

Methodological map: a mixed methods approach to explore the role of space in an Emirati single-gender learning environment

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Abstract

This paper provides a methodological map for guiding the choice and application of research paradigms and design frames that can be of value to a wide range of researchers in the fields of education, social sciences and interdisciplinary studies who are interested in teaching and learning in context. Following an interpretivist/constructivist paradigm, I used a mixed methods research approach to study the spatial experiences of Emirati female students in a gender-segregated educational context. The main component was qualitative, using ethnography, while the quantitative part included a survey. In such a research approach, my reflexivity and unique positionality as both insider and outsider played a significant role. The paper is divided into three sections: *the beginning*, which justifies the choice and philosophies of the methodological route; *the journey*, which illustrates the data collection techniques; and *the destination*, containing reflexive lessons from the field.

Introduction

In my work in a government university in the United Arab Emirates (UAE) I have often observed how Emirati Female students have their unique way of appropriating and utilizing space, in and outside the classroom. I would often come to class to find students sitting in the dark waiting for the class to begin. To my surprise, during class discussions the majority did not enjoy a semicircular class arrangement that left them exposed while sitting on chairs and facing each other; they enjoyed sitting in groups on the floor at the back of the class, especially in carpeted classrooms. I also noticed that these students choose the most (to me) obscure and unusual spaces on campus to appropriate, individually or in groups. They would find these little niches (which I call 'cocoons'), like the space for the water coolers, behind the lockers or under the library staircase, to occupy while sitting on the cold floor, despite the availability of chairs and couches around campus (Figure 1, Figure 2). This type of observation ignited my intellectual curiosity, and inspired me to plan and conduct a systematic study that would allow me to further explore the spatial experience of Emirati female learners. In this paper I reflect on how I moved from 'noticing' to systematic research of this topic.

In educational research, the approach and design frame applied inform the type of data obtained and influence the whole research journey. Together, they form what I would like to call a 'methodological map', which in turn strongly depends on the research context and the educational settings. Although a large literature already exists on educational research for women in different cultures and contexts, there is still relatively little on Emirati female students, except for few studies like the ones by Khelifa (2010) and Khine & Hayes (2010). To that end, this paper provides a specific methodological map illustrated with reference to an exploratory study of the spatio-learning experiences of Emirati female students at Zayed University (ZU), Dubai Campus, in the United Arab Emirates (UAE). The aim of the research was to understand and, if possible, enhance students' experiences by exploring the role of

space in a single-gender learning context. This was an interdisciplinary study conducted in Fall 2012 and Spring 2013, investigating the intersection between the domains of women, education and space.



Figure 1: Students behind lockers.



Figure 2: Student in an alcove.

Education and space (physical environment) are two separate domains that have always been addressed separately in the literature. Although a shift towards spatial inclusion in education has begun, with recent educational theory following social theory in what is being called the 'spatial turn' (Gulson & Symes, 2007a, 2007b; Ferrare & Apple, 2010; Taylor, 2009; Thrift, 2006), the link between physical environment and pedagogy is still ambiguous and embryonic (Ferrare & Apple, 2010; Gulson & Symes, 2007a, 2007b; OWP/P Architects et al., 2010; Gruenewald, 2003; Taylor, 2009; Temple, 2008). There are very few studies that link space to women's education (Tamboukou, 2003; Quinn, 2003), and no studies

on the role of space in learning for Gulf women in a single-gender learning context. To understand the spatio-educational experiences of Emirati higher education female students, I used a mixed methods (qualitative and quantitative) approach following the interpretivist/constructivist paradigm. In exploring the relationship (intersectionality) between space, gender and learning, I wanted to unravel all the complex cultural formations that inform the spatial realities of the learners.

My theoretical framework for this study is based on social theories of space, specifically the social construction of space. According to Lefebvre (1991), space is constructed through the projection of the activities within it that become an integral part of shaping its existence:

the social relations of production have a social existence to the extent that they have a spatial existence; they project themselves into a space, becoming inscribed there, and in the process producing that space itself (p. 129).

In line with Lefebvre's assertion of how space is socially constructed and reconstructed by its users (1991), as well as the spatial turn in social sciences that has emphasized the social appropriation of space, I argue that ZU students' spatial practices on campus embody that social construction of space while actively engaging with and appropriating campus spaces, and moving beyond an abstract conceptualization of this space as just a passive milieu. Therefore, spatiality (the spatio-learning experience of female students) as a social construction becomes both "medium and the outcome" simultaneously (Soja, 1989, p. 129). In utilizing my borrowed theoretical framework I was in part inspired by Lefebvre's (1991) triad of *perceived space* (the material aspect of space that ensures production and social reproduction), *conceived space* (the abstract conceptualizations and mental construction of space defined by experts, policy makers or others), and *lived space* (the one that encompasses the real life experiences with all its codes, symbols, meanings and significations). I wanted to examine the types of spaces that exist for those female learners and their spatial needs as informed by their daily practices and spatial appropriation of the university campus.

The focus of this paper is to offer insights into the methodology and practical applications of my chosen *design frame for conducting research* of value to educators, ethnographers, social scientists or any other researchers interested specifically in research methods applied in the study of women's teaching and learning experiences, the study of space, the Gulf cultural context, and/or interdisciplinary and cross-cultural research. That is, my study of the spatio-learning experiences of Emirati female students serves as an example to illustrate and contextualize my choice of methodology and design frame. The paper is divided into three sections: *the beginning*, *the journey* and *the destination*. In 'The beginning', I justify my choice of methodological route by presenting the philosophical theories underpinning my choice of research methods and design frame. 'The journey' reports on my data collection techniques, and the field application of the chosen methodology. 'The destination' marks the end of data collection and includes a brief account of my own reflections as recommendations and lessons from the field in applying such a research approach.

Context

In order to understand the research context and to justify the chosen methodology, it is necessary to understand the cultural and historical context of the UAE as a nation and its current educational system. What we know today as the United Arab Emirates (UAE) was established in 1971 following the unification of the Trucial Oman Sheikdoms (Khelifa, 2010; Talhami, 2004). Since independence, the UAE, like other Gulf countries, has recognized education as an important development strategy. In 1972,

primary education was made compulsory and offered for free for all nationals (Khelifa, 2010, Talhami, 2004). Between 1971 and 1978, the second largest portion of the state budget was dedicated to education (Khelifa, 2010; Talhami, 2004). With a population that had been 90% illiterate prior to the discovery of oil (Talhami, 2004), the rulers of UAE created a revolution of their own, in that the UAE government currently offers free elementary, secondary and tertiary education to all nationals.

Although discrimination between males and females is socially and culturally practiced, education is now provided for all nationals, whether male or female. The late Sheikh Zayed Bin Sultan Al-Nahyan, the founder of the nation and first UAE president, placed special emphasis on women's education and encouraged them to become active members in building this young nation. This vision has been well supported by the current UAE government, given that nationals constitute only 10-15% of the UAE's 8 million population (Khoury, as cited in Sabban, 2013), while the rest are expatriates from around the world (Alsharekh & Springborg, 2008; Bristol-Rhys, 2010; Khelifa, 2010). This unique demographic composition has contributed greatly to cultural formations that have become a mixture of the local Arabian Gulf culture and a myriad of others introduced by the expatriates. Emirati females have embraced education, with many now entering the workforce after graduation. In fact, 95 percent of Emirati females studying in secondary schools apply for colleges and universities (Al Abed et al., cited in Madsen, 2009).

ZU, established in 1998, is one of three federally funded public tertiary institutions in the UAE, and offers free education for female and, more recently, male students. It operates two campuses in Dubai and Abu Dhabi, with a mission of leading innovation in UAE higher education in a "culturally diverse, humane, technologically advanced, and increasingly global environment" (Zayed University, 2013, Para. 1). Education at ZU is based on Western educational models, employing mostly Westerners or Western-educated faculty members to meet the needs of the nation and build its human capital in a time of globalization and constant change (Khelifa, 2010). Dubai campus constitutes what Katz (1994) calls 'the field', marked off in space (campus physical boundaries) and time (research duration) for my engagement with the female students to happen. Although Dubai campus facilities were initially established for female students, they are now split spatially and temporally to accommodate national male students while ensuring full gender segregation. ZU, like all the federally funded educational institutions, strictly applies gender segregation in keeping with the traditional and cultural values of the UAE's Islamic society.

In such a context, where national, cultural, demographic and educational demands intertwine, young Emirati women are challenged by the constant change and development of their emerging state, where higher education is relatively new for females (Alsharekh & Springborg, 2008; Bristol-Rhys, 2011, Davidson, 2005; Khelifa, 2010). While education is for all, spatial mobility is limited, and gender segregation is institutionally and culturally practiced. As such, space plays a major role in the educational experiences of Emirati female learners. To understand the role of space in such a learning context, cultural formations and local values need to be unraveled and understood. This in turn encourages the application of ethnographic techniques within the local context of Dubai as detailed in the following sections.

The beginning: choosing a methodological route

In mapping the methodological route for exploring the spatio-learning experiences of Emirati female students, I initially considered both the interpretivist/constructivist and the positivist/scientific paradigms. Although both seemed to offer ways of answering some of my research questions, each offered different methodological routes for conducting my research. Ontologically, I saw the spatial experience of learners as fluid, organic and socially constructed by the female students in a myriad of ways, rather than determined or measurable by breaking it into quantifiable elements and changing variables. Researching the spatio-learning experience was more about exploring, describing and interpreting that experience within the local culture, and understanding the meaning the students invest in their spatial encounters in relation to learning. This in turn required analysis in context, as human experience is unique and is very much grounded in its particular culture (Scott, 1991). This kind of experience cannot be reduced to mere numbers or explained by graphs. As understanding human experience is central to interpretivism, with its hermeneutic-phenomenological tradition (Bryman, 2004; Cohen & Manion, 1996 ; Mackenzie & Knipe, 2006), I immediately felt an association with the interpretivist/constructivist approach.

The interpretivist/constructivist approach is inductive and exploratory, recognizing the impact of the researcher's background on their interpretation of their findings (Creswell, 2009), and recognizing the participants' view of the world. My own positionality (as a woman, researcher, teacher, mixed-background expatriate, and architect by training), as well as those of the participants, played a major role in my understanding and interpretation of the 'truth' about the female students' spatial experiences. According to the interpretivist/constructivist approach, reality and meaning are socially constructed (Cohen & Manion, 1996; cited in Mackenzie & Knipe, 2006 & Thomas, 2009). This assertion resonates with the theoretical framework I adopted for this research, guided by the literature on space, including the social construction of space, and Lefebvre's (1991) triad. I was also fully aware that my approach and findings represented only one possible valid route among many other trajectories for understanding spatio-learning experiences. This assertion of multiple realities aligns with what postmodernist and, to some extent, constructivists believe: "what might be the truth for one person or cultural group may not be the 'truth' for another" (O'Leary; as cited in Mackenzie & Knipe, 2006, p.3). Therefore, I situated myself within the postmodernist-interpretivist/constructivist approach.

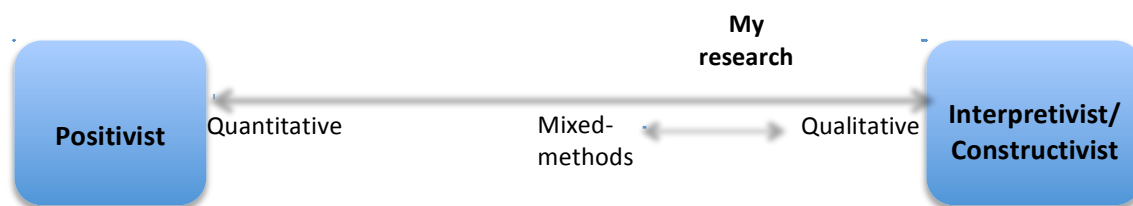


Figure 3: Visual representation of my epistemological position: my research positionality within the paradigms and design frames.

In line with the approach described above, I chose a mixed methods approach (incorporating qualitative and quantitative methods) to address my research questions within the local context (Figure 3). The main part of my approach was qualitative because the research was predominantly descriptive and interpretive in nature as the broader reality of UAE culture unfolded within the educational context; I had no specific hypothesis to start with, and the exploratory nature of unraveling the spatio-learning

experience clearly lent itself to the interpretive and inductive attributes of qualitative research. However, I also realized the benefits of supplementing my qualitative findings with quantitative data to deepen my understanding of the spatial experience among a larger sample of students. I therefore included a minor quantitative aspect (a survey) to supplement the qualitative as part of the triangulation process in drawing conclusions. According to Gorard (as cited in Mackenzie & Knipe, 2006, p. 7), a mixed methods approach has been considered as the “key element in the improvement of social sciences, including education research” and “often has a greater impact” because “figures can be very persuasive to policy-makers whereas stories are more easily remembered and repeated by them for illustrative purposes”.

I chose ethnography as my methodology for the major qualitative part of my inquiry, which is in congruence with the characteristics of ethnographic research discussed by Creswell (2008) and Flick (2010). Ethnographic techniques with a focus on human observation are one of most frequently employed tools in spatial analysis (Ferrare & Apple, 2010) and in educational research. These techniques offer multiple levels of data gathering and analysis, and address the multidimensionality of the students’ spatial experience (personal, social, cultural and academic), which requires the researcher to simultaneously perform multiple roles in different and/or the same spaces over a period of time.

The type of ethnographic research I conducted was an “instrumental case study” (Creswell, 2008, p. 476). It involved studying ZU as a case in relation to a specific issue, which was the spatial learning experience for women. My ethnographic case study involved observing and interviewing Emirati female students in higher education at Zayed University (ZU) about their learning experiences in relation to space. An instrumental case study is usually used to illuminate an issue, which in this case was the students’ experience of space (perceived, conceived and lived) and its role in enhancing or constraining their learning. Having my workplace as the research site offered me a unique positionality as both insider and outsider, which supported the application of ethnographic techniques as a reflexive and situated response to the research task.

In line with the characteristics of ethnographic studies, the group being researched (undergraduate female Emirati students) was considered a ‘culture-sharing group’ (Creswell, 2008), meaning a group of people sharing the same cultural identity of behavior, beliefs and language. As culture (in a broad sense) is ordinary (Williams, 2000) and subjective, as well as learned, our ability to experience and interpret things is based on foundations learned by every individual to represent the vocabulary of that culture. This explains the centrality of culture for this research, as it becomes very important for interpreting spatial experiences. Therefore the students’ spatial experiences needed to be analyzed within the context of the local culture in order to determine and understand their formations. This lies at the core of the chosen interpretive approach.

In the applied part of the ethnography, I moved beyond the traditional vision in anthropology of ethnography as research conducted by a lone researcher immersed in the culture (Fetterman, 2009; Spradley, 1980). Instead, I adopted a more contemporary, multi-sited (Horst, 2009) approach, which I termed ‘multi-zonal’ (different places and spaces) within the site. I explored where and how students experience learning across campus within different zones, to acknowledge that their spatio-learning experiences are not a compartmentalized process taking place only within a classroom or other specific zones; rather, they represent a network of experiences within and beyond the ZU campus. For this reason, my ethnographic investigation did not include detailed and in-depth accounts of every zone. Instead, it explored in depth the *network* of zones, movement across those zones, and the shared dimensions emerging from the experiences of learners within and across them.

The journey: pursuing/walking the methodological route

In Fall 2012, after obtaining ethical clearance from my institutional review board, I piloted two interviews and some observations. Following this pilot phase, I started my fieldwork journey in Spring 2013 by pursuing the methodological route outlined in the previous section. I used multiple data collection techniques, including both static and walking formal interviews, casual conversations, observations, class audits, exploration of the local literature and photo elicitation (Table 1). The following sections provide a brief account of each data-gathering technique.

Table 1. Summary of data sources and data-gathering techniques

Data sources	Data gathering techniques – Types of data
Female students	Observations 8 static interviews (audio + notes) 4 walking interviews (audio + mapped route) Informal conversations Photographs
Female graduates	1 walking interview (audio + mapped route) Photographs
Male students	Observations 2 static interviews (audio + notes) 1 walking interview (audio + mapped route) Informal conversations Photographs
Faculty / Professors (3 males and 5 females)	Observations 8 static interviews (audio + notes) Informal conversations Photographs
Security Personnel (1 male and 1 female)	Observations 2 static interviews (audio + notes) Informal conversations Photographs
Staff/Administrators (2 females)	Observations 2 static interviews (audio + notes) Informal conversations Photographs
Campus spaces	Observations Photographs Sketches Maps
Other sources	ZU publications (e.g. catalogue, student handbook, accreditation self-study report) ZU website ZU events (e.g. national day, ZU clubs, health fair, career fair) Local conference (<i>The UAE Through its Expats' Eyes</i>) Literature (space and the UAE): - <i>Emiratia: voices of Emirati women</i> (collection of short

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	stories) - <i>The Sand Fish</i> (novel)
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Exploring local literature and publications

I carried out an exploration of local literature for any ideas about the relationship between women, culture, spatiality and education. Spradley (1980) encourages exploring the fiction of the local culture by local writers as a way of discovering cultural themes. Therefore, I read local literature including *The Sand Fish* by Maha Gargash, an Emirati writer. This novel contributed to my understanding of Emirati women's spatiality. For example, I became interested in the main character's (Noora's) relationship with her spatial environment and its link to the local culture. Her movement and change of living place, as well as her confinement to specific spaces, determined her spatial experiences throughout the novel. I was also interested in the way local Emirati female writers understand, perceive and thereby construct their living spaces. In this respect, Maha Gargash offered a particularly vivid description of spaces in her novel, with strong reference to the local culture and the 'conceived space' of the past. I also read numerous documents and publications about the ZU campus and the UAE, as well as other publications produced by ZU's media and publication department, and by faculty and students. These publications helped crystalize my initial ideas, enabling me to better understand the local culture and its female students. I used some documents as secondary sources for my analysis as they echoed various themes emerging from the field, for example *Emiratia: World English voices of Emirati Women* (Hassall, 2010).

Auditing classes

As a major part of the fieldwork, I audited two ZU courses from two different colleges, academic levels and classroom spaces. By 'auditing', I mean attending those classes as a regular student and partially participating in class activities and readings while observing the learning environment and the students' experiences within that class. To choose the audited courses, I initially targeted several courses assigned to different classroom spaces (classes with and without windows, labs, studios and so on), and with subjects of interest to me, to experience learning as a student while observing as an ethnographer. In practice, however, the decisive factor for choosing the classes was finding an instructor who would allow me to audit their class. To avoid an awkward situation with my colleagues, I therefore only chose from classes taught by my network of close friends and colleagues, which, although limiting, was still very satisfying. The chosen classes were *Graphic Design senior class* for fourth-year Graphic Design students, and *Social and economic trends in the Gulf* for second-year Humanities and Social Sciences students, meaning that they covered two different age groups within different colleges and were taught in completely different spaces: one in a graphic design studio and the other in a regular classroom. I also attended two English Language class sessions for second-semester male students to observe their spatial behavior and see if there were differences in how they utilized the class space compared to their female counterparts.

As well as representing an important opportunity to gain open access to the students' spaces to learn and observe, the class audits also allowed me to find volunteers for my interviews. First, I was able to observe the students' reactions and experiences within the classroom spaces as a participant observer. Second, I could experience the space and learning environment myself as a student by learning the class content and participating in class discussions (Emerson et al., 2011). Third, I could invite students to participate in my interviews without any pressure or conflict of interest since they were not my own students, which in turn supported my application for ethical clearance.

Interviews

I conducted semi-structured, in-depth interviews with 29 participants from Dubai campus, focusing on female students. The interview participants were undergraduate female students, drawn from across all colleges and aged between 17 and 24. In addition, in order to triangulate with other perspectives I interviewed second-semester male students, and faculty members from different nationalities teaching at different levels in different colleges, as well as other users of the space, like administrators, security staff and cleaners (Table 2).

Table 2. The number and type of formal interviews and interviewees (W = Walking, S = Static)

Interviewees	Female students	Male students	Professors	Other users (staff, security and cleaners)	Total
# of interviewees	12	3	8	4	29
	8 S 4 W	2 S 1 W	8 S (3 males & 5 females)	4 S (1 male & 3 females)	

The interviews were semi-structured and in-depth, using open-ended questions. I developed a pool of questions to use that were a combination of descriptive, structural and contrast question types (Atkinson, 1998). Following is a sample of the question types used in my interviews:

Descriptive: How would you describe your educational experience?

How would you describe the physical setting of your classroom?

How would you describe your favorite/least favorite classroom on campus?

Structural: What are some of the daily tasks you perform once on campus?

Contrast: How is your experience in your math classroom different than the lecture hall? (Compare and contrast different spaces relevant to the specific interviewee).

The entry questions I used centered on learning and the female students without directly asking about space, although they were anchored to the spatial experience. As the interview progressed, probing questions became progressively more space-relevant, with the learning experience being explored in relation to the physical setting. Using questions from the pool kept me focused on my main themes and provided a degree of uniformity across interviewees. However, I also allowed myself the freedom to follow newly emerging themes and modify my questions, depending on which issues arose during each interview.

In line with my interpretivist/constructivist approach, I aimed to conduct a cooperative and interactional interview, as advocated by Rapley (2004), without excessive concern for objectivity in a scientific sense or about influencing the participant. Instead, I shared stories, commented and laughed with the participants in acknowledgement of the reality that “interview interactions are inherently spaces in which both speakers are constantly doing analysis” (Rapley, 2004, p. 27); that is, they are both creating knowledge.

I conducted three types of interviews in terms of location. The first type was static interviews, conducted in one fixed private or reflective space to allow different issues and personal stories to emerge. Participants felt comfortable and reflective in spaces like my office and less distracted by noise and disturbances than in public areas on campus. The second type was ‘walking interviews’ (also known

as mobile interviews), which are conducted on the move while walking with the participants as a form of deep involvement in their world experience, in congruence with the 'mobility turn' in social sciences (Clark & Emmel, 2010; Sheller & Urry, 2006). Walking with the participants offered a unique opportunity to shadow them, so as to observe, experience and spatially contextualize their learning experience on campus. This interview type lends itself to less structured interview questions that allow personal speech and memory to be evoked by the spatial positionality of the walking participant at each moment. The third type, referred to as 'casual conversations' by Creswell (2008) and Thomas (2009), includes those completely spontaneous and unstructured interviews that emerge from daily conversations and interactions between ethnographer and participants. As a participant observer on campus, I informally interviewed a great many participants through my daily observations and interactions with participants in the field.

To collect my formal interview (static and walking) and casual conversation data, I used a combination of field notes taken on iPad, transcriptions, comments and reflections before and after the interview, as well as audio recordings to enhance the quality of qualitative data management, as recommended by Tessier (2012).

Observation

As an integral part of the ethnographic research, I conducted over 200 hours of observations of different spaces and associated artifacts around ZU's Dubai campus, including classrooms and public and semi-public areas to see how students learn, utilize, interact and communicate within those spaces. I conducted participant observations of others as well as reflexive 'self-observation' according to Gold's definition of the different roles of participation (as cited in Flick, 2009). My research role was a combination between the 'complete participant' when auditing classes and 'participant as observer' when teaching and observing around campus. However, the boundaries of those roles were never rigid, but fluid, trespassing into each other's terrains.

As a participant observer conducting ethnographic research on my own work environment, I had a unique position as both outsider and insider, while playing multiple roles (student, teacher, researcher, academic, woman, academic advisor and architect), which had both advantages and disadvantages. My insider status allowed me more legitimate freedom on campus to observe with a critical and exploratory eye the unconscious patterns of behavior (usual daily practices) and reactions to different learning spaces to which I was already exposed as a teacher. Recognizing me as a local member of the university community, students would carry out their normal activities without being influenced by my presence. However, as an insider, I was faced by many challenges from an ethnographic point of view due to my familiarity with the campus prior to starting my fieldwork. This inevitably had some influence on my perspective in that it was not being freshly constructed from the beginning of the ethnography but was shaped by preconceptions formed long before starting my research. Many researchers, such as Flick (2009), Fetterman (2009), Delamont (2004), and Spradley (1980), caution ethnographers about the challenges associated with observing an already familiar site; in fact, Geertz (1979) and others advise researchers to leave the field the moment it all becomes too familiar. Being aware of that, I made great efforts to remain prepared to deal with these anticipated problems, and to take a fresh and critical look at everything that appeared familiar at that time.

Following Spradley's (1989) suggestion, I started with general descriptive observations of the whole campus, before ending with more selective and focused ones of different classrooms and zones (Table 3). The choice of spaces to observe, and the length of stay in those spaces, varied depending on the type of activities and the possibilities offered in those places at the time of the observations.

Table 3. Observed spaces on campus

Space type (Zone)	A	B	C
Description	Characterized by intensive student use and interaction, and safety	Characterized by less use and interaction	Characterized by little use and interaction and some security issues
Examples	Atrium, cafeteria, coffee shops, under the library staircase, entrances, hallways, classrooms, Pals center (Peers assistant leaders).	Bookstore, gym, courtyard, small gardens, locker areas, neglected places (e.g. water cooler areas, alcoves)	Bathrooms, elevators, empty spaces, parking lots, administration building.

I structured my observations and record-taking in the field around the nine elements recommended by Spradley (1980, p.78) for observational purposes: space, actors, activities, objects, acts, events, time, goals and feelings. However, I used these elements only as a framework, focusing on some more than others, primarily those about space and learning activity.

For note-taking, I depended exclusively on my iPad, using the Notability app as it allowed typing, handwriting, sketching, photography and audio recording.

Participation in campus events and activities

Full immersion in campus activities constituted a major part of my ethnographic experience. Being part of the ZU community offered me a unique opportunity as a researcher to attend and fully participate in many campus activities and events. Examples included celebrating UAE National Day, ZU clubs day, ZU carnival, health fair, career fair and many others. Participating allowed me to observe students' interactions, appropriation of spaces and learning experiences beyond their classrooms and daily routines on campus. Even the university public spaces transform to allow for such unusual practices during these events, and sometimes seeing unusual spatial practices enhances our understanding of the usual.

Photo elicitation

Photo elicitation involves showing participants pictures or photos relevant to what is being studied in order to trigger memories and elicit responses to a particular issue. This approach has been used by many researchers, such as Gill, Henwood & McLean (2000), who used it to elicit responses from men on their views of the male body and its representation in popular culture. In five of my interviews I used photo elicitation by showing participants photos of campus spaces (e.g. Figure 4, Figure 5) and classrooms and artifacts from the walls in order to trigger memories and start a conversation. These sample photos were accompanied by questions like:

What do you think of this class arrangement?

Can you describe your experience studying in this classroom?

Is this the type of class you are referring to? Tell me more about it.

This technique revealed aspects of their conceived and lived space when they communicated their feelings and perceptions of the space and its influence on their learning experiences. However, I only resorted to it when I felt that the interviewee needed a trigger or a reminder of a specific space.



Figure 4: U-shaped classroom arrangement.



Figure 5: Auditorium type classroom.

Survey questions

The quantitative aspect of my mixed methods approach was a survey, constituting only a minor part of the research. With the support and cooperation of the university Office of Institutional Research, I was able to negotiate the addition of a few questions (of relevance to university information needs as well as to my own research) to the Entering Students Survey (ESS) and Graduating Students Survey (GSS), which are routinely administered annually to all entering and graduating students. Three questions were added to the ESS, exploring the role of campus space and physical facilities in influencing the students' decisions to join ZU, and their overall impression of the university. Six questions were added to the GSS,

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exploring the students' views and perceptions of ZU spaces, the role of space in influencing their learning experiences, and their favorite and least favorite spaces. In 2013, 638 students completed the ESS and 322 students completed the GSS. The quantitative results supplemented those from my qualitative ethnographic data at a macro level, and contributed to triangulation in drawing conclusions. The quantitative survey data was analyzed statistically and described thematically in line with the qualitative emerging themes in the analysis of the results.

The destination: reflections and lessons from the field

It is extremely important to embrace the voice of the researcher while maintaining a reflexive account during the research journey. This is also liberating for a participant observer using an interpretivist/constructivist approach in qualitative ethnographic research, as I do not have to worry excessively about my objectivity or the level of participation in the interviews: I can freely express my emotions and fully participate in the research journey. Acknowledging, reflecting on and embracing my unique position as both insider and outsider playing multiple roles made me more aware of the advantages and disadvantages of such a position. It also greatly contributed to my understanding of the research context, enhanced my ability to analyze the data, and clarified my role in interpreting the data.

My greatest companion during this journey proved to be my iPad, which became my note pad, pen, camera, audio recorder, keyboard, folder and connection to the world. It allowed for all sorts of data gathering in the field while observing and auditing classes. I also set it up to automatically synchronize with my Dropbox account so that all my notes were regularly backed up. It allowed for spatial mobility around campus and connectivity with students and colleagues. It also reduced suspicion during field observations since using it seemed completely normal in an environment where all faculty members and new students are given iPads to use as a learning tool.

Conducting a piloting phase to test and crystalize my data-gathering techniques was very important. I was able to test and further develop my interviewing and observation techniques, make better selections of observed spaces and observation posts, practice initial transcription and analysis of data, and select the most suitable audio and visual recorders. For example, I discovered that when conducting walking interviews I needed to carry two high-sensitivity audio recorders, with microphones placed on both myself and the participant to ensure adequate quality of recording and eliminate background noise. I also experienced some of the challenges and demands involved in ethnographic fieldwork, such as the amount of time and physical effort it requires. Following the piloting phase, I was better equipped to face these challenges and conduct my work more efficiently and effectively.

In research, it is important to decide whether to assume an overt or covert position. I adopted the position of overt researcher with what Hammersley & Atkinson (2007, p. 219) call "ethical situationism". This position involves revealing information to participants to gain their informed consent according to the situation and as a matter of judgment in context. I refrained from full disclosure at times when I felt it would be counterproductive to the research, while ensuring that no harm came to the participants. For example, if I had told the students in the audited classes that I was going to observe every move they made in class in relation to space, I believe that they would have become very self-conscious and uncomfortable. Instead, I told them that I was interested in space and its relation to learning and that I would be researching the way they used and utilized space. On the other hand, I cannot stress enough how important it became to clarify my role as a researcher to certain stationed informants in some of the chosen observation posts. For example, the attitudes and cooperativeness of security personnel was transformed the moment I explained my research and why I was observing the university entrance gate,

in contrast to the suspicious and uncomfortable attitude I encountered from them before my explanation.

In conducting the observations, it was very important to find suitable observation posts. I had to trial this, as some offered visibility but made me very visible to all participants, who would then become suspicious. I also needed to remain invisible to familiar faculty and students to avoid constant interruptions.

Once in the field, one of the first actions to be taken according to many researchers, such as Fetterman (2009) and Spradley (1980), is to identify and connect with key informants. Key informants are well-established, resourceful people from the researched community who can connect you with other resources and provide access to information. In my case, where my work and research site were one, it was easier to identify those people who I already knew as colleagues, students and administrators. I therefore had no difficulty in finding classes to audit, and people who were interested in what I was doing and willing to help or recruit volunteers for my interviews. In fact, I had more volunteers than I initially planned for.

One also needs to be prepared for the ethical dilemmas that inevitably emerge despite obtaining administrative ethical clearance from review boards. Although a large literature exists on ethics in the field, each field offers its own unique ethical challenges and concerns. For example, one of the dilemmas I faced was the difference between my own value system, that of the participants, and that of the Western-led University Research Ethics Committee. This required constant re-evaluation of my decisions to weigh them against my own and the participants' value systems. I had to be culturally, socially and politically correct and aware of these differences. In some cases, I had to adhere to specific standards required in the West by the Ethics Committee, although these were meaningless in the local culture, which made such requirements appear to be a direct application of ethical universalism in exporting Western ethical values into such a different context. Specifically, I had to acknowledge issues of individuality and individual privacy as required in Western culture despite being aware that many local female students would not only not mind talking in the presence of their female peers, but would even prefer talking while with others. In the context of this research, individuality was less valued and privacy between collective friends was not practiced as much as I was accustomed to in Western societies. I remember one casual conversation when one student, in telling me about her social and academic difficulties, was revealing sensitive private information about coalitions, social groups and cliques forming in her class, and how the teacher had favorites. At that moment, she called her friend who was passing by and asked her to confirm what she was saying. This was very interesting to see as a demonstration of their collective voice and identity compared to the notion of individuality in Western societies.

Despite having full ethical clearance, I often felt that I was taking advantage of my unique position as an already established member of the ZU community. The privileges I was ascribed to due to that position as an insider allowed me free access to the field, while burdening me with feelings of invasiveness by preying on students' personal and private spaces. However, observing all kinds of spaces and places, public and private, was crucial for my research to explore the spatio-learning experience and produce a valid account of that experience. I witnessed many private moments of the Emirati female students; I was present at moments of rest; I was there when they were joking, laughing, gossiping or even fighting. Although many observations happened in open public spaces on campus, I knew students used them as their own spaces. The majority of the students could not leave campus till their classes ended, which meant a long day on campus from 8:00-5:00 pm. Their limited spatial mobility therefore made them

more exposed to observation and more vulnerable in that they had to use those spaces as personal and private spaces of their own since no other alternatives existed. This was both exciting for me to see as a researcher and ethically concerning at the same time.

Overall, learning to become flexible and open to new possibilities, while responding appropriately to the unplanned dilemmas and unexpected realities that arose during the research journey, can be one of the most rewarding experiences at both a personal and academic level.

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