing a pink headdress who was hovering around the center aisle. I asked if she was looking for a computer and she said yes. I asked whether she had a strategy for seeing all the computers at once and finding an open one and she just laughed (nervously?). I asked whether she thought it was better or worse over here than over there ("pointing"). She said "You mean in the West Tower"? And said it was about the same, but she preferred it over here. She doesn't like the west tower because "there are too many people." She asked where I was from and I said California. She did not offer her own information in return. She asked what school I was doing this for and I said library science...she said she was in SPEA and she had a friend in library science but couldn't remember his name (laughs). The person we were standing next to started to rise...she pointed to him and said, "This person is getting ready to go."

Interview 2

I stopped a male student wearing a blue overcoat, brown hat with ear flaps and glasses carrying a black briefcase. He was pacing along the side of the room looking over the computers. I asked whether he had a strategy for finding computers in crowded clusters like these. He said, "I try to find computers along the back wall or sides, and if I can't, I try to find one at least one seat away from someone else." I asked whether this was because it was awkward to sit next to people and see their screens. He replied that he doesn't feel awkward looking at people's screens "because they don't really notice," but that it was awkward to sit right next to someone. I asked if he had the same feeling standing next to someone as they print things. He replied that he usually waits to get up when the printers are free so that doesn't happen. But, he added, that's not because it's awkward standing next to someone, but because he doesn't want to waste his time waiting for others' jobs to finish when he could be using the computer some more.

Thoughts on Observation 3

This was my busiest session yet, probably because it was during the week before finals. People also acted the rudest they had yet: marking computers with belongings without using them for upwards of half an hour (which shows the power of the personal boundary), talking loudly, and eating full meals despite the “No Food or Drink” sign at the entrance. People were much more daring about talking to each other, too. I saw people actually speaking briefly to those logging out of stations. When I personally finished observing and rose to choose people to interview, a tall male student asked me whether I wanted the computer before taking it. After a few minutes, a second male student asked me whether I was looking for a station too.

The sudden rise in confidence levels may be due to two things:

- 1) Crowd concentration was the highest, and with the skewed ratio of supply to demand people may have adjusted their behavior, as people on buses would adjust their expectations of ‘personal space’ as more riders squeeze into the aisle.
- 2) The cultural make-up of the users changed. During my first interview, the word “Asian” appears many times...the cluster appears to be a hub for international graduate students. But around finals, American undergraduates who usually occupy the West tower Information Commons may have spilled over to the East tower, bringing more outgoing norms with them.

As I wrote after the second observation period, people were likely to lie about their behavior. The interviewee with the pink headdress laughed when I asked about her strategy, but it was too great of a coincidence that the person we were standing directly next to rose soon after.