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Chapter 15

Identity Transformation through Collaboration: Narratives of ‘Becoming an Architect’

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ABSTRACT

Presenting narratives of three recent graduates of a U.S. Master of Architecture program, this study employs an interpretative-narrative approach to access and evoke the role that collaboration plays in the process of ‘becoming a design professional’. Whereas ontological learning has been recognized as fundamental to life-long learning and development, research has yet to explore themes of self-authorship in relation to collaborative design experiences. In representing authentic voices of learners, the research presented in this chapter contributes to a deeper understanding of the ways in which aspiring design professionals make sense of their transformation from academic to professional selves. This will ultimately inform how design educators value and structure team-based design projects by providing a more holistic understanding of the role such projects might play in shaping individuals’ identities.

More than in many other jobs, being a successful architect means not only knowing but being. (Stevens, 1999: p. 55)

INTRODUCTION

Educators, scholars, and professional bodies have long been concerned with the transition from school to work, from the standpoints of competency, socialization, and the public good (see Boyer & Mitgang, 1996; Merton, 1968; Tierney & Bensimon, 1996). This passage from disciplinary outsider to member is a critical period of meaning-making and introspection during which aspiring professionals are con-

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fronted with questions of who they are and who they wish to become (see Baxter Magolda, 2001; Case, 2013; Chickering, 1969). Sullivan (2012, p. 104) writes, “Professional education presents students with the knowledge, skills, and purpose of the field they seek to learn. It also frames how students relate the demands and possibilities of the profession to their developing sense of self and purpose.” Thus, professional education marks a period when students undergo marked changes to their ‘ways of being’ (see Barnett, 2000; Sandberg & Pinnington, 2009). Supporting and encouraging this process of transformation, which educational theorists call ‘ontological development’, is increasingly considered a primary aim of higher education across disciplines (see Barnett, 2000; 2004; Baxter Magolda, 2001; Dall’Alba & Barnacle, 2007; Hanson, 2014; Harrell-Levy & Kerpelman, 2010).

The potential ‘transfer of learning’ from academic to professional contexts is one of the most commonly touted benefits of collaboration in higher education (see Cuseo, 1996; Ettington & Camp, 2002). Ettington and Camp (2002) argue that students need to perceive the relevance of collaboration in order to transfer teamwork skills from the classroom to professional applications. Student perceptions toward collaboration is thus a chief concern for educators and professional bodies alike. As Gale, Martin, Martin, & Duffey (2014, p. 27) warn: “Negative attitudes toward collaborative learning could have a significant impact on the success of emerging professionals.” However, prior studies on this topic in design-based fields are not designed to examine how collaborative learning experiences contribute to ontological development within students’ broader life histories. Using primarily questionnaires, they tend to consider student attitudes only within the scope of specific courses, projects, or learning outcomes (see Byun, Kim, & Duffey, 2012; Gale et al., 2014; Hynes, 2015; Kim, LaFleur, & Schaeffer, 2008; Russ & Dickinson, 1999; Webb & Miller, 2006). The study presented in this chapter takes a holistic, phenomenological approach by exploring what role collaborative experiences play in wider narratives of self that constitute the process of ‘becoming a design professional.’ This follows Hanson’s (2014, p. 8) claim that,

Any thorough study of how people change in college would seem to require an analysis of the narratives that students use to develop identities—a sense of what they were like before they started and how they became during the course of their education.

In this ongoing study, recent graduates of a Master of Architecture (M.Arch) program based in the United States participated in a series of in-depth interviews that sought to situate graduate school experiences within personal life histories. Adopting an interpretative approach informed by interdisciplinary theories of ontological learning, student agency, and narrative identity, analysis procedures ultimately produced a series of passages evoking the transformative potential of designing in teams. Thus, results from this study suggest ways in which narrative reflections of collaborative learning experiences can prompt transformations of self-identity. This work builds upon scholars’ attempts to better understand and promote ontological development amongst undergraduates in liberal arts contexts using the concept of ‘self-authorship’ (see Barber, King, & Baxter Magolda, 2013; Baxter Magolda, 2001; Case, in press; Pizzolato, 2003; Torres & Hernandez, 2007). While further research is required to convincingly link collaborative learning to the development of self-authorship in aspiring design professionals, this project serves as a revealing graduate-level and professional case study and opens up a promising area for scholarship on design education.

BACKGROUND

The uncertain and complex challenges associated with contemporary life have prompted scholars in the field of education to call for an ‘ontological turn’ in higher education (see Barnett 2012; Dall’Alba & Barnacle, 2007). As these scholars argue, epistemological qualities alone (i.e., knowledge and skills) are considered inadequate for becoming successful citizen-practitioners. Barber et al. (2013, p. 867) argue: “The complex challenges college graduates face are not just technical challenges that require skill acquisition but adaptive challenges that require transforming one’s mindset to a more complex way of making meaning.” Or as Sandberg and Pinnington (2009, p. 1162) put it, professional competence “is not primarily defined by scientific knowledge, tacit knowledge, knowing-in-action, understanding of work or practice as such. Instead, professional competence is constituted by specific ways of being.” In reconsidering curricular and pedagogical aims of universities, learning is conceptualized broadly as primarily a process of meaning-making intended to foster critical thinking and self-authorship (Kegan, 1994). A separate but related area of research suggests that a chief means by which individuals construct meaning from their experiences is through narratives of self (see Eakin, 2008; McAdams, 1993; Somers, 1994; Wortham, 2001). This section briefly reviews aspects of self-authorship and narrative identity that informed the present study, as well as how these concepts relate to design education and collaboration, specifically.

Identity and Self-Authorship in Higher Education

For decades, social scientists in sociology, anthropology, psychology, social work, and education have concerned themselves with how individuals construct meaning from life events, as well as how one’s identity develops over various life stages (Goodson, 2001). In an early attempt to theorize the transformation of college students, Chickering (1969) posited seven major dimensions of development: competence, emotions, autonomy, identity, interpersonal relationships, purpose, and integrity. Together, these qualities foreground student experience and wellbeing within higher education contexts. In the process of ‘learning’, students are “actively experimenting with and consolidating a sense of identity: who they are, what they can do well, what is important to them, how they want others to see them, and so forth” (King & Kitchener, 1994, p. 203). Based on their personal life histories, as well as self-assessments of their learning and development, students cognitively develop ‘identity horizons’ to reconcile their professional goals with their emerging sense of self (Côté, Skinkle, & Motte, 2008). This raises questions regarding how educators might support and encourage processes of self-knowing. The notion of self-authorship provides a conceptual and analytical framework for linking meaning-making and development across cognitive, intrapersonal, and interpersonal domains to narratives of personal experience (see Baxter Magolda, 2001; Kegan, 1994). According to Barber et al. (2013, p. 868), self-authorship is “the internal capacity to define one’s beliefs, values, identity, and social relations, thus taking responsibility for one’s actions and life decisions, not simply relying on the advice or actions of others.” The authors expound further on their definition:

Individuals who are ‘self-authoring’ consider multiple perspectives, reflect on their own values and motivations, and utilize goals and perspectives that are internally grounded and evaluated as a foundation for meaning making. (pp. 869-70)

Identity Transformation through Collaboration

Connecting the concept to the broader purpose of higher education, *Case (in press, p. 1)* writes:

Self-authorship as a goal for the university student is centred on building a person who can align their intellectual growth with their personal and social commitments, and thus take up the roles in society that might be expected of a college graduate.

Longitudinal studies using in-school and post-graduation interviews have found that, whereas self-authorship development rarely occurs in the timeframe of college itself, it can be detected over time by considering learning more holistically across life history contexts (see Baxter Magolda, 1992; 2001). Qualitative analysis revealed that certain students underwent ‘developmentally effective experiences’, expressed in particular by a shift from an external to an internal voice (Barber et al., 2013). Other themes tied to self-authorship included a sense of belonging and peer support, working through personal difficulties, and experiencing dissonance in terms of one’s worldview. In relating narratives of student experience to an individual’s ontological development, we can begin to see what this type of research might offer educators seeking to improve teaching and learning practices:

Understanding the factors that trigger these substantial shifts could help faculty design more powerful learning experiences [and]...help administrators make decisions about supporting educational initiatives... (Barber et al., 2013, pp. 868-9)

We also might begin to imagine the potential ways that team-based activities might be involved in the development of self-authorship, given the typical features of collaborative design processes and experiences. For instance, students might engage in certain modes of professional role-playing, allowing them to compare their present and possible future selves. Or they might encounter diverse and/or incompatible worldviews and social commitments, prompting them to reflect upon their own. The present study seeks to explore this possible relationship between collaborative experiences and aspiring design professionals’ developing senses of self.

The Role of Narrative

The work presented in this chapter presumes a certain role of narrative and storytelling in the everyday lives of individuals and learning communities. First, as the late Marco Frascari (2012, p. 228) argues, “The education of architects has always followed a curriculum based on storytelling.” Indeed, storytelling represents a central element of design culture, used by students and practitioners alike: from developing user scenarios as part of the design process (Parkinson & Bohemia, 2012a), to constructing narratives as a way of making sense of or explaining one’s design process (Parkinson & Bohemia, 2012b), to describing and analyzing the ways in which we experience a completed design product (Coates, 2012; Ro & Bermudez, 2015). In a less palpable way, narrative remains the primary means through which individuals ascribe and communicate coherence to their everyday experience: “Stories are...explanatory devices that help us make sense of the random and inexplicable happenings of everyday life” (Frascari, 2012, p. 229). A more profound role of narrative is its potential for aiding in the construction and transformation of the self: “Stories not only help us make sense of the actions of others, they serve to shape our own identities” (Frascari, 2012, p. 228). This echoes the work of researchers who claim that identity is narratively constructed, and that narrative is not simply a way of describing past events but has an

ontological dimension—meaning that we become who we are through internal and external narrative practices (see Eakin, 2008; McAdams, 1993; Somers, 1994; Wortham, 2001). Though it is important to remember that our particular social context places limits on how we perform these stories and what we are able to say through them (i.e., narrative structure and content), narratives of self are inherently tied to processes of social agency, as they grant us the opportunity to construct and reinvent our past, present, and future identities.

From a practical as well as an epistemological standpoint, narrative practice and narrative inquiry relate long-held pedagogical traditions in design culture to themes of ontological learning, identity, and agency. For this reason, storytelling occupies a central place in this study, as a methodological framework and representational strategy.

Socialization and Enculturation in Architecture

Long-preoccupied with its future standing and role in society, the profession of architecture has also been plagued by “myths and illusions about what architects do” (Gutman, 1997; 2010a, p. 44). Likewise, architecture culture has been said to function as a ‘black box’, with socialization occurring via the telling of fables and anecdotes mysterious to the outside world (Banham, 1990; 1996). Historically, architectural educators were quite transparent in their objective of cultivating a certain class of ‘professional gentlemen’ (see Cret, 1941; Esherick, 1977). Necessary while problematic, processes of enculturation came to, over the decades, constitute the ‘hidden’ (Dutton, 1987) or ‘invisible’ (Stevens, 1999) facet of architectural curricula. In his seminal work on reflective practice, Schön (1983, 1987) proposed that a chief function of architecture school was training students to ‘think-like-an-architect’, achieved by students modeling behavior of their design tutors. In this way, the traditional master-apprenticeship relationship represents contemporary studio pedagogy’s historical foundation. Critiques of Schön’s pedagogical model and studio culture from feminist and critical pedagogues (see Anthony, 1991; Dutton, 1987; Mewburn, 2010; Webster, 2008; Willenbrock, 1991), as well as various cultural shifts beyond the discipline, eventually led to more student-centered teaching practices. And as part of architecture’s ongoing attempt to define what makes practicing designers ‘successful’ in changing professional contexts and demands, educators began questioning common pedagogical practices and seeking alternatives.

As part of this shift, enculturation processes returned as a chief concern for those researching design education. Rather than simply training graduates in ‘design skills’, scholars argued that certain, revised modes of studio pedagogy could aid in cultivating critical thinking skills and dispositions through ‘independent design decision-making’ (Bose, Pennypacker, & Yahner, 2006) or that ‘practical communication strategies’ and community-based projects might promote an ethical framework of practice as opposed to egocentrism (Monson, 2005). The underlying critique of this line of research was that common practices of studio-based socialization (i.e., those that reproduced the myth of individualism, see Cuff 1991; Stevens, 1998; Till, 2009) were not producing ‘successful’ graduates and/or that out-moded professional ways of being were inadequate for meeting the demands of contemporary society (see Schneider & Till, 2009; Speaks, 2002). Amidst this rise of pedagogical criticism and innovation, collaborative learning strategies emerged as a potential means for socializing students into transformed modes of practice, such as one based on ‘design agency’ (see Schneider & Till, 2009). Till (2009), for example, recognizes ‘dependency’ as a defining feature of contemporary architectural practice and proposes reformulating our notion of architecture to introduce non-architects into the processes and products of practice. He advocates for

Identity Transformation through Collaboration

a move from the idea of architect as expert problem-solver to that of architect as citizen sense-maker; a move from a reliance on the impulsive imagination of the lone genius to that of the collaborative ethical imagination; from clinging to notions of total control to a relaxed acceptance of letting go. (p. 151)

Thus, collaborative ways of being are currently considered by certain design scholars to represent a central feature of the ideal design professional. In this way, calls for more (and more meaningful) opportunities for collaboration in educational contexts are fundamental to projects seeking to ontologically reshape the profession itself.

While research on the learning outcomes of school-based collaboration has increased in recent years, its promotion is certainly not a new trend. A half-century ago, Walter Gropius (1962) called for teamwork in architecture schools as a way to reduce the rift between the academy and the profession, referring to resolving this schism as “an urgent task lying before the new generation, not only in the field of architecture but in all our endeavors to create an integrated society” (p. 78). While noting “the advantages and difficulties of collaborating in groups”, he asserted that students “had to learn to collaborate without losing their identity” (p. 78). In a radical revision of Gropius’ dictum, this chapter’s study of student narratives suggests that collaborative learning and one’s sense of self need not be considered opposing forces, and that aspiring designers should learn to collaborate *in order to* encourage and support a transformation of their identities.

METHODS

Research studies on teaching and learning practices like collaboration most commonly employ Likert-scale surveys in order to gauge student attitudes. What these studies potentially yield in terms of informative and comparative data, they lack in richness—namely, authentic student voices understood within a particular historical and cultural context. In fact, collecting narratives of learners remains somewhat marginalized in higher education scholarship:

The stories that students use to make sense of who they are do not fit into charts or graphs. They clash with the culture of positivism that we maintain in the academy. Many scholars feel bound to use the methods of science as opposed to those of the humanities. We see stories as ‘soft’, and thus we find one reason why faculty rarely assess the meaning of the college experience. Administrators and policy makers have also paid scant attention to the web of narrative that students inhabit. (Hanson, 2014, p. 8-9)

This chapter’s study borrows from the interdisciplinary methodological tradition of life history and narrative inquiry most commonly used by social scientists for empirically exploring themes of self-authorship and identity in learning communities. Though the historic application and acceptance of this suite of methods has waxed and waned (Goodson, 2001), the recent quantity of publications on self-authorship and student identity suggests we are in the midst of a resurgence.

As is common in narrative inquiry, a case study approach was employed, focusing on a small selection of participants using in-depth, semi-structured interviews in concert with other data sources to capture the social and institutional context. The vignettes presented in the following section are passages gleaned from interviews with aspiring architects who graduated between 2013 and 2015 from the M.Arch program at the University of Washington (UW) in Seattle, USA. They form part of a larger case study of the

program that sought to examine the ways in which aspiring architects construct meaning and a sense of self from their recollections of experiences as students and emerging design professionals. Two separate cohorts of four alumni, each interviewed one-on-one, served as primary participants. The two participant cohorts were conceived to represent distinct points in the educational-professional identity development timeline. The first cohort graduated from the program within two months of being interviewed, a similar time point to typical program exit interviews. The second cohort of alumni graduated between six and 18 months prior to being interviewed, and thus were able to candidly speak about their experience in graduate school from some distance. For this second cohort, then, recollections of their experiences as students should be understood as being narratively constructed from a professional, if still emerging, identity. Much like a recent longitudinal study by Case (in press), the objective was for participants to be “able to look back on their university experiences from some distance, and also to locate these within the broader developments in their working and personal lives” (p. 3). Thus, interview content covered life circumstances, design-related learning, and perceptions towards the profession of architecture before, during, and after the graduate program. Participants were given the chance to delve into details of particular events, relationships, and courses, effectively assembling their personal histories into a holistic narrative, supported by briefer, experiential narratives. With considerable time separating given educational activities from interviews (at least one year for those presented in this chapter), recollections ought to represent more persistent attitudes than those collected, say, immediately following a course or project. Regarding the topic of collaboration, this more mature pool of participants may explain the lack of concern expressed about assessment or ‘free-riders’, a frequent theme in undergraduate surveys following team-based activities (see for instance Webb & Miller, 2006).

Overall, participants ranged in terms of program track/length and employment status. In terms of characteristics like age, national origin, ethnic and gender identity, and sexual orientation, participants were recruited in an attempt to achieve a level of diversity reflective of the program’s current student body. Common amongst graduates from this particular program, each alumni participant had some level of professional experience prior to graduating, and each participated in some form of collaborative work as students in design studios (ranging from site analysis activities to a nine-month thesis project). Each alumni participant yielded three to four hours of dialogue, recorded over three separate interviews, as proposed by Seidman (2013). To provide a better understanding of participants’ cultural and institutional context, other data sources included interviews with four faculty members, two focus group sessions with four current M.Arch students, as well as program-related documents and histories.

Researcher power, privilege, and positionality represents the central ethical concern associated with narrative inquiry. As researcher and interviewer, my own insider-outsider position (as someone who recently completed a different M.Arch program before undertaking doctoral studies and teaching duties within the same college as the participants) afforded me a certain level of access to participants’ life stories and educational experience by way of trust and parity. In other words, this study’s narratives cannot be dissociated from my performance as an interviewer and my identity as interpreted by participants. A similar study conducted by a faculty member or administrator would have undoubtedly yielded different narratives. Other ethical concerns include colonizing participant stories and the issue of textual closure inherent in ‘the move from life story to life history’ (see Goodson, 2001, pp. 137-139). Such problematic issues should not be disregarded, and yet the ethical paradox of representation cannot be avoided in the retelling of others’ stories.

Approaching the analysis and subsequent representation of participant histories includes both phenomenological and interpretative objectives (see Larkin, Watts, & Clifton, 2006). Phenomenologically,

the aim is to understand and describe what the participants' world is like, whereas the interpretative aim is to speculate on "what it means for the participants to have made these claims, and to have expressed these feelings and concerns in this particular situation" (Larkin, Watts, & Clifton, 2006, p. 104). These aims correspond to first- and second-order analysis, respectively, the former represented in narrative form as a conversation between interviewer and participant and the latter through the author's discussion that links these narratives to relevant theories. Through a close reading of all interview transcripts, first-order analysis involved inductively identifying content themes. Here, collaboration, which had not been specifically targeted as an interview topic in protocols, emerged as a theme across all eight alumni participants. The next phase of analysis consisted of constructing 'profiles' of each participant by reducing and reorganizing transcripts to first-person narrative form (see Seidman, 2013). Passages previously coded with the theme of 'collaboration' were then evaluated in relation to each participant's profile to determine whether or not these passages fit into their broader narratives of development. Passages that met this criterion, meaning those interpreted as 'developmentally effective experiences' (Barber et al., 2013) that fell within broader 'information-rich narratives' (see Baxter Magolda & King, 2007; Case, in press), are presented in this chapter. Extended interview passages are included to provide readers the opportunity, however limited, to 'hear' participants' voices. Real names, identifiable content, and everyday speech patterns that might detract considerably from the reading experience were removed, while attempts were made to remain true to what I understood to be participants' intended meaning. Thus, the passages should be read as life histories co-constructed by researcher and participant, rather than stories as told directly via interview.

PROGRAM CONTEXT

To frame the subsequent participant narratives, this section outlines the institutional context that forms the social structure of participants' academic life histories. Despite some similarities owing perhaps to accreditation requirements and pedagogical lineage, the culture of architecture programs can vary significantly, even within a particular geographic region. Thus, it is important to briefly describe the cultural milieu co-produced by the participants represented in this chapter and from which their attitudes emerged. This is also intended to help readers consider the applicability and transferability of findings to their own contexts, as case study-based inquiry demands (Lincoln & Guba, 1985).

The University of Washington is located in Seattle, the Pacific Northwest's primary urban and cultural hub and home to a growing number of software- and web-related corporations, as well as several design firms internationally renowned for their environmentally conscious approaches to regional modernism. The Department of Architecture, which recently celebrated its centennial, is housed within UW's College of Built Environments alongside units in allied fields, such as landscape architecture, construction management, urban design and planning, and real estate. Owing to its relative geographic isolation from other centers of architectural culture, members of the department have long considered its provincial character a mixed blessing (see Johnston, 1991; Ochsner, 2007). As a nationally accredited professional degree program, the M.Arch program meets the standards set by the National Architecture Accreditation Board (NAAB), meaning its graduates are eligible for obtaining state licensure as practicing architects following completion of the National Council of Architectural Registration Boards' (NCARB) Intern

Development Program (IDP) and the Architect Registration Examination (ARE). On average, about 50 students graduate from the program each year (Miller, Anderson, Young, & Cauce, 2013). Departmental administrators maintain that, “Most of our students intend to become practicing architects” (Miller et al, 2013, p. 17). From faculty, student, and alumni interviews, it was clear that working in a local architecture firm after graduation was considered both normal and expected, though there was no assumed ‘typical’ firm type or size. Recent statistics tracking the professional status, discipline, or location of program alumni were not available; however, ARE pass rates by UW alumni averaged 79% from 2010-2014, with between 25 and 50 passing the exam in each of those years (NCARB, 2015).

In the administrators’ words, the Department seeks to cultivate “students who understand their ethical responsibilities in professional practice, including obligations to the traditions of the discipline, the mores of the profession, and the needs of clients and society” (Miller et al., 2013, p. 25). This, paired with the strong connection between the program and the local community of design professionals (evident in the presence of local design practitioners serving as faculty members, guest lecturers, and guest critics) means that students are poised to join and contribute to this community soon after graduating. And as the program’s recent NAAB Report put it, “Since most graduates stay in the Seattle area, the values and skills taught in the Department ultimately make their way back into the professional community” (Chronister, Ameri, Golden, McEnroe, & Malek-Aslani, 2014, p. 1).

From departmental documents and histories, accreditation reports, and interviews with faculty, alumni, and current students, there is a remarkably consistent discourse concerning the program’s characteristic qualities. Here, architecture is considered first and foremost a craft that ultimately leads to the assemblage of tangible materials in real space. As a faculty member stated in a history lecture to students, “Architects have to be practical. Buildings have to get built” (May 11, 2015). Students are frequently encouraged to defer to the practicalities of the profession and real-world constraints, with most design projects located on feasible building sites in the Seattle area. Two of the Department’s most recognized and longest-standing courses are the Neighborhood Design-Build Studio and Furniture Studio (see Ochsner, 2012), together reflecting the school’s ethos of architecture as fundamentally concerned with making.

As is typical in architecture programs worldwide, studio lies at the center of the curriculum and student life. The studio’s pedagogical and cultural character is intended to foster a supportive environment, where “students benefit from peer feedback and a sense of common purpose unusual in other university courses” (Miller et al., 2013, p. 5). Thus, even if projects are completed individually by students, the studio is intended to function as a collaborative learning community. The claim frequently made, and boasted nearly universally in studio-based programs, is that, upon fully embracing studio culture, students often learn as much from each other as from their instructors. With the M.Arch program including a three-year track for students with non-architecture undergraduate degrees, student backgrounds can range substantially within each cohort—not only in terms of professional and academic design experience but as far as experience related to collaboration in their prior academic, professional, and personal lives. Upon graduation, however, nearly all students have first-hand experience working in the profession, thanks in part to a recently implemented initiative with local firms that guarantees a supervised, paid summer internship for all three-year students following their first year. This opportunity is meant, in part, to ease the school-to-work transition by providing mentored professional experience within the graduate-level curriculum (“UW Master of Architecture Student Internship Program,” 2014).

RESULTS: PARTICIPANT NARRATIVES

For the participants presented in this section, collaborative experiences played a central role in the meaning-making process of their professional education. As discussed in the section on methods, these three participants are being represented in particular because their narratives of ‘developmentally effective experiences’ were considered ‘information-rich.’ In analyzing their narratives, it became clear that these participants considered the value of collaboration not simply as translatable skills or knowledge for working in teams but for the ways that it shaped how they understood themselves as designers in the process of becoming. Thus, their narratives suggest that, for some, collaborative experiences play an important role in long-term projects of self-authorship, primarily by prompting self-reflection on issues of agency, identity, and wellbeing.

Irene

Irene moved to the United States from overseas initially to study interior design—partly because, in her own assessment, she lacked the aptitude and confidence to enter an architecture program directly from high school. After completing her undergraduate degree and feeling out of place in the culture of interior design, she was encouraged by her family to reconsider architecture as a field of study. When I spoke with her, two months had passed since she completed the three-year M.Arch program, and she was in the process of searching for employment. At the time, she remained skeptical about whether she was committed enough to architecture to succeed in the profession.

Irene admitted to struggling throughout graduate school when it came to engaging in design criticism. As was true for every participant interviewed for this study, the ebb and flow of self-confidence was a central theme of Irene’s graduate education. Once she became comfortable seeking feedback from instructors, her tendency, as she explained it, was to take their criticism personally and judge the success or failure of her designs (and herself as a designer) purely on the comments of instructors or guest critics. In other words, by conflating her design work with her own self, she was vulnerable to perceiving design criticism as a reflection of her identity and self-worth, reminiscent of the experiences in an undergraduate architecture program described by Willenbrock (1991, p. 102-103):

We were to wrap ourselves completely in our work until the day of critiques, and then divorce ourselves completely from it...The identification we naturally made with our work rendered us vulnerable to destructive comments and made objective distance virtually impossible in our early critiques. We later learned to toughen our skins.

Similarly, in her last interview, Irene noted that she eventually improved her ability to cope with criticism:

I think I’ve gotten a little better trying to decide for myself if it’s a good or a bad design. I mean, if I like it, I like it. And someone else is gonna hate it, but how can I do anything about that?

Probing this, I asked Irene to identify the moment when she noticed this shift beginning to happen.

Well, I noticed when I actually did a studio project with a partner—I noticed that I was more influenced by the professor than my partner was. She was very strong-minded—like, she knew what she wanted, she knew what was good. Regardless of whether people hated it or not!

So every time we had a desk crit [with the instructor], we would come outta there like, ‘Did he like it?’ ‘I don’t know.’ ‘What the hell’s going on?’

And our design was just totally different from everybody else’s.

And I would come outta there, and I’d be like, [whispering] ‘Shouldn’t we change it? Should we do what he says? Should we not make this angle?’

And she would be like, ‘No! We’re makin’ the angle! We’re stickin’ with it!’

And I’d be like, ‘Ok! Are you sure?’

And she’d just be like, ‘Yes! It’s fine! We’re going to stick with it.’

So that’s when I noticed, Oh! You can actually just say, ‘No, I don’t really want to listen to you. I’m gonna do it my way.’

And I don’t think I was brought up that way. ‘Cause my mom usually suggests things, and I’m like, ‘Ok, I’ll do it.’ So I was brought up just doing things—whatever anyone told me to do.

And then when I worked with [my studio partner], it was an interesting experience ‘cause I was like, ‘Oh! Ok!’ I could not have gone against the professor’s advice if she wasn’t there and telling me like, ‘No, it’s fine. Just leave it.’ So I think that’s when I noticed—and that’s when I started to try and do it myself.

I don’t do as good of a job as her, but...Not blindly taking someone else’s advice and thinking for myself, I think, is a good thing to learn.

Irene’s reflection on this topic suggests that, at some point, she became aware of the potential misalignment between her cultural upbringing and the ideal of objective, dialogical criticism considered such a fundamental value in contemporary studio-based pedagogy. Through this experience, she recognized an ontological gap leading up to this point in time between her self-image and the image she held of being a successful designer. In her recounting of this story, Irene makes it clear that the experiences of designing with a partner granted her the opportunity for self-reflection on her own agency as a designer, to the point where she could imagine herself challenging the opinions of her ‘superiors’, whether inwardly or outwardly. In constructing her own framework for meaning-making and not depending on authority figures, she began shifting from an external to an internal voice, a hallmark of self-authorship (Barber et al., 2013). We can infer that this experience and Irene’s willingness to adopt the traits of her peer for the sake of self-improvement was made possible largely through the collaborative structure of the project which granted her a level of joint responsibility and decision-making power. In her reconstructed dialogue, Irene conveys how her reluctance to defy instructor criticism was challenged by her partner, granting

Identity Transformation through Collaboration

Irene the opportunity to undergo an experience she would not have otherwise—namely, determining her own criteria for a ‘good’ design. In this way, she considers her collaborative experience as providing a unique opportunity to transform her previously held identity of being ‘someone who did what she was told’ to ‘someone sufficiently strong-minded to think and act for herself’.

As a narrative of meaning-making, whether or not the instructor’s criticism was externally ‘valid’ or ‘appropriate’ is irrelevant, as is whether or not the groupmate’s reaction to instructor criticism was justified. What matters in the context of this study is Irene’s belief that this experience affected her personal development, and that she was able to weave this experience into her personal narrative. Whereas the experience did not necessarily increase the confidence she had in her design ability, it did allow her to participate in, and ultimately adopt herself, a more autonomous identity as a designer. Although Irene’s narrative is not a full expression of self-authorship, it reveals that she considers the experience a significant event in shaping her current personal identity. Later in the same interview, Irene spoke of how this experience of discovering her agency as a student and as a designer influenced how she carried out her thesis project. In the process of developing her thesis project, she relied less on her instructors for design guidance: “I didn’t really have people to depend on but myself.” This project thus became a process of self-discovery, in which her disciplinary agenda and professional ambitions were sharpened. At the time of her interviews, she was attempting to enter the workforce with some hesitation, although this had more to do with concerns about finding fulfillment professionally than with doubting her competence.

Robin and Monica

Though interviewed separately one year after they graduated, the narratives of two other study participants are very much intertwined, having developed a particularly significant collaboration with each other while in graduate school. Robin and Monica each entered the 2-year track of the M.Arch program with similar agendas regarding expanding architecture’s social responsibility, which had been cultivated in undergraduate architecture programs at other institutions. Though their backgrounds and paths to graduate school differ, their journeys through school share many parallels. They each described their first studio experience at UW as ‘disenchanting’ and ‘miserable’. As Monica put it, “I thought I’d made a huge mistake coming back”. In both of their cases, this was because the way that the studio was being operated by the instructor was “tightly controlled” and therefore did not match their personal philosophies toward design (in which design problems ought to emerge from how the designer interprets the particular project’s conditions, not *a priori*) or what they considered to be the purpose of architectural education (for instance, Monica believes school should be a time and place to “formulate ideas about what *you* want it to mean to be an architect”, whereas Robin believes school should be a time and place that fosters self-exploration by encouraging students to practice what he calls ‘radical creativity’). Robin discussed these convictions in relation to his first studio experience at UW:

I think there were a lot of negative dynamics in that studio. One of them was about keeping people disconnected. It wasn’t a studio about collaboration. I didn’t get to know people for a long time because it was so individualistic. It felt like being isolated from community! Even though we were in one big room together...

That studio...rubbed me the wrong way because it felt very constraining...I felt like we were just practicing to do the work we were gonna do when we got out of school...And I think it leaves out a lot of

self-exploration and developing some self-knowing about what's important to you and what you really want to do. And I think that's part of the positive side of the individualism that I see is developing an internal compass, in a sense of what I want to be doing, what I value...

Prompted by their negative feelings in their first studios, both Monica and Robin described finding other dissatisfied students and joining a 'niche community' of what Robin referred to as the "bad kids who had been analyzing, critiquing the program for years already". While this cemented their identities at the margin of the program's dominant culture, it provided them with a peer support network they considered crucial to their livelihoods as students.

When they reached the thesis stage, a sequence of research and design courses that represents the culmination of the program's curriculum and encompasses a full calendar year, Robin and Monica discovered they had common interests and decided to undertake a collaborative thesis project. Thesis projects, typically conducted independently, are oftentimes the one opportunity for students in the program to choose their own project site, building type, and theoretical topic—and therefore can be a particularly significant moment of freedom and discovery for young designers. Because theses are not conceived as team-based design projects in the program's curriculum, Monica and Robin had to receive permission from their advisors to work collaboratively. In their case, it is clear that Monica and Robin's shared identities as outsiders were largely what led to the formation and success of their partnership. Part of what also drew them together was the potential to form a deeper working relationship than is possible in typical studios—particularly at UW, where academic terms span only ten weeks.

In describing their experience carrying out a thesis project together, both Monica and Robin noted the non-instrumental values of collaboration. As Monica said, "Sharing the burden of something like that goes a long way, I think, psychologically to making it feel like it's something that you're actually gonna finish or get to a point where you're happy with it". Or as Robin put it,

Just feeling like other people have my back and that I have their back...that we're a team, is just a way in the world that I feel most comfortable...

And actually, hard things in life were happening in different points during...thesis. And having someone else be in the back and forth, and to actually feel supported—I saw so many people working individually—And this happens a lot, I think, in architecture, that it's psychologically unhealthy and people having breakdowns. Y'know, you can see on their face, so just drained and anxious.

Building on our discussion of 'being collaborative' and his thesis experience, I raised the familiar argument for collaborative processes, that they actually generate higher-quality design products. To this, he countered:

I don't think that it necessarily is better.

I just feel better in myself and in a community and in the world if I'm seeing people do things collaboratively.

I think there's all these benefits that aren't tangible, and maybe are benefits to the practitioners more than the clients sometimes. Where you're actually just building community and exploring ideas and doing

Identity Transformation through Collaboration

all this work on yourself that I think does trickle down or is reflected in the work you actually produce that other people experience.

But I find the experience of isolated work by myself is—in the communal sense of being human—dehumanizing.

The potential that collaborative design projects have for improving psychological wellbeing is something Robin and Monica each identified as one of the chief benefits of their thesis experience. However, here, we can recognize Robin beginning to apply the ‘non-tangible benefits’ of collaboration to a professional context, where social relations and expectations of efficiency tend to differ from academic contexts. After graduating, both Robin and Monica found employment with sole practitioners and are attempting to build a foundation of professional skills. At the time of their interviews, they continue to collaborate with each other on design competitions outside of their jobs.

Ultimately, their thesis process granted Monica and Robin the time and freedom to explore a site and their own working relationship sufficiently enough to meet the standards of their converging philosophies of design. Collaborating strengthened not only each of their critical convictions about conventional architectural practice but also their beliefs that their identities—however marginalized they considered them to be in their disciplinary context—could operate successfully within the profession. Working together on their thesis offered Monica and Robin a performative opportunity to embody identities that they later would develop in a professional context. Now working for an architect whom she considers a ‘counter-example’ role model, Monica expressed the enduring conflict between her own self-image and that of an architect: “Even once I get my license, I’m not sure I’m gonna feel like an architect”. As she put it,

I don’t wanna wake up one day and be the entity that I was criticizing ten years ago...

I do wanna continue to be employed. But I think it’s gonna be largely about finding avenues on which I can actively be that and challenge it at the same time.

Thus, rather than attempting to suppress the ‘instigator’ identity she had developed over the years for pragmatic purposes, Monica attributes graduate school with providing her the opportunity to construct an ‘insider-instigator’ identity (what she calls a ‘counterexample’) that she carried with her to the professional world. In this sense, Monica might well be considered either a ‘purifying simulator’ or ‘simulating purifier’ in Whiting’s (2010, pp. 314-315) hybridization of Gutman’s (1985, 2010b, pp. 268-269) original conceptualization of architecture’s two academic camps: the ‘purifiers’ (those who sought to maintain the autonomy of the academy) and the ‘simulators’ (those who sought to integrate the academy with professional modes of design). Through reflective, creative, and performative experiences over the course of her M.Arch education, Monica was ultimately able to construct an ‘identity horizon’ (Côté, Skinkle, & Motte, 2008) that positioned her values and ethical commitments within the broader culture of architectural practice.

Robin, who also works for a sole practitioner, sees the value of learning through an apprenticeship model for his own development and goal of professional autonomy. As he put it,

I value knowing everything I need to know so that I don’t have to work for a big firm that might not be doing what I want.

I think I want more control over how and with whom I work and collaborate.

Robin ended his final interview by noting a recent shift in his outlook toward the future:

I feel like I don't know how to predict what will be next [in my career]...

Being in school, there's this conception or curiosity of what professional life is going to be like. And getting out of this long process of education that was, in a way, encapsulated. And then now to be in sort of the open range of professional life where I really want to encapsulate and figure out what are the phases. Like, are there gonna be stages of growth, or phases of interests?

I've been experiencing a bit of an overwhelming feeling...It feels like this expansive, nebulous place now. That either I could just do what I'm doing now forever. Or things will change along the way.

And I'm sure there'll be happenstance, and there'll be opportunities that'll just be out of my control. But now, I'm starting to feel like, 'Wow, I have a lot more responsibility to take those changes, make those shifts.'

Because hopefully I'm not just gonna get fired or laid off or whatever, [which would] just force me to totally reevaluate. I would rather choose like, 'Ok, I want to start a firm with a collaborative basis. Or join one at some point when I'm ready to. Or shift my focus of interest when I'm ready.'...

I think I'm seeing more that it's my responsibility to continue my evolution. Where I think I saw school and grad school as supporting me, doing that for me—like it was challenging me, it was telling me to change...And I think that that's a big shift, where now it's my job to do that.

Here, Robin is expressing how his development within a professional context demands self-authorship. Rather than depending on institutional structures for opportunities to reinvent himself, which he considers essential for professional growth, he believes this is now his responsibility. He describes this feeling as 'overwhelming', but his recognition of this shift in itself suggests he is up to the challenge. By knowing himself, knowing that he must change, and considering himself responsible for supporting these change, Robin has journeyed most of the way towards self-authorship. While he did not relate these realizations directly to his experience collaborating in school, it undoubtedly played a central role in his transition from school to work.

In fact, both Robin and Monica's interview transcripts revealed clear evidence of meaning-making processes, and their parallel experiences comprise many of the themes of self-authorship illuminated by Barber et al. (2013), including: experiences of dissonance, the significance of belonging, working through personal difficulties, and taking ownership of their beliefs. As the catalyzing force behind their identities shifting from academic to professional selves, their collaborative thesis project represents a significant chapter of their respective narratives.

CONCLUSION

The preceding narratives evoke various ways in which an individual's encounter with collaboration in a design studio ultimately became woven into their personal narrative of ontological development: from prompting reflection on one's own agency as a designer (Irene), to demonstrating the affective benefits of being collaborative (Robin), to providing an opportunity to embody a 'dissonant' professional identity (Monica). In this way, these participants' collaborative experiences shaped their student narratives, which then became prologues to their narratives as emerging architects. In other words, they are examples of how, by recollecting their experiences as students, emerging professionals might make meaning and ultimately themselves. This study thus helps broaden our understanding of how aspiring design professionals transition from school to work by expanding the focus beyond skills and knowledge to 'ways of being' and, specifically, narrative processes. How individuals construct meaning from significant events in their lives is considered a major determinant of their future wellbeing (Cox, 2015). So while there is certainly nothing inherently life-changing about collaborating in school, certain learning experiences invariably help determine how we construct our past, present, and future selves. Therefore, it is important to recognize the potential role that collaborative opportunities might play in the life histories of college students and emerging design professionals.

All this leads to the question of how educators might support or encourage ontological development, particularly as it relates to collaborative design, as well as what directions future research on this topic might take. First, it is important to recognize that self-authorship does not typically occur within the timeframe of an academic program (Barber et al., 2013). Because it cannot thus be considered a learning outcome for a single course, project, or instructor, this would suggest that self-authorship itself cannot be assessed as such. However, educators can promote self-exploration by helping students "work on themselves" over the course of their education (Tennant, 2012). As Harrell-Levy and Kerpelman (2010) argue, teachers can serve as 'agents of identity formation' by deliberately adopting 'transformative pedagogy'. This would imply extending one's role beyond simply 'supporting' students by structuring courses, projects, assessment, and entire curricula in ways that encourage self-exploration and explicitly recognize aspects of ontological learning as broader educational outcomes (Dall'Alba & Barnacle, 2007, p. 687). Opportunities for students to participate in 'autobiographical practices' (see Miller & Morgan, 1993), like exit interviews or reflection journals, can provide opportunities for them to narratively illuminate their individual journeys of 'becoming a design professional', while improving their chances for future success (Ghassan & Bohemia, 2011). Among numerous other prospects, engaging students in 'learning conversations' or role-playing exercises with peers and/or practitioners can prompt self-reflection regarding, for instance, how their emerging identities relate to others', as well as to professional social norms (Westrup & Planander, 2013). Finally, considering collaborative design practices as 'ways of being' means that educators should also recognize that cultivating the emotional aspects of collaborative design requires training, just as does learning the practical aspects of working in teams. As Byun, Kim, and Duffey (2012) argue, emotional learning "is a critical component of collaborative learning outcomes" (p. 202).

FUTURE RESEARCH DIRECTIONS

The lack of research relating collaborative learning to ontological development means there is much to be gained from future studies on this topic. However, it is important to consider possible reasons for the scarcity of research thus far. One is that modes of phenomenological/interpretative research such as this study employed are still not widely accepted in certain scholarly communities, as the results yielded are not, strictly speaking, generalizable or considered ‘valid’ under dominant epistemological frameworks. However, it remains the most accepted approach for life history research, and its acceptance appears to be growing. A second reason, as already noted, is that the timeframe by which transformations like self-authorship take place extends beyond the timeframe of educational assessment. Therefore, research studies limited to classroom contexts would prove insufficient for exploring more holistic development processes. There is, on the other hand, much more work to be done in classroom-based inquiry to understand the relative strengths of the pedagogical strategies discussed above. Future studies could begin to assess the potential of these various strategies to operate as a ‘transformative pedagogy’ in the context of collaborative design.

To expand on this case study, future research should also investigate other institutional and disciplinary contexts using longitudinal studies, as it remains unclear to what degree design collaboration as a meaning-making opportunity differs depending on one’s sociocultural context. With a wider set of examples of how collaborative learning has encouraged self-exploration in design students like those presented in this study, further thematic features and conceptual frameworks will ostensibly emerge, which could inform metrics for identifying and evaluating learning outcomes related to self-development in studio collaboration. Finally, there is much to be explored within the realm of narrative-based inquiry on this topic in terms of data collection techniques and representational strategies. Future research could take more creative approaches to gathering and depicting collaborative learning experiences within particular, contextualized life histories.

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KEY TERMS AND DEFINITIONS

Agency: The capacity of individuals to act independently and make their own free choices. Structure, agency's dialectical complement, is those factors of influence that determine or limit an agent and his or her decisions.

Life History: A method employed in social science and humanities research that studies autobiographical accounts, often to examine the relationship between a person's life story (its content, structure, or some combination) and their sociocultural structure.

Narrative Identity: The notion that we come to be who we are (however ephemeral, multiple, and changing) by being located or locating ourselves (usually unconsciously) within social narratives rarely of our own making.

Ontological Learning: A way of conceptualizing learning that foregrounds how 'ways of being' transform within a given social/disciplinary context. This is in contrast to the predominant conceptualization of learning that focuses exclusively on skill/knowledge transfer/acquisition.

Self-Authorship: The internal capacity to construct one's beliefs, identity, and social relations. A growing number of scholars and educators consider the transition from dependence on authority to self-authorship as crucial to successfully navigating adult life.