



**INTERIOR DESIGN
EDUCATORS COUNCIL®**

2022 South Regional Conference

Weaving The Threads of Design

October 6 - 7, 2022

Converse University

Spartanburg, SC

Table of Contents

Scholarship of Design Research Presentations

The Role of Interior Design in Improving the Health of Latino Residents Living in Apartment Homes in Sandy Springs, GA – Natalie Holloway, Natalie Holloway Interiors

Relief Revival Reincarnation- Lisa Moon, Independent Practitioner

All We Ever Wanted: A Heart Conversation About HGTV- Amy Roehl, Texas Christian University

Webcam-Based Eye Tracking in Interior Design Research: Preliminary Research Design Outcomes and Lessons Learned- Alp Tural, Virginia Tech

Evaluating Themes in Undergraduate Interior Design Capstone Topics: A 4-Year Study- Sarah Boehm, Savannah College of Art and Design

Juvenile Justice Centers: Addressing Rehabilitation Through Interior Design- Callie Welsh, Savannah College of Art and Design

Social Connections: Creating Opportunities of Social Interactions for Adolescents Within High School Spaces- Sarah Lopez, Savannah College of Art and Design

Scholarship of Teaching and Learning Presentations

Weaving Diverse Cultural Narratives into Studio Design Learning Objectives- Johnnifer Brown, Western Carolina University

Mill Owned Housing: Its History and its Constructs – Jane Hughes, Western Carolina University

Bridging the Inequity Gap: Instructional Interventions to Improve Academic Success of First-Generation College Students – Saman Jamshidi, University of Nevada Las Vegas

Creative Scholarship Presentations

Revisiting Design Concepts in Color, Form, and Space Through One-Point Perspectives- Yaoyi Zhou, Virginia Tech

Worthy- Anna Gatlin, Auburn University

This is Interior Design- Taneshia West Albert, Auburn University

Ecologically Balanced Ideation Regimes and Effects of Critique- Lindsay Tan, Auburn University

Designing for Social Change: Through Diversity, Equity, and Inclusive Design for Employees with Special Needs- Jane Hughes, Auburn University

Poster Presentations

Biophilic Playgrounds for Children in Highly Transient Communities of Oahu- Ying Yan, Indiana Auburn University

Improving the Longevity of China's Senior Populations: Reducing Social Isolation and Loneliness-
Muxuan Zhao, Savannah College of Art and Design

Bright Futures: A Connective Work Environment for Start-Up Entrepreneurs- Xinyu Zhang,
Savannah College of Art and Design

Psychological Trauma Rehabilitation: A Center for Children Affected by the Pandemic- Yue Che,
Savannah College of Art and Design

Evidence-Based Residential Design for Aging-in-Place and Multi-Generational Living- Cher
Pombuena, University of Nevada, Las Vegas

Leaven, Strengthening Community by Breaking Bread- Savannah Kruzner, Savannah College of
Art and Design

Shaping Socialization: Strengthening Bonds Between Middle School Students- Alana Houston,
Florida State University

Explorations in Empathy: An On/Off-Campus Challenge- Chris Smith, Georgia Southern
University

Opportunity to Adjust the Sails of a Researched Based Capstone Project: Divide and Conquer-
Shelby Hicks, Western Carolina University

Scholarship of Design Research – Diversity, Equity, and Inclusion
Presentation

The Role of Interior Design in Improving the Health of Latino Residents Living in Apartments Homes in Sandy Springs, GA

Natalie Holloway, Natalie Holloway Interiors

Abstract

The movement of immigrants to the United States from Latin America and Mexico has increased significantly in the past fifty years with the metro Atlanta area experiencing substantial growth among this population. As the service and agricultural industries in the state of Georgia continue to need workers in low-skill positions, it is projected that the influx of immigrants will continue to increase, bringing with this the need for affordable housing for these individuals and their families. As opposed to other immigrant groups, Mexican immigrants are less likely to become naturalized and are more likely to live in poverty without health insurance, with 8% of the U.S.-born population being uninsured versus 38% of Mexican migrants in 2019. Research has shown that upon arrival to the United States immigrants reside in areas where there are others in similar situations, however as they are able to make financial gains they move into different neighborhoods with lower rates of poverty (Asad & Rosen, 2019). Issues such as the presence of lead-based paint, mold, ventilation and pest infestations create homes which can negatively impact the health and well-being of residents. Through the use of surveys, photoethnography, and interviews, the researcher delves into the needs of the Latino community related to the built environment in order to get a better understanding of how these spaces can be improved. The concept of health equity,

which was first documented in the late 1960s, relates lower socioeconomic status and related implications to poorer health outcomes. This disparity disproportionately affects blacks and minorities, leading to the creation of the World Health Organization Commission which studied Social Determinants of Health (SDH) in an attempt to reduce unequal opportunities for health (Osmick & Wilson, 2020). These concepts are researched and the findings are applied to data that pertains to the built environment. The enforcement of building codes is crucial in ensuring these homes are safe for their residents, placing the burden of enforcement on local municipalities. The researcher hypothesizes that the presence of mold, lead-based paint, pest infestation, and additional factors contributing to unequal health opportunities are likely to be found in aging apartment homes in Sandy Springs and there is an opportunity for leaders within the community to come together to ensure that all residents are able to live in safe and reliable homes. The International Residential Code was created and is updated by a council with backgrounds in health, architecture and engineering however there is limited presence of practitioners of interior design who have a wealth of knowledge on materials and building systems. This field should lobby for greater involvement in code development to ensure all people have access to healthy living environments. Why and how should elected officials address these potential issues, and is there an option for landlords, builders and interior designers to work together to create a living environment that fosters positive health outcomes for residents of low-income apartments in this area?

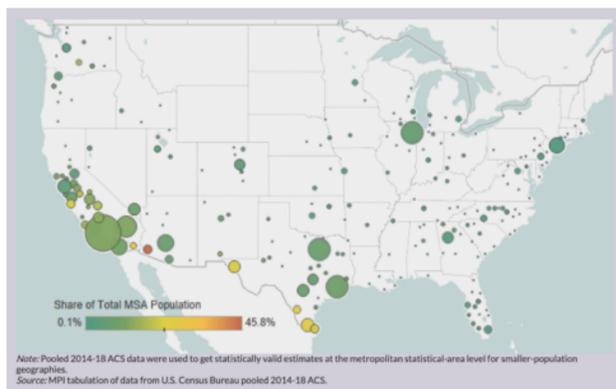
References

Asad, A. L., & Rosen, E. (2019). Hiding within racial hierarchies: How undocumented immigrants make residential decisions in an American city. *Journal of Ethnic and Migration Studies*, 45(11), 1857–1882. <https://doi.org/10.1080/1369183X.2018.1532787>

Osmick, M. J., & Wilson, M. (2020). Social Determinants of Health—Relevant History, A Call to Action, An Organization’s Transformational Story, and What Can Employers Do? *American Journal of Health Promotion*, 34(2), 219–224.

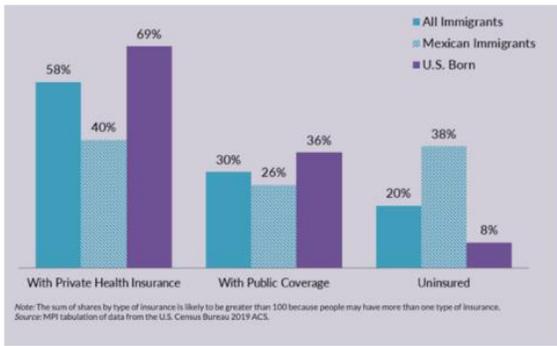
<https://doi.org/10.1177/0890117119896122d>

Figure 1. Mexican Immigrant Residence



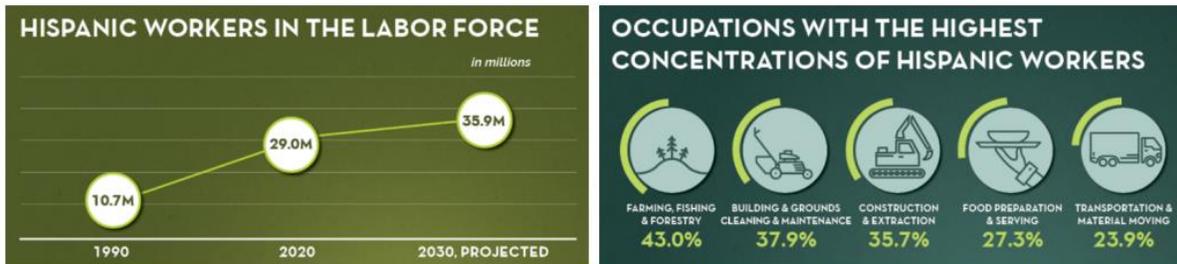
Note. This figure shows the share of the Metropolitan Statistical Area (MSA) of residence for Mexican immigrants to the United States between 2014 – 2018 (Batalova, 2020).

Figure 2. Health Coverage in the United States



Note. This bar graph displays the disparity in health coverage among different portions of U.S. population (Batalova, 2020).

Figure 3. Hispanics in the Labor Force



Note. These infographics provide data on the number of Hispanics in the work force as well as the fields in which they work. This population is projected to account for 78% of new workers in America between 2020 – 2030 (Dubina, 2021).

Figure 4. Research Photographs, Apartment Building in Sandy Springs, April 2022



These interior photographs are from a bedroom wall and ceiling in an apartment in Sandy Springs, showing a significant presence of mold.

Reference:

Batalova, J. B. E. I. and J. (2020, November 4). *Mexican Immigrants in the United States.*

Migrationpolicy.Org. <https://www.migrationpolicy.org/article/mexican-immigrants-united-states-2019>

Dubina, K. (2021, September 15). *Hispanics in the Labor Force: 5 Facts | U.S. Department of*

Labor Blog. <https://blog.dol.gov/2021/09/15/hispanics-in-the-labor-force-5-facts>

Scholarship of Design Research – Diversity, Equity, and Inclusion
Presentation

Relief Revival Reincarnation

Lisa Moon, Independent Practitioner

Abstract

There is a complex connectivity that we have with the built environment that goes beyond visual aesthetics and stimulates each of our senses. This connectivity is tied to our identity and the way we contextualize our experiences and our world. Inspired by ethnographic observations, Oscar Newman's seminal work, and the Pruitt-Igoe documentary, the project examined the elements of this connectivity or in some cases the reduced connectivity within a public housing residential environment. What contributes to this reduced connectivity? Newman examined it from an architectural perspective, exterior elements of building, space designation, corridors, skip|stop elevator, circulation patterns, natural surveillance opportunities. In this way, the predominate design approach for public housing focused on quantitative elements (i.e., architecture, engineering, economics). Other researchers (domestic and international) emphasized the importance of interior elements that contribute to a sense of belonging and ownership that include personalization, spatial layout, light, relational qualities between rooms, occupancy standards, and the spaces that support socialization. This research consistently suggested that the interior environment is equal to and in some cases exceeds the importance of the building shell, prioritizing functionality, flexibility, aesthetics, and adaptability (Roger, 2005; Pader, 2016; Hadjiyanni, 2007). The project

design improved the livability of the interior environment in public housing residential units by emphasizing the design elements of light, dimensionality, circulatory liberation, balance and symmetry, relief, and spatial adaptability in the critical living areas, while preserving the historical context of the community. Designing beyond the provision of safe shelter, this project illustrated participatory design in a public housing community, such that a renewed sense of choice, autonomy, ownership, and connectivity facilitates ownership and (re)connectivity for a group whose housing opportunities have been limited by race and economics. The research question asks when the livability of the interior space is prioritized through design elements, can a renewed sense of ownership and connectivity to the space occur, thus changing the public housing landscape.

References

Hadjiyanni, T. (2007). Bounded Choices: Somali Women Constructing Difference in Minnesota Housing. *Journal of Interior Design*, 32(2), 13-27.

Newman, O. (1972). *Defensible space: crime prevention through urban design*. Macmillan.

Roger, F. (2005). *Design Strategies for Affordable and Sustainable Housing*. *Environment Design Guide*, 1–9.

Pader, E. J. (2016). Dirt or Beauty? It All Depends: Perspective. *Journal of Interior Design*, 41(3), 7–13.

Vale, L. J. (1995). Transforming public housing: The social and physical redevelopment of Boston's West Broadway development. *Journal of Architectural and Planning Research*, 12(3), 278–305.

Scholarship of Design Research – Open Track
Presentation

All We Ever Wanted: A Heart Conversation About HGTV

Amy Roehl, Texas Christian University

Abstract

HGTV is not going anywhere. The pervasive brand conjures a range of tv and streaming content about decorating the American home. Criticism of HGTV has gotten us nowhere. Attempts to set the record straight including ASID 2008, Interior Design: More Than Meets the Eye and IIDA 2010, What is Your Definition of an Interior Designer? collectively yield barely 10,000 views to-date. The strategy has been to fight the heart with facts and the heart is winning. Momentarily putting aside myriad problems with and consequences resulting from HGTV allows exploration of the why behind the 30-year media powerhouse. What does HGTV's popularity tell us about who we are, what we value, where our attention is, and what our desires are? This review of literature examines the HGTV-style programming phenomenon through the lens of anticipation to better understand the desire-driven viewership (Everett, 2004). Findings may be leveraged to develop a framework for more effectively discussing the profession of interior design with current and prospective students. Human imagination is potent, enabling projection of future desirable (or undesirable) events and anticipation of the happiness (or unhappiness) they might bring. Research reveals a direct correlation between anticipation of future desirable events and well-being (Luo, Chen, Qi, You, & Huang, 2017) yet studies show a drop in happiness upon the arrival of the anticipated event (Nawijn, Marchand, Veenhoven, & Vingerhoets, 2010). HGTV's 2003 campaign

slogan We turn viewers into doers capitalizes on anticipation, convincing viewers they are in control of their destiny through re-design of their homes. Houston (1984) argues that TV's function is more directly linked to consumption, which it promotes by shattering the imaginary possibility over and over, repeatedly reopening the gap of desire (p.184). On the topic of the reality of renovations, in her New York Times article, Going Down the Pinterest Rabbit Hole (2016) Ronda Kaysen confirms that imagining and doing are two vastly different deals. Responding to a neighbor's admiration of her do-it-yourself home project, If only she knew how little joy was involved in making it so. Might this phenomenon be exactly what unsuspecting students experience in the foundational year? The belief that transforming our physical surroundings will change our experience for the better is the driving force of our discipline. This conviction energizes professionals defending design in the face of naysaying clients, value engineering, and adverse agendas to name a few hurdles faced throughout a project. How can we be more effective in communicating our discipline and at the same time embracing the widespread love of interiors and the belief in the positive transformation they provide? Can we gently move our youngest students through the difference between loving the idea of something and the reality of making it happen before we all suffer through the foundational year? This paper considers our next steps as interior design educators in the fight for legitimacy that impacts our status within academic institutions, teaching salaries, recruitment of students who are serious about design, professional pay, and perceived worth by the public.

References

Everett, A. (2004). Trading Private and Public Spaces @ HGTV and TLC: On new genre formations in transformation TV. *Journal of Visual Culture*, 3(2), 157-181.
<https://doi.org/10.1177/1470412904044798>.

Houston, B. (1984). Viewing television: The metapsychology of endless consumption. *Quarterly Review of Film Studies* (Summer), 184-195.

Kaysen, R. (2016, November 11). Going down the Pinterest rabbit hole. *The New York Times*. <https://www.nytimes.com/2016/11/13/realestate/going-down-the-pinterest-rabbit-hole.html>

Luo, Y., Chen, X., Qi, S., You, X., & Huang, X. (2018). Well-being and anticipation for future positive events: Evidences from an fMRI study. *Frontiers in Psychology*, 8, 2199.
<https://doi.org/10.3389/fpsyg.2017.02199>

Nawijn, J., Marchand, M., Veenhoven, R. & Vingerhoets, A. (2010). Vacationers happier, but most not happier after a holiday. *Applied Research in Quality of Life*, 5, 35-47. <https://doi.org/10.1007/s11482-009-9091-9>

Scholarship of Design Research – Open Track
Presentation

**Webcam-Based Eye Tracking in Interior Design Research:
Preliminary Research Design Outcomes and Lessons Learned**

Alp Tural, Virginia Tech

Abstract

Webcam-based eye tracking was not a well-accepted data collection method due to its low accuracy when compared with dedicated screen-based or wearable eye tracking cameras. After the Covid pandemic, higher education institutions in the US have instated measures and protocols to minimize exposure which inadvertently had an effect on research involving human subjects. Since screen-based and wearable eye tracking data collection would have necessitated working with participants in close contact, companies developing eye-tracking solutions started revisiting webcam-based data collection protocols which they have formerly criticized. This study involved a pilot webcam-based eye tracking data collection protocol. The aim was to examine participants gaze and sense of spaciousness when asked to rank their perceived spaciousness on static interior images presented through an online survey. Former research has adopted theories of stimulation, attention restoration and affordances to assess users' sense of spaciousness. Their findings suggest a strong correlation between the sense of spaciousness and physical components of the space such as area, height, amount of light, and boundary roughness for outdoor spaces, and furniture layout, density, floor area and surface color for indoors (Stamps 2009, 2010, 2011; Imamoglu, 1986; Inui and Miyata, 1973; Al-Zamil, 2017; Moscoso et. al., 2015; Castell

et. al., 2014). More research was deemed necessary specifically to study permeability considering aperture design and their position on vertical surfaces (Stamps, 2007). In this study, the construct of permeability was studied through configurational changes (position and design) of the openings on vertical surfaces. Following the laws of Gestalt perception theories (such as proximity, symmetry and similarity), a series of abstract interior settings were modeled and rendered digitally. The participants visualized those through single point perspective renders. For each setting, participants' rate of spaciousness is analyzed statistically using descriptive statistics and also utilizing Mann-Whitney U test to test the hypotheses (such as H1: The interior space will be perceived less spacious when opening sizes are equal but their designs are dissimilar). The spaciousness ratings are also correlated with participants gaze data using the created areas of interest (AOIs) and gaze-based statistical values. Preliminary findings show higher dwell time for the mid-wall regardless of opening configurations when dwell time for vertical surface AIOs are compared across all responses. Preliminary findings will be presented not only focusing on spaciousness ratings based on opening designs but also considering research design and data collection processes and challenges to help inform researchers in interior design fields who consider adopting eye tracking data collection protocols for their studies. There is great potential to using the webcam-based tools when researchers are well aware of the limitations.

References

Al-Zamil, F. A. (2017). The Impact of Design Elements on the perception of spaciousness in Interior Design. *International Design Journal*, 7(2), 177-187.

Stamps, A. E. (2007). Evaluating spaciousness in static and dynamic media. *Design Studies*, 28(5), 535–557.

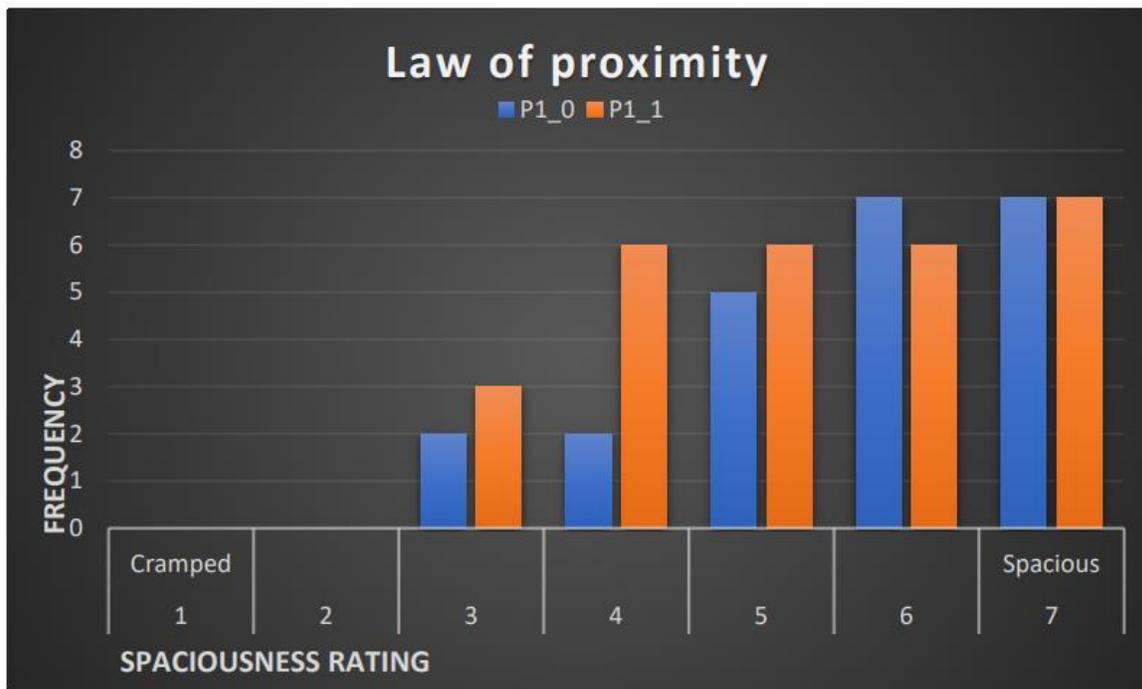


Figure 1. Comparing spaciousness rating among proximity image responses

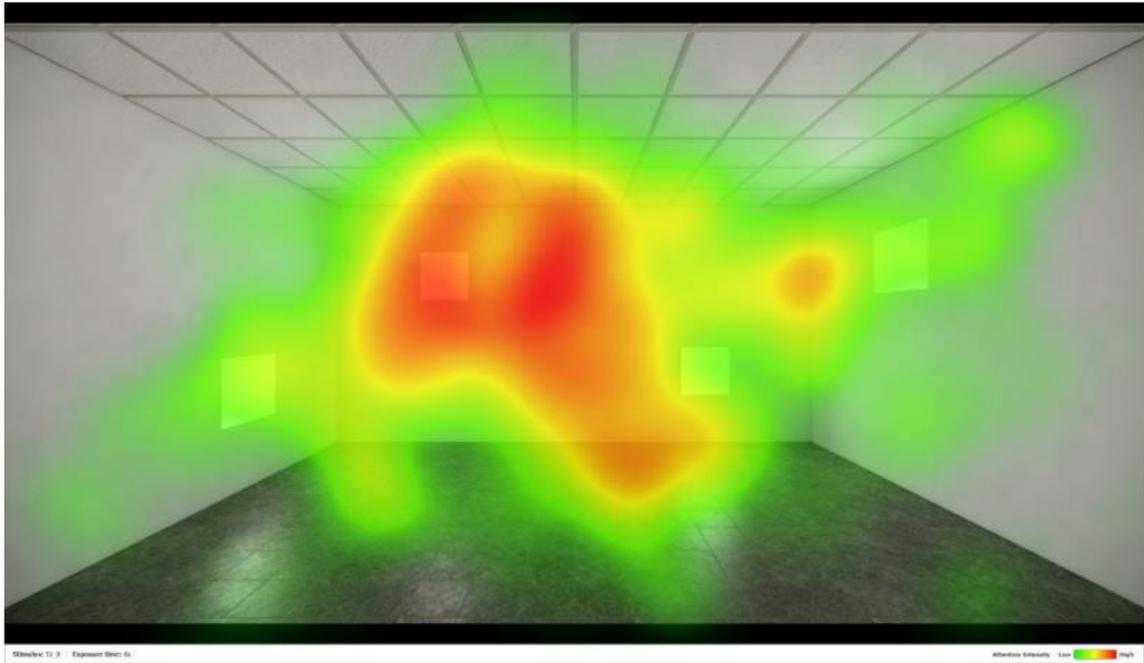


Figure 2. Aggregated gaze heatmap for image 1 of the similarity set

Scholarship of Design Research – Pedagogy
Presentation

**Evaluating Themes in Undergraduate Interior Design Capstone
Topics: A 4-Year Study**

Sarah Boehm, Savannah College of Art and Design
Catie Pzzichemi, Savannah College of Art and Design
Ricardo Nivarro, Savannah College of Art and Design
Dinah Caudle, Savannah College of Art and Design

Abstract

Over the past few years, the United States has witnessed major political shifts, widespread protests related to social inequality, and momentous events, particularly the COVID-19 pandemic, which continue to impact people's lives and livelihoods in this country. According to Fowles (1991), "changing population, social structure, cultural values, economics, technology, and resources will influence the future course of any profession and education" (p. 17). Likewise, the Global Context Professional Standard set forth by the Council for Interior Design Accreditation (CIDA) suggests that "interior designers have a global view and consider social, cultural, economic, and ecological contexts in all aspects of their work" (2022, p. 16). Given the events of the last several years and CIDA's intention to guide interior design curriculum to include a global context, an exploratory study was conducted to survey interior design capstone topics over a four-year span. The study used a deductive qualitative data analysis to discern themes and potential influences of topic selections. The results were compared to notable events that happened in and around the time students selected their capstone topics. Events were vetted as notable using Google Trends, "an unbiased sample of

Google search data" (Rogers, 2016). Rogers (2016) notes that "examining what people search for provides a unique perspective on what they are currently interested in and curious about" (Rogers, 2016). Early findings from this study will allow us the insight and responsiveness to adapt to changes in student populations, to fulfill their interests, and to create educational content that considers social, cultural, economic, and ecological contexts.

References

Council for Interior Design Accreditation. (2022). Professional standards 2022.

Retrieved May 29, 2022, from <https://www.accredit-id.org/professional-standards>

Fowles, D. L. (1991). Interior design education in the year 2000: A challenge to change.

Journal of Interior Design, 17(2), 17-24. <https://doi.org/10.1111/j.1939-1668.1991.tb00034.x>

Rogers, S. (2016, July 1). What is Google Trends data — and what does it mean?

Google News Lab. <https://medium.com/google-news-lab/what-is-google-trends-data-and-what-does-it-mean-b48f07342ee8>

**Scholarship of Design Research – Social and Environmental
Presentation**

**Juvenile Justice Centers: Addressing Rehabilitation Through
Interior Design**

Callie Welsh, Savannah College of Art and Design

Abstract

Methods: A non-counterbalanced within-subjects design employing both qualitative and quantitative techniques was adopted. The effects on multiple student outcomes (e.g., academic achievement and students' experience) of two distinct course structures implemented in a two-course sequence (i.e., Construction Technologies I and II) were examined. Third-year students in both (1) Architecture and (2) Interior Architecture and Design programs enrolled in these courses. To improve learning outcomes, the structure of CTECH II was modified based on direct observations and feedback from students enrolled in CTECH I. While the content of the two courses was relatively comparable, the delivery mode, assessments, and incentives varied in numerous aspects (e.g., onsite vs. online; textbook-based vs. lecture-based; passive exercises vs. active exercises; few vs. daily checkpoints; individual work vs. teamwork; etc.). Analyses were conducted on final grades and student responses to the end-of-semester course evaluation. A paired-samples t-test was conducted to compare final grades (as the measurement of academic achievement) between the courses. For other measurements, a descriptive statistic was conducted. Open-ended questions from the course evaluation were analyzed qualitatively to understand students' perceptions regarding each course structure.

References

Dept of Justice Office of Public Affairs. (2021, October 13). Retrieved from United States Department of Justice: <https://www.justice.gov/opa/pr/justice-department-announces-investigation-conditions-five-juvenile-facilities-texas>

Joyner, S. (2020, December 14). AIA takes an official stance on the design of prisons and justice facilities. Retrieved from Archinect News: <https://archinect.com/news/article/150241186/aia-takes-an-official-stance-on-the-design-of-prisons-and-justice-facilities>

Juvenile delinquency statistics, risk factors, and resources for helping American youth. (2022, January 20). Retrieved from Maryville University: <https://online.maryville.edu/blog/juvenile-delinquency-statistics/>

Washburn, M. (2021, February 16). Decades of Abuse at California's DJJ Will End in 2023. Retrieved from Center on Juvenile and Criminal Justice: <http://www.cjcj.org/news/13081>

**Scholarship of Design and Research – Social and Environmental
Presentation**

**Social Connections: Creating Opportunities of Social
Interactions for Adolescents Within High School Spaces**

*Sarah Lopez, Savannah College of Art and Design
Ricardo Navarro, Savannah College of Art and Design
Sarah Boehm, Savannah College of Art and Design
Jasmine Tyson, Savannah College of Art and Design*

Abstract

Social media use has been shown to increase loneliness, anxiety, and depression in adolescents affecting mental health, well-being, and their overall adolescent development (Divecha, 2017). Further contributing to adolescent development includes the quality and quantity of social interactions leading to social inclusion or social exclusion (Karim, 2020). High schools are currently lacking spaces that promote social inclusion and positive social media behavior which is essential for respite from the negative effects of social media use. This study addressed the association of mental health threats in adolescent development through various research methodologies ultimately determining that social media has positive and negative effects on adolescents influencing the use of spaces and overall high school culture. A quantitative research study was conducted through an anonymous end-user survey of current high school students to determine the needs related to the built environment and social media behavior while in high schools. The results were then affirmed through a qualitative research study of end-user interviews by current high school females.

Outcomes of all research methodologies were produced by the triangulation of data and had five key findings: 1. Students were found to seek socialization throughout the duration of their time during school but fearful of being socially excluded or punished. 2. Student responses indicated that the only places to seek privacy throughout the duration of the school day were an empty bathroom stall or their car, concluding that no spaces of solitude were present within high schools when students needed respite. 3. Adolescents continue to use social media for the socialization and entertainment value, but during school hours students were found to use social media platforms as a creative outlet and a means of expression through independence. 4. Students regularly sought out opportunities for identity support by means of visiting the school library. This space and time allowed students to practice personal and social development. 5. Social independence was successfully sought out through the duration of the scheduled lunch period, resulting in positive school culture and student behavior. These key findings provide five implications for design with each finding, being addressed by a design solution for the high school built environment. The implications for design include: 1. The Chalk Talk for socialization and social inclusion, 2. BeCalm for solitude and respite, 3. The Break for healthy social media use, 4. The Reprint as a library redesign to support identity, and 5. The Turf to obtain social independence and, not just a time for lunch. Each implication for design addresses a need found in adolescents and their time in high school. A growing divide of students making social connections within high schools presents the need for interior design interventions within high school spaces. Overall, this study addressed needs found in adolescents and their time in high school

through design solutions that promote social inclusion and positive social media behavior through the implications for design addressing a need found in adolescents.

References

Diana Divecha, D. (2017, October 20). How teens today are different from past generations. Greater Good Magazine. Retrieved November 8, 2021, from https://greatergood.berkeley.edu/article/item/how_teens_today_are_different_from_past_generations.

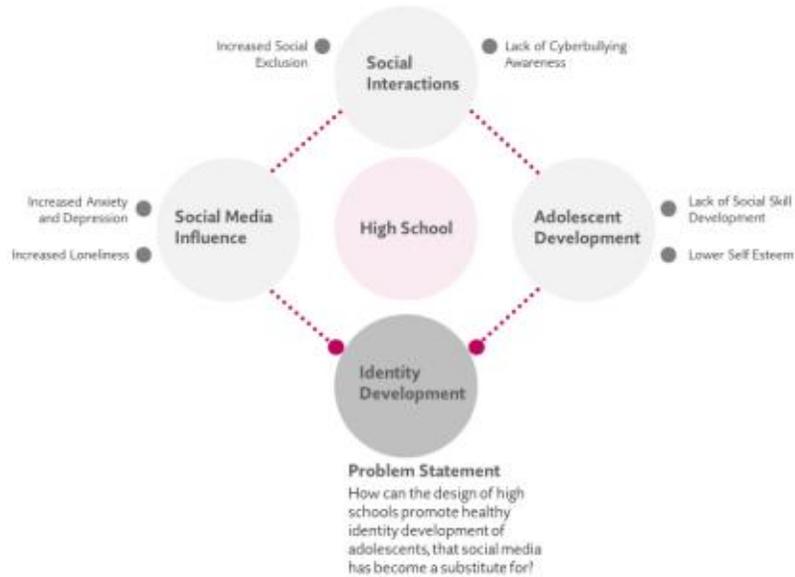
Karim, F., Oyewande, A. A., Abdalla, L. F., Chaudhry Ehsanullah, R., & Khan, S. (2020, June 15). Social media use and its connection to Mental Health: A Systematic Review. The National Center for Biotechnology Information. Retrieved January 16, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7364393/>

Appendix

Problem Identification

PROBLEM Identifying the Gap

Social Interactions of Adolescents within High School Spaces



(Divecha, 2017) (Kain, 2020)

Problem Identification: Identifying Gap Within Literature (By Author)

Goal of Study: Process Identification

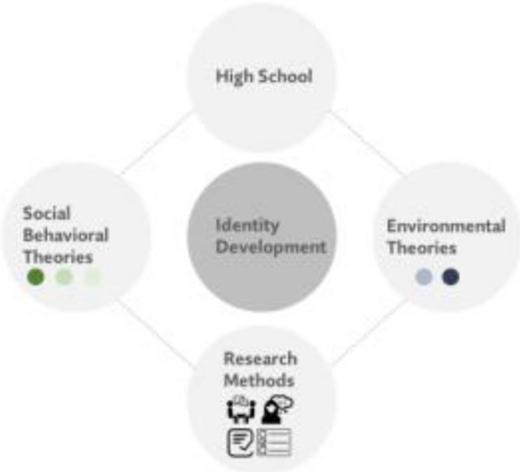
GOAL

Creating Opportunities for Social Interactions of Adolescents, within High School Spaces.

Legend

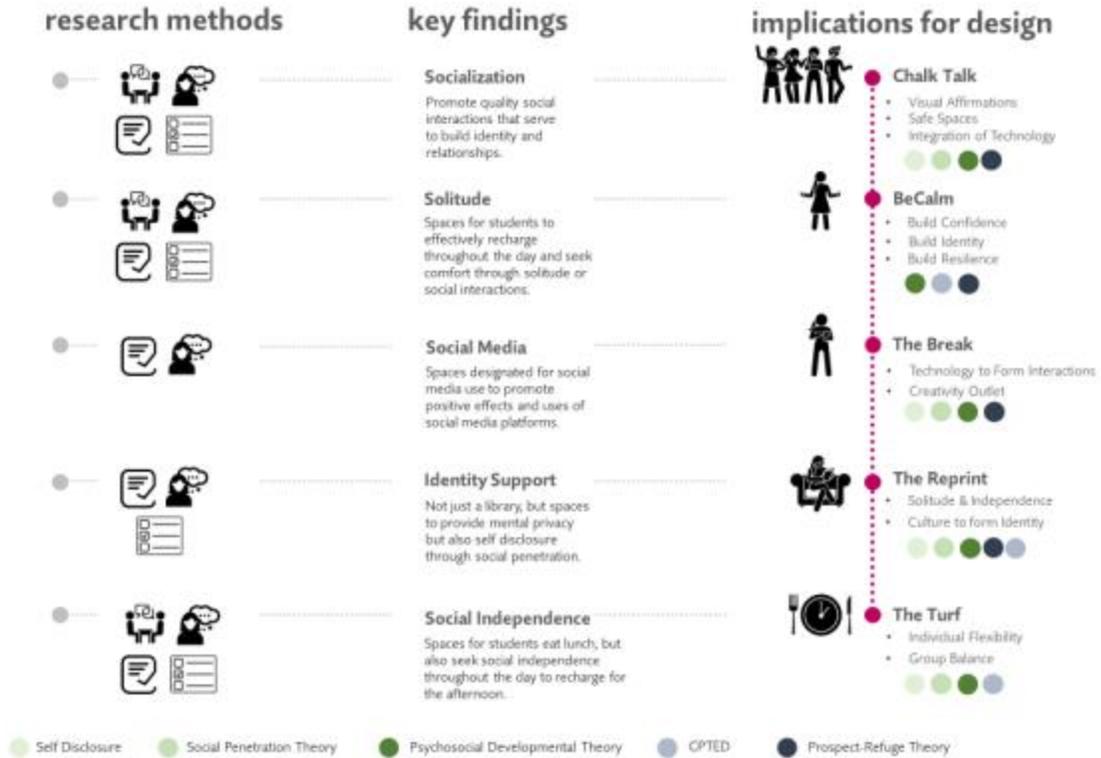
-  Expert Interview
-  End-User Interviews
-  End-User Survey
-  Case Studies

-  **Psychosocial Developmental Theory**
 Stage in development where adolescents explore their independence and develop their identity through social connections and relationships.
-  **Social Penetration Theory**
 Explores the ways in which relationships develop through interpersonal communication to create personal relationships.
-  **Self Disclosure**
 Achieved through Social Penetration, needed to increase intimacy in friendships and social groups by revealing personal details about oneself.
-  **Crime Prevention Through Environmental Design**
 Enhances design to promote safety of development through spaces, to minimize opportunities for crime.
-  **Prospect-Refuge Theory**
 Spaces that provide safety and sense of security through environments that give the capacity to observe without being seen.



Goal of Study: Process Identification of Research to Methodologies (By Author)

Implications for Design Determination



Implications for Design: Determination Through Key Findings (By Author)

Implications for Design Identified Pt. 2

Implication for Design	Experience	Social Media Use	Associated Activities	Applicable Theories
<p>The Break</p> <ul style="list-style-type: none"> Spaces designated for social media use to promote positive effects and uses of social media platforms. Promote identity positively through social media. 	<ul style="list-style-type: none"> Designated spaces to pull out phones or devices and use social media without punishment or criticism. Reinforces positive elements of social media use such as creativity, expression, connection to friends, and keeping up with current news. Create a safe environment to self express and promote identity through social media. 	<ul style="list-style-type: none"> High social media use/activity. <ul style="list-style-type: none"> This is the designated space to use phones or devices so this would be a device friendly space. Social interactions are still promoted, social media is the avenue in order to get to face-to-face interactions. 	<ul style="list-style-type: none"> Showing current news in pop culture, politics, and local news. Technology to play music, have interactive games (ex. Wordle), express creativity (ex. Music, fashion, trends). Self express through social media. Create opportunities for social interactions. 	<ul style="list-style-type: none"> CPTED Social Penetration Theory Self Disclosure Psychosocial Developmental Theory
<p>The Reprint</p> <ul style="list-style-type: none"> Included in the school Library but expanded upon by the need of more spaces. Provide social independence through opportunities in the space. 	<ul style="list-style-type: none"> Students are able to experience social independence while going to a space to do work, meet with friends, lounge and read a book, or do work alone. Able to seek privacy and recharge in the space in being independent or with peers. 	<ul style="list-style-type: none"> Moderate social media use. <ul style="list-style-type: none"> Although social media use is acceptable face-to-face interactions are still emphasized to create quality interactions. This can be the quick break needed to check social media or to escape social media. 	<ul style="list-style-type: none"> Lounge area to read, sit alone, or meet with a friend. Mix of individual and collaborative furniture to do work alone or with others. Seek social independence and solitude if needed. This will be a spaced used periodically by different people throughout the day. Designated events to promote community, education direction, college, etc. 	<ul style="list-style-type: none"> CPTED Social Penetration Theory Self Disclosure
<p>The Turf</p> <ul style="list-style-type: none"> Spaces for students to not only eat lunch, but seek a time of social independence throughout the day to recharge for the afternoon. Time to take a mental and physical break to be ready for the afternoon. 	<ul style="list-style-type: none"> Students are able to socialize freely to see friends and socially recharge in the middle of the day. Students are able to seek solitude through individual spaces that promote dignity. Students are able to comfortably interact with various sized groups of people. 	<ul style="list-style-type: none"> Moderate social media use. <ul style="list-style-type: none"> Although social media use is acceptable face-to-face interactions are still emphasized to create quality interactions and build identity. Promote social interactions more so than social media use. 	<ul style="list-style-type: none"> Eat/ buy lunch with other individuals, large group of people, or by yourself. Seek social independence by providing multiple different space for types of socialization and of different sizes. Rethink typical cafeteria. Build identity by promoting social interactions with peers. 	<ul style="list-style-type: none"> CPTED Social Penetration Theory Self Disclosure Psychosocial Developmental Theory

Implications for Design Identified: Pt. 2 Project Program & Experiences (By Author)

Implications for Design Identified Pt. 1

PROJECT PROGRAM

Implication for Design	Experience	Social Media Use	Associated Activities	Applicable Theories
<p>Chalk Talk</p> <ul style="list-style-type: none"> Designated spaces to promote face-to-face social interactions. Promote quality social interactions that serve to build identity and relationships. 	<ul style="list-style-type: none"> Students have a designated space to socialize freely and independently throughout the day. Socialize without punishment yet with security. Socialize comfortably and build confidence in face-to-face interactions. 	<ul style="list-style-type: none"> Moderate social media use. <ul style="list-style-type: none"> Although social media use is acceptable, face-to-face interactions are the primary focus in this space. Practice social skills but also practice socializing with and without the presence of phones and social media. 	<ul style="list-style-type: none"> Integration of technology to show conversation starters or talking points. Affirmation maybe Practice Social Penetration through Self Disclosure. Safe spaces to develop genuine relationships and communication. 	<ul style="list-style-type: none">  Social Penetration Theory  Self Disclosure  Psychosocial Developmental Theory
<p>BeCalm</p> <ul style="list-style-type: none"> Spaces for students to effectively recharge throughout the day and seek comfort through solitude or social interactions. Promote balance of personal preservation and bonding through group support, to leave with confidence. 	<ul style="list-style-type: none"> Designated spaces to go when feeling stressed, overwhelmed, in need of comfort, or to socially recharge. Provide spaces of dignity for seeking social solitude. Provide experience for group bonding to build confidence and dignity alongside peers. 	<ul style="list-style-type: none"> No social media use. <ul style="list-style-type: none"> This space provides a break from social media use and an opportunity to disengage from the social media world. This is the place to recharge from self comparison, low self esteem, and the negative social media influences. 	<ul style="list-style-type: none"> Space to sit alone, in own designated room. Space to cry. Space to be silent. Space to think out loud. Small group space to talk if needed. Build confidence individually and with others Build identity by knowing self and needs better Build resilience from stressors and triggers 	<ul style="list-style-type: none">  Prosect-Refuge Theory  CPTED  Psychosocial Developmental Theory

Implications for Design Identified: Pt. 1 Project Program & Experiences (By Author)

Scholarship of Teaching and Learning – Diversity, Equity, and Inclusion
Presentation

Weaving Diverse Cultural Narratives into Studio Design
Learning Objectives

Johnnifer Brown, Western Carolina University

Abstract

Design Intelligence in Studio learning comes from various characteristics such as Comfort with Ambiguity, Creativity, and Cultural History (Ankerson & Pable, 2008). Jr Studio I is a teaching and learning environment that combines the design characteristics of cultural history, and creative storytelling using client profiles and personas. One narrative using everyday culture teases out storylines underlining design. (Van Erva, 2018) Students were asked to create a client profile and persona from a different culture based on research. The clients consisted of multiple generations residing and working in a mixed-use space. This client persona would carry a storyline through the design process and the development of a course long project. The purpose of this study was to understand how students wove their choice of cultural design into the course objectives using cultural research of a multi-generational family. Each stage of the design process was aligned with a rubric and reflected the visual and analytical aspects of learning. Each student was asked to provide written and verbal statements of takeaways or personal lessons learned during their presentation. It was during these moments that true efficacy was discovered by each student where their authentic selves emerged and

spoke freely on true learning. Students in 2020 created a client profile. Students of 2021 created a profile and persona. Project design and student takeaways at the end of the semesters, the results determined the level of cultural learning. These results were taken by two sets of students within two years. There were 19 students in Fall of 2020 and 24 students in Fall of 2021. Fall 2020 demographics consisted of 16% Black, 10% Latina, and 73% White students. There were 14 cultures researched for projects. According to the student take-aways, only 13% of the students focused on diverse culture into their projects. This set of students were instructed in either an online or hybrid format of a studio with minimal space planning and codes knowledge prior to this course. Fall 2021 class demographics consisted of 13% Black, 8% Mexican, and 79% White students. There were 19 cultures researched for projects. The course learning objectives reflected in student takeaways were 33% Research of the Culture. This set of students were instructed in an in-person face to face studio with a full course of space planning and codes prior to this course. The second set of students were more focused on weaving culture into their projects, and it was shown within the rubrics and design boards of the students. In conclusion, the following questions arose for further discussion: How does creating a cultural client profile and persona increase student learning? How does culture weaving of narratives affect course learning objectives of the design process? What new assessment tools are needed at each phase of the design process to enhance student cultural learning? This study for Fall 2022 will explore new methods to enhance cultural learning within the studio course.

References

Ankerson, K. S., & Pable, J. (2008). Interior design: Practical strategies for teaching and learning. Fairchild Books. Mobile makers (n.d.). mobile makers. Retrieved May 26, 2022, from <https://mobilemakers.org/>

Cheng, I., Davis, C. L., & Wilson, M. O. (2020). Race and modern architecture: A critical history from the enlightenment to the present.

Creswell, J.W. (2003). Research design, qualitative, quantitative, mixed method approaches. Thousand Oaks, CA: Sage.

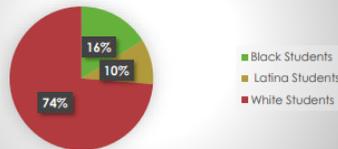
Podcast: Alternative design | Kimball international. (n.d.). kimball-intl.

<https://www.kimballinternational.com/alternativedesignpodcast/episode/4c67f54b/what-you-dont-see>

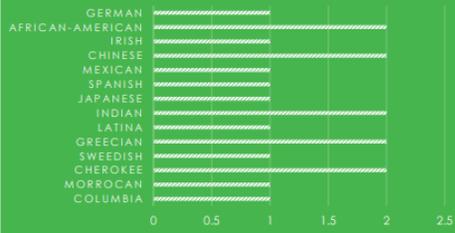
Van Evra, Jennifer. Metropolis: Architecture Design. Mar2018, Vol. 37 Issue 7, p76-79. 4p. Database: Art & Architecture Complete

Jr. Studio I – 2020 Data Collection

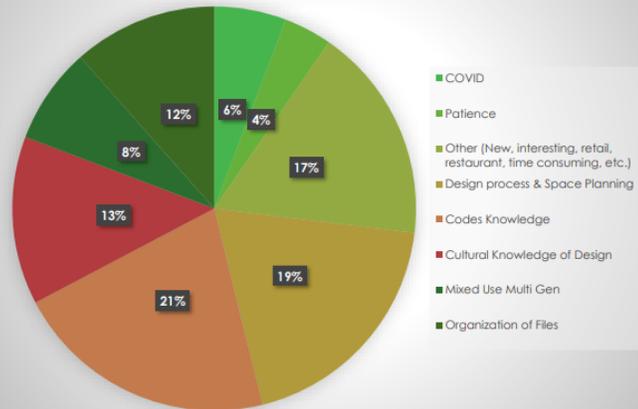
Course Student Demographics - 19 Students



CULTURES RESEARCHED 2020



Jr. Studio I - Fall 2020 Student Learning Takeaways

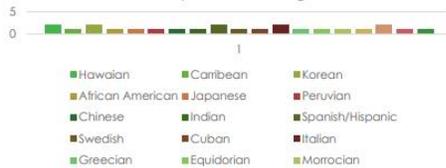


Jr. Studio I – 2021 Data Collection

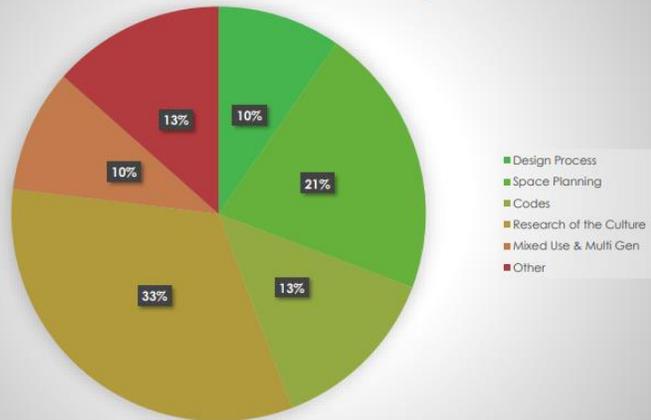
Jr. Studio I Class 2021 Demographics



Jr. Studio I - Fall 2021
19 Cultures and Client Profile Personas
Created by Interior Design Students



Jr. Studio I - Fall 2021 Student Learning Takeaways



Jr. Studio I – 2020 Student Projects

RESIDENTIAL SKETCH



COMMERCIAL SKETCH



CLIENT PROFILE: THE BELLANI FAMILY

- Bitai Bellani (45)**
 - Loves to fish
 - Needs an office space to run his business
- Imane Bellani (39)**
 - Loves the outdoors
 - Wants a craft space to work on various projects
- Zarif Bellani (17)**
 - Loves computer programming
 - Wants a space where he can play video games
- Amina Bellani (13)**
 - Is an aspiring dancer
 - Would like to have a practice room
- Farrah Abdel (73)**
 - Loves to read
 - Would like a large window
- Mehdi Abdel (79)**
 - Loves to fish
 - Enjoys the outdoors
 - Wants a great view in the home

Jr. Studio I – 2020 Student Projects



CLIENT DESCRIPTION

ABDET FAMILY
 1. THE ABDET FAMILY
 2. IMANE IS A DESIGNER, ALIENOR
 3. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 4. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 5. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 6. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 7. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 8. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 9. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 10. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 11. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 12. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 13. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 14. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 15. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 16. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 17. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 18. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 19. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 20. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 21. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 22. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 23. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 24. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 25. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 26. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 27. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 28. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 29. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 30. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 31. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 32. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 33. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 34. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 35. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 36. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 37. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 38. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 39. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 40. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 41. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 42. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 43. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 44. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 45. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 46. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 47. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 48. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 49. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 50. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 51. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 52. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 53. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 54. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 55. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 56. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 57. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 58. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 59. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 60. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 61. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 62. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 63. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 64. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 65. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 66. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 67. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 68. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 69. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 70. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 71. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 72. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 73. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 74. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 75. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 76. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 77. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 78. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 79. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 80. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 81. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 82. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 83. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 84. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 85. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 86. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 87. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 88. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 89. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 90. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 91. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 92. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 93. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 94. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 95. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 96. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 97. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 98. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 99. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)
 100. IMANE AND ALIENOR ARE AMERICAN RESTAURANT CALLED "PINKY" (100)

RESIDENTIAL 3D SKETCH

RESEARCH FINDINGS

THE FOUR TOPICS

- 1. MIXED SPACE**
 - There will be several spaces in the residential space that the family can come together to practice their hobbies, and spend time together.
 - The kitchen floor will have a custom area for the family to get together.
 - The commercial space will have a large kitchen and dining space or will be other space needed in a restaurant.
- 2. MULTI-GENERATIONAL FAMILY**
 - A family which includes three generations (grandparents, parents, and children) in the residential space the grandparents will have a separate living space and will be the parents and children.
- 3. CHINESE CULTURE THAT IS PRACTICED IN THIS FAMILY**
 - There should be a high amount of space from each family member in the grandparents.
 - Grandparents should be the part of the space, on the ground floor (first, second).
- 4. HOW SOCIAL DISTANCING WILL BE IMPLEMENTED IN THE SPACE**
 - The key space will be the kitchen.
 - The key space will be the kitchen.
 - The key space will be the kitchen.

Jr. Studio I – 2021 Student Projects

The Yang Family



Tom, age 32, who works as a banker at the local Sun Bank, Hunt and Yang. Needs an office for clients and document storage.



Jennifer, age 40 is a dental hygienist in the west part of town.



Ella, age 23 has recently finished college and lives at home while searching for a job. She has finished an online business where she sells culturally accurate, painted bags. She needs an office to create packages and ship and address.



Emma, age 17, she wants to play sports and she has working on a scholarship to play tennis on a competitive level. She needs a desk for studying and wants a vanity for makeup.



Chiu, 72 for short, age 72, immigrated in 1950 to the US, recently widowed, will be leaving Chiu Cháguān.

Research Findings

The four main issues discussed are:
Color, Orientation, and Aesthetics
 The program identification for the tea shop is on a 3rd floor residence in a 6-story building in downtown Seattle. The construction site is in progress to expand the building space. The building is located in a historic neighborhood with historic architecture.
Climate and Location
 The site is located in the historic district of downtown Seattle. The site is located in a historic neighborhood with historic architecture. The building is located in a historic neighborhood with historic architecture. The building is located in a historic neighborhood with historic architecture.
Multi-generational Living in Chinese Culture
 In many cultures, the older generation is often seen as a burden. In Chinese culture, however, it is encouraged to care for the older generation. The older generation is often seen as a burden. In Chinese culture, however, it is encouraged to care for the older generation. The older generation is often seen as a burden. In Chinese culture, however, it is encouraged to care for the older generation.
Sustainability and Environmental Awareness
 Sustainability is a key concern in the design process. The design team has focused on creating a sustainable and environmentally friendly space. The design team has focused on creating a sustainable and environmentally friendly space. The design team has focused on creating a sustainable and environmentally friendly space.

Daisy Tea House

Chújú Cháguān 雏菊茶馆



Rendered Floor Plan



Tea Ceremony Room



Dining Area of Daisy Tea House



Acoustic Ceiling Design



**Scholarship of Teaching & Learning – Open Track
Presentation**

Mill Owned Housing: Its History and Its Constructs

Jane Hughes, Western Carolina University

Abstract

An obsolete local textile mill was being developed into a multi-family community with restaurants and retail spaces in out lying buildings. The developers reached out to the fine and creative arts programs with a vision to transform an element of the Mills warehouse building into a creative workspace. Specifically, we discussed how the fine and performing arts could inject creative electricity into the new community space. We applied and received a Project Grant to kick-start a new partnership between the College and the newly renovated Mill. Our purpose was to establish a physical, Arts presence at the Mill that gives students and the community, an alternative venue for experiential making and learning. The interior design programs contribution included having Sophomore level students first project of the semester be a deep dive into researching Mill/ Factory owned housing and the sociological and economic realities of the average Mill employee. Research included identifying average salary and expenses of mill workers, and the housing options afforded them within these constraints. Floor plans from existing homes and/or public records were examined and discussed in this context. Students then replicated a mill house floor plan within the mill building, along with supporting documentation identifying design elements, and features within a 1:1 scale model plan. The objectives of this project were: Goal 1. Creative and functional applications of art and design theory complemented by products and processes and

used to develop their interior solutions; manual and digital methods of graphic visualization competently used to portray their interiors; and verbal and written explanations of their interiors. Goal 2. understanding of the role of interior design in historic and current cultures, and the team of stakeholders involved in interior design projects

The Outcomes of this project were:

Outcomes for Goal 1. Student project outcomes indicate their appropriate development in understanding and applying:

- Research and analysis
- Structure of critical design aesthetics
- Interior components
- Communication graphics
- Speaking and writing skills

Outcome for Goal 2. Student project outcomes indicate their appropriate development in understanding:

- Historic applications
- Cultural diversity

Students begun the research and analysis by: Identifying average salary and expenses of mill workers Housing options afforded mill workers within the above constraints. Floor plans from existing homes and/or public records will be examined and discussed in this context. Exploration of cultural diversity within the Mill framework. Identifying what they could about the specific mill, the owners and their position within the community, who designed the building, when it was built and closed, and anything else of interest. Guest Speakers were included, a walking tour of a Mill neighborhood, which include a discussion on Historic Preservation. After the presentation of our research to the community at the Mill Reopening Ceremony, the students began their final project of the semester. The students began with the four-room mill house plan we researched and redesigned it for a young single parent family unit, based on select project narratives, geared at revitalizing the residential community surrounding the Mill.

References

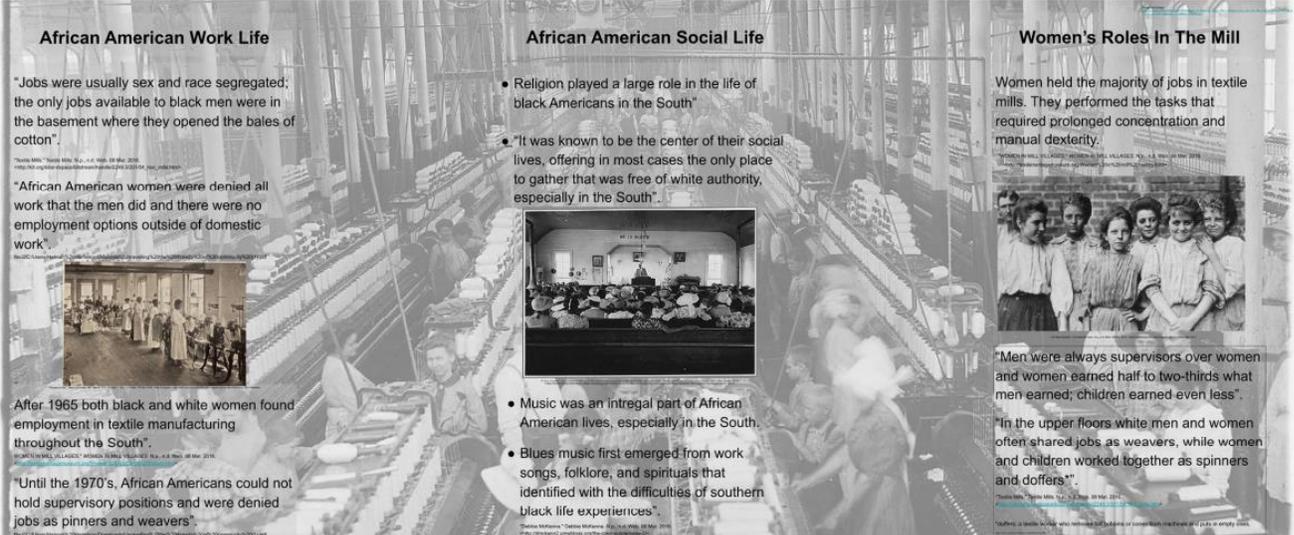
Heiss, M. W. (1924). I. The Southern Cotton Mill Village: A viewpoint. *Social Forces*, 2(3), 345–350. <https://doi.org/10.2307/3006294>

Hobgood, A. (n.d.). Women in Mill Villages. Textile Heritage Museum. Retrieved March 8, 2016, from <https://textileheritagemuseum.org/women-in-mill-villages/>

Lodge, D., & Judkins, B. M. (1986). Life and labor in a textile mill village. Tar Heel Junior Historian Association.

Magnusson, L. (1917). Employers' housing in the United States. *Monthly Review of the U.S. Bureau of Labor Statistics*, 5.5, 35–60. Retrieved from

Tompkins, D. A. (1899). Cotton Mill, commercial features a text-book for the use of textile schools and investors. (Electronic Edition, 1st Edition). The author.



African American Work Life

"Jobs were usually sex and race segregated; the only jobs available to black men were in the basement where they opened the bales of cotton".

Thomas Mills, "Spinnin' Mills," c.1899, pp. 114-115, 118-119, 120-121.

"African American women were denied all work that the men did and there were no employment options outside of domestic work".

Thomas Mills, "Spinnin' Mills," c.1899, pp. 114-115, 118-119, 120-121.

After 1965 both black and white women found employment in textile manufacturing throughout the South".

Thomas Mills, "Spinnin' Mills," c.1899, pp. 114-115, 118-119, 120-121.

"Until the 1970's, African Americans could not hold supervisory positions and were denied jobs as pinner and weavers".

Thomas Mills, "Spinnin' Mills," c.1899, pp. 114-115, 118-119, 120-121.

African American Social Life

- Religion played a large role in the life of black Americans in the South"
- "It was known to be the center of their social lives, offering in most cases the only place to gather that was free of white authority, especially in the South".

Thomas Mills, "Spinnin' Mills," c.1899, pp. 114-115, 118-119, 120-121.

• Music was an integral part of African American lives, especially in the South.

• Blues music first emerged from work songs, folklore, and spirituals that identified with the difficulties of southern black life experiences".

Thomas Mills, "Spinnin' Mills," c.1899, pp. 114-115, 118-119, 120-121.

Women's Roles In The Mill

Women held the majority of jobs in textile mills. They performed the tasks that required prolonged concentration and manual dexterity.

Thomas Mills, "Spinnin' Mills," c.1899, pp. 114-115, 118-119, 120-121.

"Men were always supervisors over women and women earned half to two-thirds what men earned; children earned even less".

"In the upper floors white men and women often shared jobs as weavers, while women and children worked together as spinners and doffers".

Thomas Mills, "Spinnin' Mills," c.1899, pp. 114-115, 118-119, 120-121.

Nothing is made today, but the mill is a fine example of a complete mill, and it is a very good one.

Average Mill Worker's House

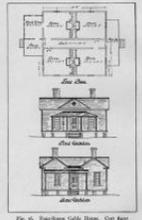


Fig. 9. Washburn Cotton Mill, Cot. 800.

Sq. Ft. Area: 1,020
 Salary: \$0.25 per day
 Cost of Home: \$400

Superintendent's House



Fig. 10. Washburn Cotton Mill, Cot. 800.

Sq. Ft. Area: 2,050
 Salary: \$2.00 per day
 Cost of Home: \$1,500

Floor Plans

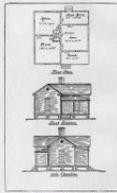


Fig. 11. Washburn Cotton Mill, Cot. 800.

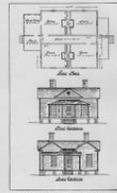


Fig. 12. Washburn Cotton Mill, Cot. 800.



Fig. 13. Washburn Cotton Mill, Cot. 800.

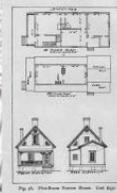


Fig. 14. Washburn Cotton Mill, Cot. 800.

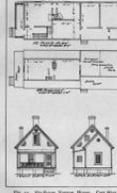


Fig. 15. Washburn Cotton Mill, Cot. 800.



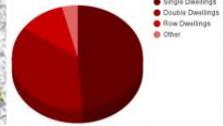
Fig. 16. Washburn Cotton Mill, Cot. 800.

Type of Housing

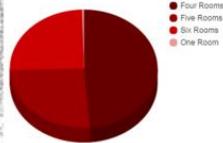
One dwelling is a family unit; therefore, a double house is considered to be two dwellings. Frame structures were the most popular style, followed by brick.

Harris, M. W. 1. The Southern Cotton Mill Village: A Monograph. Social Forces 2:3 (1924): 345-50. Oxford Journals. Web. 8 Mar. 2016.

Types of Housing



Number of Rooms



"Some Southern Cotton Mill Workers And Their Villages." Google Books. N. p., 2016. Web. 8 Mar. 2016.
 Tompkins, Daniel Augustus. Cotton Mill, Commercial Features, A Text-Book for the Use of Textile Schools and Investors, With Tables Showing Cost of Machinery and Equipments for Mills Making Cotton Yarns and Plain Cotton Cloths. Electronic Edition, 1st ed. Charlotte: Tompkins, 2001. University of North Carolina at Chapel Hill. Web. 8 Mar. 2016.
 Background image: Meeks, Martin. "Drayton Mill." Converse College, Spartanburg, 18 Feb. 2016. Lecture.
 Other images: Meeks, Martin. "Preserving Mill Villages." Converse College, Spartanburg, 18 Feb. 2016. Lecture.

Scholarship of Teaching & Learning – Pedagogy
Presentation

Bridging the Inequity Gap: Instructional Interventions to Improve Academic Success to First-Generation College Students

Saman Jamshidi, University of Nevada Las Vegas

Abstract

Background: To achieve social equity, it is critical that underrepresented students, such as first-generation college students, have the opportunity to succeed in higher education. However, first-generation students tend to have certain characteristics that make it more challenging for them to successfully complete their education. Among the characteristics of first-generation college students cited in the literature are having a full-time job, being financially independent, supporting their families, attending college part-time, and having a relatively older age than their peers. Thus, in order to increase the academic achievement of these underrepresented students with the ultimate goal of establishing social equity, it appears crucial to identify novel teaching strategies that cater to their unique requirements. Accordingly, this study aims to examine the effectiveness of two distinct course structures on the academic achievement of design students in a two-course sequence of technical courses at a first-generation serving university.

References

Bui, K. V. T. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal*, 36(1), 3–12.

Guo, P. J., Kim, J., & Rubin, R. (2014). How video production affects student engagement: An empirical study of MOOC videos. *Proceedings of the First ACM Conference on Learning @ Scale Conference*, 41–50.

<https://doi.org/10.1145/2556325.2566239>

Lowery-Hart, R., & Pacheco Jr., G. (2011). Understanding the first-generation student experience in higher education through a relational dialectic perspective. *New Directions for Teaching and Learning*, 2011(127), 55–68. <https://doi.org/10.1002/tl.457>

McCallen, L. S., & Johnson, H. L. (2020). The role of institutional agents in promoting higher education success among first-generation college students at a public urban university. *Journal of Diversity in Higher Education*, 13(4), 320–332.

<https://doi.org/10.1037/dhe0000143>

Toutkoushian, R. K., Stollberg, R. A., & Slaton, K. A. (2018). Talking 'Bout My Generation: Defining "First-Generation College Students" in Higher Education Research. *Teachers College Record*, 120(4), 1–38.

<https://doi.org/10.1177/016146811812000407>

Tests of Normality to Satisfy the Assumptions of T-Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CTECH_1	.092	47	.200*	.974	47	.388
CTECH_2	.065	47	.200*	.985	47	.793

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Paired Samples T-Test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	CTECH_1	85.2428	47	5.97738	.87189
	CTECH_2	91.4940	47	3.65501	.53314

		Paired Differences		95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Lower	Upper			
Pair 1	CTECH_1 - CTECH_2	-6.25128	5.32092	-7.81356	-4.68899	-8.054	46	.000

Descriptive Statistical Analysis of Data from the Course Evaluation

Item in the Course Evaluation	CTECH I		CTECH II	
	M	SD	M	SD
This course increased my knowledge.	4.22	0.88	4.39	0.86
This course provided sufficient opportunity for me to learn.	3.90	1.12	4.22	0.90
This course challenged me intellectually.	4.35	0.93	4.11	1.12
The instructor made a significant impact on my understanding of the course content.	3.63	1.39	4.08	1.00

Creative Scholarship- Design as Art
Presentation

**Revisiting Design Concepts in Color, Form, and Space Through
One-Point Perspectives**

Yaoyi Zhou, Virginia Tech
Jinting Yang, YUZO Design
Yunhao Lu, YUZO Design

Abstract

Today, interior perspectives in various formats are used expansively to explore and illustrate design concepts. One point perspective is a drawing method that shows how things appear to get smaller as they get further away, converging towards a single vanishing point on the horizon line. It is a way of drawing objects upon a flat surface so that they look three-dimensional and realistic. This drawing technic is well developed and widely applied in the drawing of built environments both indoors and outdoors since the Italian Renaissance. This presentation showcases a series of interior renderings in a unified one-point perspective format with techniques, texture, and color palette inspired by hand-drawings popular in the early 20th century. The drawings are attempts to merely depict the most essential design elements in the projects done by a design firm based in southern Virginia. The rationale for formatting the perspective and drawing technics is to encourage the designers to revisit the most fundamental design elements in interior settings that have been built. The focus was placed on the interplay between the spatial form and organization of surfaces and objects. We argue that the use of a one-point perspective as the primary presentation format encourages the designer to

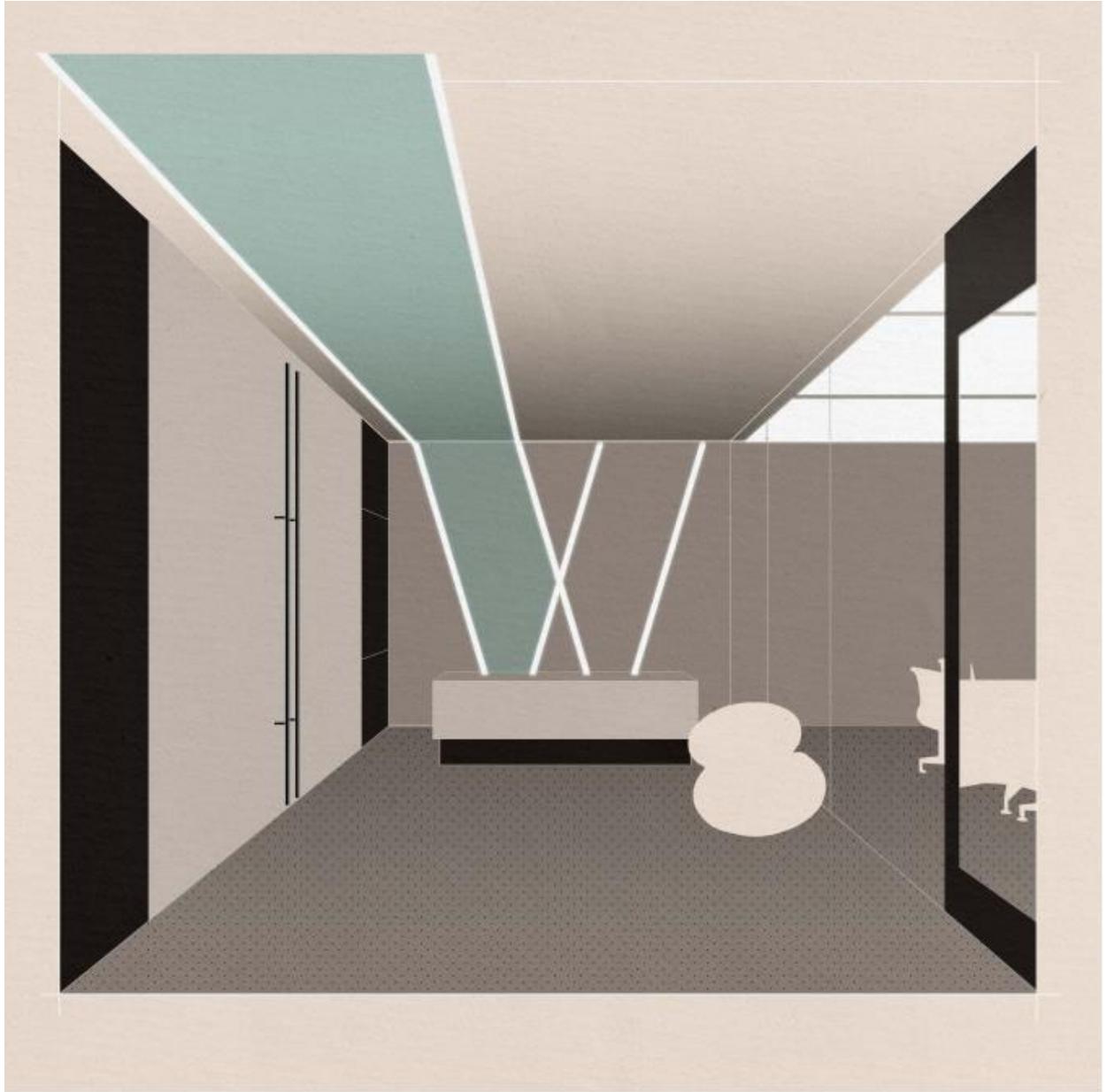
rethink design with a focus on the proportion and composition of different colors, objects, and spatial forms. It works as a reflection and provides the designers a chance to revisit the projects and rethink the relationships between the elements proposed in the settings. It also shows a different method of visual presentation of interior spaces with intentional controls on what to show and what not to show. The drawings we illustrated embody the following characteristics: A one-point perspective view. An enhanced expression of color, shadow, form, proportion, and composition. A euphemistic illustration of the function of the setting. A controlled demonstration of context. A controlled manner for illustrating material and texture. An opportunity to re-interpret the symbol of the form. A more static and abstract expression. We believe that architectural drawings are ideally an attempt to establish a comprehensible order out of an otherwise jumbled collection of perception and stimuli. A successful design as a piece of artwork has a lucid sense of prioritization - a clarity in its concept speaking to the viewer as to which elements must come of primary as well as secondary and tertiary importance. The more static the art, the more distant and abstract it becomes, the closer to infinity and perfection (Schaller, 1997, p.22).

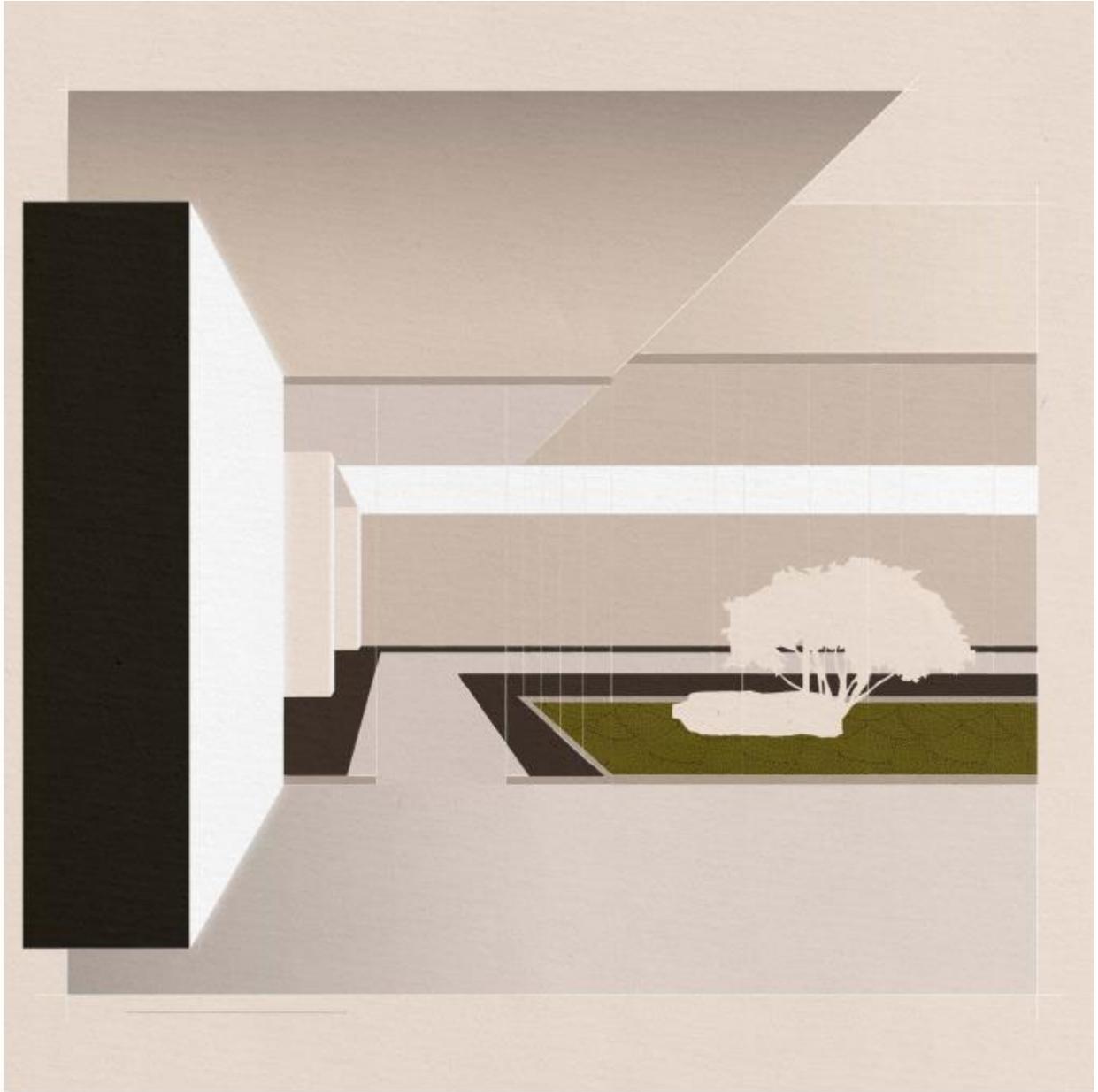
References

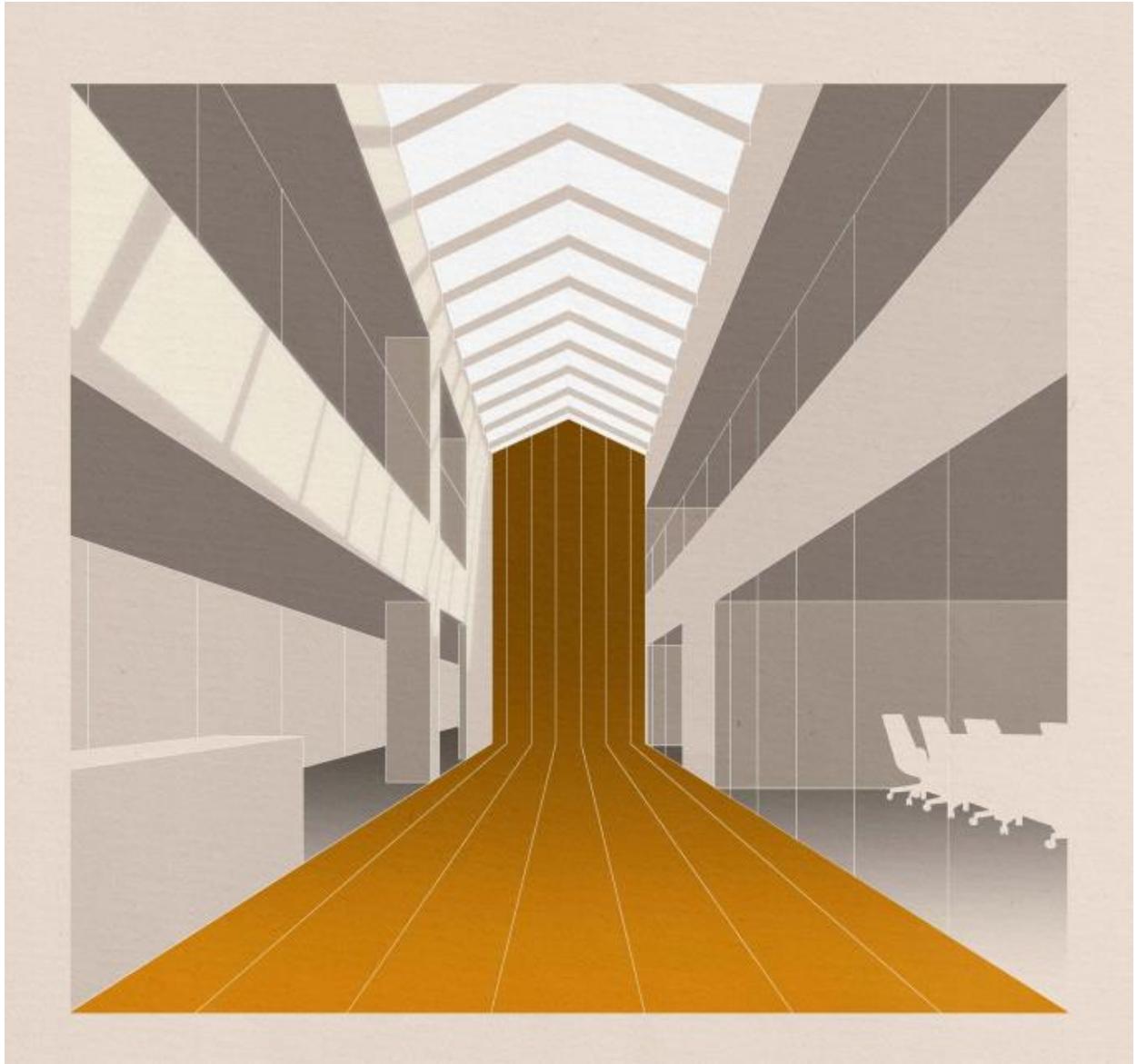
Schaller, T. W. (1997). *The art of architectural drawing: imagination and technique*. John Wiley & Sons.

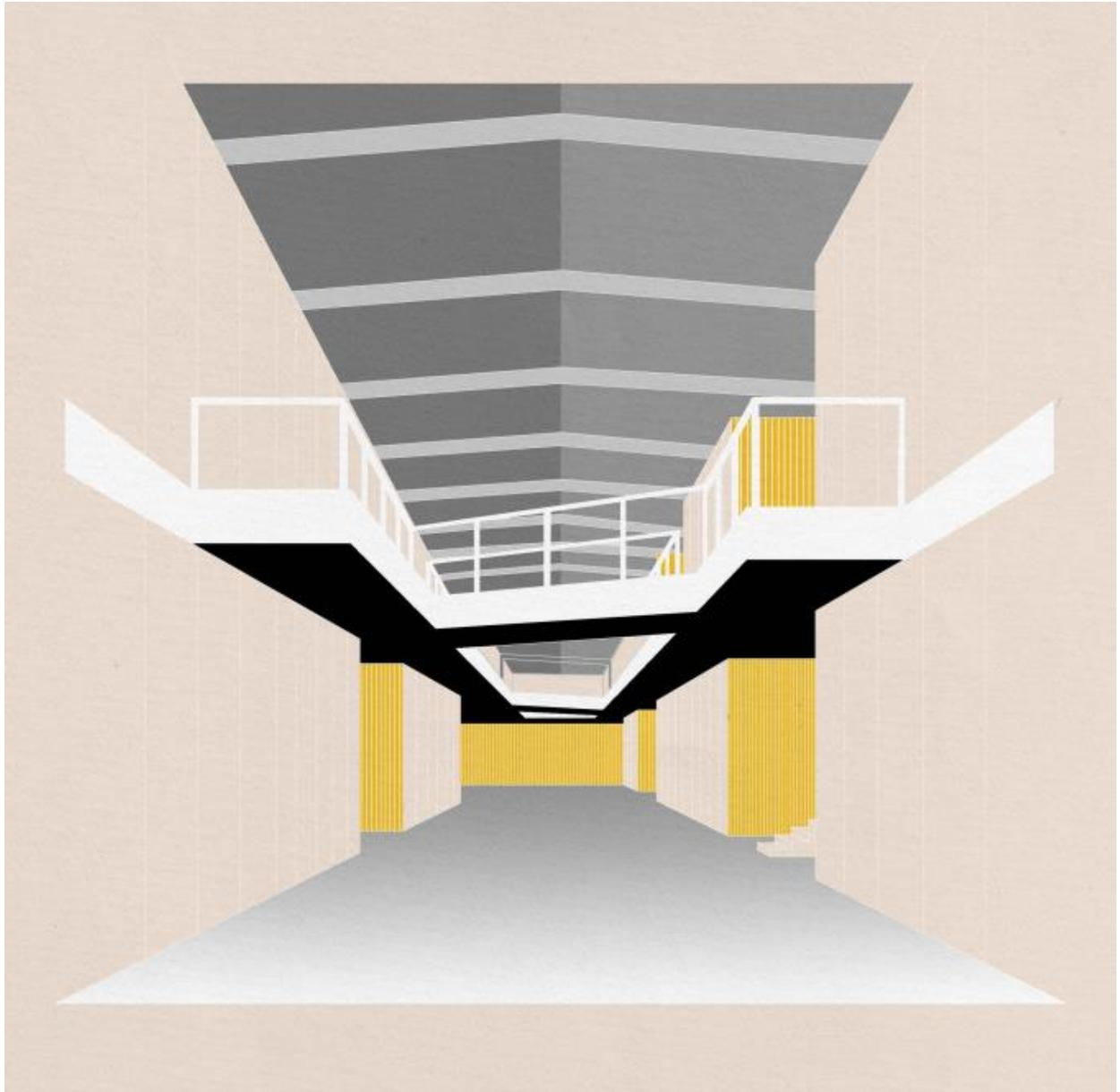
Banham, R., & Banham, M. (1999). *A critic writes*. Berkeley: University of California Press.



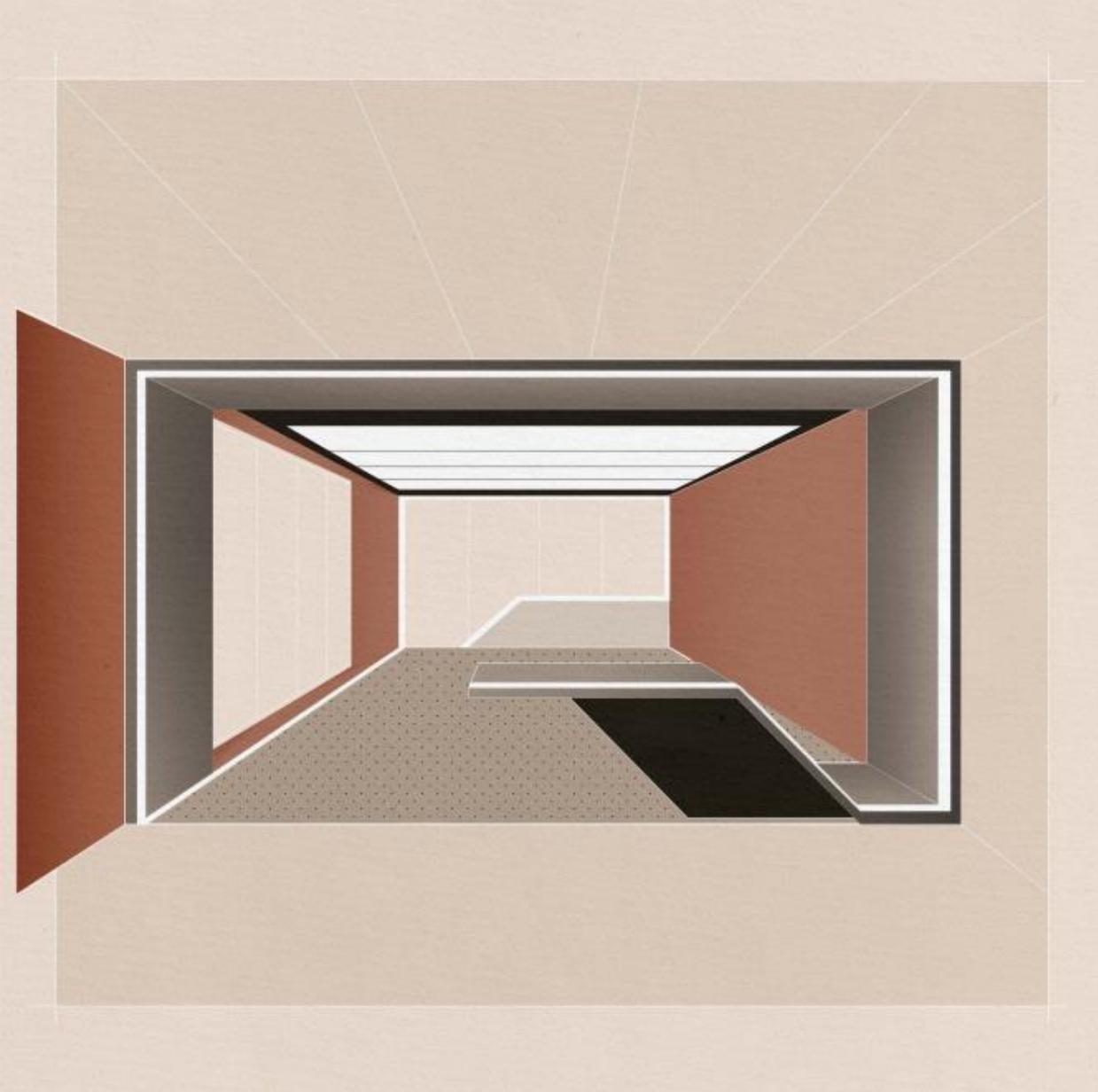




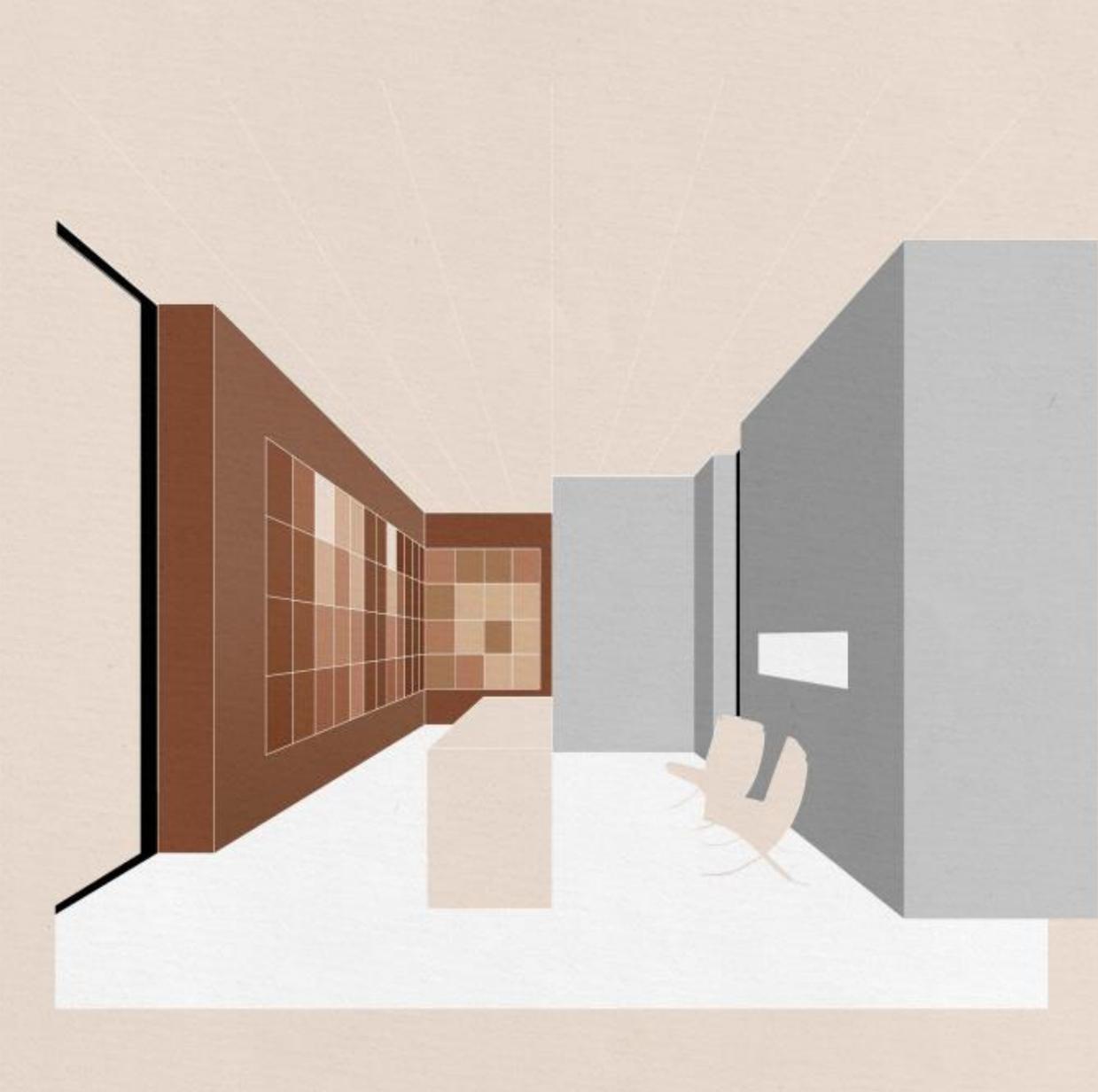














Creative Scholarship- Design as Idea Presentation

Worthy

*Anna Gatlin, Auburn University
Steve Bice, Luceo Studio*

Abstract

Identity and worth are foundational to interior design practice. Since its inception as a profession, interior design has been used to establish and portray identity: of the family, of the brand, of the client. While harder to measure, worth has also been a core aspect. Residentially, design has also been continuously used as a tool to symbolize identity and worth, and historically decorative objects have held great significance for the owner (Csikszentmihalyi, 1993). Comfort was an expensive luxury and art an indicator of taste and success (Ames, 1985). Today, decorative objects that provide comfort or visual pleasure are ubiquitous and mass-produced, but a sense of worth is still intrinsic in ownership of these items. In the early 1900s the symbology of the home itself shifted from primarily that of familial status to a symbol of personal identity (Cohen, 2006). Many have explored the meaning of home, material culture, and the effect of home and material culture on personal identity and self-worth (Ames, 1985; Maquet, 1993; Marcus, 2006). This work delves deeper into questioning representation of worth as it relates to the residential decorative arts material culture, a stream of research becoming increasingly more salient in the age of online shopping, celebrity brands, and social media depictions of impeccably staged homes. Are brand names and hashtags more important than function and comfort? In the related fields of textile and fashion design, a

label provides a sense of identity (brand), function (care instructions, sizing), and worth (designer or not). The label is integral to the garment the way that decorative objects are integral to a room. The purpose of this handsewn, quilted pillow crafted entirely of discarded garment labels questions how we use high-end products to establish self-worth. The log cabin quilt pattern of labels surrounding the center label, which depicts a fashionable human, symbolizes how our choices can actually contain self, hiding it rather than displaying self without the fine trappings. Several portions of the pillow have been decoratively handsewn to symbolize how material culture can be used to create individual identity by personalizing mass-offered choices. The labels were collected over a decade by a tailor in a local shop, and the brands range from mass-market big-box to high-end couture, representing the range of home goods people cloak their space in to establish worth. The medium of a pillow was chosen to reflect the worth that is put on accessories and the residential decorative arts a throw pillow can cost \$20 or it can cost \$2000, but in the end it remains a throw pillow. If the garments the labels were removed from are considered as part of the cost this throw pillow would be worth approximately \$26,000. However, since it's made from discarded pieces of those garments it's worth is merely the cost of the thread and the filling: \$1.27. What determines true worth? The pillow explores some of the ways that question can be answered through making.

References

Ames, K.L. (1985). The stuff of everyday life: American decorative arts and household furnishings. In T.J. Schlereth (Ed.), *Material culture: A research guide* (pp.79-112). University Press of Kansas.

Cohen, D. (2006). *Household gods: The British and their possessions*. Yale University Press.

Csikszentmihalyi, M. (1993). Why we need things. In. S. Lubar & W.D. Kingery (Eds.), *History from things: Essays on material culture* (pp. 20-29). Smithsonian Institution.

Maquet, J. (1993). Objects as instruments, objects as signs. In. S. Lubar & W.D. Kingery (Eds.), *History from things: Essays on material culture* (pp. 30-40). Smithsonian Institution.

Marcus, C.C. (2006). *House as a mirror of self: Exploring the deeper meaning of home*. Nicholas-Hays, Inc.

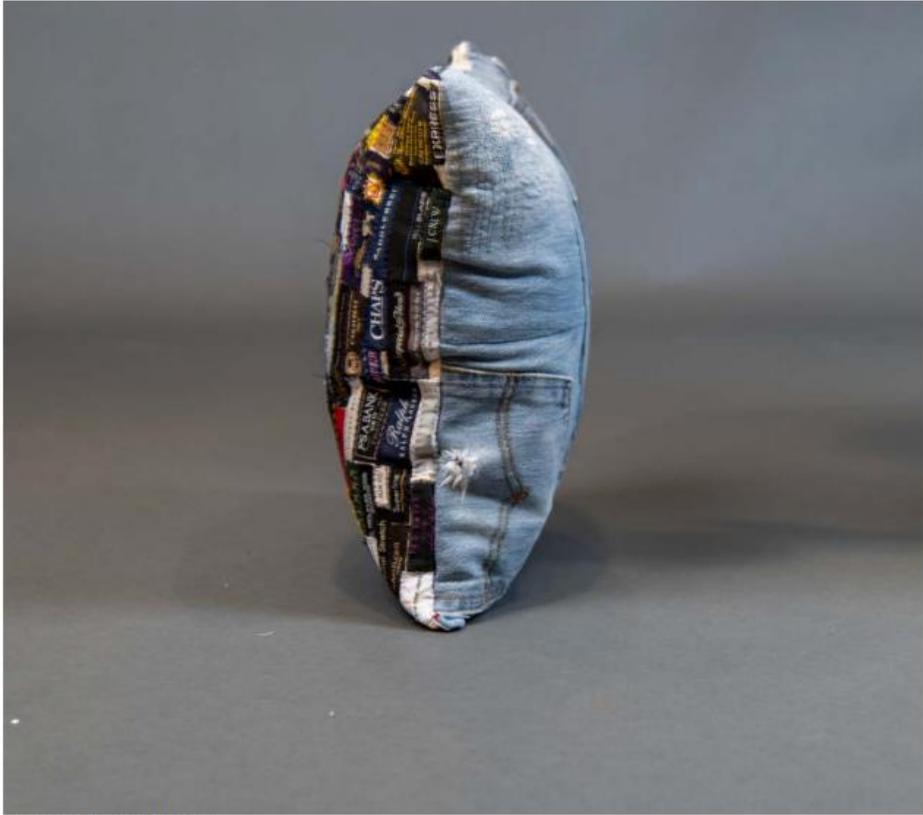


IMAGE 3: SIDE VIEW



IMAGE 4: DETAIL VIEW #1



IMAGE 6: DETAIL VIEW #3



IMAGE 7: IN SITU, ROCKER PROVIDES SCALE

Creative Scholarship- Design as Idea
Presentation

Warped: Demographic Disparities Woven in Design

Anna Ruth Gatlin, Auburn University

Abstract

In interior design, representation matters. Designers of space matters, since intentionally or not, designers cultivate space for their own culture and subconscious cultural biases (Heazlewood, 2017). 79% of all interior designers in the US are female and 83.9% are White (Zippia, 2022), a significant deviation from national demographics, where 57.8% are White and 50.52% female (United States Census Bureau, 2020). There has been no significant shift towards inclusion and diversity in interior design education: within the author's program, 91% of the students are white females. The remaining 9% represents everyone else. Textiles have also been used as representation for thousands of years, with the first woven cloth used to signify cultural association dating back to the 6th century BCE (Hamilton, 1987). Since then, humans have used textiles to visually sort themselves into identifiable groups. Examples of this cultural sorting via textiles includes denoting tribal affiliation, hierarchical rank, religious order, royalty, cultural and familial groups, peasant class, and trade groups the world over (Hamilton, 1987). Textiles have also signified socio-economic status by the fineness of the weave. For example, in the American South, where post-Civil War cotton mills produced a majority of the country's cloth, mill workers would wear the cheapest

and most loosely woven clothing, denoting their low placement in society. The use of decorative objects to assert or convey data about the owner, their values, their identity, and their self-worth has occurred for hundreds of years (Schlereth, 1985). This creative scholarship work is grounded historically in the use of decorative objects as instruments of communication; this set of pillows uses the medium of textiles to juxtapose objects made for comfort with data that creates discomfort. This metaphor is important because designers appropriate multi-cultural design to make space comfortable and attractive, but looking beneath assumptions reveals the merging patterns of disparity, making the viewer uncomfortable. The historically deep roots of woven textiles to visually represent the aforementioned demographic data make the viewer uncomfortable with the disparity of who is being represented in space. Each pillow was hand-woven on a lap-loom using 26 different yarns in the weave ranging from acrylic to silk; one wool yarn creates the weft. The 26 yarns vary in fiber, weight, and texture; the one yarn is homogenous. The individual pieces of weaving that comprise the exterior had to be hand-pieced together to create the uniform facade. After completing the outer layers, they were constructed into pillows by a combination of hand- and machine-sewing, and stuffed with a traditional polyester fill. The two pillows represent an underlying disparity. Pillow One: 91% white females (coral yarn) 9% other (multi-color yarn) to reflect the demographics of students in the author's academic program. Pillow Two: 31% white females (coral yarn) 69% other (multicolor yarn) to reflect demographics of the 2020 US Census. The people designing our spaces don't look the same as the people living, working, and recreating in those spaces.

References

Hamilton, J.A. (1987). Dress as a cultural sub-system: A unifying meta-theory for clothing and textiles. *Clothing and Textiles Research Journal*, 6(1), 17-32.

Heazlewood, J. (12 April 2017). Combatting unconscious bias in design.

<https://uxdesign.cc/combating-unconscious-bias-in-design-bff4dfb013c3>

Schelreth, T.J. (1985). Social history scholarship and material culture research. In T.J. Schlereth (Ed.), *Material culture: A research guide* (pp.155-196). University Press of Kansas.

United States Census Bureau. (2020). Quick facts United States.

<https://www.census.gov/quickfacts/fact/table/US/PST045221>

Zippia (18 April 2022). Interior design demographics and statistics in the US.

<https://www.zippia.com/interior-designer-jobs/demographics/>



Front of "Demographics of the United States of America" pillow



End of "Demographics of the United States of America" pillow



Front of "Demographics of the <redacted> Interior Design Program" pillow



Back of "Demographics of the <redacted> Interior Design Program" pillow



Side of "Demographics of the <redacted> Interior Design Program" pillow



The pillows together, creating the collection "Warped"



The two pillows, in situ

**Creative Scholarship- Design as Idea
Presentation**

This is Interior Design

*Tameshia West Albert, Auburn University
Anna Ruth Gatlin, Auburn University*

Abstract

The contemporary conversations around the interior design profession are focused on its: future development around identity and equity; effectiveness in design and construction process; and efforts around sustainable design (International Interior Design Association, 2019a, 2019b). In this forward motion, a review of past contributions from decorative artist can often be marginalized. Often, these works are performative examples of male architects, and their ventures into creating highly structured, form-forward masculine objects that exist within interiors. These highly celebrated objects often overshadow the contributions of softer feminine decorative arts thus limiting and disregarding past contributions of historically female makers. In these mediums of expression, mostly including knitting, quilting, sewing, and embroidering (Chansky, 2010; Amos & Binkley, 2020, Newmeyer, 2008), women found themselves confined to over several centuries (Parker, 1984; Amos & Binkley, 2020; Chansky, 2010; Newmeyer, 2008) through the hegemonic stratification of arts and art culture (Parker, 1984; Amos & Binkley, 2020). Popular culture has seen an advent of Third-Wave feminists reclaiming the decorative arts as a means of political expression (Newmeyer, 2008). This creative scholarship positions itself through the lens of critical

discourse analysis (CDA) to question the academy to consider what the contributions of feminine decorative arts are to the contemporary field of interior design.

Juxtapositioning decorative arts-based items made by female interior designers to historically celebrated and masculine decorative arts objects, the makers ask the viewer to question textile and traditionally contributions to the inclusive future of interior design.

Images of a carefully crafted tableau consisting of form-forward masculine objects opposed to soft textile-driven feminine decorative objects are contrasted to the same setting without the masculine items, leaving the feminine pieces to probe the viewer into questioning whether or not the soft goods and decorative objet d'art so formative to the practice and history of interior design can exist as enough in its own right. Each feminine piece portrayed in the tableaux is unique, original, and hand-crafted by the authors using a variety of construction methods; each piece portrayed in the tableaux is designed by a notable artist and produced for the mass-market. Three tableaux are presented in photographed form, each twice (with and without the objects). As part of the meta-approach of this questioning, one of the objet d'art featured in a tableau is a hand-embroidered, functioning QR that takes the viewer to a mixed-methods survey of the creative scholarship in interior design, allowing viewers who would otherwise remain aphonic an opportunity to have a voice in the discourse.

References

Amos, J., & Binkley, L. (2020). *Stitching the self: Identity and the needle Arts*.

Bloomsbury Publishing Plc. <https://doi.org/10.5040/9781350070417>

Chansky, R. A. (2010). A stitch in time: Third-Wave feminist reclamation of needled imagery. *The Journal of Popular Culture*, 43(4), 681–700. <https://doi.org/10.1111/j.1540-5931.2010.00765.x>

International Interior Design Association. (2019). (Re)Designing our profession for diversity (2019 IIDA Student Roundtable Report, p. 18). International Interior Design Association. <https://iidavawva.org/wp-content/uploads/2019IIDAStudentRoundtableReport.pdf>

Newmeyer, T. S. (2008). Knit one, stitch two, protest three! Examining the historical and contemporary politics of crafting. *Leisure/Loisir*, 32(2), 437–460. <https://doi.org/10.1080/14927713.2008.9651417>

Parker, R. (2010). *The subversive stitch: Embroidery and the making of the feminine* (Auburn RBD Library (3rd Floor) NK 9206 .P37 2010; New ed.). I. B. Tauris.

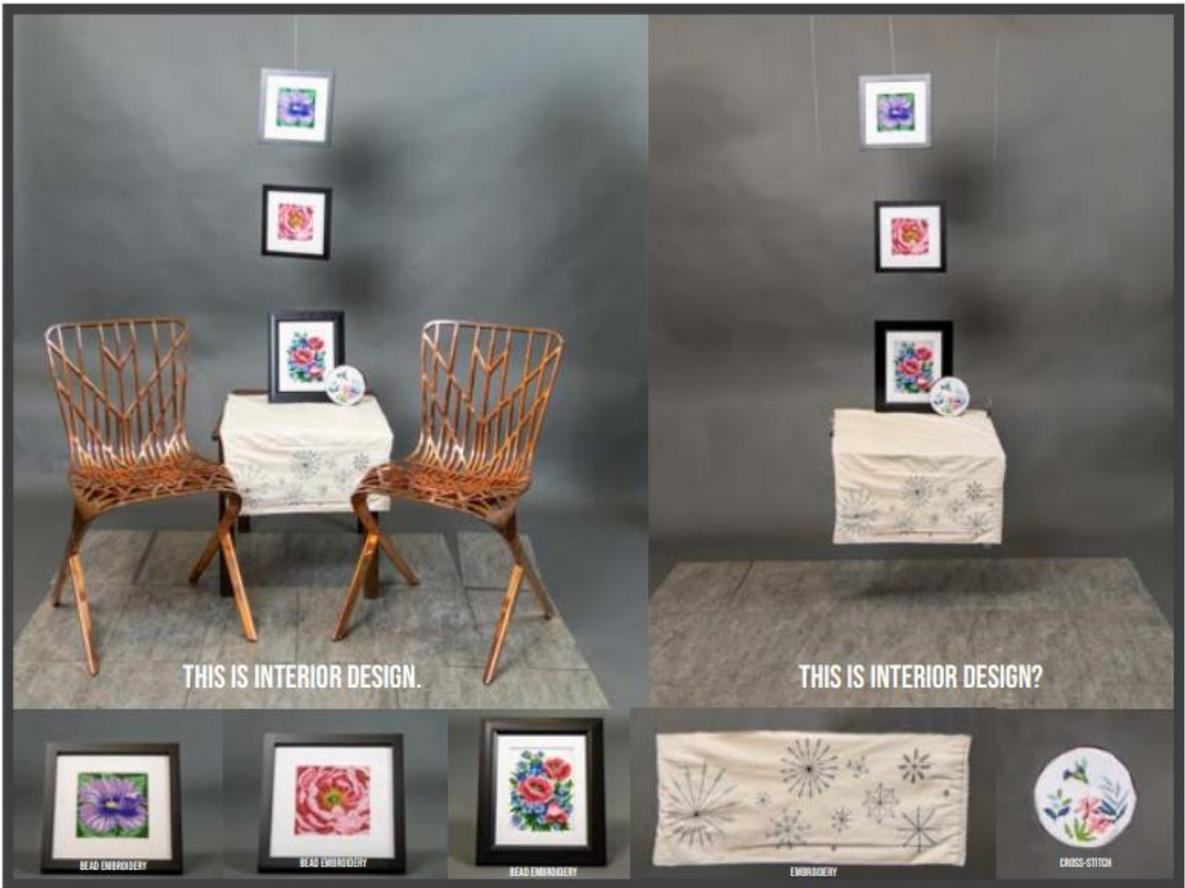
IMAGE #1



IMAGE #2



IMAGE #3



**Creative Scholarship- Design as Idea
Presentation**

Ecologically Balanced Ideation Regimes and Effects of Critique

Lindsay Tan, Purdue University

Abstract

Narrative: The term critique regime describes a perspective that acknowledges critique's long-standing role in shaping design ecosystems. Critique has been a source of disturbance, as well as an integral part of ecosystem health, for as long as design has existed. It changes the pattern of ideation and the composition and structure of design outcomes at a variety of scales. Critique has clear and immediate impacts on design outcomes. There are many ways in which a critique regime might be described. Functionally, a critique regime may be viewed as a practical description of the role of critique, its characteristics, and its effects within a given design ecosystem. Although critique may seem to be systematic and predictable, in truth it demonstrates a high degree of variability across space and time. It can be difficult to define a single classification system for critique regimes for several reasons: 1. Difficulty in bounding parts and components of the critique that can vary continuously 2. Difficulty in accounting for complex, interacting variables in the process 3. Difficulty in simplifying classification in a way that will still be accurate and practical. Although classification is difficult, it remains necessary in order to communicate about the role of critique and so is often approached by focusing on one of two things: characteristics of the critique or effects produced by the critique the critique effects. Factors include critique frequency,

critique periodicity, critique intensity, scale of critique, pattern on the ideation habitat, stage of design, and depth of critique with critique frequency and intensity as the two primary classifications. Critique intensity and severity are not the same thing, and intensity can be problematic in its own regard because there are different ways to measure intensity. Critique regimes can also be described by type; examples include surface critique regime, replacement critique regime, and non-critique regime. Critique effects can be described in terms of physical, technical, and introspective effects. Physical effects, such as endorphin release, are fairly easy to replicate. Technical effects, such as the consumption of idea biomass, can also be replicated with some degree of accuracy if enough is known about the performance of a specific design ecosystem. Introspective effects have a high degree of variability, to the degree that they may seem random, and yet they are a keystone factor of the critique regime and a strong influencer on the health of the design ecosystem. Designer's notes: This work is part of a series exploring the design process through an ecological lens. Each piece in the series began with a unique set of digital photographs taken by the designer in situ. The raw photos were combined and manipulated, then overlaid with filters, special effects, and mixed media on a texturized canvas.

References

None Listed.

Title: *Ecologically balanced ideation – regimes and effects of critique*

Composition:



Details:



**Creative Scholarship – Design as Interior
Presentation**

**Designing for Social Change: Through Diversity, Equity, and
Inclusive Design for Employees with Special Needs**

Jane Hughes, Western Carolina University

Abstract

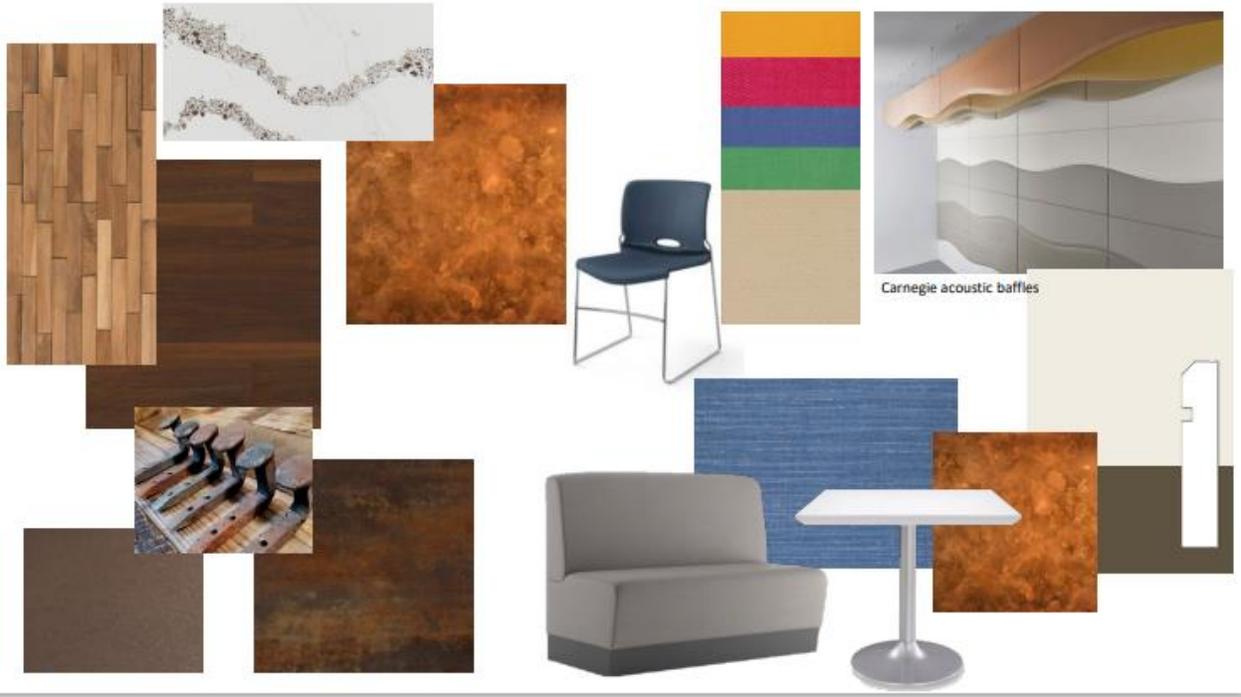
A look at influencing positive change through ice cream and the environment it is served in. The initial project charge was to design an 800 sq. ft. ice cream parlor that doesn't look like a traditional pink and white ice cream parlor of days gone by. The goal was to create something vibrant, fun, and that fits in with Asheville, NC's vibe while also creating a space that is easy to maintain (a high level of cleanability) and that has strong acoustic solutions. Beyond the aesthetics, the space must support its employees - individuals with special needs - in their ability to complete their assigned tasks with a high level of success. The primary issues of the design include ease of achieving and maintaining an elevated level of cleanliness and a high level of acoustic control. The client set a goal of maintaining 98 or higher on all sanitation scores for the business. This goal was set as a means of circumventing the projected fears regarding the abilities of the employees to maintain a hygienic food establishment. The other primary concern was acoustics as many individuals with autism deal with acoustic sensitivity. Given that these were the two primary issues, building and interior materials became increasingly important and a primary focus for the design solution. The space also must

support customers from the neighboring community in providing a spirit of place, which allows an invisible weaving of culture, relational aspects, and the physical aspects of the place. The space must also be a safe place for individuals with special needs and those without to interact in an environment that is designed to support a positive interaction between the two groups. It is important for the design solution to focus on diversity, equity, and inclusion for its employees and its varied customers, as well as support positive social impact in the community. Programming was conducted and identified the issues of audibility, comfort, DEI, social impact, image, interaction, maintenance, and ambience. Then design resources were focused on solving these issues and design solutions focused on form, lighting, interior building materials and finishes.

References

Duerk, D. P. (1983). Architectural Programming: Information Management for Design. Wiley and Sons.





Carnegie acoustic baffles

Creative Scholarship- Design as Idea
Poster

**Biophilic Playgrounds for Children in Highly Transient
Communities of Oahu**

Ying Yan, Auburn University
Lindsay Tan, Auburn University

Abstract

Incorporating nature into urban outdoor playgrounds promotes children's health and well-being, including physical, emotional, cognitive, and social development (Frost, 2008). Active play in a natural environment strengthens children's communication and problem-solving abilities. The use of natural and local materials enhances children's interaction with nature to reduce children's mental fatigue (Cengiz & Boz, 2019). Outdoor play is necessary for healthy communities; obesity is a serious health problem, affecting about 19.7% (14.7 million) children and adolescents. Without outdoor activities, 9.4% (5.8 million) children have been diagnosed with anxiety and 4.4% (2.7 million) children have been diagnosed with depression in 2016 & 2019 (3-17 years) in the United States (Bitsko et al., 2022). Biophilic playgrounds in an urban setting can be challenging; they often begin with few natural elements on site such as trees, sand, water, or other natural elements. Designers may focus on adding natural forms to enhance the aesthetic aspect at the expense of meeting design functionalities, resulting in a fantastical but impractical playground (Andreucci et al., 2021). Practicality is critical to effective playground design, not just for comfort but also safety. Outdoor play carries

some other risks. For example, the incidence of hand-foot-and-mouth disease (HFMD) is a common viral infection in children at public playgrounds. Therefore, biophilic playgrounds must balance lifestyle and vector borne disease prevention with the desired restorative effects. Consequently, this study seeks to explore the potential relationship between natural design elements and child development theories to address the specificity of biophilic playgrounds in practical application. The site of the study is Oahu, Hawaii. Hawaii's population is a blend of many cultures (middle of the Pacific Ocean). In the 2019 census of Hawaii's residents, 57.3% were Asian, 43.5% Caucasian, 27.0% Pacific Islander, 10.7% Hispanic, 4.8% American Idina and Alaska Native, and 3.6% Black or African American. Hawaii has a lengthy history of immigration resulting in abundant diversity of cultures. With the growing and densifying urban populations, former forest lands are considered primary human land use for cities to convert into mixed commercial-residential areas and resulted in the lack of urban biophilic playgrounds. The research method of this study used systematic observations of children's play behaviors interaction with others at the Ala Moana Playground Climber - and precedent studies of playgrounds in Oahu, Hawaii. Findings suggest children enjoyed climbing and had higher interaction with others during climbing activities. Findings also reveal limited natural and cultural Hawaiian components in commercial playgrounds. Hence, this study uses design to explore two aspects the vernacular and the organic design in biophilic playgrounds. Informed by Jean Piaget's child cognitive development theory (2000), the colorful play is intended to grab children's attention and enhance their play experiences. Natural elements and local cultural motifs encourage child-nature interaction. Combining child development and natural elements into

biophilic playground design principles is designed to enhance the connection between children and nature. The design outcomes from this study can inform the body of knowledge for playground design as well as other play-related spaces.

References

Andreucci, M. B., Loder, A., Brown, M., & Brajković, J. (2021). Exploring challenges and opportunities of biophilic urban design: Evidence from research and experimentation. *Sustainability*, 13(8), 4323.

Bitsko, R. H., Claussen, A. H., Lichstein, J., Black, L. I., Jones, S. E., Danielson, M. L., ... & Ghandour, R. M. (2022). Mental health surveillance among children—United States, 2013–2019. *MMWR supplements*, 71(2), 1.

Cengiz, C., & Boz, A. O. Biophilic Playgrounds as Playscapes in Child-Nature Interaction.

Frost, J. L., Wortham, S. C., & Reifel, R. S. (2008). *Play and child development*. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Piaget, J. (2000). Piaget's theory of cognitive development. *Childhood cognitive development: The essential readings*, 2, 33-47.

Landscape Map



Flag

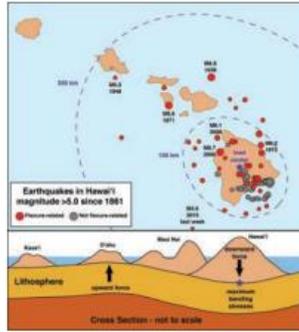


Seal



State quarter

Island of Hawaii (the big island) Molokai (the Friendly Isle)
 Maui (the Valley Isle) Lanai (the Pineapple Isle)
Oahu (the Gathering Place) Niihau (the Forbidden Isle)
 Kauai (the Garden Isle) Kahoolawe (the Target Isle)



Earthquakes in Hawaii



Tsunamis

Great waves that strike the shore
 The city of Hilo on the Big Island has been most affected by Tsunamis



Water

Onshore aquifers, which are layers of rock and soil underground that collect water after rainfall.



Water



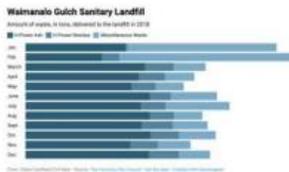
Transportation

Dependable Hawaiian Express (DHX)
 Hawaiian Air Cargo



Power

Fossil fuel
 Renewable resources
 Petroleum and Coal
 The Waves of the Future
 Visible Light Uses
 Wind and Water



Agriculture

sugar cane
 coffee
 cattle
 hogs



Landscape Map



Site analysis - O'ahu Island



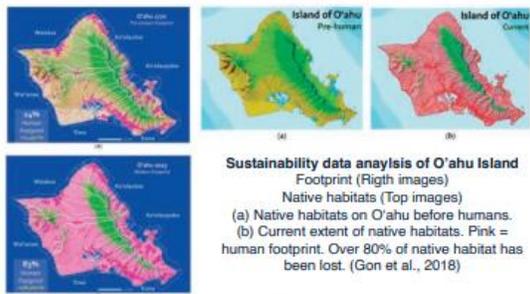
Hawaii	
New Hawaii 2050 1,455,271	2000 561,066
Median Age of Population 2010 34.970	2000 12.6%
Percentage of Population 65+ 7.0%	2000 8.0%

Honolulu County, Hawaii
 White alone
 Percentage of total population: 18.5% (188,462 people)

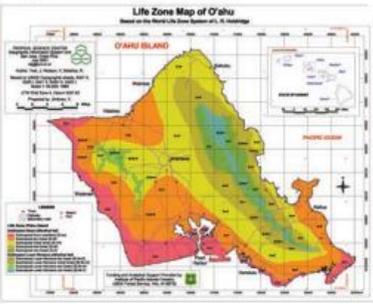
Percentage of Total Population

White alone	18.5% (188,462)
Black or African American alone	2.0% (20,720)
American Indian and Alaska Native alone	0.2% (2,270)
Asian alone	43.0% (434,933)
Native Hawaiian and Other Pacific Islander alone	10.0% (102,899)
Some Other Race alone	3.7% (37,497)
Two or More Races	24.3% (246,088)

Hawaii was the first state to set a deadline for generating 100% of its electricity from renewable energy sources (to be achieved by 2045).



Sustainability data analysis of O'ahu Island
 Footprint (Right images)
 Native habitats (Top images)
 (a) Native habitats on O'ahu before humans.
 (b) Current extent of native habitats. Pink = human footprint. Over 80% of native habitat has been lost. (Gon et al., 2018)



Business & Economy
 Oahu's Opportunity

Reference: Gon, S. M., Tom, S. L., & Woodside, U. (2018). 'Aina Mōkoma, Hōmau Au Lāi—Productive Lands, Changing Work: Using the Hawaiian Footprint to Inform Biocultural Restoration and Future Sustainability in Hawaii'. Sustainability, 10(10), 3420.

Landscape Map

Zoom in community environment



Geographic location: Queen Kapi'olani Hotel Waikiki Beach

Site boundary: 150 Kapahulu Ave, Honolulu, HI 96815

Entrance locations and types

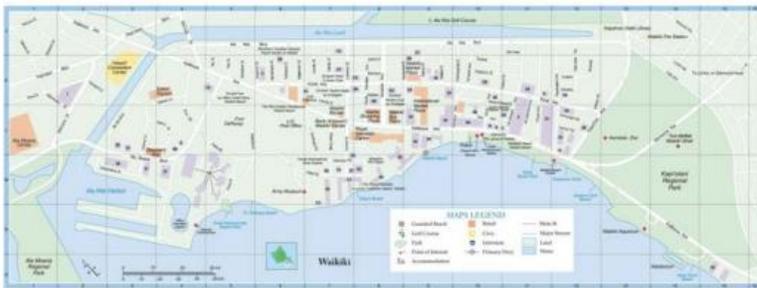
Site security

Existing buildings (see right image)

This 19-floor, 315-room property in Waikiki has two excellent features: its location and its wallet-friendly prices. A minute's walk away from Waikiki Beach and right next door to Honolulu Zoo, Queen Kapiolani Hotel is a convenient choice for the budget-conscious traveler, who doesn't mind the obvious display of wear and tear that can be seen all over the hotel.

Neighbouring buildings

The rooms at this 176-room budget hotel, located five minutes from the beach, are fairly spacious -- but also noisy, tired looking, and a bit grimy



😊 Lovely views

One block from Waikiki Beach and next door to Honolulu Zoo

Close to excellent surfing

Free beach towels

Free Wi-Fi

Discounts available at two local golf courses

On-site spa, pool and shops

Smoke-free

😞 Decor is dated

No free parking

Not directly on beach

Breakfast at a cost

The entire building could use an upgrade.

Landscape Map



Scholarship of Design Research- Diveristy, Equity, and Inclusion
Poster

**Improving the Longevity of China's Senior Populations:
Reducing Social Isolation and Loneliness**

Muxuan Zhao, Savannah College of Art and Design

Abstract

Research has shown that an increasing number of senior citizens in China have been troubled by loneliness due to social isolation stemming from the transition to retirement. Social isolation and loneliness pose a higher risk for seniors' physical and mental health leading to premature death (Donvito, 2018). However, the mortality rate dropped from 8% to 6% for seniors who continued to work from 62 - 65 years old (Fried, 2021). Additionally, working-class seniors have a life expectancy that is 3.5-year shorter than white-collar professionals (Fried, 2021). That said, six months can be added to a senior's life span if lifelong education is supported (Second Wind Movement, 2022). For these reasons, a more interactive and inclusive community environment needs to be developed to support seniors to continue working or change careers by learning. The study aims to alleviate seniors' loneliness and improve their well-being in the senior community center by utilizing interior design, human behavior theories, and psychological therapies for loneliness. Through two user groups were identified, as highly educated and minimally educated people. Results of interviews help narrow down user demands from the lens of Maslow's hierarchy of needs, in which self-actualization, a sense of belonging, and hobby pursuits are the primary stimulus for seniors to

continue working and learning when they age. While case studies reveal that interaction, flexibility, and accessibility are significant for seniors' positive cognitive abilities, productivity, and social engagement. In summary, the design implication of the study is to accommodate the older adults to better continue working and build lifelong learning, and have more social activities when they arrive at the age of retirement, thus prompting their well-being in an interactive senior community by reducing aging loneliness.

References

Donvito, T. (2018). Why Do Lonely People Die Younger? Keck Medicine of USC.

Retrieved from <https://www.keckmedicine.org/blog/why-do-lonely-people-die-younger/#:~:text=This%20mental%20health%20problem%20has,from%2026%25%20to%2032%25.>

Fried, C. (2021). New research shows men who work longer live longer. NNY360.

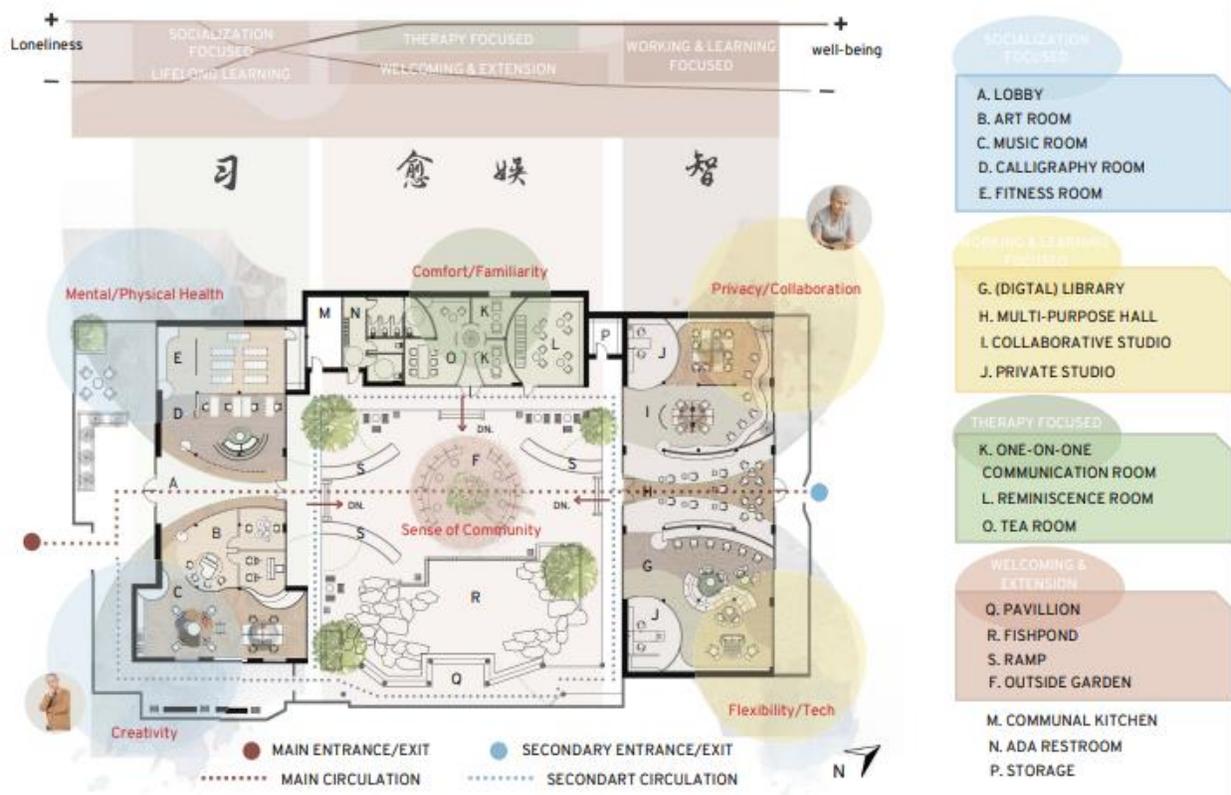
Retrieved from https://www.nny360.com/artsandlife/lifestyle/new-research-shows-men-who-work-longer-live-longer/article_6cae2a9d-1589-5270-a906-3122836d80d6.html

Hellmich, N. (2014). Retirement: Some struggle with leaving their jobs. Use Today.

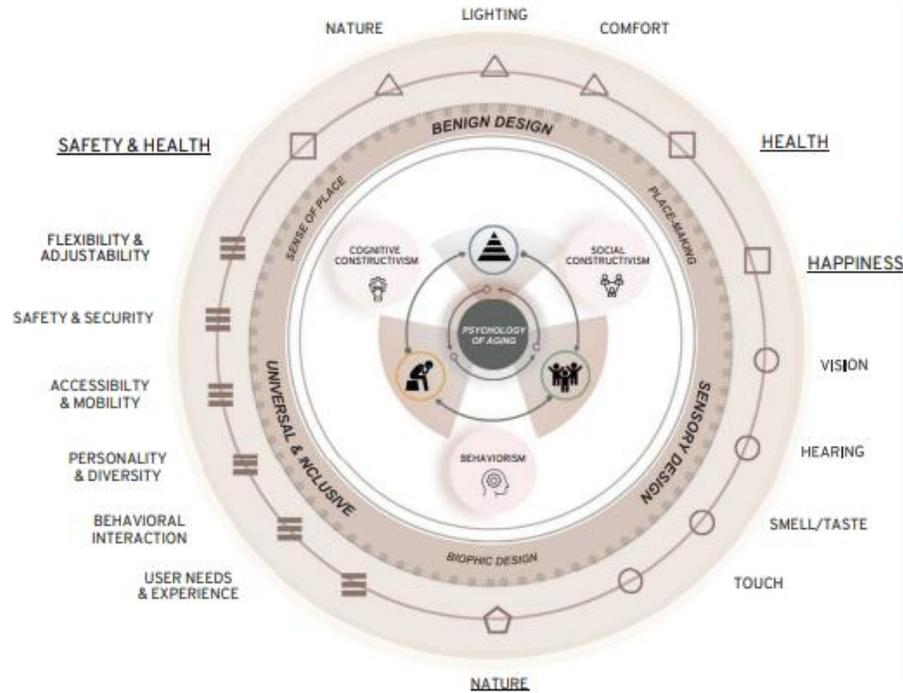
Retrieved from

<http://www.usatoday.com/story/money/personalfinance/2014/10/28/retirement-leaving-job-work-identity/17671579/>

Second Wind Movement (2022). 5 Lifelong Learning Benefits That Could Change Your Future. Retrieved from <https://secondwindmovement.com/lifelong-learning-benefits/>



Theory Summary



PSYCHOLOGY OF AGING INCENTIVES FOR WORKING AFTER RETIREMENT

Maslows Hierarchy of Need



It presents in a pyramid shape, with basic needs at the bottom of the pyramid and more high-level, intangible needs at the top (McLeod, 2022).

Models for the Loneliness



Loneliness happens when the social connections that people want don't match their actual experience of relationships with others ("The Psychology of Loneliness," n.d.).

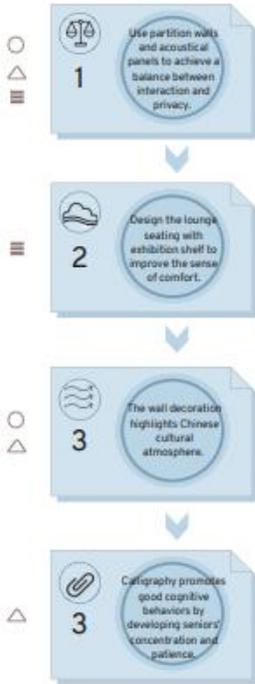
Activity Theory for Aging



It describes the psychosocial aging process, which emphasizes the importance of ongoing social activity ("Theories of Ageing," 2022).



IMPLICATION FOR DESIGN



CALLIGRAPHY ROOM

USER NEED

1. Highly and Minimally educated people need an elegant space to develop their positive cognitive behaviors
2. The connection to nature and co-workers alleviate seniors' loneliness and increase well-being

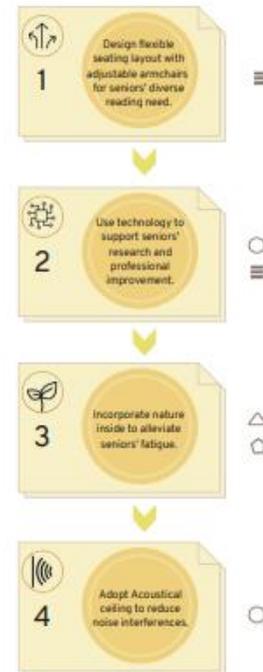
HUMAN BEHAVIOR & PSYCHOLOGY



DIGITAL LIBRARY



IMPLICATION FOR DESIGN



USER NEED

1. Highly and Minimally educated people need a quiet reading space to improve their professional knowledge and build lifelong learning.
2. The learning process with technology supports seniors to build the self-actualization and alleviate loneliness.

HUMAN BEHAVIOR & PSYCHOLOGY



Scholarship of Design Research – Diveristy, Equity, and Inclusion
Poster

**Psychological Trauma Rehabilitation: A Center for Children
Affected by the Pandemic**

Yue Che, Savannah College of Art and Design

Abstract

Psychological trauma in children, as a pervasive social problem, is increasing the possibility of children suffering from it after the influence of the pandemic. Children with existing mental health problems have seen a 2-percentage point increase in prevalence due to restrictive policies on daily life and school closures (Gatell-Carb & et al., 2021), due to schools being the only source of trauma-informed care and support for students (Phelp & Sperry, 2020). However, this situation is not paid enough attention to in society. The widespread inequities and social neglect of childcare are such that only 20% of children with psychological trauma receive effective treatment and services. The situation underscores the urgent need and necessary measures for attention and intervention in the aspect of mental health and psychological trauma for children. The preliminary research indicates a lack of interior design or space type with healing functions integrated with schools after the impact of the pandemic. In addition, it also shows that adverse childhood experiences (ACEs), which are potentially traumatic events that occur during childhood (0-17 years), are the major cause of psychological trauma in children (Goddard, 2021). Meanwhile, according to the data from the Arkansas fact sheet, Arkansas children are significantly more likely than children in

most other states to endure adverse childhood experiences (ACEs) (Burch, 2019). Therefore, the project focuses on providing Arkansas children with a new interior design solution that effectively mitigates psychological trauma. The methodology uses qualitative research, including surveys, interviews, ethnography, and case studies, to identify the mental health issues, life challenges, and existing school issues which are the potential of children's psychological trauma during the pandemic and explore the trauma-informed design for children. The methodology uses qualitative research, including surveys, interviews, ethnography, and case studies, to identify five issues that need to be solved in this project, including the health safety issue, the psychological trauma issue, the lack of socialization opportunities, the emotional neglect by families, and the fear of going back to school. Furthermore, the research findings reveal the necessity of children's socialization activities, the use of natural components during the pandemic, and the importance of increasing children's participation through interactive tactics. The significance of the study and design implications, which are guided by a theoretical framework that includes biophilia, phenomenology, child development theory, proxemics theory, and the third-place theory, are dedicated to motivating children to engage in social activity, family cooperation, and immersive healing experience, thus improving the rehabilitation efficiency of psychological trauma, based on this detailed investigation and analysis.

References

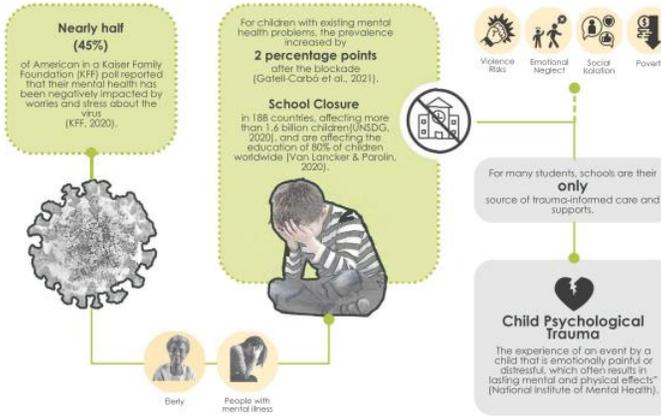
Burch, A. (2019, November 6). Why experts say Arkansas has more traumatized kids than any other state. KATV. Retrieved June 9, 2022, from <https://katv.com/news/local/why-experts-say-arkansas-has-more-traumatized-kids-than-any-other-state>

Gatell-Carbó, A., Alcover-Bloch, E., Balaguer-Martínez, J. V., Pérez-Porcuna, T., Esteller-Carceller, M., Álvarez-García, P., & Fortea-Gimeno, E. (2021). State of child and adolescent mental health during the first wave of the COVID-19 pandemic and at the beginning of the 2020–2021 School Year. *Anales De Pediatría (English Edition)*, 95(5), 354–363. <https://doi.org/10.1016/j.anpede.2021.08.004>

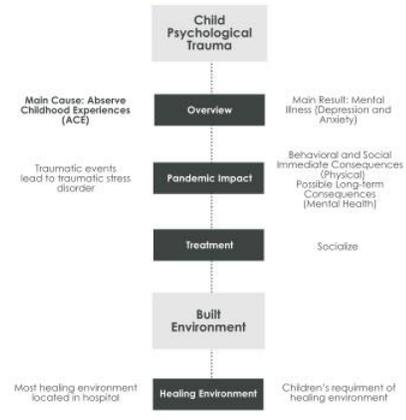
Goddard, A. (2021). Adverse childhood experiences and trauma-informed care. *Journal of Pediatric Health Care*, 35(2), 145–155. <https://doi.org/10.1016/j.pedhc.2020.09.001>

Phelps, C., & Sperry, L. L. (2020). Children and the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S73–S75. <https://doi.org/10.1037/tra0000861>

Problem Statement



Literature Review



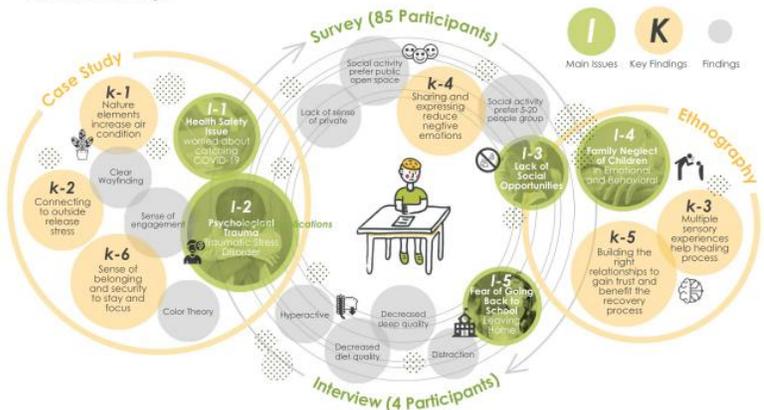
Gap

Lack of design with healing functions integrated with schools after the impact of the pandemic, prevents effective recovery of the children with psychological trauma.

Research Question

How can interior design help child psychological trauma recovery?

Research Findings



Design Implications

- Nature Connection**
Nature elements reduce stress, attract attention, and reduce concerns about hygiene.
- Immersive Sensory Experience**
Multi-sensory stimulation enable users to intelligently experience the physical world, thus forming a subjective weaving of each person's self.
- Social activities support**
Community environment provides opportunities to make friends.
- Cooperation Experience**
A variety of hands cooperation activities to promote communication and enhance feelings.
- Multiple ways of Interactions and engagements**
Adventurous and challenging environment provide multiple interactions, to increase sense of engagement and belonging.

Theory & Application of Design Implications



Attention Restoration Theory (ART) says that people can concentrate better after they spend time with nature, or even just by looking at or imagining such scenes. Biophilic design provides opportunities for people to connect with nature, raising awareness of health safety.

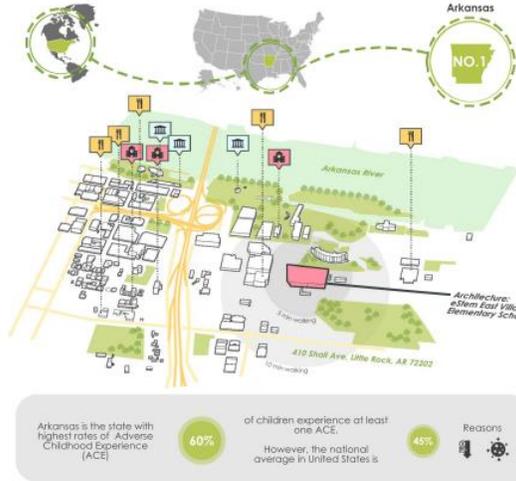
Phenomenology emphasizes approaches to sensory Design. Stress Restoration theory considers the beneficial role of restorative environments in reducing stressors and improving well-being. Trauma informed design means safety, trustworthiness, give support, collaboration and reciprocity, voice and choice.

The third place provide social opportunities. Theory of proxemic indicates the ways in which people will maintain varying degrees of personal distancing depending on the social environment.

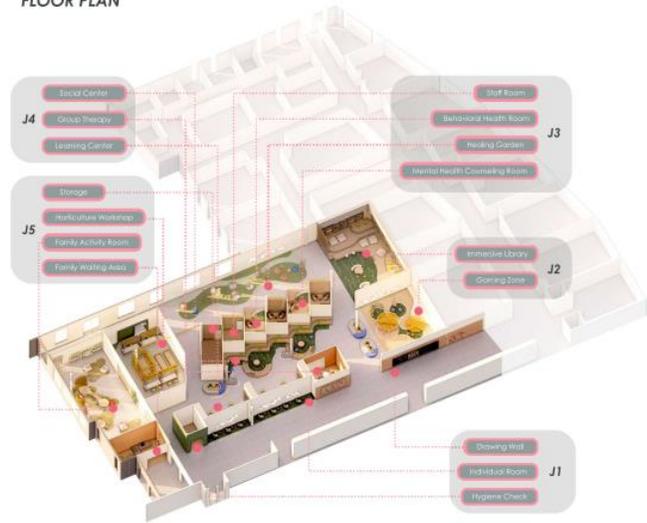
Theory of proxemic shows that environment can influence degree of social and cooperation.

Children Development theory explains how children acquire knowledge, with an eye toward understanding the nature of intelligence.

LOCATION



FLOOR PLAN



USER ANALYSIS & USER JOURNEY (J)



Gaming Zone



Immersive Library



J2. Participating

Design Implication

Gaming Zone
Multiple ways of interactions and engagements

Immersive Library
Multiple ways of interactions and engagements

Key Experiences

Gaming Zone
Multiple Interactive Facility
Induction Lighting
Children's Cognitive Board

Immersive Library
Immersive Reading Experience
Gentle Music
Individual Reading Couch
Group Reading Salon

Theory

Gaming Zone
Children Development Theory
Phenomenology

Immersive Library
Phenomenology
Trauma-informed Approach

Healing Garden & Mental Health Counseling Room



J3. Expressing

Design Implication

Immersive Sensory Experience
Nature Connection

Key Experiences

Picture Tree/ Message Tree
Swing Chairs and Beanbags
Trunk Wood Table

Pipe Landscape Installation
Semi-open Rooms

Theory

Phenomenology
Stress Restoration Theory
Trauma-informed Approach
Attention Restoration Theory
Biophilia

Social Center



J4. Interacting

Design Implication

Nature Connection
Social activities support

Key Experiences

Open Social Area
Group Therapy Room

Group Learning Area
Tactile Stone Material
Visual Connection

Theory

☑ The third place
☑ Theory of proxemics
☑ Biophilia



J5. Reviewing

Design Implication

Horticulture Workshop
Immersive Sensory Experience
Nature Connection
Social activities support

Key Experiences

Family Activity Room
Cooperation
Experience
Social activities support

Theory

☑ The third place
☑ Theory of proxemics
☑ Biophilia

Horticulture Workshop



Family Activity Room



Key Experiences

Horticulture Workshop
Seed Adoption
Nature Connection
Farm Observation
Pipe Landscape
Installation
Specimen Making
Workshop

Family Activity Room
Family Cooperation
Activity
Flexible Revolving Door
Family Desk
Display Panel

Theory

Horticulture Workshop
☑ Attention Restoration Theory
☑ Biophilia
☑ Phenomenology
☑ Stress Restoration Theory
☑ Trauma-informed Approach
☑ The third place
☑ Theory of proxemics

Scholarship of Design Research – Open Track
Poster

Evidence-Based Residential Design for Aging-in-Place and Multi-generational Living

Cher Pombuena, University of Nevada Las Vegas
Saman Jamshidi, University of Nevada Las Vegas

Abstract

Findings: The end-of-semester course evaluations were completed by 51 of 54 (94%) CTECH I students and 36 of 48 (75%) CTECH II students. Statistical analysis showed that the final grades of CTECH II students ($M = 91.49$, $SD = 3.66$) were significantly higher than those of CTECH I students ($M = 85.24$, $SD = 5.98$); $t(46) = -8.05$, $p < .05$. The qualitative analysis suggests that the new course structure may have helped students to (1) better absorb the content by enabling them to watch the prerecorded lectures at their own pace; (2) study efficiently by identifying and focusing on key contents as a result of doing weekly exercises; (3) perform better in exams by having better time management in reviewing the course material; (4) remain engaged during lectures; (5) achieve the intended learning outcomes with less effort from students. However, the qualitative data also demonstrates that some students did not take responsibility for their learning, which made some assignments less effective. The limitations of this study and directions for future studies will be discussed.

References

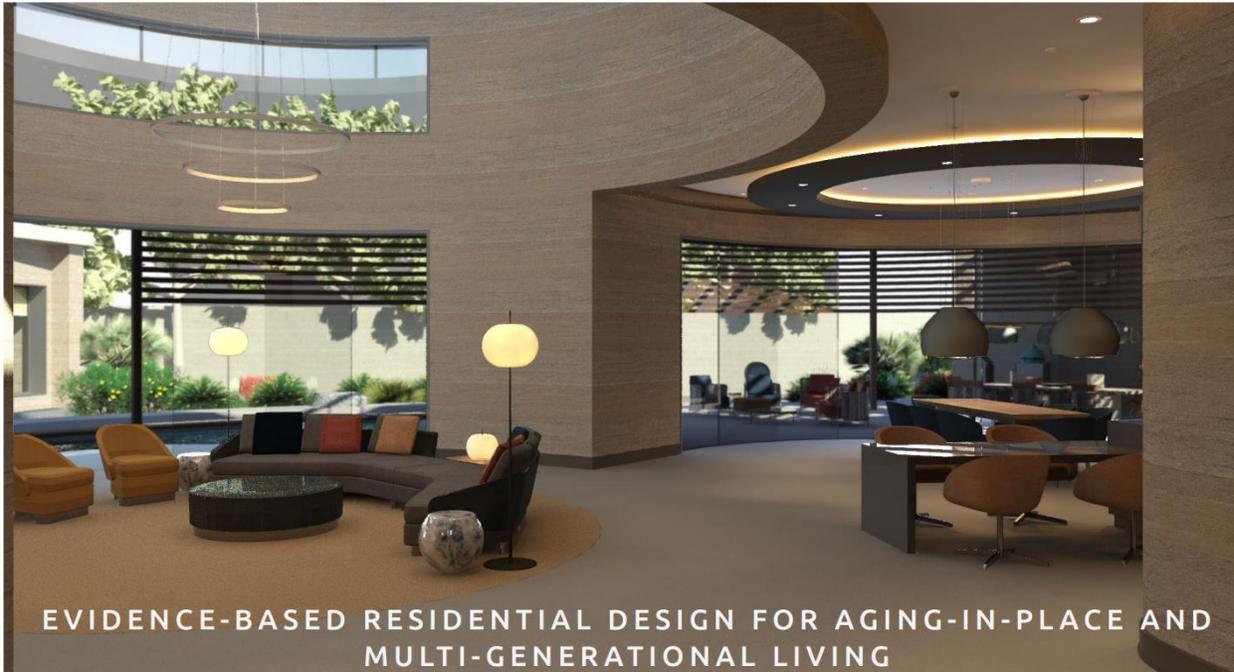
Andersson, Morgan, et al. "Aging-in-Place: Residents' Attitudes and Floor Plan Potential in Apartment Buildings From 1990 to 2015." HERD: Health Environments Research & Design Journal, May 2021, doi:10.1177/19375867211016342.

Greasley-Adams, Corinne, et al. "Good Practice in the Design of Homes and Living Spaces for People with Dementia and Sight Loss." University of Stirling (2018), https://www.northlondonpartners.org.uk/downloads/plans/Mental%20Health/Dementia%20care%20in%20NCL/Dementia-support-in-care-home/Dementia_sightloss_design_guidance.pdf

Kopec, Dak. Environmental Psychology for Design. Fairchild Books, An Imprint of Bloomsbury Publishing Inc, 2018.

O'Malley, Mary, et al. "(Dis)Orientation and Design Preferences Within an Unfamiliar Care Environment: A Content Analysis of Older Adults' Qualitative Reports After Route Learning." Environment and Behavior, Sept. 2020, doi:10.1177/0013916520953148.

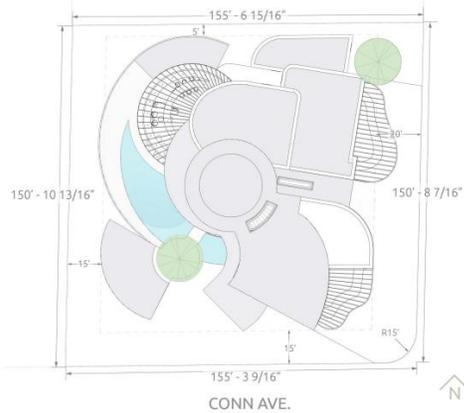
Nioi, Amanda et al. "Seasonal Differences in Light Exposure and the Associations With Health and Well-Being in Older Adults: An Exploratory Study." HERD vol. 10,5 (2017): 6479.doi:10.1177/1937586717697650



EVIDENCE-BASED RESIDENTIAL DESIGN FOR AGING-IN-PLACE AND MULTI-GENERATIONAL LIVING

SITE PLAN

SC: 1/16" = 1'-0"



CONCEPT

Generations are shaped by their predecessors in a similar way as to how a potter shapes a block of malleable clay taken from the earth. The process begins with the molding and shaping of an undefined and irregular form until you have something whole and well-rounded. This natural process that comes from the interaction of the potter's hands with the clay is like how generations are shaped by and molded by their previous generations. Molded, the new Franklin residence aims to encourage this shaping and molding by facilitating and encouraging family bonding and interaction through architectural forms and space planning.





PROJECT

MULTI-GENERATIONAL LIVING · AGING IN PLACE · SUSTAINABILITY



The project's first goal is to accommodate **multi-generational living**. The new residence should be comfortably accommodate the Franklin's, their children, and parents.



The second goal is to support **aging-in-place**. Dr. Franklin and Mariana would like their new residence to be readily able to adapt to changes in their physical, psychological, cognitive, and possible financial needs as they age so that they may continue to live in their own space.



The third goal is **sustainability**. The residence's construction and use should utilize means to lower energy needs, use as few non-renewable resources as possible, limit pollution and waste, and conserve or support the surrounding natural environment where possible.

EVIDENCE-BASED DESIGN FOR AGING-IN-PLACE AND MULTI-GENERATIONAL LIVING | 01

SITE ANALYSIS & SUSTAINABILITY

The project is located in the Southwest region of Las Vegas, Nevada. Daylighting and passive ventilation comprised key portions of Molded's sustainable design strategy. From the daylighting analysis, you can see that the commonly occupied areas have adequate exposure to daylight. The west-facing windows are protected from excess sunlight by vertical shading and overhangs. The living area benefits from a clerestory window and a roof monitor that provides stack ventilation.

DAYLIGHTING ANALYSIS

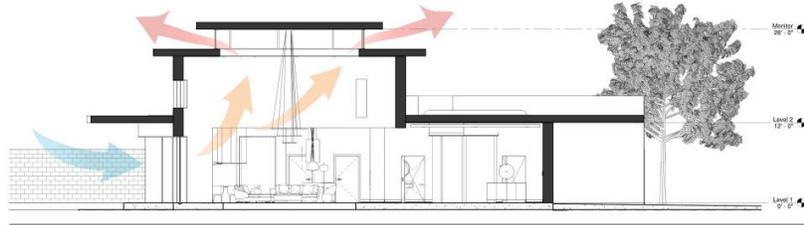


LEVEL 1 | March 20, 9:00 LEVEL 2 | March 20, 9:00 LEVEL 1 | March 20, 15:00 LEVEL 2 | March 20, 15:00 LEGEND

SUN STUDIES



SUMMER SOLSTICE | July 21, 2021 9:00



BUILDING SECTION NORTH VIEW | SC: 3/16" = 1'-0"



SUMMER SOLSTICE | July 21, 2021 15:00



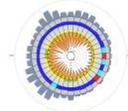
WINTER SOLSTICE | December 21, 2021 9:00



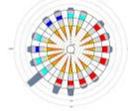
WINTER SOLSTICE | July 21, 2021 15:00

WIND WHEELS (1)

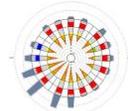
The wind wheels depict wind data in months where natural ventilation is feasible. The natural pool was placed in such a way that would provide natural humidity to the otherwise dry wind.



APRIL



MAY



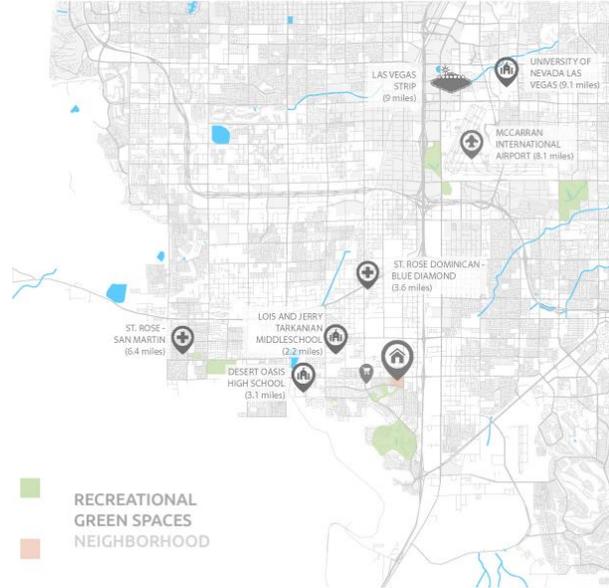
SEPTEMBER



OCTOBER

PROXIMITIES

- The nearest neighborhood emergency center is 3.6 miles away, and the nearest pharmacy is less than 1 mile away. Both are vital sites as the clients age.
- The closest middle and high schools are within walking distance. This is ideal for sustainability however, it may not be possible during the hotter months. UNLV is a 13-minute drive from the site.
- The nearest park and walking trail are within 1 mile from the site. The closest nature preserve is a 16-minute drive. This is ideal for a more active lifestyle while being closer to nature.



RESEARCH FINDINGS



SPACE PLANNING AND WAYFINDING

- Spatial proximity between entrances, bathrooms, bedrooms, and storage spaces is ideal for aging in place. [2]
- Ensure that spaces are well-integrated and have access to important facilities. [4]
- Doors and circulation paths should accommodate people of varying levels of mobility. [5,7]
- Views to the exterior can aid in self-localization. [4]
- Corridors with excessive turns can cause confusing and difficult wayfinding. [4]



AGING IN PLACE

- Allowing seniors to stay in their homes has a sizeable impact on their health and wellbeing. [7,8]
- Aging in place allows seniors to stay near close friends, family, and known environments. [4,7,8]
- Bathrooms are common spaces requiring design interventions to accommodate aging in place. [7]
- Showers should have textured/non-slip flooring and grab bars. [7]



DAYLIGHTING

- Age-related macular degeneration and other common visual impairments contribute to diminished color perception in the elderly. [5,6,7]
- Daylighting has a positive impact on productivity, circadian rhythms, and cognitive health. [3,5]

DESIGN THEORIES/HYPOTHESES

MULTI-GENERATIONAL LIVING

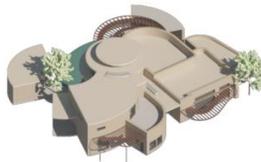


RECIPROCAL DETERMINISM

Behavior modeling, environmental design, psychological processes have a reciprocal relationship. [8,9]

- Promote positive interactions and bonding within the home.
 - The main living area is centralized, and an open concept is used for all the gathering spaces.
 - The gathering spaces are rounded with seating oriented to promote dynamic interaction.

ISOMETRIC VIEWS



SOUTHWEST



NORTHEAST



NORTHWEST

AGING IN PLACE

SALUTOGENESIS



Promote health and wellness through an improved sense of coherence and decreased environmental sources of stress. [10]

- **COMPREHENSIBILITY**
 - decreased number of turns at egress points improves visibility and self-orientation
 - open space planning and a see-through fireplace helps for visualization throughout the main living area
 - use of large windows to aid in self-localization
- **MANAGEABILITY**
 - increased accessibility
 - increased doorway and circulation clearances
 - decreased distances between bedrooms, bathrooms, and storage spaces
- **MEANINGFULNESS**
 - encouraging interaction and socialization by centralizing gathering spaces



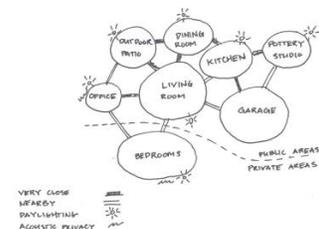
CRITERIA MATRIX

ROOM/AREA	SQUARE FOOTAGE	Public	Private	Very Close	Nearby	Distant	DAYLIGHT	PLUMBING	SPECIAL EQUIPMENT	ACCESSIBLE	ACOUSTIC PRIVACY	SPECIAL CONSIDERATIONS
1. ENTRYWAY	495 Ft ²	○	●	●	●	○	Y	N	N	Y	N	Requires enclosed storage space and mirror.
2. LIVING AREA	804 Ft ²	○	●	●	●	○	Y	N	N	Y	Y	Requires accessible furniture.
3. DINING AREA	455 Ft ²	○	●	●	●	○	Y	N	N	Y	Y	Should include a large dining table, fireplace
4. KITCHEN	374 Ft ²	○	●	●	●	○	Y	Y	Y	Y	U	Custom island with integrated trolley and folding seat.
5. DIRTY KITCHEN	214 Ft ²	○	●	●	●	○	Y	Y	Y	Y	N	Ample storage spaces, messy cooking area, exterior ventilation.
6. OUTDOOR PATIO	1511 Ft ²	○	●	●	●	○	Y	Y	Y	Y	N	Should include an outdoor cooking area.
7. GARAGE	1092 Ft ²	○	●	●	●	○	Y	N	N	Y	N	Should accommodate at least 3 cars.
8. POTTERY STUDIO	511 Ft ²	○	●	●	●	○	Y	Y	Y	Y	Y	Should be expandable. Include kiln, refrigerator, turning wheel, and supply/shed storage.
9. WINE CELLAR	94 Ft ²	○	●	●	●	○	N	N	Y	Y	N	Must be temperature controlled with UV resistant glazing.
10. OFFICE	572 Ft ²	○	●	●	●	○	Y	N	Y	Y	Y	Include artifact collection storage, light and sound control and hallway.
11. GAMING AREA	230 Ft ²	○	●	●	●	○	Y	N	N	Y	Y	Should include storage space for games, must accommodate 6+ people.
12. LAUNDRY/MUD ROOM	66 Ft ²	○	●	●	●	○	U	Y	Y	Y	U	Should include integrated, accessible folding and ironing spaces.
13. HALF BATHROOM	71 Ft ²	○	●	●	●	○	U	Y	N	Y	Y	Include grab bars, clearance space below sink, turning space.
14. MASTER SUITE	869 Ft ²	○	●	●	●	○	Y	Y	N	Y	Y	Must include walk-in closet, luxurious en-suite.
15. GRANDPARENT'S SUITE	641 Ft ²	○	●	●	●	○	Y	Y	N	Y	Y	Must include accessible bathroom, kitchenette, seating space and desk.
16. HERBERT'S SUITE	429 Ft ²	○	●	●	●	○	Y	Y	N	U	Y	Must be especially sound proofed to allow for practicing music.
17. EMILY'S SUITE	442 Ft ²	○	●	●	●	○	Y	Y	N	U	Y	Must include storage space for toys and puppets.
NET FLOOR AREA:	8310 Ft²											
GROSS FLOOR AREA:	8586 Ft²											

PROBLEM STATEMENT

The major problems for the project concern **visibility**, **flexibility**, and the promotion of an **active lifestyle**. Since the clients plan to age in place and host their parents for long periods of time, opportunities for monitoring and checking on the elderly should be provided while also allowing them privacy. Since the clients are considering aging into their home, the home should be adaptable to provide possible future supplemental income for after the clients retire. Lastly, since the clients seek to have a more active lifestyle, the home should promote mobility without reducing efficiency and hindering wayfinding.

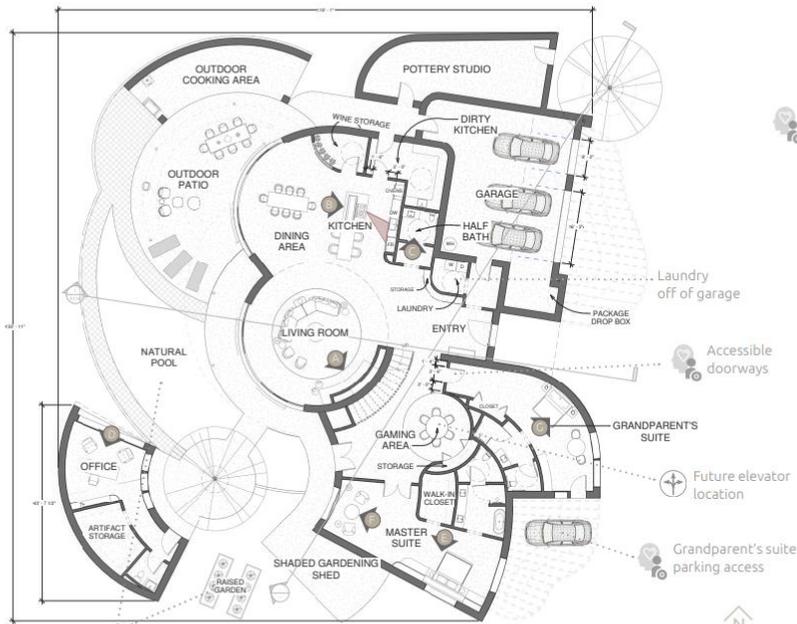
BUBBLE DIAGRAM



WEST ELEVATION | SC: 3/32" = 1'-0"

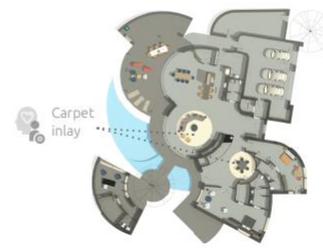
EAST ELEVATION | SC: 3/32" = 1'-0"

MOLDED LEVEL 1 | SC: 1/8" = 1'-0"



 Raised garden beds and a natural pool allows for closeness with nature.

RENDERED FP LEVEL 1 | SC: NTS

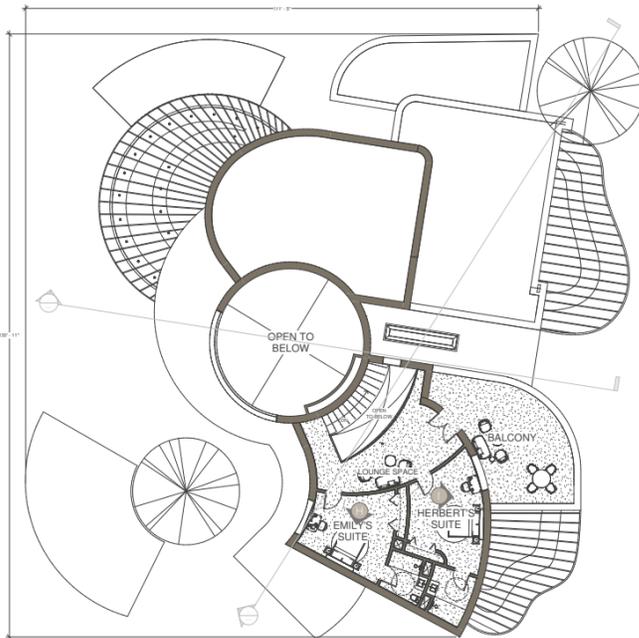


 **RECIPROCAL DETERMINISM**
The kitchen, living room, and gaming area are all located within curved and rounded forms. The seating arranged around rounded tables promotes dynamic interaction and provides the flexibility to accommodate more people. [11]

 **FLEXIBILITY**
The grandparent's suite can easily be converted into a rentable room and serve as a source of income in the future.

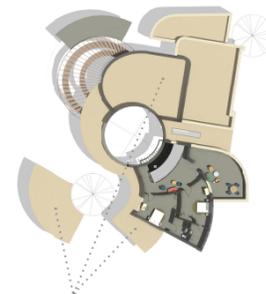
 **VISIBILITY**
The office can be seen from both the master suite and the living area, providing both the opportunity for Graham to see into the living spaces and an opportunity for monitoring by other family members as Graham ages.

 A mudroom/laundry room next to the garage provides Mariana with a place to change out of her scrubs to limit contamination of the rest of the home.



MOLDED LEVEL 2 | SC: 1/8" = 1'-0"

RENDERED FP LEVEL 2 | SC: NTS



Light colored, low-sloped roofing

LEGEND

-  COMPREHENSIBILITY
-  MANAGEABILITY
-  MEANINGFULNESS
-  BIOPHILIA

- [1] Liggett, Robin, et al. "Climate Consultant." Society of Building Science Educators, 6, UCLA, 16 Jan. 2021, <https://www.sbse.org/resources/climate-consultant>.
- [2] Andersson, Morgan, et al. "Aging-in-Place: Residents' Attitudes and Floor Plan Potential in Apartment Buildings From 1990 to 2015." HERD: Health Environments Research & Design Journal, May 2021, doi:10.1177/19375867211016342.
- [3] Nioi, Amanda et al. "Seasonal Differences in Light Exposure and the Associations With Health and Well-Being in Older Adults: An Exploratory Study." HERD vol. 10,5 (2017): 64-79.doi:10.1177/1937586717697650
- [4] O'Malley, Mary, et al. "(Dis)Orientation and Design Preferences Within an Unfamiliar Care Environment: A Content Analysis of Older Adults' Qualitative Reports After Route Learning." Environment and Behavior, Sept. 2020, doi:10.1177/0013916520953148.
- [5] Greasley-Adams, Corinne, et al. "Good Practice in the Design of Homes and Living Spaces for People with Dementia and Sight Loss." University of Stirling (2018), https://www.northlondonpartners.org.uk/downloads/plans/Mental%20Health/Dementia%20care%20in%20NCL/Dementia-support-in-care-home/Dementia_sightloss_design_guidance.pdf
- [6] Chen, Liang-Kung. "Gerontechnology and artificial intelligence: Better care for older people." Archives of gerontology and geriatrics, vol. 91104252. 10 Sep. 2020, doi:10.1016/j.archger.2020.104252
- [7] Grimaldi, April. "Aging-in-Place." Interview by Daphne Cuellar, Devina Gallegos, Natalie Klainer, Cher Pombuena. 29 August 2021.
- [8] Kopec, David Alan. Environmental Psychology for Design. Fairchild Books, An Imprint of Bloomsbury Publishing Inc, 2018.
- [9] "Apa Dictionary of Psychology." American Psychological Association, American Psychological Association, <https://dictionary.apa.org/reciprocal-determinism>.
- [10] Lindström, Bengt, and Monica Eriksson. "Salutogenesis." Journal of Epidemiology and Community Health (1979), vol. 59, no. 6, 2005, pp. 440–442.
- [11] Panero, Julius, and Martin Zelnik. Human Dimension & Interior Space: A Source Book of Design Reference Standards. Langara College, 2019.
- [12] Mitton, Maureen, and Courtney Nystuen. Residential Interior Design. 3rd ed., Wiley, 2016.

Scholarship of Design Research – Social and Environmental
Poster

Leaven. Strengthening Community by Breaking Bread

Savannah Kruzner, Savannah College of Art and Design

Abstract

Leaven is my undergraduate senior thesis. The design process began by first identifying a problem and then using the lens of design to try and make a space that could remedy the problem within an existing building. Very early in the project I had the opportunity to speak with Paula Kreissler, executive director of Healthy Savannah- a non-profit organization that focuses on the community health of residents in Chatham County. She brought to my attention that Georgia is one of the leading states in chronic diseases due to poor health and emphasized that this is especially amplified in marginalized communities. With the poverty level of Savannah being at nearly 23% there was a demographic here that needed access and education to healthy food. Through research, I found that in case studies, increased self-sufficiency leads to stronger communities and empowered individuals. To make this actionable I turned to two physiological theories: Maslow's Theory of Motivation and Third Place Theory. Maslow's Theory of Motivation supposes that in order to satisfy increasingly complex needs, basic needs must be met and serve as a foundation first. If the local community had reliable access to their physiological needs such as sustenance then their chances of achieving things such as belongingness, esteem and self-satisfaction were far more likely. The Third Place Theory puts forth that we have three primary places in our lives: the home

(1st place, or the one where we spend the most time), work (2nd place) and 3rd places defined as informal meeting spaces that serve to satisfy human social needs. It's common especially in our modern world that 3rd places fall by the wayside. An individual who engages in a 3rd place is regularly interacting with the community. They are less likely to feel lonely or isolated and more likely to feel safe and have a stronger sense of place. Leaven is designed to fulfill this role of 3rd place. The downtown historic building that was chosen as the site for the project was at the perfect location to be accessible to a wide variety of Savannahians, had ample land for community gardens and it's history is strongly rooted in local culture. It was apparent, in the wake of a global pandemic, the desire and need for this type of project was in the forefront of local minds after a conducted survey. With all of the elements needed and a strong foundation of research, the design proper could get underway. After evolving a well rounded program I focused on 12 key spaces; A Tool Rental Space, Classroom, Seed Library, Cookbook Library, Market, Atrium, Living Room, Cafe Communal Chef's Table, Learning Kitchen, Nutrition Museum and Rooftop Bar. The project was fully flushed out with Construction Documents, FFE, budget calculation and in accordance with WELL building standards and ADA requirements. The result is the design for Leaven, a food empowerment center with the goal of serving the needs of its community, celebrating local culture and improving the wellbeing of Savannah.

References

Oldenburg, Ray. *The Great Good Place: Cafés, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community*. Da Capo Press, 2005.

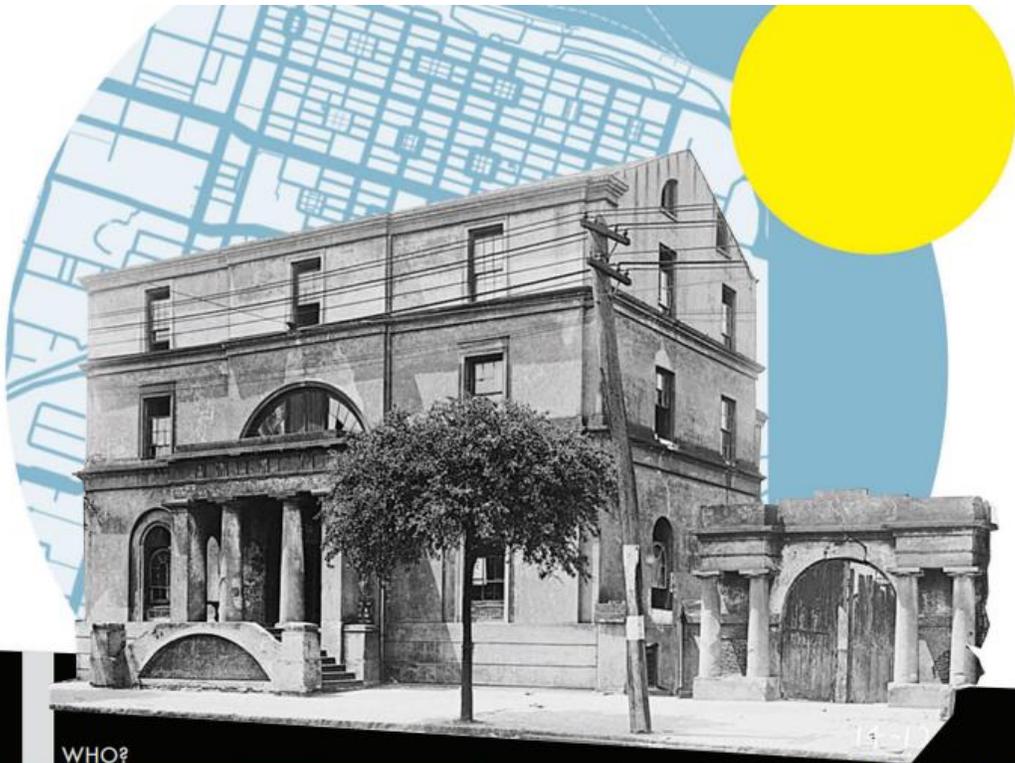
Ramos-Vidal, I., Palacio, J., Uribe, A., Villamil, I., & Castro, B. (2020). Sense of community, psychological empowerment, and relational structure at the individual and organizational levels: Evidence from a multi case study. *Journal of Community Psychology*, 48(2), 398-413. <https://doi.org/10.1002/jcop.22261>

“Savannah, GA.” Data USA, <https://datausa.io/profile/geo/savannah-ga/#education>.

Survey, Historic American Buildings. “William Scarborough House, 41 West Broad Street, Savannah, Chatham County, GA.” Library of Congress, <https://www.loc.gov/pictures/collection/hh/item/ga0030/>.

Taormina, R. J., & Gao, J. H. (2013). Maslow and the motivation hierarchy: Measuring satisfaction of the needs. *The American Journal of Psychology*, 126(2), 155-177.

<https://doi.org/10.5406/amerjpsyc.126.2.0155>



WHO?

The project provides an unequivocally equitable space for locals to access resources and amenities.

41 Martin Luther King Jr Blvd
Savannah, GA 31401

WHAT?

Leaven aims to bolster community ties, enhance individual self-sufficiency and celebrate local culture through providing education and the tools necessary to improve community health.

WHY?

Informal meeting spaces serve a vital function in the wellbeing of a neighborhood. Leaven is a neutral ground in which relationships can form, loneliness + isolation are mitigated and the community can take pride in local culture.

WHEN?

Now, in the wake of a global pandemic as we begin to define our "new normal".

WHERE?

GA is a leader in chronic disease due to poor health. These facts are amplified in marginalized communities. When the basic needs of community individuals are met, the community as a whole experiences the benefits.

Rooftop Bar

All the pinpoints of the center is a rooftop social space with an built raised cocktail bar and views of the Seneca River and Fallside Bridge. The rooftop celebrates a sense of place and pride in the cultural identity of downtown Savannah.

Event Space
Commercial Kitchen



Rooftop Bar

Learning Kitchen

Learning Kitchen gives the opportunity for users to cook hands-on through classes to build skills preparing healthy food.

Cooking stations are designed to mimic residential kitchen attributes so that skills acquired are easily implemented at home.

Nutrition Library

The Communal Table

The Communal Table provides a Chef's Table experience by seating and cooking demonstration theatre by day. Food is prepared consistently to maintain transparency in the cooking process for diners who experience the space around a single large counter.



The Communal Table

Market

The market with a "cut your own herbs wall" sells primarily produce grown in the center's garden and from local farmers. Alongside

products is nutrition information and methods of preparation. Cool colors motivate shoppers to explore the space and make selections mindfully.

Seed Library

This space provides users with access to seeds and any information they may need to cultivate them with local growing conditions in mind.

This provides the opportunity for community members to acquire skills and tools to work toward healthier lifestyles and self-sufficiency.

Cookbook Library

This library is for exchange of recipes. Selections include books that reflect and celebrate local culture, books that cater to specific diets and

a variety of formats for accessible use. Annually the center will produce a cookbook of recipes compiled from community members.



Seed Library

Cook Book Library

Office Suite . Volunteer Lounge

Tool Rental

The tool rental encourages recurring social reactions to rent, learn and return gardening tools. Users are provided with

the necessary means to have more autonomy over their health with resources, education and a supportive community atmosphere.

Garden Classroom

One of the most family-friendly spaces, the classroom provides a small theatre for presentations and entertainment as well as a child play

area with miniature kitchen and fall garden box. Wall space aims to celebrate members the community and their involvement with the center.



Tool Rental

Garden Classroom



Learning Kitchen





Scholarship of Design Research – Social and Environmental
Poster

Shaping Socialization: Strengthening Bonds Between Middle School Students

Alana Houston, Florida State University

Abstract

A national emergency is how major pediatric groups characterize children's mental health (Strauss, 2021). Given the magnitude of this issue, this study looks to answer, how can informal social spaces in a middle school encourage meaningful interactions to increase social support levels in students from low socioeconomic backgrounds?

Adolescence, the developmental years between childhood and adulthood, is a difficult time for many people, leaving many children feeling confused and vulnerable. Early adolescence is the liminal stage of these developmental years and is marked by the onset of momentous biological, psychological, and social changes (typically occurring between ages 10-15) (Arain et al., 2013). During early adolescence, children's sense of identity becomes strongly influenced by their peers (Strauss, 2021). This coupled with the heightened need for belonging can increase susceptibility to peer pressure and drug and alcohol experimentation (Arain et al., 2013). Low socioeconomic status (SES) further complicates this developmental stage. Differences in SES have been found to affect emotional regulation, behavioral function, social relationships, and self-perceptions (Bukowski et al., 2020). Early adolescents spend most of their time inside a middle school building, making this environment impactful on adolescent development.

Jacquelynne Eccles and co-authors hypothesize that mismatches between the developmental needs of adolescents and the opportunities afforded to them by their environments result in negative psychological and social changes (Wang & Hofkens, 2020). Most middle schools are not set up to support adolescent needs, and students have little time to interact with peers or faculty (Wang & Hofkens, 2020). In turn, students have fewer opportunities for decision-making, exploration, and self-management (Wang & Hofkens, 2020). Furthermore, the lack of interactions and opportunities for relationship building prevents students from satisfying their increased need for a sense of belonging (Wang & Hofkens, 2020). COVID-19 has only compounded the challenges young people face. The pandemic has led to increased difficulties with virtual school, depriving students of socialization. When returning to school, adolescents have had to navigate masks and social distancing alongside typical middle school situations (Strauss, 2021). These issues can reduce students' resilience. Factors that have been found to promote resiliency are tied to social support or an individual's perception of support from their social network (Malecki & Demary, 2002). Higher perceived levels of social support have also been found to have positive outcomes for children of divorce, children with learning disabilities, and disadvantaged children (Malecki & Demary, 2002). This presentation will share a mixed method study that has been designed to explore how school spaces can bolster social support amongst early adolescents. First, 7 students from a school that serves majority economically disadvantaged students will be surveyed with an existing scale that measures levels of social support. They will then answer questions about where they interact most with others in their school, and why they select different environments to

do so. Students will have the opportunity to explain their thoughts more fully in individual interviews. The data collected will be used to develop design considerations for informal social spaces in middle school.

References

Arain, M., Haque, M., Johal, L., Mathur, P., Nel, W., Rais, A., Sandhu, R., & Sharma, S. (2013). Maturation of the adolescent brain. *Neuropsychiatric Disease and Treatment*, 9, 449–461. <https://doi.org/10.2147/NDT.S39776>

Bukowski, W. M., Dirks, M., Persram, R. J., Wright, L., & Infantino, E. (2020). Peer relations and socioeconomic status and inequality. *New Directions for Child and Adolescent Development*, 2020(173), 27–37. <https://doi.org/10.1002/cad.20381>

Malecki, C. K., & Demary, M. K. (2002). Measuring perceived social support: Development of the child and adolescent social support scale (CASSS). *Psychology in the Schools*, 39(1), 1–18. <https://doi.org/10.1002/pits.10004>

Strauss, V. (2021, November 24). Middle school is always hard—And the pandemic made it worse. Here’s what these kids need now. *The Washington Post* (Online); WP Company LLC d/b/a The Washington Post.

<https://www.proquest.com/docview/2601760768/citation/945FC9AB28FE4D99PQ/1>

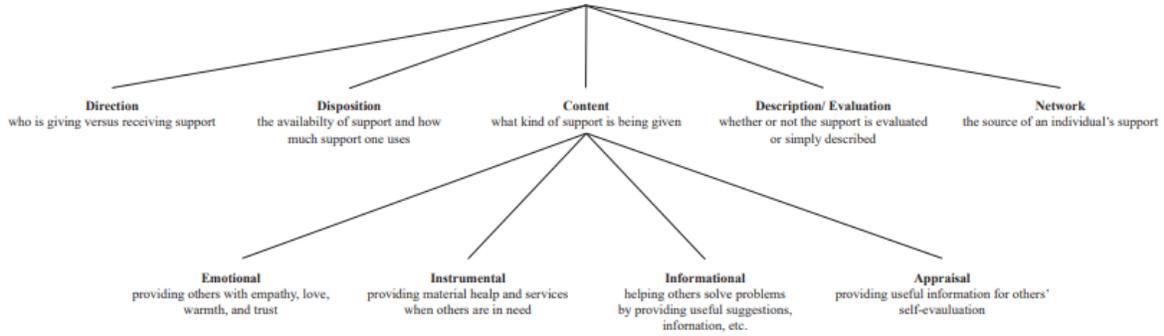
Wang, M.-T., & Hofkens, T. L. (2020). Beyond Classroom Academics: A School-Wide and Multi-Contextual Perspective on Student Engagement in School. *Adolescent Research Review*, 5(4), 419–433. <https://doi.org/10.1007/s40894-019-00115-z>

<p style="text-align: center;">Sense of Community</p> <p style="text-align: center;">Sense of Community: A Definition and Theory (1986) David M. McMillan and David M. Chavis</p>	<p style="text-align: center;">Sense of Community in the School</p> <p style="text-align: center;">Psychometric Properties of a Multidimensional Scale of Sense of Community in the School (2017) Gabriele Prati, Elvira Cicognani, and Cinzia Albanesi</p>
<p>“Sense of community is a feeling that members have a belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together.”</p>	<p>School sense of community “refers to feeling of belonging to the school as a community, perception of emotional connection and bonds with other students, and the feeling that personal needs are satisfied through such membership.”</p>
<p>Membership</p> <ul style="list-style-type: none"> • Boundaries • Emotional safety • Sense of belonging and identification • Personal investment • Common symbol system 	<p>Membership</p> <ul style="list-style-type: none"> • Feeling of belonging • Identification with the school • Perception of emotional safety
<p>Shared Emotional Connection</p> <ul style="list-style-type: none"> • Contact hypothesis • Quality of interaction • Closure • Shared valent event hypothesis • Investment • Effect of honor and humiliation on community members • Spiritual bond 	<p>Emotional Connection</p> <ul style="list-style-type: none"> • Relationships and emotional bonds with other members of the school community
<p>Influence</p> <ul style="list-style-type: none"> • Member openness to influence by community members • Power to influence community <p>Integration and Fulfillment of Needs</p> <ul style="list-style-type: none"> • Reinforcement <ul style="list-style-type: none"> • Status • Group success • Competence • Shared values • Members can meet theirs’ needs while meeting their own 	<p>Opportunities</p> <ul style="list-style-type: none"> • The perception of enjoying opportunities for satisfying needs • The perception of opportunities to have influence

SOCIAL SUPPORT MODEL

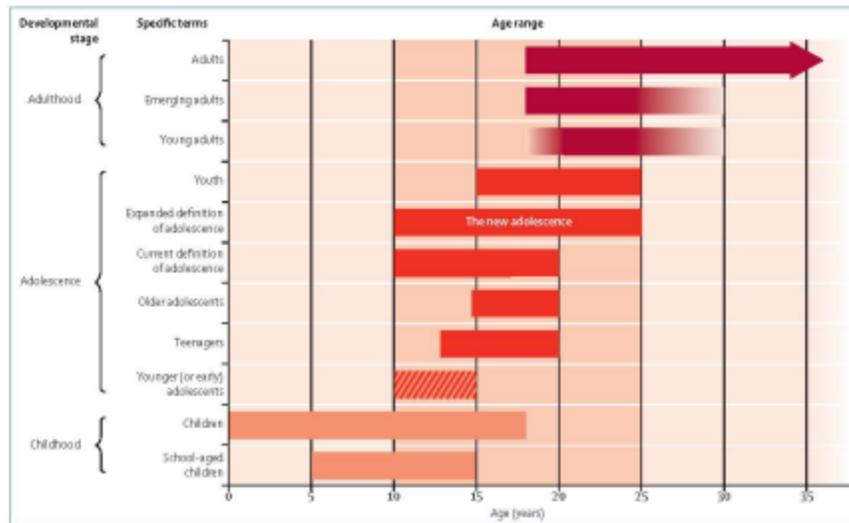
Definition

An individual's perceptions of general support or specific supportive behaviors (available or enacted upon) from people in their social network, which enhances their functioning and/or may buffer them from adverse outcomes.



Developed by Charles Tardy as explained in Measuring perceive social support: Development of the child and adolescent social support (CASSS) (2002)
Christine Kerres Malecki and Michelle Kilpatrick Demaray

Commonly used age definitions of specific terms of relevance for adolescence that span or overlap with the developmental periods of childhood, adolescence, and adulthood.



Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence.

The Lancet Child & Adolescent Health, 2(3), 223–228. [https://doi.org/10.1016/S2352-](https://doi.org/10.1016/S2352-4642(18)30022-1)

4642(18)30022-1

Scholarship of Teaching and Learning- Diversity, Equity, and Inclusion
Poster

Explorations in Empathy: An On/Off Campus Challenge

Chris Smith, Georgia Southern University

Abstract

Purpose and Rationale: The purpose of the study was to foster dialog among students around empathy for interior design clients with various limitations by allowing an experiential exercise in the context of a residential undergraduate studio. The piloted exercise was highly successful with greater than 75% students participating. Universal design principles are an important aspect to interior design education. The American Association of Retired Persons (AARP) reported that 88% of those aged 65 and older want to remain in their homes for as long as possible (i.e., aging in place) (Keenan, 2010). Incorporating evidence-based universal design research will be beneficial.

Evidence-based design is the process of basing decisions about the built environment on credible research to achieve the best possible outcomes (Levin, 2008, p.8)

Methodology: Research Objectives: 1. Pilot an off-campus scavenger hunt exercise from the fall 2020 semester 2. Through the continued development of an off-campus scavenger hunt questionnaire students experience various disabilities. 3. During the scavenger hunt students note challenges and limitations as they assume various persona to better empathize with the experience of navigating interior spaces. 4. Provide students with a variety of tasks at various locations off campus 5. Have

students return to class and share their findings. 6. Through ongoing reflective teaching, evaluate the effectiveness of the scavenger hunt for best practice for teaching. -The researcher developed the universal design scavenger hunt questionnaire using materials from the Center for Universal Design at NC State University. The students further explored universal design principles through a universal design building analysis evaluating a building's interior spaces. Students were assigned a building off campus and completed a multi-page universal design questionnaire. Aspects examined included various aspects of universal design such as clarity, inclusiveness, safety, comfort, choice, and accessibility culminating with a graphic, written, and verbal presentation of findings. Students were assessed on their knowledge through a quiz on universal design principles. Ultimately students synthesized their knowledge of universal design principles in a final course project focusing on a multi-family, multi-generational residence incorporating aging in place, accessibility, and theories on restorative environments. Findings: Students who participated in the scavenger hunt earned higher scores when tested over universal design principles. Students who participated provided regular, timely, critical feedback during desk critiques which facilitated student success. An example of a student comment includes, I feel I am better able to empathize with the daily limitations of clients in their homes. Challenges of the scavenger hunt included student level of engagement, site access, and access to equipment. Conclusions and Implications: Experiential learning activities for college students are possible, attainable, and successful. This exercise provided students with an opportunity to experience a variety of physical user limitations. The research ensured students were afforded opportunities to experience, document, and discuss multiple

limitations at various environments. The exercise will be implemented into curricular offering within the interior design program.

References

Levin, D.J. (2008). Defining evidence-based design. *Healthcare Design* 8 (8), 8.

Keenan, T. A. (2010). Home and community preferences of the 45+ population. AARP Public Policy Institute. Retrieved from the American Association of Retired Persons website <http://assets.aarp.org/rgcenter/general/home-community-services-10.pdf>

Explorations in Empathy: an on/off-campus challenge

Project Statement:

The goal of this project is to promote a deeper empathy in students and understanding of daily life of users with various disabilities and limitations. Each student will be assigned an initial physical limitation and must complete the following tasks with said limitation- try to not break character. Students will travel around various locations on/off-campus as a group completing the tasks of the scavenger hunt. At each stop, please pause to allow your classmates to switch personas with you. This will allow you each to directly experience a full range of challenges inherent in each limitation. **Document** your challenges on the back of this page as well as with selfies.

Project Outline:

Persona:

Limitations may include the following:

- Physical mobility limitation (*use wheelchair/scooter where available*)
- Limited/impaired vision (*close one eye*)
- Baby stroller (*use childe stroller "add on" extension where available*)
- Limited range of motion (*both with non-dominant hand and no arms-place hand in shirt/coat*)
- Sensory impairment (*use gloves/tape hands*)

Tasks:

1. Visit local fast-food restaurant or Dining area on campus of choice
 - a. wash hands in restroom
 - b. go to order counter and ask for a cup of ice
2. Visit local library or library on campus
 - a. Each student must look up one physical book on the library computer and then go get it from the shelf
 - b. Each student must check out one book from the library help desk (any book)
3. Visit local coffee shop or grocery store
 - a. Everyone go inside and take your picture with a classmate
4. Go shopping at a local clothing boutique or large retailer such as Belk/Wal-Mart
 - a. select an article of clothing to try on and go to dressing room in persona
5. Go to local visitor center or Museum on campus and everyone collect a piece of literature
6. **Return to local fast-food restaurant or Dining Area you started at and discuss your findings**

<p>Physical Mobility Limitation</p> 	<p>Restroom:</p> <p>Library:</p> <p>Coffee Shop:</p> <p>Boutique:</p> <p>Visitor Center:</p>
<p>Limited/impaired vision</p> 	<p>Restroom:</p> <p>Library:</p> <p>Coffee Shop:</p> <p>Boutique:</p> <p>Visitor Center:</p>
<p>Baby stroller</p> 	<p>Restroom:</p> <p>Library:</p> <p>Coffee Shop:</p> <p>Boutique:</p> <p>Visitor Center:</p>
<p>Limited range of motion (explore this with using non-dominant hand + missing arms/hands)</p> 	<p>Restroom:</p> <p>Library:</p> <p>Coffee Shop:</p> <p>Boutique:</p> <p>Visitor Center:</p>
<p>Sensory Impairment</p> 	<p>Restroom:</p> <p>Library:</p> <p>Coffee Shop:</p> <p>Boutique:</p>

Scholarship of Teaching and Learning – Pedagogy

Poster

Opportunity to Adjust the Sails of a Researched Based Capstone Project: Divide and Conquer

Shelby Hicks, Western Carolina University

Abstract

For every new semester and CIDA standards revision comes the opportunity to adjust the sails of the interior design program's curriculum, course content, planning and the assessment of student outcomes. The interior design programs current Capstone project includes a research component in the form of a literature review. The challenge currently, is both the research and capstone project 5-8,000 sq ft occupancy of student choice, are in the same 15-week semester. Although literature review has been acceptable there is an opportunity to improve. The decision to create a new course, Senior Research for Interior Design, as a preparatory research course the fall semester prior to the Spring Capstone Project was made. The interior design faculty researcher will take this opportunity to evaluate the outcomes using a rubric designed to focus on the quality and depth of the literature review and the appropriate concepts to be implemented within the capstone project, the following spring semester. This same rubric will be used to evaluate previous literature reviews from the past semester, in the combined research/project course, to compare the student outcomes. This poster presentation will discuss research on course development, research practices and

approaches, and outcome evaluation methods. Course content, schedules, assignments, and rubrics will also be included to assist in the viewers understanding of the research process the students have undertaken. Partial student work will be presented at the time of the Regional Conference. Viewer's feedback and suggestions will be welcome, as it is a work in progress.

References

No references listed.

INTERIOR DESIGN

IDES 453 Research Methods for Interior Designers

***Your professor reserves the right to alter or change due dates and projects. Students must adhere to due dates and be in attendance to know if due dates change.

Week	Day	Month	Date	Pre-Design Research	Lecture/Discussion/ Topic	Reading	Project/ PwPt	Assignment	Assignment Points	Assignment Due date
1	W	8	24	Pre-Design Research	Capstone Project and Senior research overview. Project Exploration	Part 1 Chapter 1-3	Research Interior Design and the why?	1. Project type, occupancy, location, mission	100	8/26
1	F	8	26		Case Study Project Selection Due. First Project Statement Due. List of research resources due. Client and User Profiles Review, Assigned.	Chapter 1-3	Case study 101	1. case studies	100	9/2
2	W	8	31		Review case studies (redline) Studio research	Part 2 Chapter 3-5				
2	F	9	2		Case studies due	Part 2 Chapter 3-5				

3	W	9	7		Interviews/Site visits Develop questions site visit assessment Choosing your professional advisor	Part 3 Chapter 6-10	Interview and site visits	1.	Interviews site visits Presentation of research to date Choosing your professional advisor	9/16 9/16	
3	F	9	9		Field work	Part 3 Chapter 6-10					
4	W	9	14		Field work						
4	F	9	16		Presentation of research to date						
5	W	9	21		Precedent studies		Precedent studies				9/30
5	F	9	23		Studio research						
6	W	9	28		Studio research						
6	F	9	30		Precedent studies due						
7	W	10	5		Lit review & Interior Design Theory	Lit Review (Groat Wang)	Lit review and design theory		Literature review outline	10/12	
7	F	10	7		Studio research						
8	W	10	12		Lit review outline				Literature draft	10/26	
8	F	10	14		Studio research						
9	W	10	19		FALL BREAK						
9	F	10	21		FALL BREAK						
10	W	10	26		Lit review draft				Lit review final	11/18	

10	F	10	28		Studio research Last day to W					
11	W	11	2		Studio research					
11	F	11	4		Studio research					
12	W	11	9		Studio research					
12	F	11	11		Studio research					
13	W	11	16		Studio research					
13	F	11	18		Final literature review due					
14	W	11	23		Thanksgiving					
14	F	11	25		Thanksgiving					

15	W	11	30		Programming Begins Client and User Profile Areas of Design: Functional Needs/Requirements including Spatial Requirements and Adjacencies Functional Needs/Requirements Codes Statements, Sustainability Statement, Special Topic Revised Project Statement Due. Special Topics, Final Document Review, Client Goals Review, Existing Conditions for Spring Review. Client Goals Final Programming Document with Project Statement Review	Programming Chapters 1-3 (Botti-Salitsky)	Programming (putting it all together)		Programming draft Research binder	12/TBD 12/TBD
15	F	12	2		Studio research					
16	W	12	7		Studio research					
16	F	12	9		Studio research					
					Final research and draft Programming Document with					