

OVERCOMING



— [Guiding individuals through liminal conditions on the pathway to adulthood.] —

OVERCOMING

A design Thesis Submitted to the
Department of Architecture and Landscape Architecture
of North Dakota State University

By

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ABSTRACT

The approach to student housing has been stuck in the past while its inhabitants are evolving towards their future. This thesis research will examine the significance and importance of a building as a rite of passage in an individual's life by emphasizing its ability to facilitate an individual's transition from one period of their life to another. A proposed university Residence Hall building will engage its inhabitants to overcome liminal periods of their young adult lives and allow them to grow and prosper into productive members of society. The building will focus on facilitating its occupants to move from the comfort of their parent's home to the world around them by giving them the tools needed for individual development and personal growth. Through designs backed by historical and qualitative research, a proposed model will allow higher education institutions to ditch the cold and sterile student housing model of the past, and focus on a new version that directly applies to the transitional period in which students are living in.

NARRATIVE OF THEORETICAL ASPECT OF THE THESIS

With every major life milestone, the built environment is present. Time and time again people find themselves moving from one period in their lives to another and yet architecture exists within that timeline. Buildings, streets, landscapes, and monuments that people have interacted with in the past act as a threshold to a person's future. It is here that humans develop and maintain an emotional connection to buildings and structures that are associated with the rites of passage in their lives.

Moving from one period of your life to another is hard and often comes with unforeseen opportunities for personal growth. This growth is exponential in the liminal condition. A liminal condition is described as being in a state betwixt and between two phenomena by Arnold van Gennep who coined the term in his book *The Rites of Passage* (1960). Recognizing the importance of these liminal conditions in ones life is important to designing for a liminal period. This thesis will focus on the liminal conditions that someone moving from a comfortable adolescence to a disorientated adulthood would experience by using the University Residence Hall as a threshold between home and the world.

I ask myself what if architecture could prepare a growing human for what is to come next in life? What if architecture could guide someone through one of the most nervous and ambiguous time of their lives? I see this as an opportunity for a building to give its residents not only shelter and a bed to sleep on, but to give them security, sanctuary, a freeness to express themselves, and connection to others. I am interested in the intangible that fascinates human beings to places that have significance in their lives due to the forces that acted upon them while they were spending time within its walls.

UNIFYING IDEA:

The University Residence Hall as a threshold between home and the world.

THE PROJECT TYPOLOGY

The transition from adolescence to adulthood happens mostly within the walls of higher education buildings. The idea of higher education is to prepare people to become conducive and contributing members to society. The amount of change that happens on university grounds within its students' lives is vast and unmeasurable. Universities and the buildings that make them up can be thought of as a catalyst for change.

Residence Halls are a major integral part to the university experience. However, the students of today are not the students of past that campus residence halls are being built for. The old sterile model of the residence hall needs to be refined into a new model. One that is more than just a place to sleep but a place to live. Residence halls are a place where students are no longer within the safety and security of their familiar home and the student is forced to prepare themselves and learn valuable life skills for the future.

This project will offer its students variety and adaptability while contributing to the overall culture of the surrounding university and context. The mixed-use higher education building will offer its students places to study, connect with others, express themselves creatively, all while preparing them to learn valuable life skills for what is to come next in their lives.



BASIC NEEDS FACILITY



EDUCATIONAL FACILITY



SOCIAL FACILITY

MAJOR PROJECT ELEMENTS

VARIETY OF STUDENT ROOM OPTIONS

Every student has different needs and backgrounds. University housing however tries to be equal in their room sizes and types in a building rather than equitable. Some students will spend tons of time in their rooms while others may never be in their room because they are active on campus. These types of students will need different room types/sizes to accommodate for their differences. This is a critique of the current “one size fits all” strategy that is present within student housing.

- Suite Style Rooms
- Micro-studios
- Single rooms
- Double rooms

CREATIVITY SPACES

Every student finds some creative outlet in which they can express themselves. Creativity spaces will be focused on skills like writing, making, art, and music. Even the rooms themselves will be flexible for residents to be creative and make a home for themselves.

- Makerspace
- Performance Spaces
- Art Studio/Gallery
- Computer/Engineering Labs

COMMUNITY SPACES

Humans long for connection to other humans. Spaces that embrace or facilitate interaction with others of diverse and different backgrounds will be necessary for a successful project. These spaces can be both Educational, Recreational, and Creative.

- Library
- Coffee Shop
- Social Night Cafe
- “House” Style Lounges
- Public outdoor space
- Private indoor lounges
- Shared Kitchens & Laundry Facilities

EDUCATIONAL FACILITIES

A historically revived approach to student housing design is including classroom space within residence halls to allow for a “live-learn” environment. It connects students with other students and faculty who don’t live in the building therefore creating a deeper connection into the campus itself.

- Classrooms
- Campus Departmental Offices

USER/CLIENT DESCRIPTION

CLIENT:

This residence hall model will be designed for a higher education institution. It is important to know that this is more than just student housing but it is student housing for a higher education setting. This changes who will be using the building and the spaces within it as you will find more educational and curriculum based program elements rather than amenities.

USER GROUPS:

- “Live-in” users:

Incoming Students	400 Beds
Upperclassman Students	400 Beds
Student Community Assistants	18-20 Beds
Professional “Live-in” Staff	6-8 Beds
- “Context” users (Varies):

Off-campus Students	25%
Professional Faculty	5%
Maintenance Workers	5%
Passerby	15%

CONSIDERATIONS:

- Exterior
 - Parking
 - Private Spaces
 - Non-Private Spaces
 - Cafes/Bistro
 - Bicycle Storage
 - Recreation
 - Connection to nature
- Interior
 - Access to daylight
 - Private Spaces
 - Non-Private Spaces
 - Creative Spaces
 - Flexibility and adaptability
 - Staff Spaces
 - Student Galleries
 - Social Kitchens
 - Social Laundry Facilities
 - Social Restrooms
 - Security
 - Classrooms
 - Emphasis on Identity Exploration

SITE LOCATION

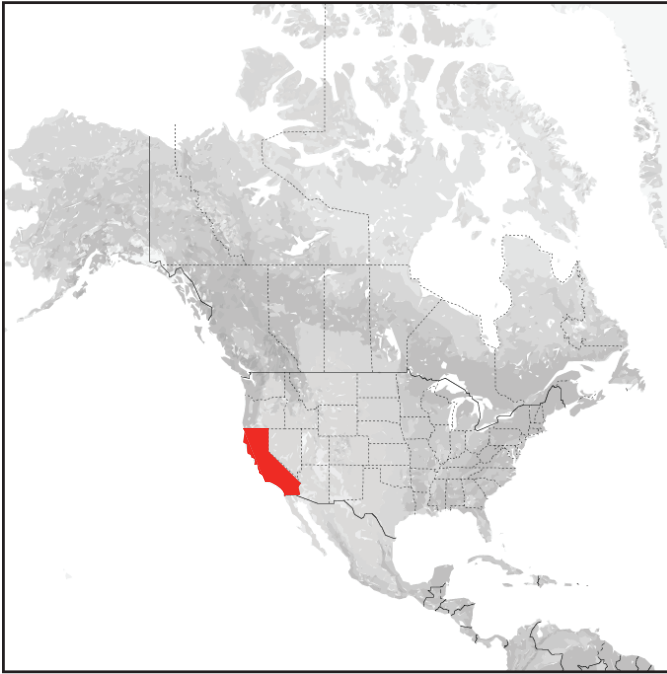


Fig. 1 | California | Google

The project is located in Santa Monica California. Santa Monica is a coastal city with 3.5 miles of ocean front. The 8.3 square miles that make up the city of 94,000 inhabitants is very bike friendly and is easily accessible to the nearby city of Los Angeles. The city is mostly known for its pristine beaches and the Santa Monica Pier, nightlife, and shopping.



Fig. 2 | California | Google

While the city is bustling with energy and action however it is very expensive to live in. Much of California is suffering from a housing crisis due to AirBNB taking valuable affordable housing stock off the market. This caused a massive problem for universities that rely on students to be able to afford housing nearby their campus. Four year colleges in the CSU system and two year public colleges have now been scrambling to come up with more housing for their students.

PROPOSED BUILDING SITE



Fig. 3 | Los Angeles | Google



Fig. 4 | SMC Map | Google

The college that I am focusing my efforts on is a college that's recently seen a lot of change happening. Santa Monica College is a two-year transfer college made up of approximately 30,000 students. The campus is developing and has recently finished updating their student union, library, and wellness center. A lot of the educational facilities, however, are in need of a major overhaul. Santa Monica College doesn't offer housing to its students but are now seeing students driving upwards of 2 hours to get to class because they can't afford to live in the area.

Santa Monica College was chosen for my thesis site because of my ability to make an impact on this campus. The campus is in a transitional period. They have recently gone through many expansion and renovation projects to further support its students. The site I have chosen is situated on the edge of campus on the south-east side. It was chosen because of its prominence on the corner of campus and relation to the campus quad and green space that runs through the middle of campus. It is currently home to a residential block of homes and a small surface parking lot for faculty. Most of these homes are already home to university offices and would make a great opportunity to connect the residents of this building to other areas within campus.

THE PROJECT EMPHASIS

1) The building will enable the occupants transition from adolescence to adulthood.

Residence Halls are a key feature to the higher education approach but have missed out on giving the residents more than just a bed to sleep on. This building will do just that. It will give its residents the tools it needs to move from one period of their life to another with ease.

2. Apply environmental strategies to enhance the users experience and cut down of the buildings environmental footprint.

Santa Monica California has plenty of opportunity to incorporate passive principles into the design of their buildings. The building will use these strategies as a way to teach its occupants about the importance of preserving the earth for the future.

3. This project will bring a new icon to the campus and while connecting its residents to other people and programs on campus.

There is a large need for student housing at SMC. There is also a large need for new educational facilities for multiple university departments. Combining the two into one building will help invigorate and connect youth to the campus..

4. This project will incorporate elements designed to help stimulate user-focused residence halls across the country.

GOALS OF THE THESIS PROJECT

- 1) Expand my knowledge on higher education design to further my career moving further as I look to specialize in it.
- 2) Understand and research the specific forces that allow someone to become connected to such a place even though it is a temporary stage of their life.
- 3) Establish an understanding of the needs that a building of this nature must provide its occupants with for successful integration into the next stages in life.
- 4) Understand the culture of the site and the importance of it to the design of the building.
5. Educate others on the need for a new student housing model for higher education design.

A PLAN FOR PROCEEDING

After completing the proposal I will be doing more research into the types of liminal conditions that students experience. Fully understanding the settings and places in which these conditions happen will be helpful in analyzing how to overcome them. Establishing a set of architectural programs, settings and elements that can help students overcome liminal conditions will require an in depth analysis of the transition from adolescence to adulthood.

After fully understanding the liminal condition in design I will start developing my program further. Spaces will be selected based on whether they are necessary to help someone overcoming liminal conditions. After developing the program I will begin design research. I will utilize Adobe Creative Cloud computer software to create collages and creative artwork that will inspire or capture the essence of my design. Writing design intentions will help come to the root meaning I want to express to the user about my design. Utilizing design software like Autodesk Revit, Rhinoceros, I will develop a design that is both striking, fits into its context, and pushes the boundary of student housing.

METHODOLOGY

Research will be conducted through the use of many mediums and methods. A qualitative study of firsthand experiences from individuals themselves about the adjustment will take place. Through both printed and online media, articles, and literature, the subjective experience and settings in which these conditions occur for a variety of diverse people will be collected. These sources will also be included in the process of interpreting and understanding the thoughts and experiences revolving around liminal conditions. Conclusions as to how architecture can influence and address this state of ambiguity in a college environment will be drawn. Then through careful and thorough investigation, architectural elements that address liminality and this process of overcoming will be introduced in general terms. Through the use of computer software such as Adobe Illustrator, Photoshop, and InDesign, a final product will be introduced that will be able to conclude the research to an audience on how architecture can help someone overcome liminality in a college environment.

DOCUMENTATION

Design:

- Computer Software
- Hand Sketching
- Hand Modeling
- Collage work (2d)

Software:

- Autodesk Revit
- Rhinoceros 6
- Enscape
- Lumion

Representation:

- Adobe Illustrator
- Adobe Photoshop
- Adobe InDesign

Preservation Methods:

- Collection of all materials produced by and in the form of a sketchpad
- Notes in sketchbook about student feedback and professor reviews
- Auto sync everyday with Google backup and sync.
- External Hardrive
- Adobe Creative Cloud Storage for digital documentation of sketched notes and models.

Publication of Material:

- Thesis 5th Floor Gallery
- Social Media platforms
- NDSU Institutional Repository
- Thesis Printed Book and Boards

Staying organized will be necessary in completing the goals and expectations established in this document.

SCHEDULE

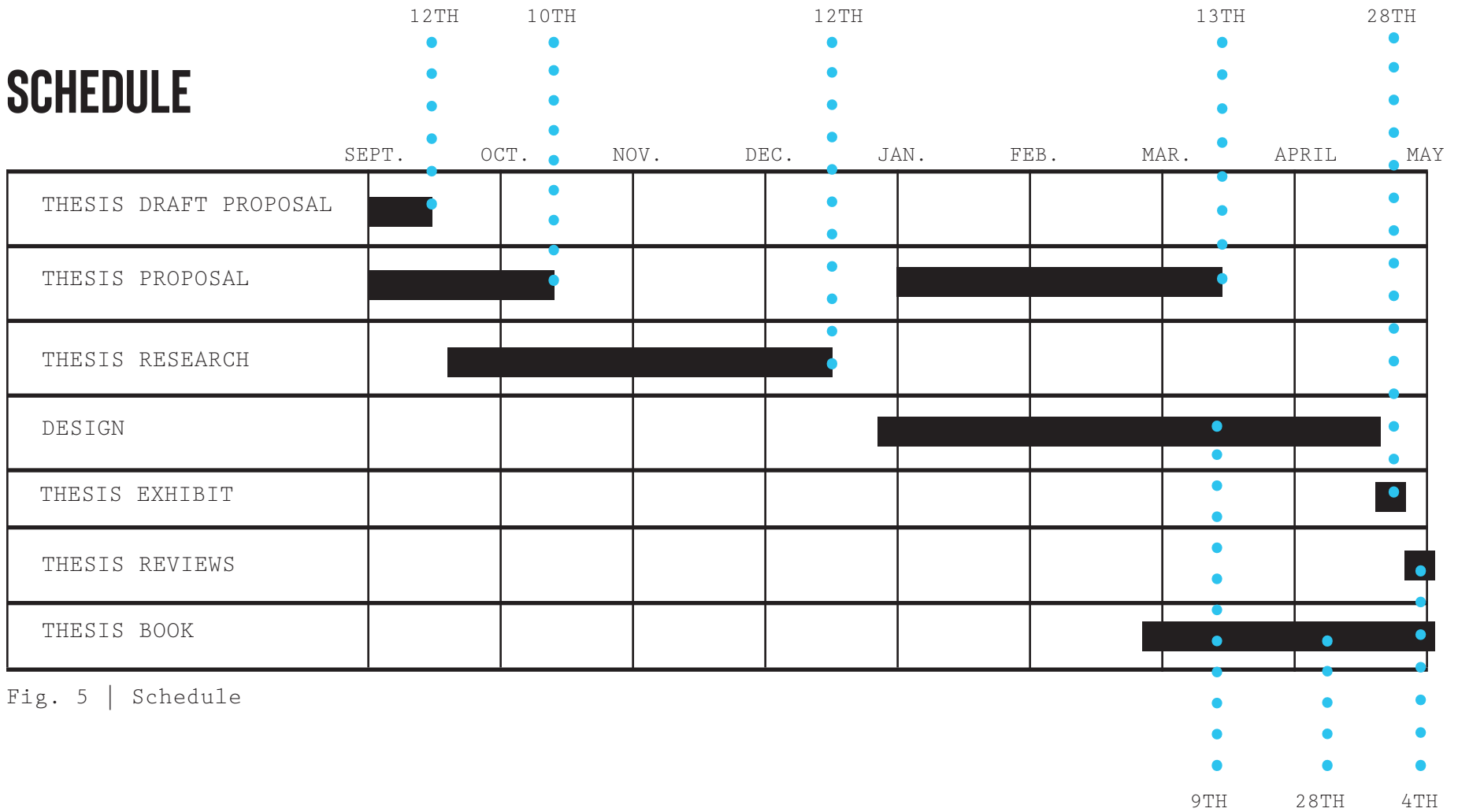


Fig. 5 | Schedule



I believe the way people live can be

DIRECTED

————— a little by —————

ARCHITECTURE

-Tadao Ando

RESULTS FROM THEORETICAL PREMISE

In order to fully understand the liminal conditions that students who would be living in these buildings are trying to overcome, two main texts were selected to be discussed in full detail. While no texts were found that frame student learning in terms of liminality these texts offered the needed backing in order to frame my research. Two secondary texts will also be reviewed, however, these will not be reviewed in full detail. The first text, *Emerging Adulthood: The winding Road from the Late Teens through the Twenties*, offered first hand accounts and a national perspectives on the types of conditions students are facing today compared to past generations. After reading this source it was quite obvious that spaces in the building needed to focus on identity exploration and financial independence in order to be effective in serving the students of this generation. The second literature review, *Living on Campus: An Architectural History of the American Dormitory*, offers a detailed description of the changing social and cultural patterns that shaped this building typology over the past 2 centuries. These reviews, while very different, offer an inside look at the conditions being present currently and historically that students have been facing.



Fig. 6 | Emerging Adulthood | Arnett (Cover)

EMERGING ADULTHOOD

The Winding Road from the Late Teens through the Twenties

Emerging Adulthood: The Winding Road from the Late Teens through the Twenties, written by Jeffrey Jensen Arnett, outlines the journey of moving from adolescence to adulthood. The professor in the Department of Human Development at the University of Maryland defines this period between the ages of approximately eighteen to around twenty-eight years old as a period called emerging adulthood. This writing was very influential to understanding the thought processes of people who are currently living in this liminal stage of their lives and outlines what they believe is to be the key factors of reaching adulthood. The literary work helps define what it means to be living in-between adolescence and adulthood and the personal qualifications and aspirations of reaching the threshold of adulthood.

This review will cover the importance of this age of exploration, the lack of stability in this period called emerging adulthood, and the challenges and mindsets of emerging adults as they move through this uncertain and contradictory period of their lives. It will also cover some of the changes that emerging adults are now experiences as a subculture than their prior adult counterparts. Then after a review of the contents of the book, a critical analysis of the relation of the book to overcoming liminal conditions within this time period will be drawn. Overall, Emerging Adulthood: The Winding Road from the Late Teens through the Twenties was a valuable resource in understanding the identity of what it means to be an emerging adult in the modern era compared to the past and placed precedent that spaces should be designed to help someone overcome liminal conditions mostly regarding around identity, responsibility, and financial independence.

REVIEW

Throughout the book, Arnett talks a lot about the path and processes of getting to adulthood status. The author also proceeds to note that the status of adulthood, and the time in which someone qualifies that they have reached it is essentially defined differently for every individual. Arnett points out similarities of qualities and culture changes he has been seeing across the general entirety of emerging adults in America. One of those similarities is that emerging adulthood is a much longer process now than in years past.

In *Emerging Adulthood*, Jeffrey Arnett lays out the 5 key characteristics or features that contribute to a longer road to adulthood. He points out that the time between adulthood and adolescence has increased substantially due to the fact that emerging adults are living in an age of identity explorations. It is a period of here they no longer have to be forced into a career right away, marriage is continuously being pushed further and further back in peoples lives, and people are free to try out the many opportunities they have in realms of love and work. This changing mindset, while combined with the American colleges framework for being exploratory in nature, leaves emerging adults always wondering and questioning the choices that they are making and whether those choices are the choices they want to live with for the rest of their lives.

The second feature of a longer road to adulthood is that emerging adults live in an age of instability. Arnett points out that as much as people in this age group try to plan out their next step or threshold in life, most of them come across challenges or complete roadblocks to this plan such as but not limited to family problems, health issues, dropping out of

college, or financial struggles. Emerging adults live in a period of instability and choose to accept it for what it is, which in turns allows them to explore their own identities more. This leads into the third feature which is that emerging adults live in a self-focused age. They no longer live under complete and utter control of their parents. Their parents are no longer directly telling them how to live, who to date, what to eat for dinner, when they should do the laundry, and what they should major in. While it also goes on throughout the book to note that some emerging adults do allow their parents to have influence in their choices, it is not as prominent as it has been in past emerging adult cultures as it is today. It is here the age of self-focus that Arnett mentions three characteristics that are pertinent results of his research into what it means to be an adult. Three top criteria for adulthood that continuously kept coming up in his research were, accepting responsibility for yourself, make independent decisions, and becoming financially independent from their parents.

The fourth characteristic is that emerging adults are living in the age of feeling in-between. They are neither adolescent nor adults. They are not on the road to adulthood either as that paints a picture that they are on a straight path. They are simply in a time period of their life that everything is in question and that at some point when they have found their direction, they will then find their ability to classify what it means to be an adult. The fifth feature is that emerging adults live in the age of possibilities. Every decision they make could potentially impact the rest of their lives. Most life changing decisions in a person's life are made in this period between adolescence and adulthood. Possibilities are endless and large amounts of possibilities need to be explored before choosing the

correct one for themselves.

Throughout the rest of the book, the author Jeffrey Arnett explains these concepts in greater detail through firsthand interviews with many different and diverse emerging adult interviews. He examines topics such as parental relationships changes, love and sex, the changing age in which people get married, college, work and financial independence, and religion. Overall, the important points of the book were to showcase that the transition to adulthood is not as simple as it was in the past. Emerging adults are lengthening the time between adolescence and adulthood and they are doing so due to shifting cultural phenomena. It goes to show that culturally people are no longer defining adulthood by classic role transitions such as getting married or having children. These phenomena have been occurring later and later in a person's life due to shifts in the minds of people in this age group and society as a whole. People are pushing these types of roles to the later part of their twenties and early thirties. This allows more room for people to find themselves and discover who they are and want to be in society, internally placing more responsibility on this period as an important identity exploration stage of their lives. Identities such as religious views, employment, hobbies, and personal beliefs are increasingly allowed more time to be discovered and developed.

CONCLUSIONS

Emerging Adulthood: The Winding Road from the Late Teens through the Twenties, showed the importance that identity and identity exploration is to college aged individuals. The way in which college aged individuals are defining adulthood allowed for

an analytical look into the liminal conditions they thought they would need to overcome before reaching adulthood. The author also placed importance in showing a diverse pool of interviewed candidates. This is important for the idea that while everybody is moving towards adulthood they may be experiencing or interpreting this transition differently than others. A diversity of liminal conditions was presented that will generally relate to the mass numbers of people moving through this period in their lives.

One key factor to designing to overcome liminal conditions in the college environment is to offer individuals who are emerging adults, spaces that relate to identity and career exploration. Emerging Adulthood placed the precedence for why these are important in the lives of today's college aged youth. The author, Jeffrey Arnett, also presented very clearly that emerging adults are always searching for more out of their lives. They don't just want to be seen as another cog in the wheel of existential existence. Emerging adults are also willing to spend more time exploring their career choices. In turn, they are going to be spending more time in settings in which they are allowed the freedom to overcome the identity exploration liminal conditions. Another way that Emerging Adulthood set precedence for, were the three reoccurring themes in which emerging adults defined reaching adulthood. These themes of accepting responsibility for yourself, making independent decisions, and becoming financially independent should be the root cause of the inclusion of spaces within a building built for this specific age group. Shouldn't spaces in which emerging adults are living be designed to help them overcome these root themes?

How can design foster this need to find one's identity? Providing spaces such as makerspaces, art galleries, worship, and academic libraries allow

for people to question their own identities they may have had coming into college. Makerspaces can allow individuals to learn almost immediately if certain majors are correct for them due to the fact that they can firsthand test and develop skills relating to their majors such as engineering, computer science, art, and design. Not only does it allow individuals to develop the skills necessary to move forward in their careers but depending on the type of services included in the makerspace it could also allow individuals the ability to create products or services to sell to the public. This allows individuals to jump start their career, find a new potential career path, or simply earn financial independence way early in their college careers. These types of liminal conditions usually aren't fully developed until after recent graduates finish their education and start a career in a job they enjoy. Other ways identity liminal conditions could be overcome is by simply viewing, hearing, discussing, or debating with others.

Creating spaces not only for people to connect, but also for people to discuss who they are and what they believe is an important part of designing to overcome liminal conditions when it surrounds the idea of identity exploration. If students view an intriguing or controversial piece of artwork in a gallery, they may find the need to discuss their findings with other students or observers. In this setting they can argue and stand up for what they believe in or they can be persuaded and opened to the viewpoints of others. Arnett presents his findings on the importance of religion in emerging adults. Worship spaces allow for people to question their identities as well as they allow for people to conform to identities presented in the church. The spaces listed above are just a few examples in which identity can be explored in architectural settings.

The book *Emerging Adulthood: The Winding Road from the Late Teens through the Twenties* provided

insight into the liminal conditions being present in the emerging adult populations of the twenty-first century. Conclusions drawn from the reading are that architectural spaces designed for emerging adults should focus on identity exploration, career exploration, and independence and responsibility liminal conditions. Focusing on these key elements will create buildings that emerging adults are more likely going to relate to. It will also be very effective in creating buildings that can help transition students from a comfortable adolescence to adulthood.

LIVING ON CAMPUS

An Architectural History of the American Dormitory

Living on Campus: An Architectural History of the American Dormitory, written by Carla Yanni, is a 300-year architectural history of the American college dormitory. The professor of art history at Rutgers University, offers an analysis of the social and cultural ideas that influenced the design of residence halls. Overall, this writing was influential in understanding why the current model of a residence hall is what it is today. While the students have changed and the architecture in which they resided in adapted to those changes, it is obvious that the building typology is changing yet again but it is changing in a way that I believe is not for the good of the students. This literary work helped me define what portions of the current architecture needed to be kept or adapted or avoided altogether to better serve the individuals that would be spending time within their walls.

This review will cover an overview on the contents of the book by focusing on the major shifts in the lifetime of the typology. It will also cover the current ideologies of residence halls are heading. This includes mentioning that many college campuses use the residence halls as a recruitment tool by filling them with expensive and unnecessary amenity spaces that only drive up the cost of student housing and higher education in a whole. Then after a review of the contents of the book, a critical analysis of which spaces and ideas that should be kept or modified to address liminal conditions in a college environment will be drawn. Overall, the book, Living on Campus: An Architectural History of the American Dormitory, was a valuable resource in understanding how the typology of a residence hall has morphed into what it is today.

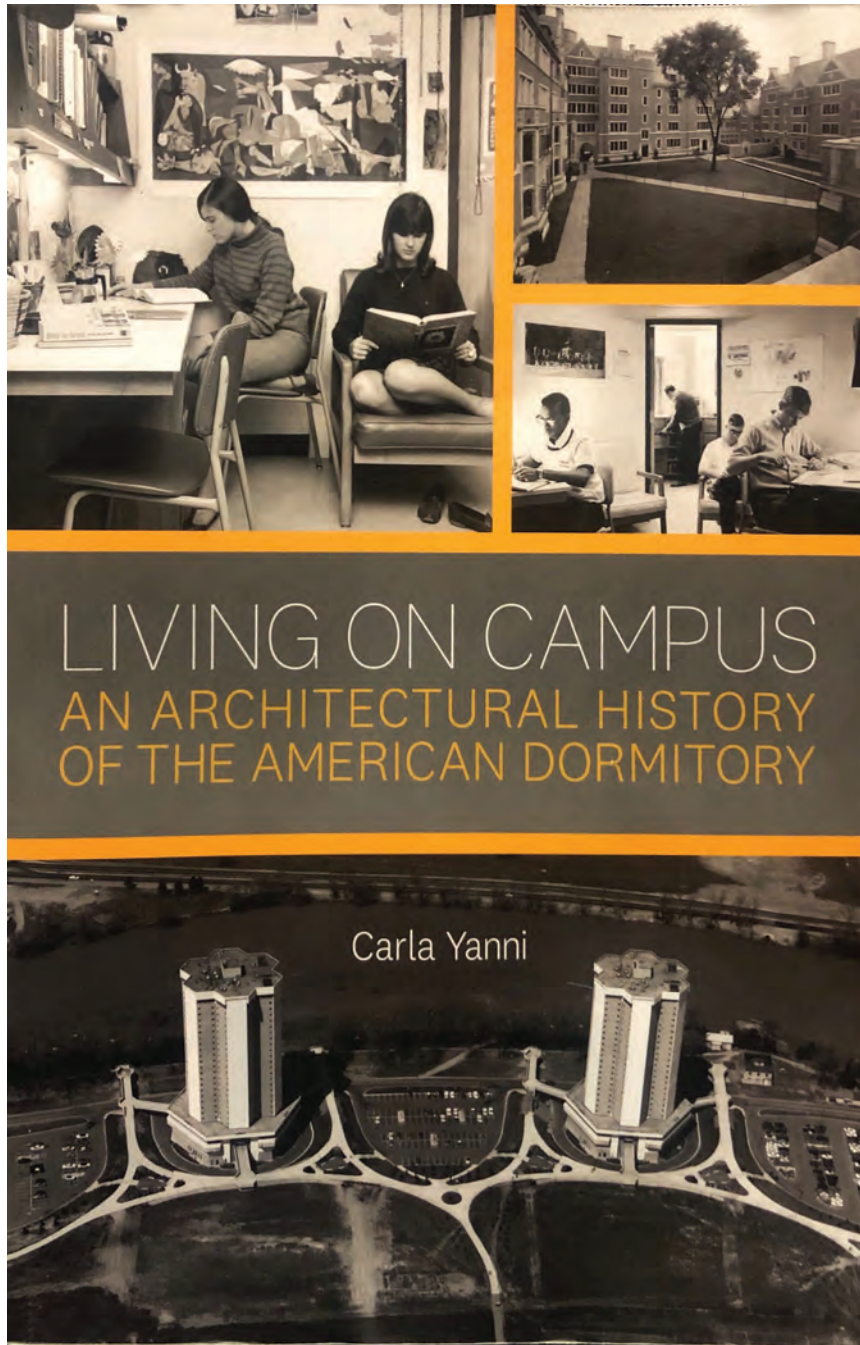


Fig. 7 | Living on Campus | Yanni (Cover)

REVIEW

Carla Yanni, the author, starts off the book by detailing the architectural history of college housing for men. She makes a point to note that while both men and women are enrolled in college today, that was not always the case and this type of divisive thinking influenced different ideas into the design of men's halls than women's halls. Essentially, she goes on throughout the beginning of the book to examine why colleges started needing student housing to begin with. It is also quite obvious to the reader of the book that while the author has written a book on the architecture of the American dormitory she isn't really that fond of the fact that they exist due to their origins as divisive and institutional tools of college administration. She likes to place precedence that residence halls were often times places of exclusion between certain groups of people and were often meant to socialize its occupants, not study. She relates the need for student housing due to the fact that rural colleges lacked the housing stock necessary to house large amounts of people because of the lack of housing stock in the towns. This was in part because the towns where colleges were being formed at this time period were lacking development and most individuals lived on farms in the countryside.

Yanni goes on to mention how some of the earliest forms of social college housing were essentially just found spaces within the workings of current academic buildings and weren't necessarily purpose built at all. College educators at the time placed a large importance on faculty living with the students and would often retrofit a building with a multitude of uses to hold college students. She found it important to note that Harvard University was in its earliest state a standalone mixed-use building

with sleeping spaces next to the educational spaces. The ideas that students and faculty members live communally together first started appearing as soon as 1671.

For decades after the idea of student housing for men remained drastically unchanged but mostly followed the staircase model of residence halls which offered men the most freedom to move in and out of the hall as much as they deem necessary due to its many exits. She notes that once the idea of college became more and more popular, students (mostly still men in the 1870s), became unhappy with their current on-campus or off campus boarding house living situations. They wanted to live with other like-minded individuals, and this is where Yanni believes that the rise of fraternity housing began.

The author explains in detail the many ways that women halls differed from men's halls. These include that women's halls were meant to be controlling and offered women only 2 exits so staff could easily keep watch on them. Also, women's halls offered more domestic features and rooms while men's halls were repetitive and sterile environments to help mold them into responsible men. The idea of women's housing being more domestic was not to help them with the adjustment but because campus leaders at the time thought that women belonged in the home performing domestic duties. Women's halls also offered some of the first lounge spaces available in purpose-built housing. These spaces were often quite luxurious, and this was because campus administrators thought that these lounges would offer the women a place to host their fellow male students and consequently possible suitors. Popular models for this time period were the double loaded corridor shaped around a central courtyard with 3 or four sides enclosed, otherwise known as the quad.

Yanni goes on to mention how with the change of the century even more changes were in store for university style housing. The author mentions that in the early 20th century university leaders thought that order and repetition would allow individuals to be shaped and controlled into productive members of society. Here is where low rise residential buildings became to rise from the ground. Halls like these offered students very little flexibility for students and were seen as a needed integral part of the university experience. Soon land became more and more valuable on college campuses and with the rise in building strategies and techniques, high rise style residence halls became more and more popular in the 1950s. Essentially these didn't offer students anything more to the student experience than their 3 story older siblings except for maybe a chance at a good view at the top and a shorter hallway.

Carla Yanni ends her analysis of student housing around the mid-1960s but does go on to mention the current trends she sees being present in the typology. She notes that a lot of colleges are still using the many high-rise and low-rise redundant and divisive buildings of their past to house the students of today. Some colleges however in the more recent years, have started updating and renovating their facilities due to failing infrastructure. They have been incorporating a few new ideas into the plans of student housing, however, some of these buildings are now using the university residence hall as a recruiting tool for their campus. Essentially rather than focusing on the residence hall as a transitional and transformational space, residence life departments are filling halls with luxurious features that will bring students to their campus but still leaves students feeling empty, letdown, and uninspired in the process.

CONCLUSION

Living on Campus: An Architectural History of the American Dormitory, showed the importance that campus administrators social ideologies had on the development of the typology. These administrators were the ones in charge of implementing ideas into the buildings on campus because they were the ones that controlled the budget. While some of these ideas are outdated or did not have the most moral reasons for implicating them, they have been an integral part of the college experience to date. Which campus ideas set forth should be kept in the planning or designing of residence halls, which ideas should be adapted, and which ones should be avoided all together will be covered and analyzed in this conclusion.

One thing that is an interesting approach of current trends in residence hall building typology is this idea of living where you learn. Across many college campuses, administrators have started implementing this idea. Some reasons for doing so historically was for the students to constantly be able to watch and interact with faculty. This was seen as a way of controlling young men in the past however it has great implications and benefits for today's college campuses. Land is becoming more and more valuable in college campuses today. It is cheaper to include classroom spaces on the ground level and build housing on top of them due to already having the equipment available and also not needing to purchase material and labor to build two foundations if they were separate buildings. Doing so also allows students to become connected deeper to the campus itself by giving them the chance to interact with people who would not normally be spending time there if they were separate buildings. It is also incredibly convenient

for students who would have class in that building if they were living right above it.

Another idea that can help students with the adjustment to coming to college is making spaces a little more domestic in nature. While historically campus administrators only placed this type of ideology in women's halls, it does show some benefits in terms of addressing liminality in a college environment. It should not be kept around for the same reason as it was implemented historically however, as it is wrong to think that women only belong doing domestic duties. It should be kept around to help all people with the adjustment to college. Making sure spaces are warm and inviting and having similarity to their home environment can go a long way in helping individuals feel more comfortable and secure in the space.

Also, historically speaking, specific styles of residence halls do function better than others. Quad and double loaded corridor style halls originally were set up for control and observation of the students. While quad style residence halls historically allowed faculty to be able to observe the students on the other side of the building from their rooms on the opposite side of the quad, they gave a valuable amount of community space to the students that was protected and often a popular hang out, relaxation, and study space. The shape of the building offered students necessary social spaces and emphasized community. Double sided corridors however should be avoided at all costs. They are a secure method in terms of keeping unwanted people out by reducing the amount of entrances, but with technology like card scanners, we can easily maintain the needed security with more entrances and exits into buildings.

The staircase model of a residence hall that was popular in early men's halls was a reaction to keeping small amounts of men together to avoid them from getting into trouble. They thought that if large groups of men lived together that those men would get into more trouble. Therefore, they had multiple smaller communities of men living under one roof but

with no way of getting from one community to the other without going outside. This model while originally backed by outdated knowledge limited the amount of people who can interact within a building and can help make it easier to build community. While total division between "houses" is no longer necessary and is divisive it, should be grouped in such a way that it is less intimidating to get to know your neighbors. Rather than having to find friends from a group of 100+ people dividing the spaces up in architectural form to be limited around 40-65 people could be seen as less intimidating to individuals living within the space.

The author made a good point of showing the importance of high-rise buildings to college campuses. The only necessary reason for doing so is if land is limited. They only get rid of the long dark hallway's residence halls are known for and often switch them out for dark student lounges located in the core of the building. Maybe rather than taking the low-rise form and sticking it on its end we should be combining the models into a building that essentially tackles both, gets rid of the long corridors, and offers plenty of natural light in community spaces. Finding a way to increase the amount of natural light in the center of the buildings and in circulation spaces may be helpful.

The book *Living on Campus: An Architectural History of the American Dormitory* provided much needed response, critique and historical evidence to the typology in a whole. This offered an interesting approach into how to design for such a typology. The Conclusions drawn from the reading are that spaces need to take into account the divisive and controlling nature that residence halls were designed for in the past and combat them through a current cultural framework. Focusing on incorporating and re-evaluating the key ideas talked about above will help residence halls be even more transformative than they already are.



RESEARCH RESULTS - SUMMARY

WHAT IS THE LIMINAL CONDITION?

The word “Liminal” is derived from the Latin word limens which in turn means threshold (Barron 2013). Theologian Richard Rohr defines being in a liminal state as “being betwixt and between the familiar and the completely unknown” (Barron 2013). In order to define liminal conditions in a college environment it’s important to further define what it means to be in a liminal state. As mentioned earlier, being in a liminal state is being betwixt and between two very separate stages of your life. It’s a threshold that needs to be crossed between two phenomena. These stages often come at times of tremendous change which is often the result of hardship enacted upon an individual for whatever reason. While this thesis focuses on liminality in a college environment, any person at any age can experience it, whether that’s through the

loss of a job, loss of a loved one, or other major life change.

Liminal conditions however are conditions that are a result of being in a liminal state. In a college environment, these conditions will be everything from finding one’s identity, to finding security within your new surroundings. All or most of these conditions are experienced in college depending on the environment in which students were raised. While some students may have experienced or overcame these liminal conditions early on in their lives, its safe to say that some have not due to the fluid and diverse amounts of students and backgrounds we have in our college system.

FOCUS OF THESIS

PRE-LIMINAL RITES	LIMINAL RITES	POST-LIMINAL RITES
Rites of Separation	Rites of Transition	Rites of Incorporation

Fig. 8 | Rites Table



FURTHER STEPS

After fully understanding what liminal and liminality in its entirety. A critical analysis of what liminal conditions emerging adults encounter on their pathway to adulthood had to occur. This was done by analyzing first hand experiences, journal articles, online media, and books. This also involved understanding spaces that emerging adults spend a majority of their time in. The liminal conditions presented while not fully exhaustive is pretty comprehensive to the mindsets of most emerging adults. The following tables were created to help frame liminal conditions in a college environment into these categories.

- Independence Liminal Conditions
- Responsibility and Task Liminal Conditions
- Psychological Loss Liminal Conditions
- Identity and Age Exploration Liminal Conditions
- Career and Academic Liminal Conditions

This list was then analyzed to come up with architectural programs, settings, and elements that help emerging adults overcome liminality in a college environment. While certain elements and settings can have a larger influence on peoples lives this research set out to identify them in general terms.



Liminal conditions presented in this category focus on liminal conditions that deal with the idea of independence. Emerging adults themselves place a lot of focus on independence. In fact, a study found that emerging adults are more likely to define adulthood with independence conditions rather than classic role transitions like getting married or having children (Arnett, 2001). Another key factor to emerging adults in emerging adulthood is the importance of being financially independent from their parents. This can be achieved multiple ways but continuously kept coming up as a key component to attaining adulthood (Arnett 2004). This shows the massive change that our population has been going through in terms of college aged youth. In the early 1900s college aged men went to college to essentially network with other like-minded men. These men in turn had sisters that would be possible suitors for them (Yanni 2019). This is a very outdated concept, but clearly shows that the reasons people went to college have drastically changed over the last century and therefore the conditions experienced would also change with the culture of the students.

INDEPENDENCE LIMINAL CONDITIONS		
<i>Pre-liminal Condition (Seperation)</i>	<i>Current Liminal Condition (Transition)</i>	<i>Post-Liminal Condition (Incorporation)</i>
High school peer pressures are dealt and experienced with under the constant surveillance of parents and guardians.	New college peer pressures are dealt with and experienced under the surveillance of yourself with an increased distance between you and your parents.	Adult peer pressures while existing are few and far between and are easily overcome.
Impulse control is in dealt with by the parents or guardians mostly when it comes to finances, time management, and partaking in social situations.	Developing a sense of impulse control by yourself with no connection to parents or guardians.	Clearly define and understand when impulse control is needed to be enacted and no longer giving in to impulse.
Housing is provided by your parents or guardians.	Housing is needed to be found by yourself.	Housing has been secured and no is no longer changing frequently.
Parents and guardians often made the choice of what to eat and when.	The choice of what and when to eat is entirely up to you and is probably unsteady and fluid.	Food choices become a second nature and the unsteady nature of what to eat and when has been solidified.
Personal finances rely mainly on parental or guardian support.	Gaining financial independence is almost entirely independent of parents and guardians and the process in which you gain independence is fluid.	Financial Independence has been reached in full and you are entirely supporting your personal finances in a steady manner.

Fig. 9 | Independence Liminal Conditions

RESPONSIBILITY AND TASK LIMINAL CONDITIONS		
<i>Pre-liminal Condition (Separation)</i>	<i>Current Liminal Condition (Transition)</i>	<i>Post-Liminal Condition (Incorporation)</i>
Parents and guardians prepare meals for their dependents.	The process of making a meal is now the responsibility of the dependents.	Meals can be made with ease and dependents move into a period of providing for others.
Parents and guardians shop for groceries and living necessities for dependents.	Shopping for groceries is now the responsibility of the dependent.	Shopping for groceries and living necessities are second nature.
Parents and guardians do your laundry. This can be further broken down into folding, ironing, washing and drying laundry.	Doing laundry is now the responsibility of the dependent. This can be further broken down into folding, ironing, washing and drying laundry.	Laundry can be done with ease. This can be further broken down into folding, ironing, washing and drying laundry.
Adults managed your time. They told you when to set alarms, when to arrive at events, when to go to bed, when to eat, and when to brush your teeth and bathe.	Learning how to manage time by balancing everything that takes time to do in order to live.	Time management is second nature and a routine is developed.
Parents and guardians planned healthy meals, bought personal care items, and managed your medical appointments.	Learning self-care by having to eat and choose healthier lifestyle choices, buy personal care items, and manage medical appointments.	Self-care is second nature and is easily worked into the routine of your daily life.
Parents and guardians often clean up after their children. This includes cleaning up their room, doing their dishes and cleaning the bathroom.	Learning how to clean and when to clean is necessary so that a good living environment is formed for the developing individual.	Cleaning is something that is done frequently and easily.



Liminal conditions presented in this category revolve around task and responsibility items. These are liminal conditions that may have been overcome earlier in someone's life or can come later as well depending on the way they were raised. These liminal conditions however can be seen as essential to adult-like tasks that should be developed and maintained to be a productive member of society.

Fig. 10 | Responsibility & Task Liminal Conditions



Liminal conditions presented in this category are psychological responses to change or loss in an individual's life. The loss associated with the college environment is the loss of the support and security they were relying on in their adolescence. Now that incoming students are no longer able to rely on that support, they have to come up with other ways to overcome the loss. Often, these types of liminal conditions have a large impact on whether a student succeeds or struggles to adapt to their new environment. Colleges recognize the need for this type of support and often implement resident assistants, sometimes called community advisors, in their residence halls (Blimling, 2015). These students are often living in the resident halls to help advise and guide students through these types of liminal conditions by providing students who are struggling to find the necessary support that's needed.

PSYCHOLOGICAL LOSS LIMINAL CONDITIONS

<i>Pre-liminal Condition (Separation)</i>	<i>Current Liminal Condition (Transition)</i>	<i>Post-Liminal Condition (Incorporation)</i>
People find security in homelife due to familiarity with their physical and social environments.	Now that their physical and social environments have changed drastically over a short period of time, individuals experience a loss of security.	Security is regained through familiarizing themselves with their physical and social environments.
Physical Environment of home is familiar to individuals as it doesn't change frequently.	New physical environment is unfamiliar and therefore causes individuals to feel not at home.	Familiarity in physical environment has been found due to stability of physical environment.
Mental obligation in high school is familiar and often unchallenging for most students.	Mental obligation in college is unfamiliar and different and causes a need to develop new study skills.	Adulthood mental obligation is clearly understood, and they can easily deal with its constraints.
Social situations are stable, and you are relatively surrounded by the same people every day.	Learning to accept fluid social situations by voluntarily or involuntarily participating in them.	Accepts fluid social situations and their awkwardness.
Social network is often consistent and unchanging to high school students.	Social network of friends has been shattered and individuals must develop a new definition of friendship and make new connections.	An individual's social network has been restructured and is stable.
Privacy is very apparent in the home for individuals. This is because an increased number of children have their own bedroom and are not sharing it with other siblings. (Rosenblum, 2016).	Privacy is hard to come by when you have to be sharing a room with someone. An individual will have to develop a new mental definition of privacy.	Privacy has been restored.

Fig. 11 | Psychological Loss Liminal Conditions

IDENTITY AND AGE EXPLORATION LIMINAL CONDITIONS

<i>Pre-liminal Condition (Separation)</i>	<i>Current Liminal Condition (Transition)</i>	<i>Post-Liminal Condition (Incorporation)</i>
Parents and guardians often influence an individual's identity when they are around them often.	No longer being around certain figures in their lives, individuals can explore their identities on their own without influence from outside forces.	Exploring who they are as a person has exponentially decreased as they are now comfortable with their own identity.
Parents and guardians often speak for their children when it comes to what they believe.	No longer having their parents and guardians speaking for themselves, they can learn how to voice their opinions themselves.	Individuals voice opinions based on their own values.
Parents and guardians often create rules for their children to live by.	Individuals are now in charge of creating their own rules to live by.	Individuals live by their own rules in which they themselves have created.
Parents and guardians often control which identities their children can interact with.	Individuals can learn and interact with whichever identities they want to learn more about.	Individuals can interact with a multitude of identities.
Specific identities are forced upon children while in the custody of parents and guardians. These identities include gender, sexual, spiritual, social class, national, racial, and personal identities.	Individuals can explore, take on, and accept whichever identities they seem fitting for themselves. These can be fluid and will likely change multiple times.	Specific identities have been explored and individuals are more stable in their identity conformance.



The liminal conditions presented in this category are a result of being in the age of identity exploration. Emerging adults are no longer under the supervision and constant eye of their guardians. This allows them to start exploring who they are and who they want to be as an individual. While these types of liminal conditions may start to be overcome in childhood or adolescence the formation of identity is exponential in emerging adulthood (Arnett, 2004). These types of liminal conditions are very important to the social, physical, psychological and professional development of college aged individuals.

Fig. 12 | Identity Liminal Conditions



The liminal conditions presented in this category revolve around an individual's professional development. Emerging adults attend college to gain skills and experience related to their profession of choice. Emerging adults will frequently change their professional direction or need to develop a direction while they are attending college (Arnett, 2004). Academic and career liminal conditions were grouped together due to their ability to affect one another and be indirectly related. For example, if a student doesn't develop productive study habits in college, attaining their professional goal will be increasingly difficult.

CAREER AND ACADEMIC LIMINAL CONDITIONS		
<i>Pre-liminal Condition (Separation)</i>	<i>Current Liminal Condition (Transition)</i>	<i>Post-Liminal Condition (Incorporation)</i>
No future career path is chosen.	Career paths are in the workings of being chosen.	Career path is chosen, and individuals are on path to their professional goals.
Work was not meaningful as work seems like a chore to adolescents.	Individuals are trying to find work that is meaningful.	Individuals have found meaning in the work that they do.
Individuals have little to no public speaking and presentation skills.	Individuals need to acquire public speaking and presentation skills.	Individuals express public speaking and presentation skills.
Individuals hardly partake in risky actions due to fear of parental repercussions.	Individuals start taking more risks as they deem necessary to their development.	Risks are only taken after a lot of thought has been given to the potential benefits of doing so.
Study habits in high school exist but were not developed fully.	Study habits in college differ than those in high school. New study habits need to be formed.	Study habits have been formed and students know what conditions work best for them and what doesn't.
Often times it is the case that parents and guardians are doing so much for their child that the child has zero need to develop multi-tasking skills.	Now that the students are on their own they must develop the ability to multi-task.	Individuals are able to multi-task and succeed while doing so.

Fig. 13 | Career and Academic Liminal Conditions

BLACKBOX THEATRE/PERFORMANCE SPACES:

Theatre and performance spaces are an excellent example of architectural settings that allow for individuals to overcome liminal conditions associated with the college environment and therefore transitioning individuals into becoming an adult. Theatre students are known to be boisterous and having a knack for vocal presence. The stage creates an environment that allows individuals the ability to creatively express themselves and gain self-confidence. While being in theatre is not for everybody there is a lot to be learned from having to be up in front of an audience and performing. Architectural elements present in a theatre or performance space in general are, a stage, seating for the audience centralized around or facing the stage, and lighting that focuses the audience's attention on the presenter or actor. Specific design of such places should consider the acoustics of materiality and architectural form of the space and its effect on the audience's experience.

LIMINAL CONDITIONS PRESENT

- Gaining self-confidence in public speaking and being able to communicate clearly and thoughtfully under pressure.
- Developing confidence in self-presence and creatively expressing themselves through the arts.
- Identity exploration is present for both the audience member and the actor as now students can observe and take on different identities.
- Acting allows individuals to place value in their lives by seeing recognition for their actions firsthand.
- Form creative problem-solving skills necessary for

ARCHITECTURAL ELEMENTS

- Stage or platform for performance
- Centralized seating arrangement focused towards stage
- Dimmed lighting on audience
- Spotlights focusing on the performer
- Comfortable seating for audience
- Stage sets (changing)
- Speakers playing music or sound relating to performance
- Projector screen for specific presentations
- Dark material pallet to focus attention towards stage
- No outward views through window openings to distract audience members.
- Billboards or cork boards to post upcoming performances

the workforce.

- Develop the ability to work in groups to attain a defined goal.
- Allows individuals the ability to take risks and reap the rewards
 - Allows individuals to accept uncomfortable experiences while performing in front of others therefore increasing their presentation skills.
- Teaches students to be able to effectively time-manage and multi-task

THE *Saatchi & Saatchi* Institute
GATHERING
— 2018 —

OUR logo National Health Service Healthy Living logo

Exit



Fig. 14 | Theatre Space | Main Street Landing

LAUNDRY ROOMS - SOCIAL

Laundry facilities teach emerging adults needed skills that focus on task and responsibility related liminal conditions. These skills may be developed earlier in adolescence however the responsibility of doing laundry is almost entirely shifted to the individual in emerging adulthood. While a laundry room in homes or apartments may offer similar abilities to overcome liminal conditions, making the space more social would allow for an increased amount of conditions to be present. An example of a social laundry room would be a laundromat or laundry room in a university residence hall that offers its users more than just washers and dryers to clean their clothes. This can be done by increasing the comfortability of such a space by including seating for social interaction between space users and therefore increasing the amount of time spent in such a space.

LIMINAL CONDITIONS PRESENT

- Giving users the ability to accept responsibility for washing, drying, folding, and ironing clothes.
- Creating a sense of self-confidence, self-worth, and self-care, when the individual completes above tasks.
- Gives individuals the ability to meet new people and build their social circle while accepting fluid social situations.
- Individuals will develop multi-tasking and time-management skills due to the need to schedule time to do laundry.

ARCHITECTURAL ELEMENTS

- Appliances like washers and dryers.
- Comfortable color palette to attract users to spend time in the space.
- Well light space this includes both natural and artificial lighting solutions.
- Standing height tables or counter tops to allow individuals to complete tasks like ironing and folding.
- Comfortable seating for students to socialize and study while waiting for laundry to be done.
- Technology plug-in outlets to allow individuals to plug in their devices.
- A video screen could be helpful in increasing time spent by residents in the space.
- Posting materials referencing laundry room rules and tips.



Fig. 15 | Laundry Room | NDSU Residence Life

KITCHEN/FOOD PREPARATION SPACES - SOCIAL

Spaces that allow people to prepare food such as a kitchen or self-service grills in a university dining center helps individuals overcome liminal conditions that also mainly focus on task and responsibility liminal conditions. These spaces should also be created in such a way that they can become social spaces. Architectural elements that would be present in such a space would include, kitchen appliances, cabinets, and food preparation surfaces, as well as seats or islands that allow for other individuals to partake in the process of making a meal. The inclusion of technology such as televisions and speakers for music could be helpful in retaining individuals to spend time in the space. Many students move off campus and live in houses and apartments while in school because they want to be able to make their own meals and not depend on the university dining center.

LIMINAL CONDITIONS PRESENT

- Gives users the ability to accept responsibility for making their own meals. This includes all necessary steps for making a meal including but not limited to: following a recipe, proper appliance use, grocery shopping and ingredient selection, food preparation techniques, etc.
- Gives users the ability to independently make decisions on what to eat and when.
- Develops an individual's sense of self-care as they will need to be choosing healthier options over non-healthy options.
- Grows an individual's ability to care for others as they will need to make sure they are cleaning up after themselves to allow others to use the kitchen.

ARCHITECTURAL ELEMENTS

- Kitchen appliances like cook tops, fridges, dishwashers and microwaves
- Comfortable color and material palette to attract users to spend time in the space.
- Well light space this includes both natural and artificial lighting solutions.
- Standing height tables or counter tops to allow individuals to prepare food.
- Comfortable seating for students to socialize and study while cooking.
- Technology plug-in outlets to allow individuals to plug in their devices.
- A video screen could be helpful in increasing time spent by residents in the space.
- Posting materials referencing kitchen rules and events happening in the building.

- Allows individuals to create rules to live by and develop conflict resolution skills as they try to develop a level of cleanliness between occupants.
- Individuals will develop multi-tasking and time-management skills due to the need to schedule time to make meals.
- Food is known to bring people together and a social kitchen may attract other individuals to it which in turn will help users accept fluid social situations.
- Develops users' social circles by providing spaces for people to gather.
- Allows users the ability to explore their own and others cultural identities through food.



Fig. 16 | Social Kitchen | VMDO

CREATIVE AND CAREER FOCUSED SPACES

Spaces that focus on creativity such as makerspaces, woodshops, artist studios, music studios, engineering labs, etc. are very helpful tools when it comes to emerging adults overcoming career and professional liminal conditions. They can also be very influential in developing emerging adults' identities and career aspirations. These spaces are where students gain hands-on experience in their desired profession and can help them decide if that profession is correct for them or not. They also allow individuals to experience and observe others doing work that may interest them. Architectural elements vary depending on the exact creative outlet that is chosen. These spaces should be catered to the needs of the population in that area. For example, if a college is engineering focused and doesn't offer any majors in art it should make it a point to include more engineering focused technology rather than art focused elements.

LIMINAL CONDITIONS PRESENT

- Allows individuals to become financially independent both through obtaining skills needed to obtain a job but also by providing the opportunity to produce goods or services for the public while in school.
- Allows individuals the opportunity to manage their own money when it comes to buying supplies if making goods for public purchase.
- Allows individuals to obtain and test new skills necessary to obtain a job in their selected career field.
- Individuals in the space can observe and explore professional and career driven identities as well as academic identities.
- While working in the space individuals may discover a hobby or passion for their work which can help with their self-care tendencies.

ARCHITECTURAL ELEMENTS

- Tools and technology relating to the intended use of the space
 - Comfortable color and material palette to attract users to spend time in the space.
 - Well light space this includes both natural and artificial lighting solutions.
 - Standing height tables or counter tops to allow individuals to work on their creations.
 - Comfortable inward facing seating for students to collaborate and study
 - Technology plug-in outlets to allow individuals to plug in their devices.
 - Computers stations for individuals to use
 - Display space for creations like art and furniture.
 - Views to other spaces within the maker-space.
-
- Individuals will gain a new view of self-worth and self-confidence through presenting their work.
 - Allows individuals to expand their social circle by finding those who think similarly to them or have similar interests.
 - Allows individuals to explore their identities through creativity and observation.
 - Allows individuals to accept uncomfortable experiences. I.E. Viewing controversial or political artwork etc.
 - Individuals gain confidence in public speaking by presenting their work as well as arguing on behalf of their work.



Fig. 17 | Makerspace | BHDP

FLEXIBLE & SHARED RESIDENT ROOMS

The ability for spaces to have agency, otherwise known as the ability for individuals to craft their own environment, is very important to emerging adults (Arnett 2004). One way this can be expressed is through their own rooms and living spaces. One harsh critique of university residence halls is that residents are not allowed to express themselves freely through their living arrangements. The rooms are often only able to be set up one way and offer very little ability for customization due to furniture already being in the space or fixed to one specific location. Off campus rooms allow more privacy for the students as well as more of an ability for residents to express themselves freely through room layout, furniture selection, and décor. Sharing a room with another individual is also a transformative learning experience and has a lot to offer students in terms of social development.

LIMINAL CONDITIONS PRESENT

- Allows individuals to redefine their definition of privacy.
- Individual customization of the space will allow for students to regain familiarity in their living environments.
- Allows students to furnish or come up with arrangements for their own living situations therefore exploring and expressing their identities.
- Allows students to create rules to live by and to build communication and conflict resolution skills.

ARCHITECTURAL ELEMENTS

- Flexible furniture arrangements that residents can control themselves
- Comfortable and home-like color and material palette to help with the transition to college.
- Well light space this includes both natural and artificial lighting solutions.
- Dimmers allow a variety of lighting options.
- Surfaces for residents to study.
- Seating for residents to have people over.
- Technology plug-in outlets to allow individuals to plug in their devices.
- Personal Decor and artwork.
- Closet and storage space for belongings
- Views to the outside.
- Private spaces within the shared space.

- Allows individuals to develop a sense of empathy towards others by understanding the results of their actions on their roommate.
- Allows individuals to accept and deal with uncomfortable experiences related to living with others.



Fig. 18 | Bedroom | Sara Ligorria

BARS, CAFES, AND COFFEE SHOPS

Additional spaces for college individuals to spend time in and socialize have a lot to offer in terms of overcoming liminal conditions in a college environment. Bars, cafes, and coffee shops are hotspots of activity when it comes to college aged adults. While people may attend each of these for different reasons, they are known to offer students experiences that may impact their lives greatly. The local coffee shop offers students a quiet place to study during the day, while the bar allows students to unwind and meet other people at night. Spaces like these have certain architectural characteristics that attract students to spend time in them.

LIMINAL CONDITIONS PRESENT

- Allows individuals to manage and cope with new peer pressures.
- Gives opportunities for individuals to develop new social circles.
- Develops individual's ability to handle impulse control and safe coping mechanisms.
- Allows individuals the opportunity to develop skills managing money.
- Gives opportunities for students to be employed therefore allowing financial independence.

ARCHITECTURAL ELEMENTS

- Flexible furniture arrangements that individuals can control themselves
- Comfortable and color and material palette that doesn't ostracize groups.
- Well light space this includes both natural and artificial lighting solutions.
- Variety of lighting options.
- Variety of elevated surfaces for residents to study.
- Comfortable seating arrangement's set around tables
- Technology plug-in outlets to allow individuals to plug in their devices.
- Relate-able, age appropriate decor and artwork
- Bulletin board for event postings
- Views to the outside and people within
- Speakers for sound.
- Variety of seating areas (private and open)

- Allows individuals to accept and deal with uncomfortable experiences that are present in a fluid social situation.
- Gives individuals spaces to develop new study habits.
- Gives individuals opportunities to observe and interact with different identities.



Fig. 19 | Coffee Shop | Riley Spencer

RELIGIOUS AND WORSHIP SPACES

Religious environments and places of worship act as instruments in identity exploration for emerging adults. While some individuals may find themselves exposed to religion early on in their lives due to their upbringing, others may find themselves spending more time in them as they get older, while some individuals may reject organized religion all together. In fact, religion, whether we agree with it or not, is so intertwined with individual's worldview that it is inherently part of being human (Arnett, 2004). Architectural elements that are present in religious spaces are the nave, alter, and narthex. The nave usually contains rows of seating facing the alter. The narthex acts as an entrance or vestibule to the space and is commonly located on the opposite side of the alter. The alter is usually manipulated in such a way that it shows hierarchy and draws the attention of the audience to it. While these elements are broad in scope, they are present in a space where individuals explore their identities and create their worldview.

LIMINAL CONDITIONS PRESENT

- Offers students a place to observe and interact with different identities.
- Gives students the ability to create their own rules to live by whether that's through accepting or rejecting the ideas set forth in the space.
- Allows individuals to expand their social circle with like minded individuals.
- Gives students a space to gain mental independence from their parents.

ARCHITECTURAL ELEMENTS

- Inward facing seating centralized around alter
- Alter with hierarchy in spaces
- Nave (Seating Area)
- Narthex (Entry-space)
- Well light space this includes both natural and artificial lighting solutions that are controllable by users.
- Comfortable seating for longer periods of sitting.
- Minimal decor and artwork.
- Bulletin board for religious event postings
- Views to the outside that are not distracting to the individuals attending service.
- Speakers for sound.



Fig. 20 | Chapel | Jonathan Hillyer

GROCERY STORES AND RETAIL SPACES

Retail and grocery stores are often overlooked when it comes to how impactful they can be for emerging adults. Before coming to college, students' parents did most of the shopping. While individuals may have been with their parents while they were shopping and giving their opinions, the final say in what to buy for food, clothing, and everyday use was entirely up to the parent. This is because they were the ones who would be purchasing it. Now that students are free from constant parental supervision, they are now the ones entirely responsible for making these decisions. This is a daunting task to those who have never made their own meals before or purchased their own clothing. Common architectural elements that are present in these spaces include, shelves containing goods and products for purchase, aisles for browsing the options, cashier stations, atm machines, and adequate amounts of lighting to view the products.

LIMINAL CONDITIONS PRESENT

- Gives users the ability to accept responsibility for making their own meals.
- Gives users the ability to independently make decisions on what to eat and when.
- Develops an individual's sense of self-care as they will need to be choosing healthier options over non-healthy options.
- Gives individuals a place to purchase items necessary to developing and expressing their identities. I.E. Clothing
- Individuals will develop multi-tasking and time-management skills as they need to plan time to shop for themselves.
- Allows users the ability to explore their own and others cultural identities through food and products.

ARCHITECTURAL ELEMENTS

- Variety of displays and shelves containing goods and products for purchase
- Comfortable and color and material palette that doesn't ostracize groups.
- Well light space this includes both natural and artificial lighting solutions.
- Comfortable seating for people waiting for others to finish shopping
- Age appropriate decor and artwork.
- Views to the outside that are not distracting to the individuals attending service.
- Unobstructed views all around store to allow for security and safety.
- Speakers for sound and music.
- ATMs
- Aisles for browsing the products and good
- Cashier stations
- Gives users the opportunity to manage money and financial independence.
- Allows individuals to develop a sense of impulse control.
- Gives individuals opportunities to observe and interact with different identities.
- Gives opportunities for students to be employed therefore allowing financial independence.
- Allows individuals to accept and deal with uncomfortable experiences that are present in a fluid social situation.



Fig. 21 | Retail | Yale

EDUCATIONAL AND STUDY SPACES

Educational and study spaces often come in a multitude of forms throughout many college campuses. These spaces offer students places to study and work on their academic work. The sizes and options of these spaces vary so much it is difficult to draw a conclusion as to how these spaces help people overcome liminal conditions associated with the college environment. Students need a variety of study spaces because everyone learns and prefers different environments. Key elements that change in study and educational spaces is the lighting level, the seating comfortability and options, the work surface size and material, the noise level, number of people in the space, and the technology options available in that space. Architectural elements when broken down to their simplest forms that can address liminal conditions in these spaces are centralized seating arrangements in discussion rooms, student lounges, conference rooms and technology huddle rooms. This can be everything from a conference room in the library to a dining table in the dining center. Providing a multitude of seating arrangements for people to talk and gather and share their ideas and experiences, goes a long way in addressing liminal conditions in a college environment.

LIMINAL CONDITIONS PRESENT

- Allows individuals to expand their social circle by finding those who think similarly to them or have similar interests.
- Allows individuals to explore their identities through listening to and observing others.
- Allows individuals to accept uncomfortable experiences and react with their worldview.
- Individuals gain confidence in public speaking by debating their ideas and arguing on behalf of their work.

ARCHITECTURAL ELEMENTS

- Seating arrangements of all types to accommodate different types of people.
 - Classroom style seating
 - Comfortable and color and material palette that doesn't ostracize groups.
 - Well light space this includes both natural and artificial lighting solutions.
 - Comfortable seating for people
 - Age appropriate decor and artwork.
 - Views to the outside
 - Working surfaces of all types, sizes, heights and shapes.
 - Technology inclusion whenever possible
 - Technology outlets for individuals to plug in their devices.
 - Both private study spaces and open study spaces with various heights of enclosure.
 - whiteboards for writing and group work.
-
- Allows students the ability to create rules to live by
 - Gives students opportunities to develop conflict management skills
 - Allows students the ability to develop study skills based on their preferences in learning environments.
 - Spaces could offer students the ability to become financially independent if equipped with the necessary equipment and technology to do job interviews through video messaging.



Fig. 22 | Study Space | Steelcase

CONCLUSIONS

The information presented above can be very helpful in design for higher education. The article offers a new perspective on learning in a college environment, by framing architectural program and elements based on their ability to help individuals overcome liminal conditions associated with the path to adulthood. If college administrators and designers focus on including spaces with these elements in higher education environments like academic classroom buildings, residence halls, and student life buildings, it would help support higher education's main objective of being a transitional period to produce individuals ready to be productive members of their professions and communities. College buildings and campuses need to offer students spaces that will help transition them to adulthood, rather than including expensive incentives and amenities spaces like leisure pools & video game lounges. It is the duty of designers of such environments to argue for the inclusion of these spaces to better serve the needs of our building's users and clients.

PRECEDENT STUDIES

Selection of precedent studies was made by using the following criteria:

1. Building Program Elements
2. Emphasis on building community between its inhabitants
3. Creative Expression
4. Campus Impact
5. What can be learned from the building in application to my design.

These case studies were selected based on these criteria:

- Simmons Hall
- Tietgen Student Hall
- State Street Village
- Studentboende



Cambridge,
Massachusetts



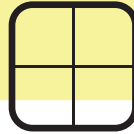
369
Beds



195,000 SF



\$75 Million



>9 Windows
per Bed

SIMMONS HALL

Architect: Steven Holl

Finished in 2003, Simmons hall on Massachusetts Institute of Technology's campus is astonishing in the amount of focus it puts on contributing to its students needs. The architect designed the building based on a sponge by incorporating a porous facade penetrated by 5,538 windows and organically shaped multistory atria that provide both light and air to the building. The building was designed to be reminiscent of a city block, giving students diversity in both its program and building layout.

The design of the building is striking, especially when compared to the sterile and lifeless student housing models found spread across many American colleges and universities. The programing of spaces, architect's focus on bringing in natural light, and level of mystery and curiosity found in the layout of the building, invites students to investigate the social interactions echoing through its concrete halls. The materiality of the building is textural and playful. The colorful metal window wells enliven students attitudes and are a nice contrast to the textural board formed concrete walls found within the building. Its a creative living environment for its creative inhabitants.



Fig. 23 | Simmons Hall Openings | Andy Ryan



Fig. 24 | Simmons Night | Andy Ryan

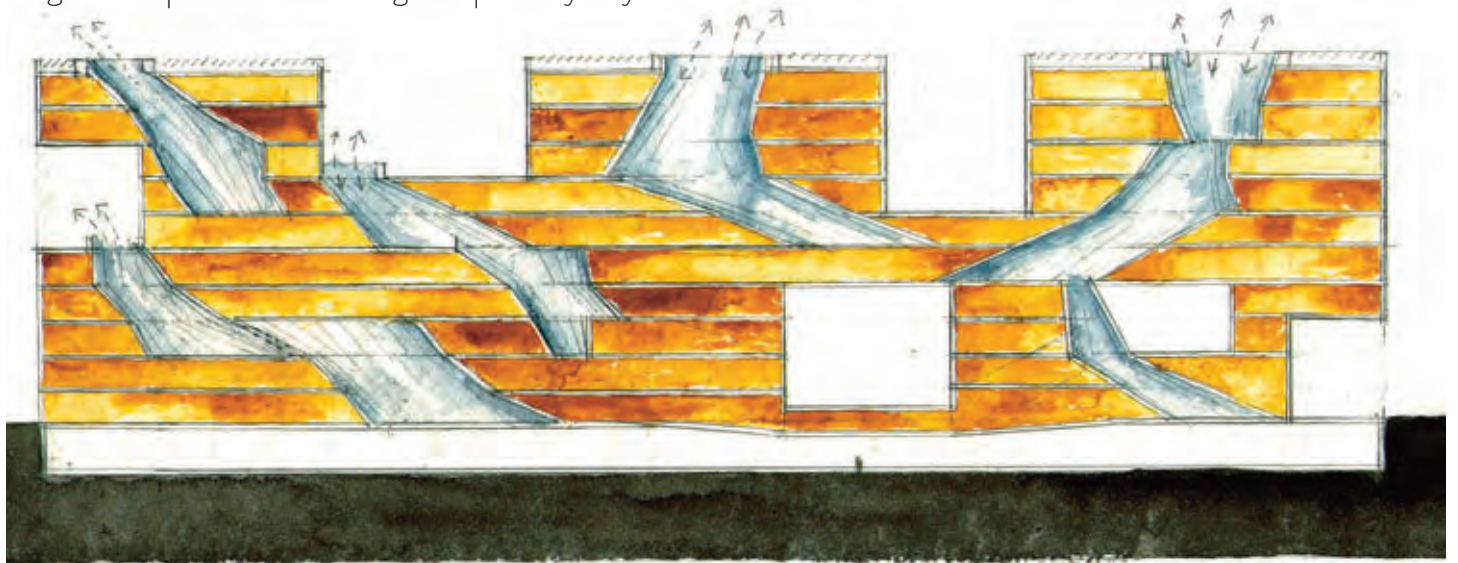


Fig. 25 | Simmons Sponge | Steven Holl



Fig. 26 | Simmons Atria | Andy Ryan

PROGRAM ELEMENTS

- *Student Rooms (Single, Doubles, and Triples)*
- *Dining hall*
- *125 seat theatre*
- *Ball pit*
- *Night cafe*
- *Outdoor activity terraces*
- *Multistory atria lounges*
- *Study rooms*
- *Gym*
- *Electrical Engineering Lab*
- *Laundry facilities*
- *Woodshop and creative studios*
- *Music Rooms*



Fig. 27 | Simmons Room | Andy Ryan

CAMPUS IMPACT

Simmons Hall had a major impact on the function of the university as a whole. The need for the building was in direct correlation to the university requiring all freshman students must live on campus their first year. This is not an uncommon practice in higher education as they believe that living on campus can ease the transitions and produce better students. MIT however, utilized this opportunity to produce a building that really focused on the students that would be living there. It provides a vibrant and creative environment for its inhabitants. It's program allows residents to hone their skills for the workforce through its electrical engineering lab and woodshop. Mixing both underclassman and upperclassman together throughout the building allows each and every one of them to help guide and be guided by their neighbors. The rooms while bare and cold, feature furniture that is flexible so residents can freely set up their room however they would like and instill their own life into the space. Each resident receives 9 windows in their room because increased amounts of natural light has been proven to increase human wellness both mentally and physically.

LESSONS LEARNED

- Creative environments allow for creativity to occur
- Building program should have direct correlation to student inhabitants
- Increase access to daylight to promote mental wellness
- Allow building use to occur at all times of the day
- The cultural form of this building created a building that had major navigational issues for its students
- Flexibility in rooms allow for inhabitants to make it their own

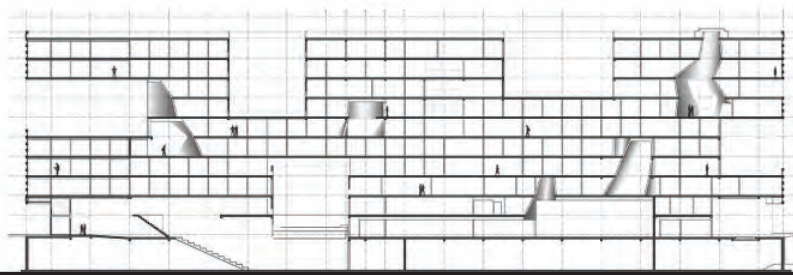


Fig. 28 | Simmons Section | Steven Holl

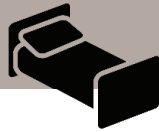
LONGITUDINAL SECTION



SOUTH ELEVATION



Ørestad,
Copenhagen



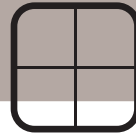
396
Beds



285,243 SF



No Data



<4 Windows
per Bed

TIETGEN STUDENT HALL

Architect: Lundgaard & Tranberg

Finished in 2005, Tietgen Student Hall located in the Ørestad Nord of Copenhagen is student housing that showcases through architecture how community can be built using architectural historical precedent. The building takes on its circular form because of traditional Chinese Hakka architecture. It recognizes that people build community when they feel protected. The circular form allows residents to view outward toward the city and all community spaces inside and outside are located on ground level facing the courtyard.

The design of the building was intended to be a dormitory of the future. Its form represents unity while it turns inward and away from its rectilinear neighbors. Its inhabitants feel safer in the middle, forcing them to congregate in the communal and educational spaces where they can meet and interact with others. Communal kitchens were also included to force residents to become part of the greater whole. It also plays with the transparency in students social lives and if they see an event happening in the courtyard or another communal room residents can easily navigate there and join. Individual bedrooms are mostly offered to allow residents space to reflect on who they are and want to become.



Fig. 29 | Tietgen Close-Up | Jens Lindhe



Fig. 30 | Tietgen Reflection | Jens Lindhe

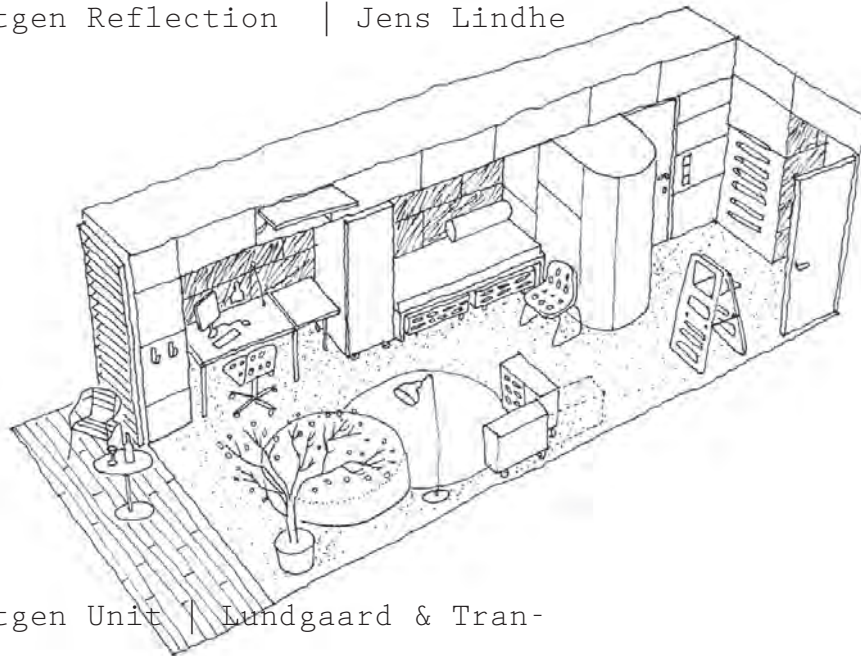


Fig. 31 | Tietgen Unit | Lundgaard & Tran-



Fig. 32 | Tietgen Court | Lundgaard & Tran-

PROGRAM ELEMENTS

- Student Rooms/Apartments
- Communal Kitchens (12 Residents per kitchen)
- Cafe
- Auditorium
- Outdoor terraces
- Computer and reading Rooms
- Workshops
- Laundry facilities
- Music and meeting Rooms
- Bicycle Parking
- Student lounges
- Private baths
- Courtyard

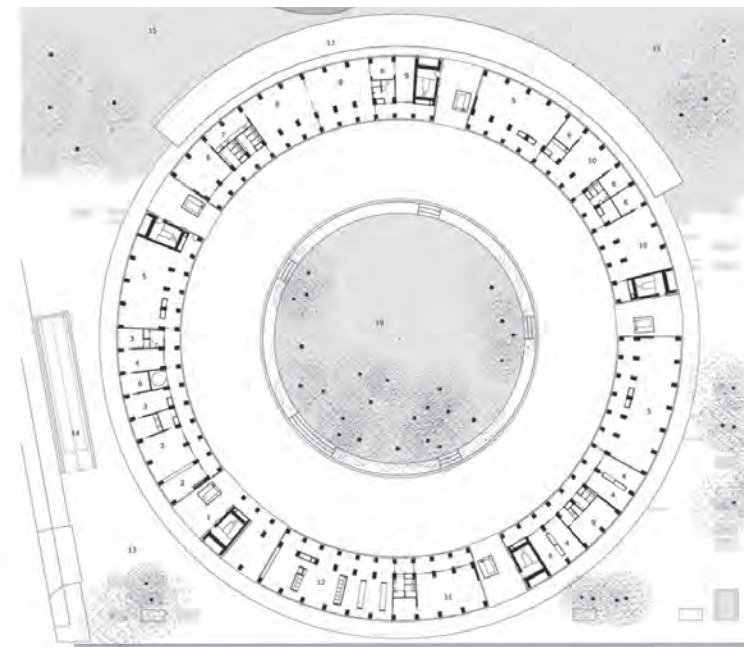


Fig 33 | Tietgen Plan | Lundgaard & Tranberg

CAMPUS IMPACT

Tietgen Student Hall is unique in that it serves as housing for two universities, the University of Copenhagen Amager and the IT University of Denmark. This building essentially reinvigorated the neighborhood in which it is in by increasing the younger population. Newer youth focused businesses, like internet cafes, are becoming very popular in the area. It brought life to the many nearby canals as water is always a popular gathering point in both summer and winter. Most residents rely on cycling as their main transportation method around the neighborhood. This building added to the sense of place of the neighborhood. Many critics of the building (most of them not residents) see the form of the building as an overused prototype that will one day become outdated.

LESSONS LEARNED

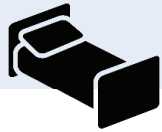
- Removing certain program elements that would normally be private (kitchens) and placing them in public areas can help make residents meet one another.
- Take into account the buildings potential ability to impact multiple universities and spark revitalization within its context
- Utilize the bodys natural visceral feelings to layout building form and design.
- Beware of leaving residents to much space as it can no longer be an affordable model for higher education design



Fig 33 | Tietgen Plan | Lundgaard & Tranberg



Chicago,
Illinois



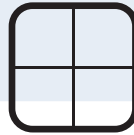
367
Beds



110,000 SF



28.7 Million



>4 Windows
per Bed

STATE STREET VILLAGE

Architect: Helmut Jahn

Finished in 2003, State Street Village (SSV) located on the Illinois Institute of Technology's campus is a more moderate student housing option than the earlier case studies. This building isn't filled with expensive academic and recreational incentives but rather goes to show the effect that a well thought out design can have on a buildings occupants. State Street Village is essentially three separate buildings that share a common facade on the east side of the building. The building itself is placed on a site that acts as a threshold between the east and west side of campus. The building needed to allow people to use it as a corridor between the two sides of campus hence why the architect decided to split it into three separate yet connected buildings.

State Street Village is unique in the fact that it was designed with human comfort in mind. The rooms are much larger than the other housing offered on campus. This allows residents room to breathe, entertain, and host others in their homes. Each one of the three buildings has a certain age group that lives within it and the rooms offered change with those age groups. It was also important to the architect to have the rooms look into the glass courtyards created between the main sections of the buildings. This gives users access to plenty of natural light and views to the surrounding area.



Fig. 34 | SSV Close-Up | Doug Snower



Fig. 35 | SSV End | Doug Snower



Fig. 36 | SSV Terrace | Doug Snower



Fig. 37 | SSV Courtyard | Doug Snower

PROGRAM ELEMENTS

- Suite Style Rooms (Freshman)
- 3 Bedroom Apartments (Upperclassman)
- 5th floor Sky Terraces
- Courtyards
- Double Envelope Circulation (Sound)
- Communal Kitchens
- 5th floor communal lounges
- Laundry Facilities
- User Specific Technology

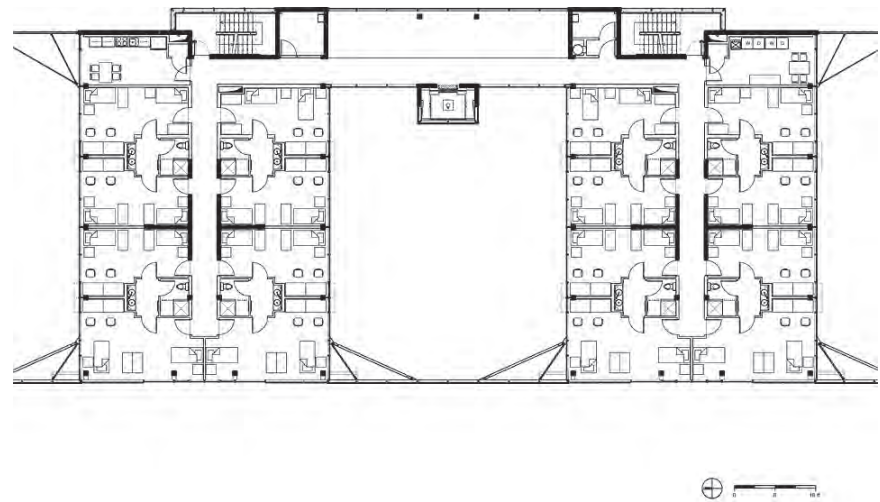


Fig 38 | SSV Plan | Helmut Jahn

CAMPUS IMPACT

The State Street Village had a significant impact on the campus. Not only did it add a needed on campus housing to the university, but it also added a needed update to the idea of what student housing is. It recognized that students of today are the most technologically connected students. It incorporated the newest technology in places like laundry rooms, student lounges and student rooms to allow the students to control the environment in which they are in. The building also was built on a site that was not ideal for housing. The east side of the building is right next to the elevated train and the architect incorporated a double envelope that reduces the noise for the residents and doubles as circulation space. It created a comfortable transition space for students to move from one side of the campus to another.

LESSONS LEARNED

- The site does not need to be ideal for housing but rather the building needs to respond to the conditions of the site.
- Integrate technology into the design of a student housing since today's students are so connected to technology.
- Design spaces to do dual purpose, for example the double envelope that acts as a sound-wall and circulation space.
- Simplicity in both program and form can still have a high impact on the campus environment.

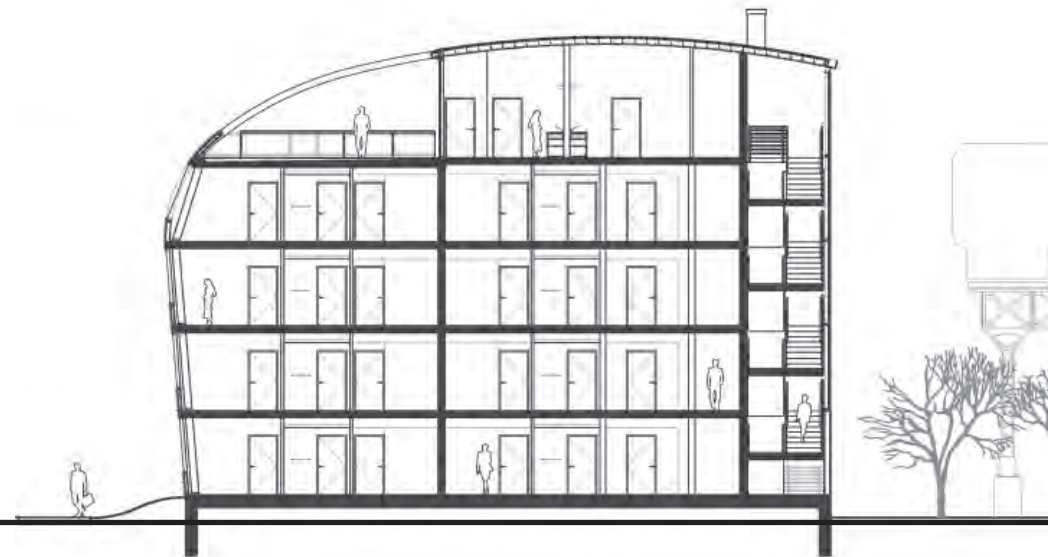


Fig 39 | SSV Section | Helmut Jahn



Smaland,
Sweedn



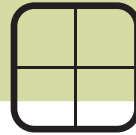
1
Bed



107 SF



No Data



6 Windows
per Bed

STUDENTBOENDE

Architect: Tengbom

Designed in 2014, Studentboende was a collaborative project between Tengbom Architects and students from Lund University. I believe the power here is in its size. The mini-studio living unit is very efficient laid out. Inside the unit is a kitchenette, bathroom, sleeping loft, and furniture that can be tucked away into the walls when you are not using it. It was designed with intentions to create an affordable and green housing option for students.

Another thing that I find really interesting about this project is the way they expressed its construction and materiality. By using cross laminated timber every wall was structural, beautiful finished, and to some degree insulated. The ability for the table and desk unit to flip back up into the window wells and fit perfectly is astonishing. While this project isn't a part of a massive student housing project I believe that there is a lot of learning that can be done here. This unit fits more programming and needs into 100 square feet than most current student housing rooms. Student housing rooms usually only have a two beds, a couple desks, and wardrobes in a little over 100 square feet, While I don't believe that this is a correct model for student housing I do think that this can really meet the needs of students who don't want to have roommates but don't need full size studio apartments.



Fig. 40 | Studentboende Close-Up | Bertil



Fig. 41 | Studentboende Interior | Bertil

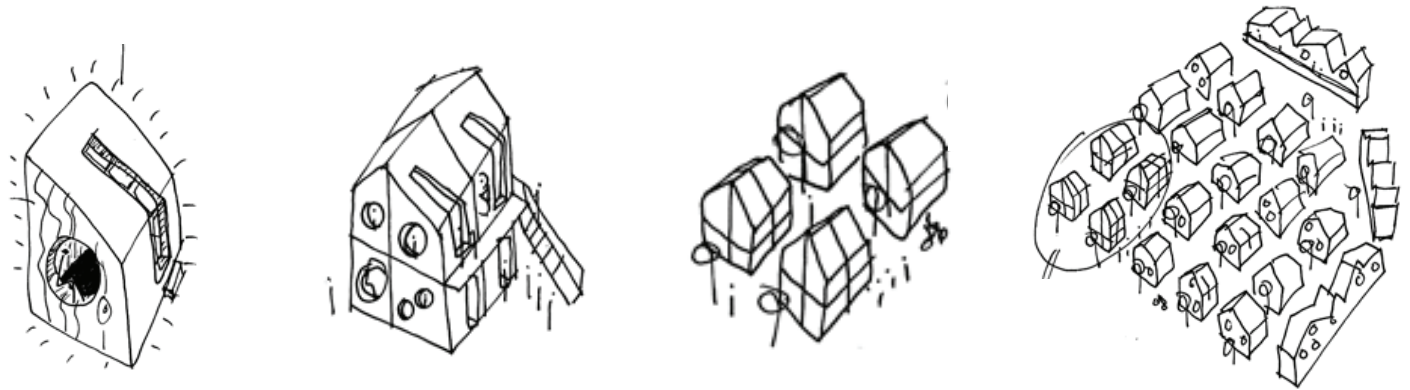


Fig. 42 | Studentboende Process | Tengbom



Fig. 43 | Studentboende Study | Bertil

PROGRAM ELEMENTS

- Study Area
- Bathroom
- Guest Space/Hammock Area
- Kitchenette
- Dining Room
- Bedroom Loft



Fig. 44 | Studentboende Plan | Tengbom

CAMPUS IMPACT

Only 22 units of this project have been built however I think that this idea of mini-student living is an idea that needs to be adapted more on universities. Higher education keeps giving students more and more amenity spaces which is only raising up the costs of college in general. This unit costs 50% less than rent and would allow students to spend their money on living rather than housing. Instead of giving students more space we should be giving them less. This would allow us to increase the amount of students living on campus, which in turn would bring in more money for the university.

LESSONS LEARNED

- Small can be good
- A well thought out layout of a space can allow ample opportunities for students
- Simplicity is key



Fig. 45 | Studentboende Section | Tengbom

PROJECT JUSTIFICATION

Growing up in a small town in the Midwest my childhood was far from stereotypical. However, living in such a small close-knit community all of your life, can make the task of moving on to an entirely new place seem extremely daunting. The idea of going to college and leaving home was daunting but it was the necessary step to for me to achieving my life goals. It was difficult at first to wrap my head around everything. My social circle had been shattered and I needed to make new friends. I needed to figure out how to make friends again however as I hadn't had to make new friend's since kindergarten do to the nature of my small-town. I was changing as a person, but it was the architecture in which I resided in that I owe everything too. I began appreciating the fondness for the place. While it was a small, beige, shared room that offered little to be architecturally excited about, it was the place that shaped me into who I have become today.

Upon coming to college, I learned quickly that who I was in high school and elementary school is not who I was meant to be. All of adolescence people are telling you what to do. Choices like what to eat, when to wake up, how to study, who to hang out with, and who to vote for are choices that you can now freely start examining and questioning without influence from parental guidance. The social and cultural ring in which you previously existed within has been shattered and a new one needed to form. The time itself is so ambiguous and you feel like you are in a pinball machine aimlessly smashing into walls and roadblocks until you find the goal. I have had the honor of working as a resident assistant for 3 years in a first-year hall. I was able to witness first-hand upwards of 100+ students' responses to their shifting of environments. While some flourished and some failed, I couldn't help but notice how the buildings

themselves didn't help people discover who they were.

Residence halls have such an impact on the college experience due to the time in which they enter your lives. It is here people meet friends for life, start dating new people, learn life skills, and start emerging as an adult. The current architectural model itself however does not help with this transition. Simply a small dark room in which you get a twin sized bed and desk does very little to help people discover who they are and become adults. It relies on the help of resident assistants to help mentor and guide individuals through the most nervous uncomfortable time of their lives so far. The model itself offers minimal opportunities to overcome conditions that could help prepare an individual for the next step in life.

Students hardly want anything to do with the buildings after their first year. Some move on to upperclassman halls that offer them apartment style living with on-campus conveniences. Those types of halls however are isolating and offer very little social interaction between residents. Others, move off campus, to enjoy the freedom of no longer being under same roof with hundreds of students. Here, however they are facing the struggles of having to commute to campus, and further isolate themselves from the social comradery that exists within a campus's main gates.

Sadly, universities have recently started including expensive incentives and amenity spaces in their halls to retain and attract students. While spaces like tanning salons, rock walls, and lazy rivers are sure to attract students to stay on-campus, these spaces only drive up the cost of living and higher education. Universities have also been tearing down traditional halls known to be socializing in

nature and building more apartment style halls that are known to isolate students. This action is wrong, and this thesis project will be a critique to this idea by providing students with a hall that offers the responsibility factor of off-campus and apartment-style living with the social spaces necessary for student development.

Because of the lack of these buildings focus on overcoming liminal conditions students are left wanting more from their living situations and move off campus. The current model leaves students believing that these buildings have in fact hindered their success and overall happiness. This project will bring the power of transformation back to the students through architecture. It will offer students so much more than a bed to sleep on. Student housing is a passion of mine. I hope to expand my knowledge in its abilities because I believe as a designer that design affects the way we live and therefore affects our lives outcomes. I believe design has the power to shape us into better people which therefore results in a better society.

“We shape our buildings;
thereafter they shape us”

Winston Churchill

HISTORICAL, SOCIAL, AND CULTURAL CONTEXT OF THE THESIS

Historically university residence halls came to be because of rural colleges that needed to provide large amounts of housing for its students. This was in part because of the lack of housing available for students to live in nearby. Towns lacked development as everyone lived on the farm so therefore, they lacked the social housing necessary for universities. Some universities simply tried finding housing wherever they could put it, utilizing empty and unused facilities or building makeshift structures nearby. Some started housing students in mixed function buildings that featured faculty apartments, chapels, libraries, dining halls, and educational facilities. Harvard university in its earliest state was in fact a standalone multipurpose building with sleeping rooms right next to the education spaces (Yanni 2019). The ideas of students and faculty member living communally together first started appearing as soon as 1671 (Yanni, 2019).

Soon the idea of college became ever more popular and attendance numbers continued to grow. Administration buildings began to take on the ideas and morals of those who were running the universities. Students however were not happy with their living situations and some even began to design and implement their own “purpose built” housing in the late 1870s (Yanni, 2019). This housing came to be the rise of fraternity housing. A group of like-minded individuals, primarily consisting of men, who wanted to live together while attending university.

University housing like most of US history has been very segregated. “College life introduced men to other men like themselves” (Yanni 2019). In

fact, university housing has taken a well-deserved bad standing for being controlling and divisive. The concept of women attending college essentially began to take place in the mid to late 1800s and soon housing was going to also change for socially, and contextually for them as well. Women’s halls resembled home a little more than men’s halls in the earlier years. This became the standard for women’s halls due to the culture of the time in which women were thought to have belonged in the home doing domestic duties so in turn their housing should be as domesticated as possible (Yanni, 2019). One women’s residence hall building on the University of Michigan’s campus called the Martha Cook building in fact had intentions of “civilizing the young men” (Yanni, 2019).

The early 20th century offered yet another change for university housing model as university leaders thought that order and repetition would allow individuals to be shaped and controlled into productive members of society. Here is where low rise residential buildings became to rise from the ground. Halls like these offered students very little flexibility for students and were seen as a needed integral part of the university experience. Soon land became more and more valuable on college campuses and with the rise in building strategies and techniques high rise style residence halls became more and more popular in the 1950s (Yanni, 2019). Essentially these didn’t offer students anything more to the student experience than their 3 story older siblings except for maybe a chance at a good view at the top and a shorter hallway. Very little growth in the development of the residence hall model occurred during the later part

of the 20th century. A lot of colleges are still using the many high-rise and low-rise redundant and divisive building of their past to house the students of today. Some colleges however in the more recent years, have started updating and renovating their facilities due to failing infrastructure. They have been incorporating a few new ideas into the plans of student residence halls that do impact the experience of the student itself. However, some of these buildings are now using the university residence hall as a recruiting tool for their campus. Essentially rather than focusing on the residence hall as a transitional and transformational space it is not filled with luxurious features that will bring students to their campus but still leaves students feeling empty, letdown, and uninspired in the process.

“As an architect,
you design for the **PRESENT**,
with an awareness of the
PAST, with a **FUTURE** which is
essentially unknown.”

Norman Foster

HISTORICAL TIMELINE - Architectural Typology

Fig. 47 | Wren Building | Yanni

Indian College - Harvard University
1655

The earliest forms of communal student housing in the US on college campuses. A very early form of the staircase plan which kept the amount of men living in each part lower due to the social construct that a lot of men living together would cause conflict and rough-housing. This building in particular was actually the first housing built on college campuses to house minorities. Those minorities were Native Americans in this particular case.

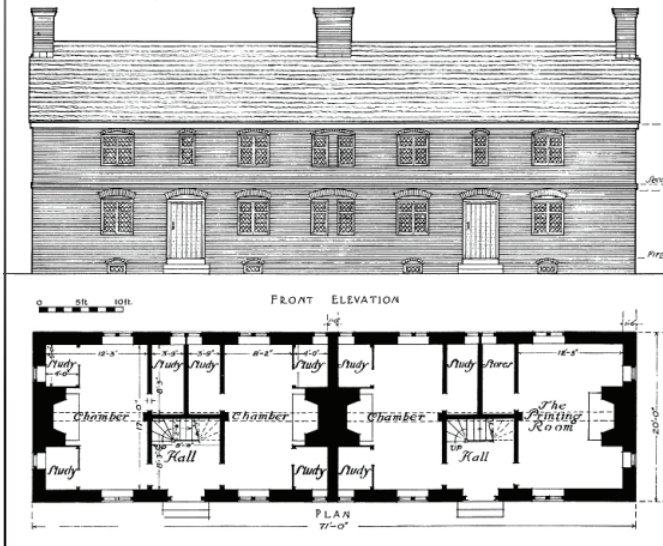
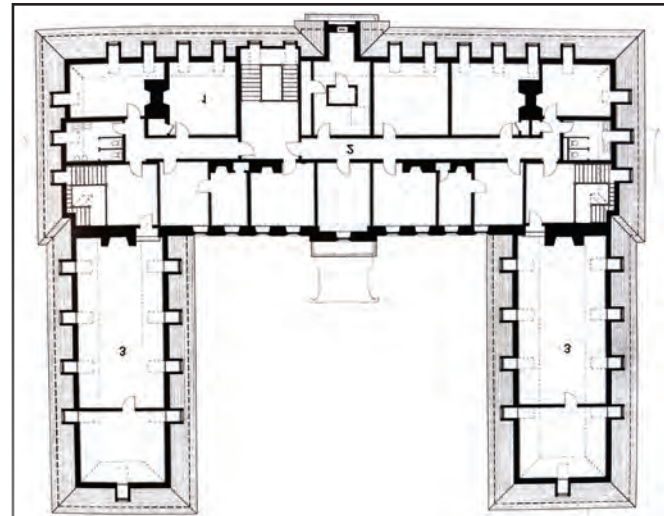


Fig. 46 | Indian College | Yanni



Wren Building - College of William and Mary
1705

This building is one of the earliest forms of the quad-style halls. The two wings were built to have a fourth closing piece added later on. Also the interior layout of this hall shows an earlier version of the double-loaded corridor. There are two staircases that feed the two ends of the halls. These halls were seen as tools for faculty in residence to be able to observe the students with ease.

Nassau Hall - Princeton University
1754

This building is an earlier model in higher education time. The main floor plan added was flanked by two wings of the buildings. In the earlier buildings, educational classes were usually held in one building. The spaces were usually open-plan. In this building, you can make out spaces meant to be study.

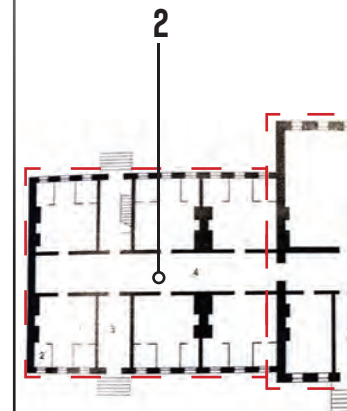


Fig. 48 | Nassau Hall | Yanni

Fig. 49 | Baldwin Cottage | Yanni (pg. 88)

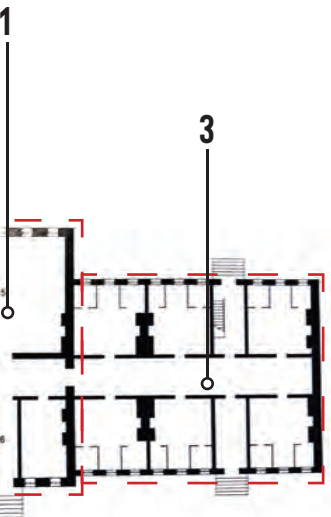


Baldwin Cottage - Oberlin College
1886

This building is an example of how early womens halls were very domestic in nature. They also featured large and lavish lounges on the first level that were meant to make these halls the social center of campus. This also allowed women to host possible suitors, under supervision of course. As one can see from the floor plan its full of rooms that are multiple different shapes. This particular building was Oberlin Colleges reaction to the rise of fraternity and sorority housing in a college environment.

nceton

seen as one of the exterior form for buildings of this central portion of led hierarchy and it two smaller sections This building like dings combined both rooms and housing g. The educational ly on the main floor In the student rooms small rooms that were areas.



anni

Martha Cook Building - University of Michigan
1915

The significance of this building is the reliance in division in its history. This womens hall featured mostly only single rooms which was because administrators thought that putting women together in a room would cause too many problems. Administrators also say this as a strategy to keep women from talking to each other as educated women of this time were seen as unattractive due to their dependence on education and not domestic duties. Lobbies on the first floor were very lavish and lead out to a grand lawn.



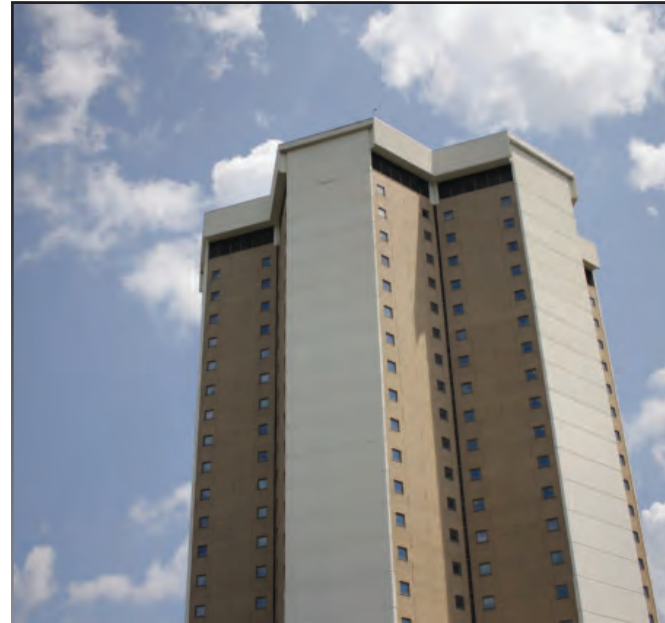
Fig. 50 | Martha Cook Building | Yanni (pg. 107)

HISTORICAL TIMELINE - Architectural Typology

Fig. 52 | Morrill Tower | Yanni (pg. 177)

Uptown - New York University
1956

With changing ideas university administrators and campus designers thought that brutalism was the next step in residence hall design. Halls like this one were arising up all over the country by famous architects like Marcel Breuer and associates. The rough site cast concrete while aesthetically pleasing actually made the environments the students were living in even less home-like. These buildings are now very hard to renovate and adapt to current standards due to their construction.



Kresge College
California
1973

Kresge college first examples of reacting to large campuses. This was built to house thousands of students however residents nicknamed this development 'The Village'. This type of housing was built on small bits of land and was not very home-like but designers were where the future of campus housing was. They designed this type of campus including the Village which has



Morrill Tower - Ohio State University
1963-1967

In the 60s and 70s there was a huge boom in student housing. Land was also becoming more and more scarce on college campuses. With the increase in current building technology, campus designers set their eyes on the skys. Buildings like this one arose on many college campuses across the country. They offered students a better view but the interior spaces lacked natural light.



Fig. 53 | Kresge College | Yanni (pg. 177)

Fig. 51 | NYU | Yanni (pg. 124)

Fig. 54 | ASU Hall | Yanni (pg. 130)



Jane Doe Hall - University of Unknown
Present Day

No one can predict the future of student housing but it is obvious that a new model is needed that combines and rejects features of the past. This will allow individuals to still have the classic integral student experience of living in the halls while also giving them the needed skills and social abilities to move on to adulthood with ease. Only time will tell which model will be placed here in this space.

- University of
ge was one of the
f campus designers
blocks of housing.
emble a neighborhood
s themselves have
velopment "the zoo".
sing took up large
was very spread out
thought that this
ture was heading so
s style on a lot of
g NDSU's University
similar aspects.



The District on Apache - Arizona State
University
2015

This hall is an example of where student housing is now. This hall features tons of expensive amenities. It's most featured is the lazy river out in front. It also features apartment style living where residents get their own rooms. Halls like these are on the rise as entire student life departments are selling out to developers who are raising the price for student housing by including these expensive amenity spaces and classifying them as student needs.



Yanni (pg. 214)

SITE ANALYSIS AND INVENTORY

SANTA MONICA, CALIFORNIA



As mentioned earlier in this document, Santa Monica California is the locations selected for this thesis project. This coastal city is very active in both nightlife and culture. It is best known for its pristine beaches and the Santa Monica Pier. Santa Monica offers its residents a very active lifestyle. Residents of the area can often be found biking, surfing, and spending time at the beach. It's downtown is very active as well and offers residents and visitors lots of options for shopping, eating, and street life.

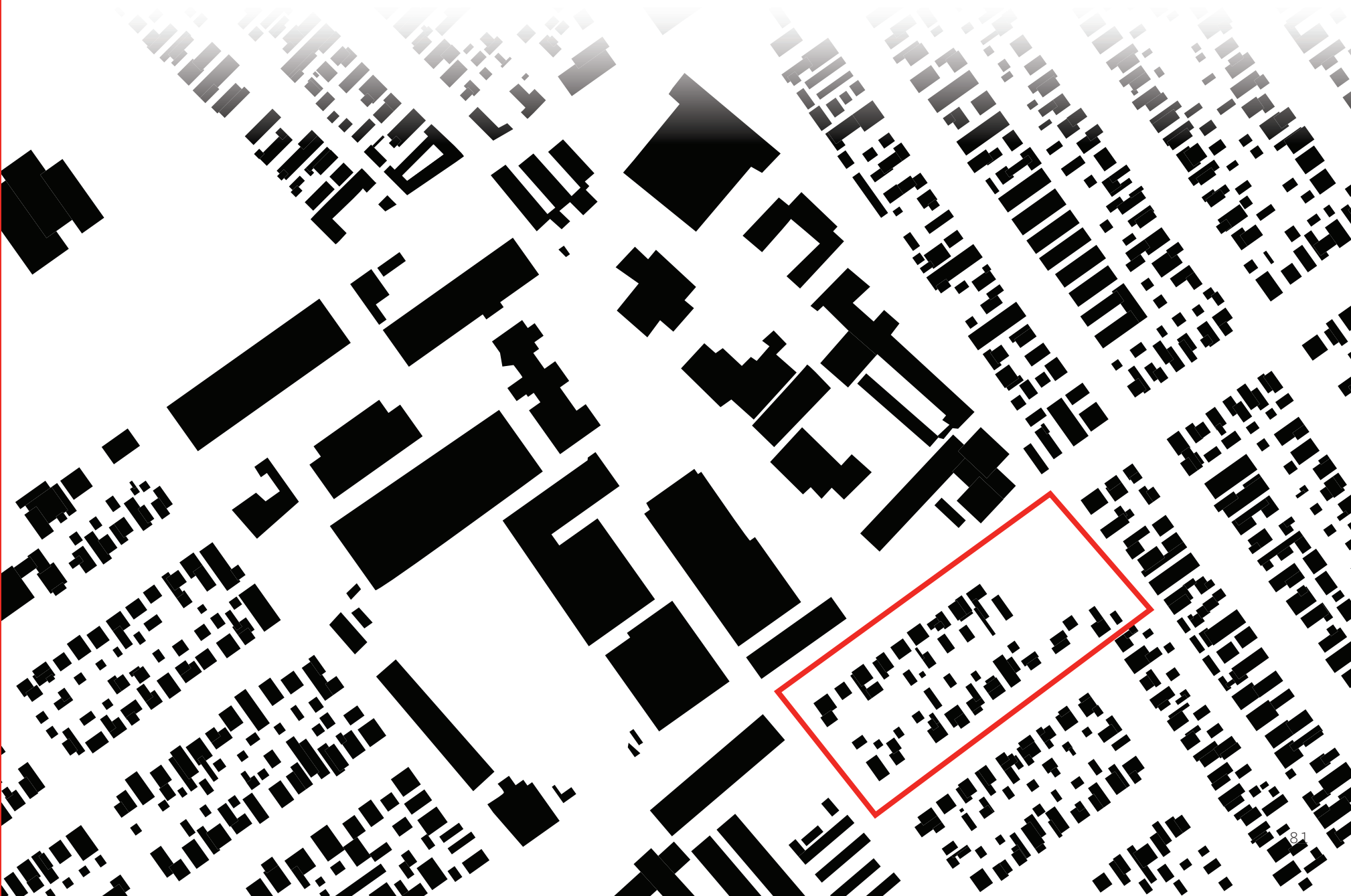
SANTA MONICA QUICK FACTS:

- Pop. Appx. 94,000
- 50,912 Housing Units (13,315 Owner-occupied)
- \$73,649 Median household income
- 4.41% Crime Rate (National Average 4.48%)
- 7.2% Pop. age 18-24
- 310 Days of Sunshine a Year

Fig. 55 | Santa Monica Pier | Boden/Ledingham



Fig. 56 | Figure Ground



SITE ANALYSIS AND INVENTORY

ZONING

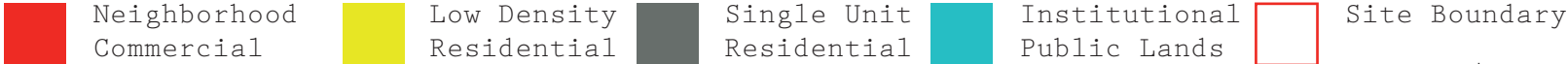


Fig. 57 | Zoning



DESIGN OPPORTUNITY:

The current zoning of the site sets up an interesting design opportunity. Currently it is zoned Single Unit Residential. It would be impossible to design such a large building with such restrictive code on such a site. Santa Monica College however has very little land available on the campus for future development and will need to expand into the nearby neighborhoods. My proposed site location is already home to some property owned by SMC so it is obvious that they are looking to expand in this direction. These properties include a few homes on Pearl St. where departments like Axillary Services, Campus Police, Outreach and Recruitment, and International Counseling are being housed.

Due to the higher education nature of this project it would make sense to have to re-zone the entirety of the site to make way for a new education based facility for the campus. This will allow for the needed square footage and height required for a building of this size. While taking into account the zoning and code restrictions of this area is necessary for a successful project in the field it will not be a limiting factor to the design of this thesis project. to allow for the necessary amount creative freedom needed.

SITE ANALYSIS AND INVENTORY

CLIMATE 🏠

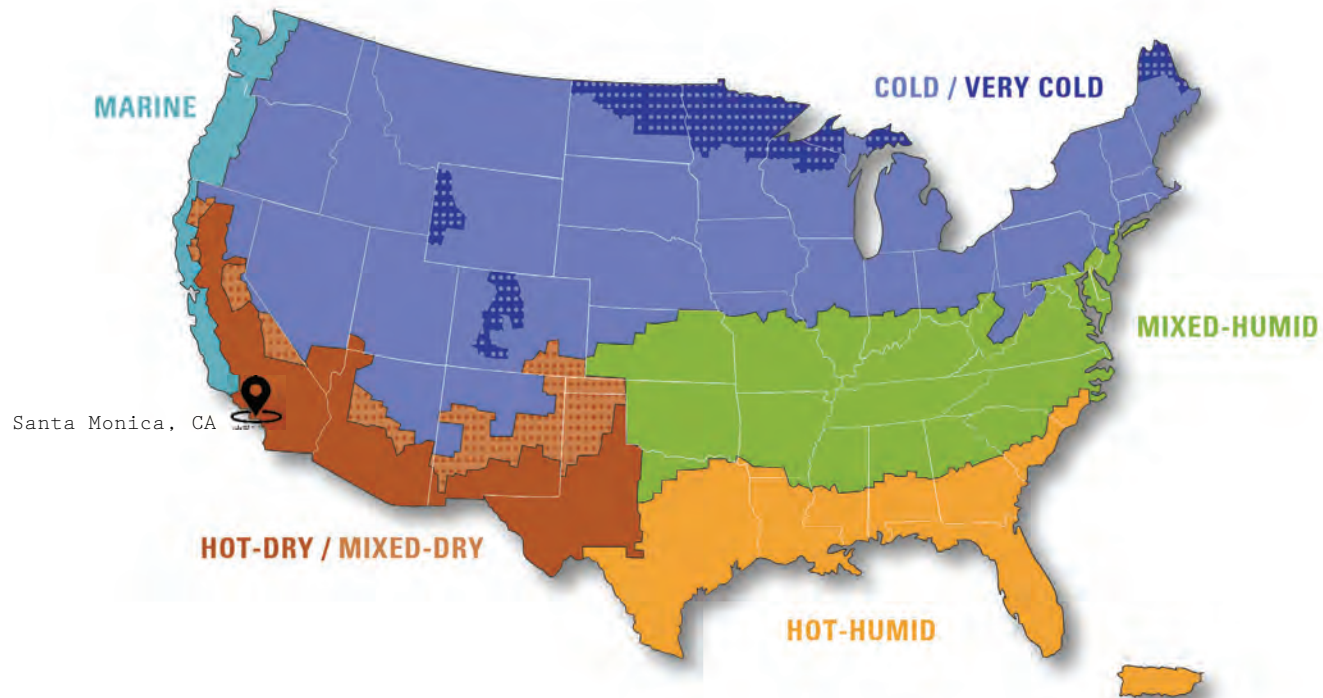


Fig. 58 | Climate Zone | U. S. DOE

DESIGN OPPORTUNITY:

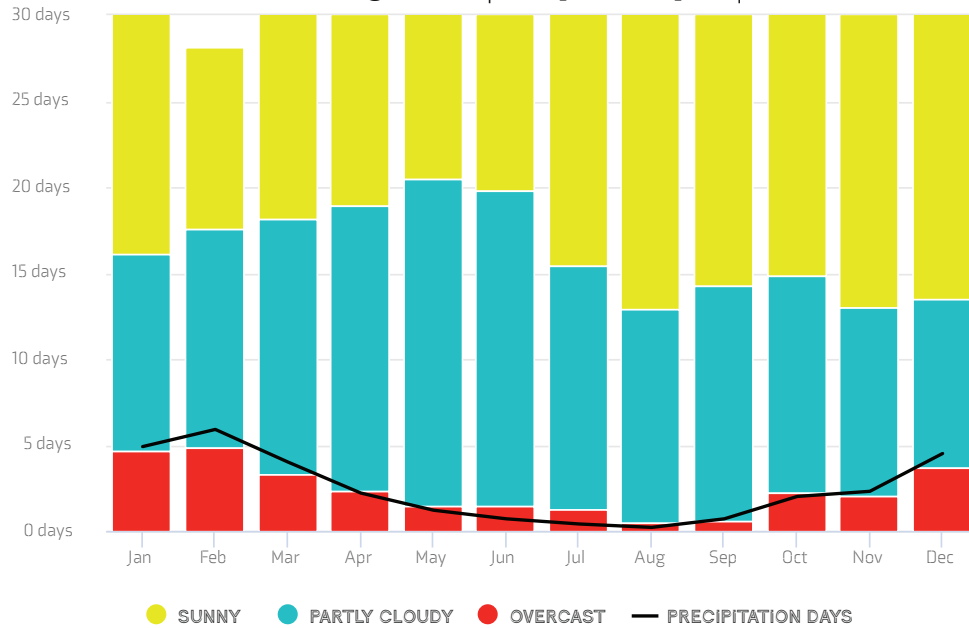
The climate zone for Santa Monica California is in a Hot-Dry climate zone according to this map from the US Department of energy. Interesting enough that its almost on the edge of a Marine Climate. This is not surprising as it allows for great weather which attracts lots of tourists. This will affect the project design in many ways as the building will need to be built to accommodate such a climate.

Some ways that the building can respond to its climate is through the use of rainwater collection systems to collect what little rainwater falls. This

can be used to water the vegetation on site. Another thing is this building will require a large amount of air conditioning to run and keep cool for the inhabitants. These air conditioners will produce a lot of condensation which that condensation can be collected to be used in toilets and on the site vegetation.

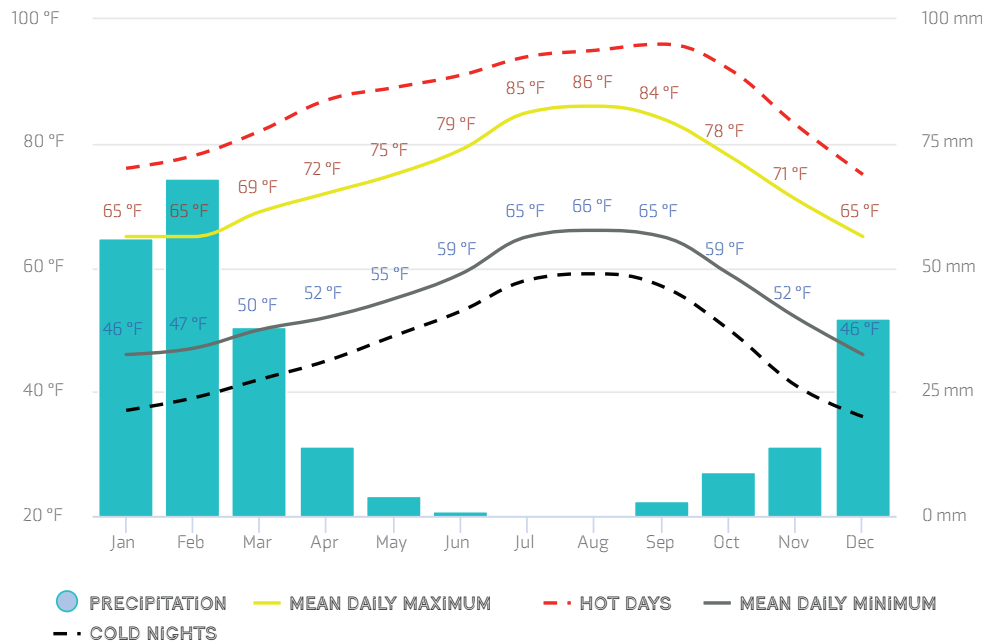
This will also affect the plants and amount of vegetation that will be able to used on the site. The plants will need to be picked to use a little watering as possible. Also outdoor spaces should open to the inside as much as possible.

Fig. 59 |Temp. Graph | meteoblue



SUNNY DAYS

The graph on the left shows the amount of sunny days compared to the partly cloudy and overcast days in Santa Monica California. This is critical in understanding strategies that the building will take to incorporate passive principles into its design. This building will need to provide some sort of shading structure on the south side to relieve some pressure on the air conditioning systems due to sunlight heating up the inner space within the building. Solar arrays or photovoltaic panels will be used to collect the energy from the sun.



TEMPERATURE

This graph shows a comparison between the average temperature highs and lows and the amount of precipitation Santa Monica gets. This graph is critical to understanding that when the building would be in use is when the most precipitation falls on the site. Water-collection system must be used to water vegetation during that time. As well, this graph shows that when residents would be moving into the building for fall semester the building would be at its hottest. Shading devices and vegetation should be abundant to help fight microclimates that would exist on site. Avoidance of dark materials will be necessary to keeping the building cool.

Fig. 60 |Temp. Graph 2 | meteoblue

SITE ANALYSIS AND INVENTORY

WIND 🏠

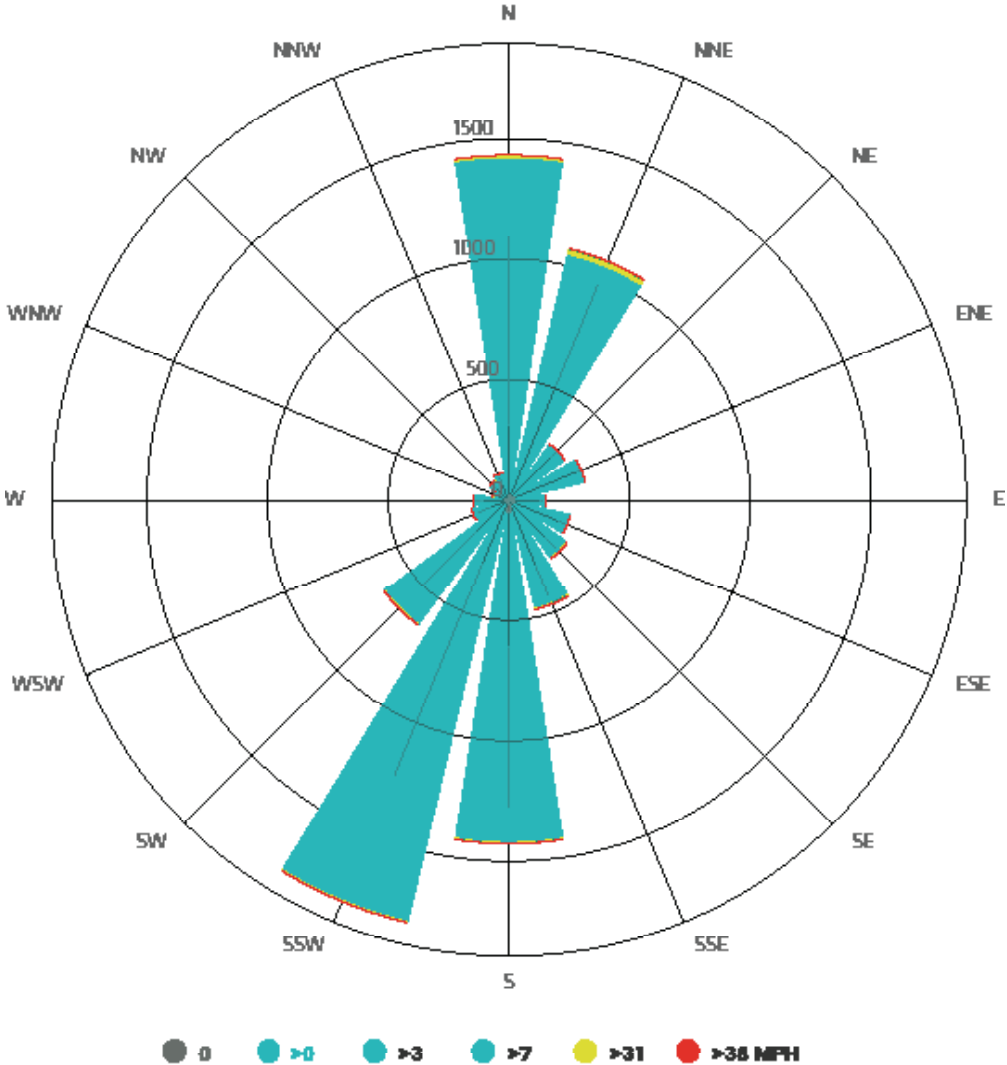


Fig. 61 | Wind Rows | meteoblue

Fig. 62 | Wind & Site | google - source image



DESIGN OPPORTUNITY:

The wind-rows diagram the left on the previous page is helpful in understanding which direction the winds primarily come from in Santa Monica, California. After reading and analyzing the graph it is obvious the majority of the winds come from South-Southwest, and the North. The wind-rows diagram also notes that not a lot of winds are all that strong. Most are around 3 to 7 mile per hour with a small amount being above 31 and 38 miles per hour.

The site is slightly off of the perfect Jeffersonian East and West grid axis as shown in the above diagram. This allows the wind to reach all parts of the site due to the low height buildings that surround most of the site. The building form may have to be slightly rotated are adapted to allow for the pristine conditions to allow wind to move through the building. Also , any outdoor space should be located in these portions of the site to allow individuals to be cool when they are spending time in them.

SITE ANALYSIS AND INVENTORY

SUN

Fig. 63 | Sun & Site | google - source image



DESIGN OPPORTUNITY:

As shown in the above diagram, the sun rises in the East and sets in the West. This has a large effect on how the building is going to be laid out. Thankfully, the site runs Southwest to Northeast and will allow for easy access to sunlight due to its orientation and low surrounding buildings.

The building form will have to be manipulated in such a way that it allows the most sunlight into the spaces. This may come in the way of creating a jagged facade on the south side to increase the amount of square-footage that faces south. This would allow building residents an increased amount of sunlight into their rooms.

SITE ANALYSIS AND INVENTORY

PATHS AND CIRCULATION

Fig. 64 | Site Circulation | google - source image



- Main Campus
Entry
- Secondary
Streets
- Primary
Roadways
- Residential
Roadways

DESIGN OPPORTUNITY:

As shown in the above diagram, the site is located on a primary roadway, Pearl St. It is not as busy and Pico Blvd. located on the north side of campus but does provide the main circulation to the southern side of campus. Secondary Streets allow students to get all the way around campus but most of campus circulation is by foot only. While

the street may pose a problem to the design of this project it may be interesting to design a complete circulation reroute and bring the circulation around or underneath the building to allow for residents to have complete access to campus and not have to worry about crossing the street. This will be more explored come the following semester. The residential street on the southern side of the site may become the primary vehicular entry to the site.

SITE ANALYSIS AND INVENTORY

VEGETATION

Fig. 65 | Sun & Site | google - source image



DESIGN OPPORTUNITY:

As shown in the above diagram, the site is located nicely to some major public green space. While SMC's campus quad is a mixture of both grass and walking paths its a nicely landscaped area that students spend a lot of time in. The cemetery on the north end of the site provides nice walking trails and

running trails for people who don't want to run or walk on the sidewalk. One large reason for the site selection was to have the campus quad overflow into the site. This would provide direct access to campus as well as make the residence hall a destination or central ending point to the campus. The site is also located near the SMC's football field and track to allow the students nice access to those amenities of the campus.

SITE ANALYSIS AND INVENTORY
COMMON VEGETATION

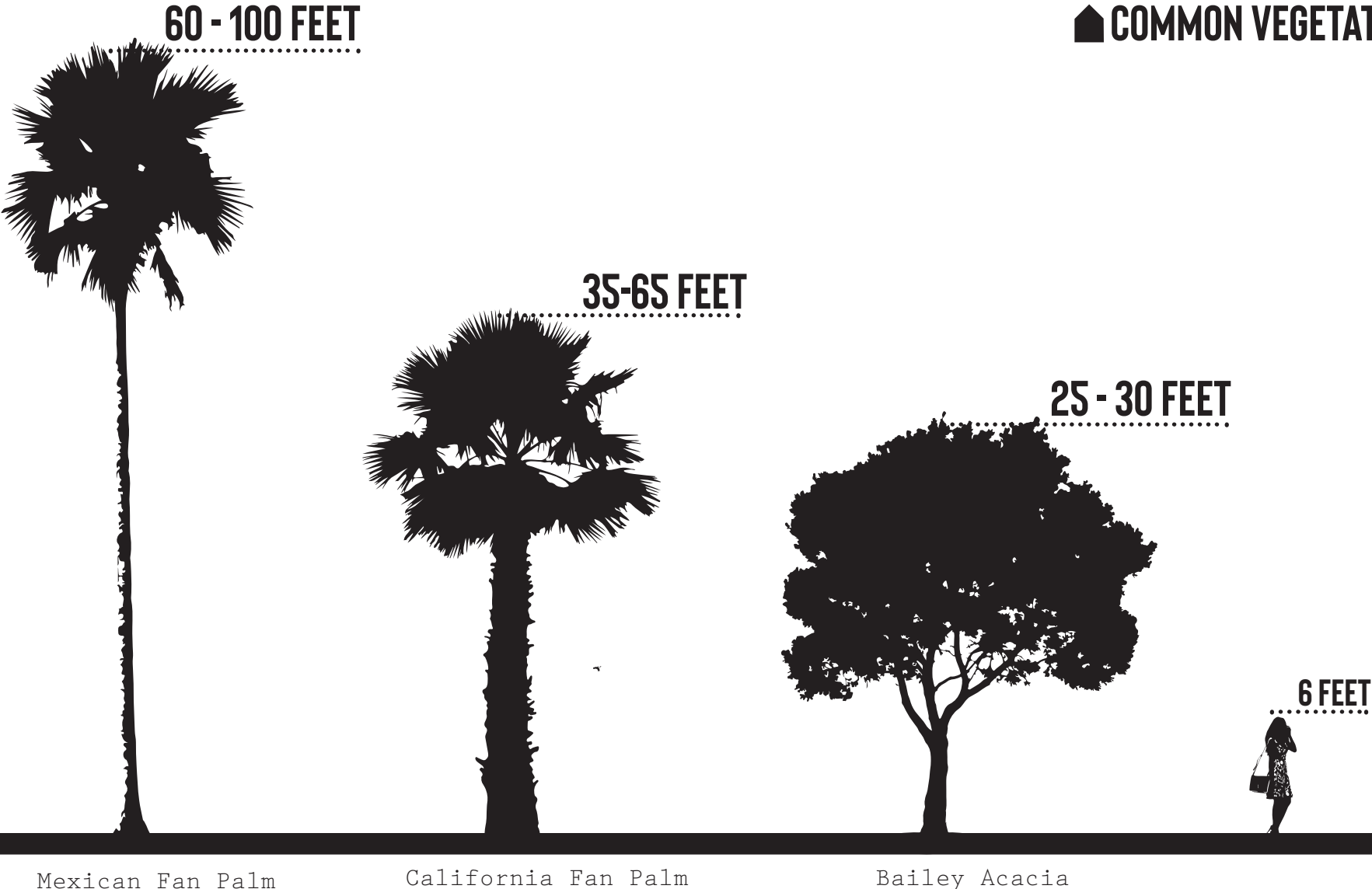
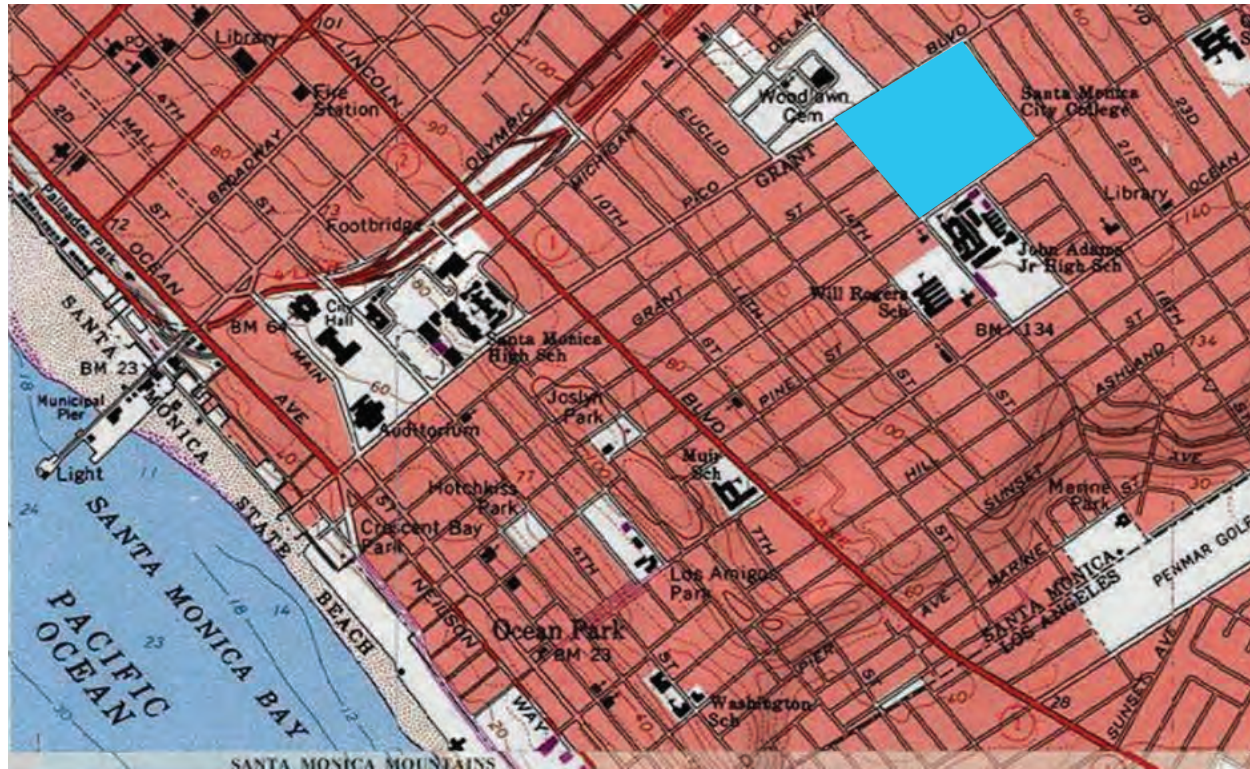



Fig. 66 | Trees

SITE ANALYSIS AND INVENTORY

TOPOGRAPHY

Fig. 67 | Topography | arc-gis



 Santa Monica College

DESIGN OPPORTUNITY:

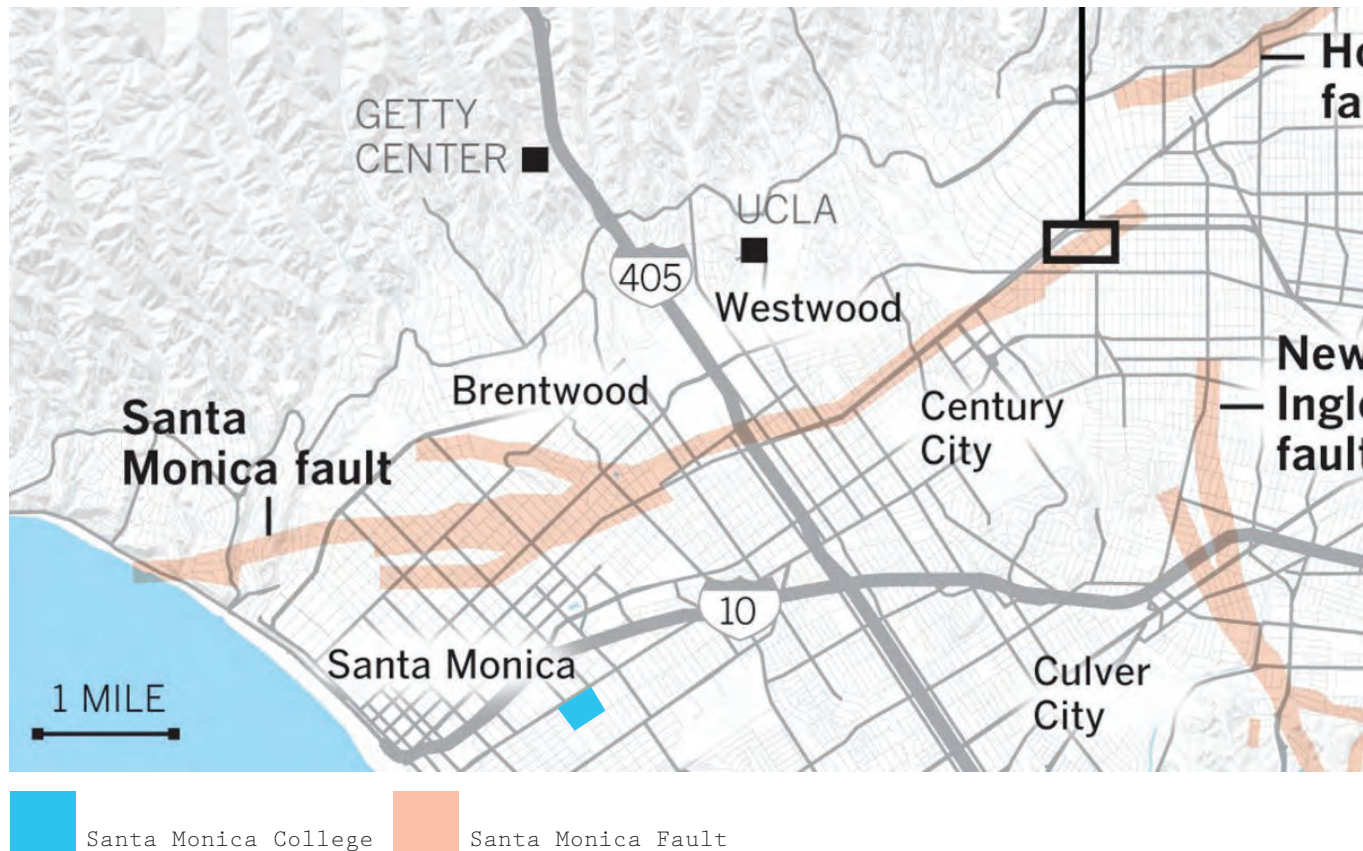
As shown in the above map, Santa Monica sits between 80 and 100' above sea level. Santa Monica College sits at approximately 140' above sea level due to being approximately 1.5 miles from shore. The topography on the thesis site is relatively flat due to its urban setting and the fact that half of it is

a parking lot. The other half of the lot is mostly residential but even that looks pretty flat with very little change. Any interesting design elements in terms of topography will have to be built into the site. Any small elevation changes on the site would likely be excavated and taken care of during the construction of the building if it was actually going to be built.

SITE ANALYSIS AND INVENTORY

EARTHQUAKES

Fig. 68 | Santa Monica Fault | Raoul Ranoa



DESIGN OPPORTUNITY:

California is no stranger to earthquakes. This site in particular is located within a mile of the Santa Monica fault shown in red in the above diagram. This will pose an interesting design opportunity as I have never designed for earthquakes. Further investigation will need to be done into how to

account for the building to react to earthquakes. The structure must somehow account for seismic activity. Base isolators have been proven effective for dampening the effects of shaking on a building, however the design is too early in its process to have specific examples on how the building will respond to this design opportunity.

SITE ANALYSIS AND INVENTORY

SANTA MONICA COLLEGE



As mentioned earlier in this document, Santa Monica College was selected for the project location. This was due to the rapid amount of change happening on this campus. This 2-year transfer college is a transitional passageway to adulthood for many. A new type of student housing deserves to be designed for a place with no student housing at all. This thesis will serve as a model for student housing at other colleges like Santa Monica College as well.

SANTA MONICA QUICK FACTS:

- #1 transfer college to UCLA, USC, and U of C systems.
- Active Student Life
- Over 100 degrees and certificates
- More than 30,000 students enrolled per year
- 35 acre main campus with 5 satellite locations
- In state tuition \$1,142 per semester.
- Out-of-state \$8,078 per semester.

Fig. 69 | SMC Quad | SMC



SITE ANALYSIS AND INVENTORY

CAMPUS DESIGN AESTHETICS

Fig. 70 | SMC IT Center | SMC



SMC IT CENTER

This building is located right across from the chosen thesis site. This modern design was completed in 2016 and was an 14,000 square foot addition to the campus main library.

Fig. 71 | Media and Design | SMC



CENTER FOR MEDIA AND DESIGN

Located on one of their nearby satellite locations, SMC's Center for Media and Design is a striking learning space for its students. This building was an addition and renovation of the current facilities finished in 2018.

SITE ANALYSIS AND INVENTORY

CAMPUS DESIGN AESTHETICS ▲

Fig. 72 | SMC Performing Arts Center | DLR Group



PREFORMING ARTS CAMPUS

This building designed by the DLR Group, is a 20,000 square foot structure located a couple of blocks from the main campus. This building was finished in 2013.

Fig. 73 | Student Services Center | Huitt-Zollars



STUDENT SERVICES BUILDING

This project consolidated all student services into one hub on the main campus. This large building is a very recent project and was the second design after the first one came in 25% over budget.

SITE ANALYSIS AND INVENTORY

CAMPUS DESIGN AESTHETICS

Fig. 74 | SMC Core Performance Center | Bernards



CORE PERFORMANCE CENTER

This project updated the campus's wellness center and added additional office space for the athletic department. This LEED Platinum project was completed in 2017 and was designed by the award winning firm Gensler.

Fig. 75 | SMC Math & Science | Cannon

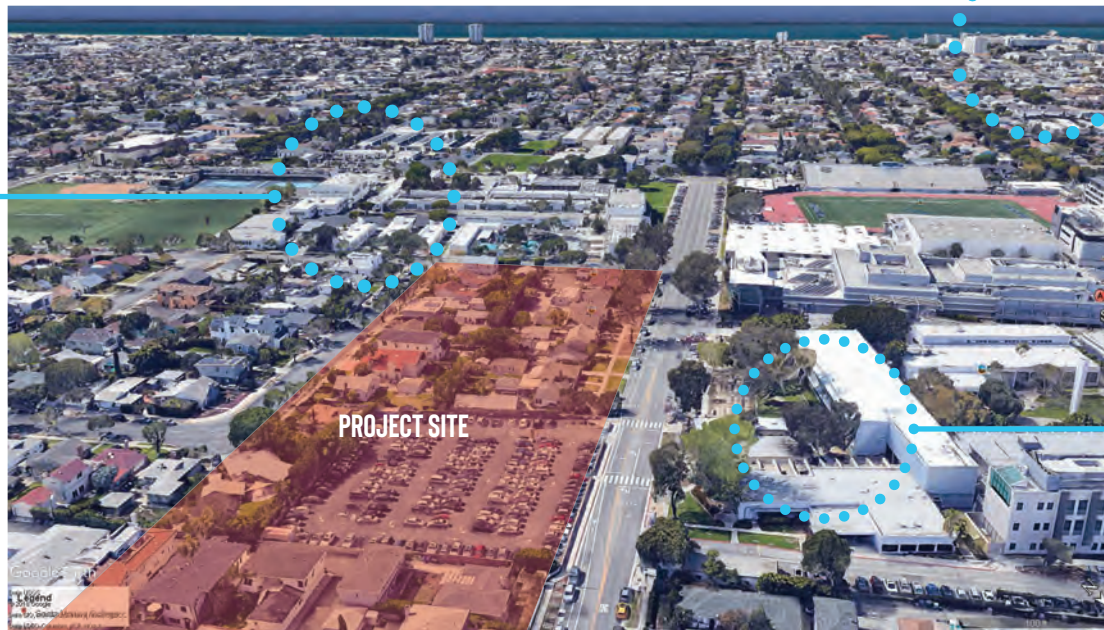


MATH AND SCIENCE BUILDING

This building will be located across Pearl Street from my thesis site. Its designed by CannonDesign and will be replacing very outdated classroom space currently existing on the site. This 110,000 sf building is set to open in 2021.

SITE ANALYSIS AND INVENTORY VIEWS

John Adams
Middle



Santa Monica
Pier and
Downtown

New Science
and Math
Center
Location

Fig. 76 | Site Views West | Google

Beverly
Hills



Downtown LA

SCM Library
and Media

Fig. 77 | Site Views East | Google

SITE ANALYSIS AND INVENTORY

HOME VIEWS

Santa Monica
Mountains



Fig. 78 | Site Views North | Google

Marina Del Ray
and Venice
Beach



Fig. 79 | Site Views South | Google

SITE ANALYSIS AND INVENTORY

SITE PHOTO GRID 🏠



NORTH VIEW FROM CAMPUS



SOUTHEAST VIEW FROM QUAD



NORTHEAST VIEW FROM SITE

SITE ANALYSIS AND INVENTORY

🏠 SITE PHOTO GRID



SITE ANALYSIS AND INVENTORY

SITE PHOTO GRID



SITE ANALYSIS AND INVENTORY

🏠 SITE PHOTO GRID



PARKING LOT VIEW FROM SITE



SOUTHWEST VIEW FROM SITE



VIEW TOWARDS MIDDLE SCHOOL

PERFORMANCE CRITERIA FOR THESIS PROJECT

SPACE ALLOCATION

The building complex will use the site in the most respectable way possible. The current density of the project site is very low for being near a higher education institution. It will increase the population density of the site while not being too much of a burden on the surrounding context. The surrounding site infrastructure will be built to withstand such an increase by increasing the amount of crosswalks to the campus etc. Individual Spaces will be allocated their needed amounts of space by understanding how much space is necessary for the individuals spending time in the space and by looking at past student housing models and figures. The spaces will need to be efficient to be an effective model for higher education as if too much space is allocated to certain uses it may come across some criticism to no longer being a financially stable model for the future to campus administrators. Spaces and building program elements will only be allocated to spaces that can help individuals with the transition to adulthood and not expensive amenity spaces like gyms or pools for example. Also spaces like parking and mechanical will be incorporated underground as much as possible to not have the surrounding context having to constantly look at them. The code will also be very helpful in understanding how much space to allocate to which spaces.

ENERGY CONSUMPTION

As designers we have a large responsibility to be looking out for the planet and its future. We can no longer argue for not including energy efficient ideas and tactics into our designs. This also increases the amount of instruction that needs to be done on this measure to the use of energy efficient tactics to our youth. This can be done by simply

including these spaces as much as possible so that they become second nature to those spending time in the space. Already well established models like LEED and WELL will be utilized to understand acceptable building energy use measurements. This project will incorporate and intend on the utilization of energy from solar panels. The design will be laid out in such a way that we can incorporate and harvest the energy from the sun. This is due to the fact that California has an increased amount of sunlight available when compared to other states in the country. This is already apparent on SMCs campus as all or most of the parking structures have some sort of solar array on the roof of them.

ENVIRONMENTAL PERFORMANCE

Environmental performance will be measured based on the amount of environmentally friendly tactics and ideas used in its design. It will rely on past data and ideas implemented in case studies and other buildings of similar typologies located in the west coast at nearby universities. There will be a sustainable strategies passive systems diagram included on the final boards to measure the amount of passive systems included into the design.

BEHAVIORAL PERFORMANCE

The goal for any building is to be used. Building spaces that would not be used would be a waste of time and money so therefore importance will be placed on selecting the right settings and making them useful and attractive in order to improve the amount of time that building users will be spending in them. This being said, most spaces that are private will need to be located farther away from spaces that are going to have high traffic to give

users more privacy. The site will respond accordingly to the increased amount of use. Social spaces should be located as the center part of the design and be accessible to all who need access.

PSYCHOLOGICAL IMPACT

Architecture is the human body's internal visceral responses to the built environment. Materiality, location of spaces in relation to others, physical presence, and internal temperatures all have effects on the body's response to its environment. This thesis project will pick building materials that are both current and will help people overcome psychological loss liminal conditions. It will chose materials based on the building uses but will be comfortable for users to call home. Spaces will be located where they will not ostracize certain groups of people or individuals. Also there have been many studies found that spending time in nature increases overall happiness and human well-being so incorporating the ability for building inhabitants to be close to nature of outside will be key to a successful design. Psychological impact will be measure on viewers analysis of the drawings, diagrams and renderings based on whether the spaces are home-like, relate-able to the age group, and not ostracizing in nature.

ENVIRONMENTAL IMPACT

The environmental impact will be measured based on the amount of passive strategies incorporated into the building. It will also be measured based on the fact that providing housing to a college where students are traveling upwards of 2 hrs by car is more environmentally friendly than driving everyday. For more on environmental impact see environmental performance section.

CODE COMPLIANCE

It is our duty as designers to protect the health safety and welfare of the public. This means design needs to be accessible to all, safe to occupy, and meeting the requirements set forth in the building code. We as designers need to design buildings that are accessible to all. Accessibility should not have to be built into design but rather design should just be accessible in the first place. This will be measured using the IBC building code as a guideline to building accessible buildings. As well as general safety measure will be enacted into the design including egress and fire separation walls. Due to the fact that this thesis site is located in a seismic zone it is incredible important to be aware of this while designing and to have a structure designed to withstand seismic activity.

COST

Cost is a driving factor in the creation of this design but is not going to be limiting to the design of this thesis. This thesis will be cost effective by focusing on including spaces that are not extra add-ons that cost a ton of money. The spaces that are included will be educational in nature or will help people overcome liminal conditions experienced in emerging adulthood. The building is for a community college and costs of materials and construction should be chosen to make the building affordable in that context. Doing so will allow the building occupants to afford to live in the housing and therefore will be a critique to the current trends in student housing.

SPATIAL SQUARE FOOTAGE REQUIREMENTS

SPACE	APPX. NUMBER OF SPACES	INDIVIDUAL ROOM DEMENSIONS	SQUARE FOOTAGE	TOTAL SQ. FOOTAGE
Suite Style Single Rooms	53	10' x 10'	100	5300
Suite Style Double Rooms	212	12' x 15'	180	38160
Micro-Studios	50	25' x 10'	250	12500
Suite Style Bathrooms	150	10' x 6'	60	9000
Makerspace	1	100' x 100'	15000	15000
Art Space	4	10' x 20'	200	800
Performance Space	2	30' x 30'	900	1800
Computer Labs	3	40' x 40'	1600	4800
Market	1	60' x 30'	1800	1800
Coffee Shop	1	60' x 30'	1800	1800
Student Lounges	12	40' x 40'	1600	19200
Social Kitchens	12	40' x 10'	400	4800
Social Laundry Rooms	12	20' x 20'	400	4800
Classroom Space	6	30' x 40'	1200	7200
Campus Departmental Offices	3	30' x 40'	1200	3600
Music Practice Spaces	10	10' x 10'	100	1000
Outdoor Terraces	7	40' x 10'	400	2800
Faculty Apartments	1	40' x 40'	1600	1600
Visiting Scholar Apartment	1	40' x 20'	800	800
Total:	541		29590	136760

Fig. 80 | Spaces Sq.Ft.

SPACE ADJACENCY MATRIX

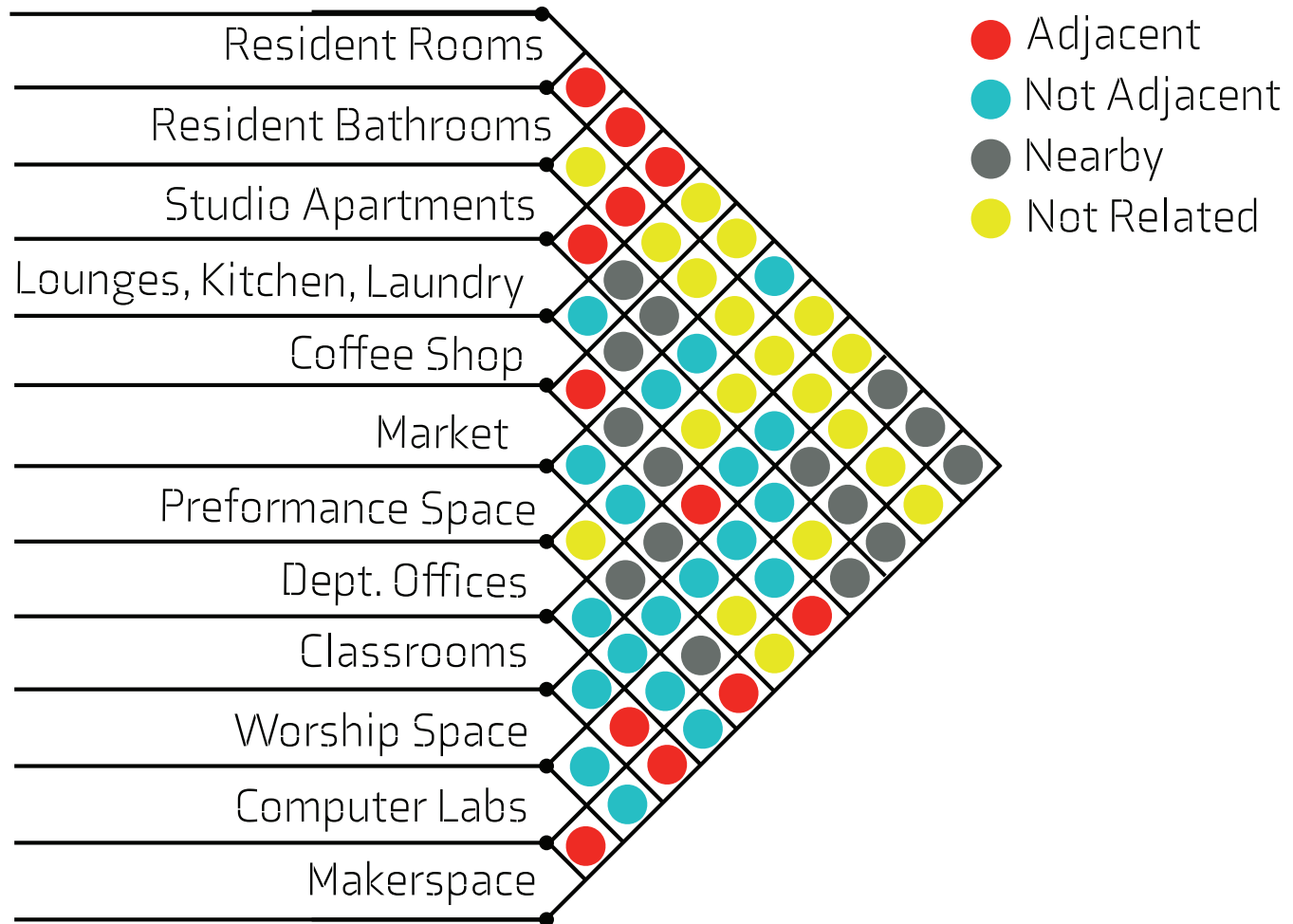


Fig. 81 | Matrix

SPATIAL INTERACTION NET

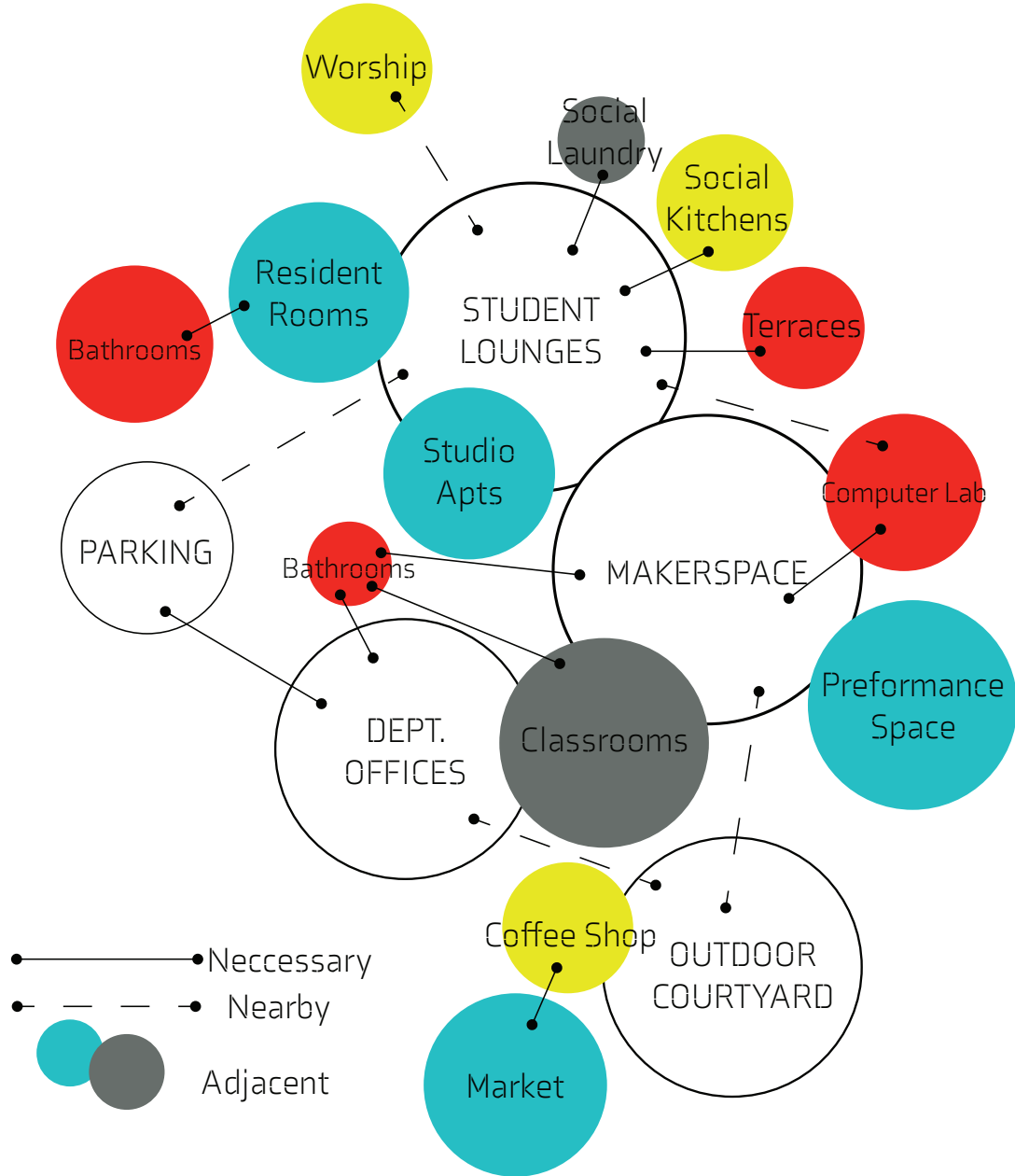


Fig. 82 | Bubbles



LESS

— is —

MORE

-Mies Van Der Rohe

OVERCOMING
OVERCOMING
OVERCOMING
OVERCOMING
OVERCOMING

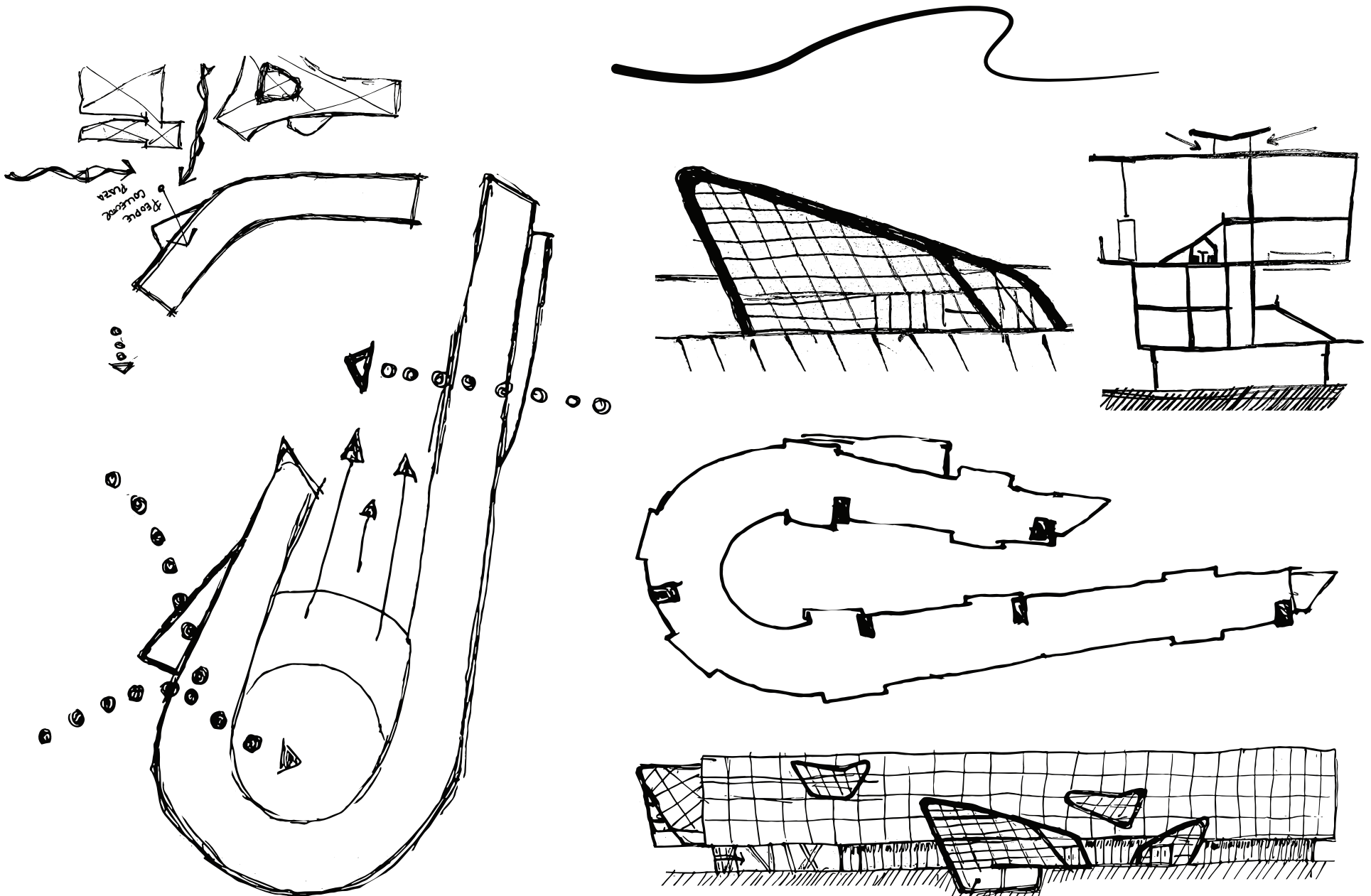
THE THESIS DESIGN

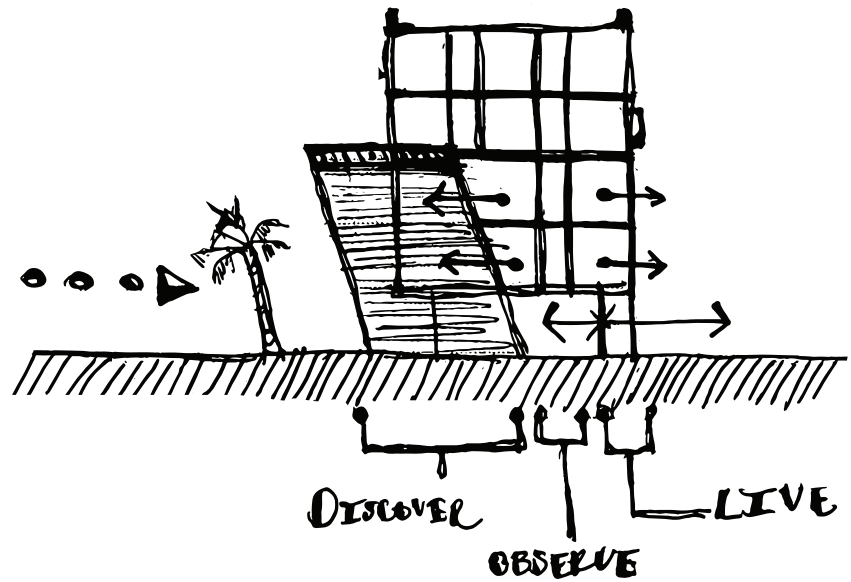
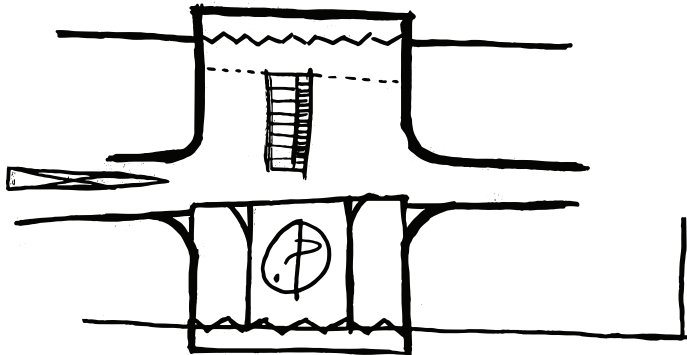
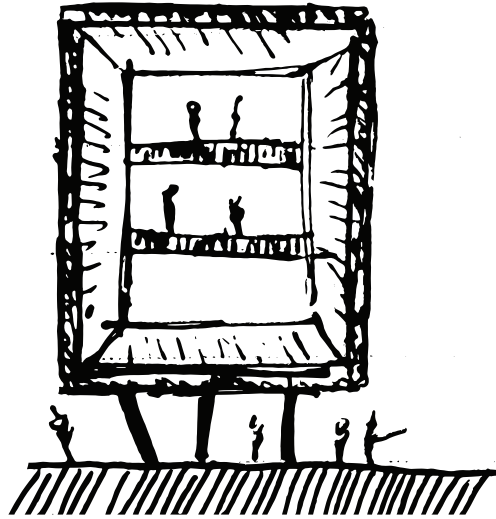
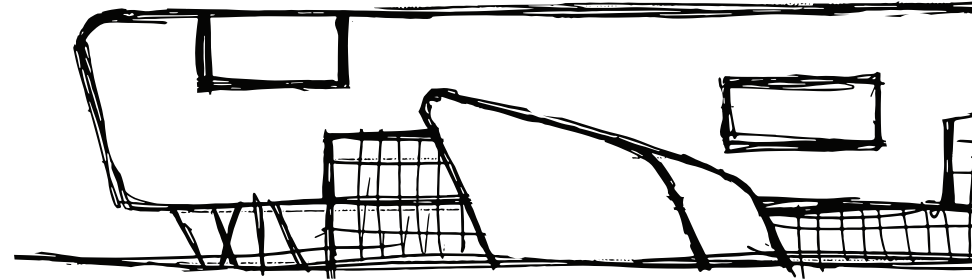
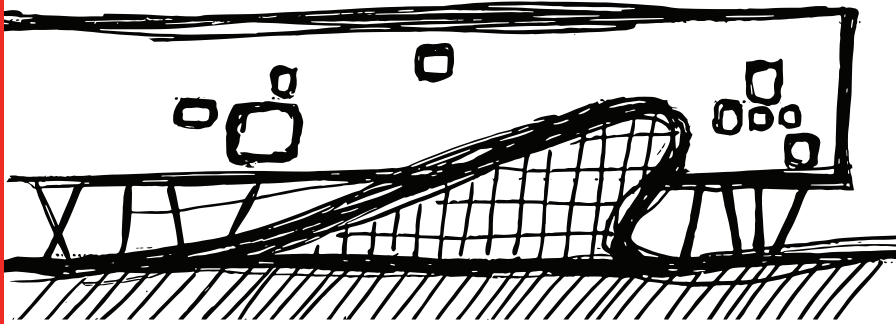
A proposal.

Guiding
individuals
through liminal
conditions on
the pathway to
adulthood.

PROCESS SKETCHES

The very beginning.





THE FORM

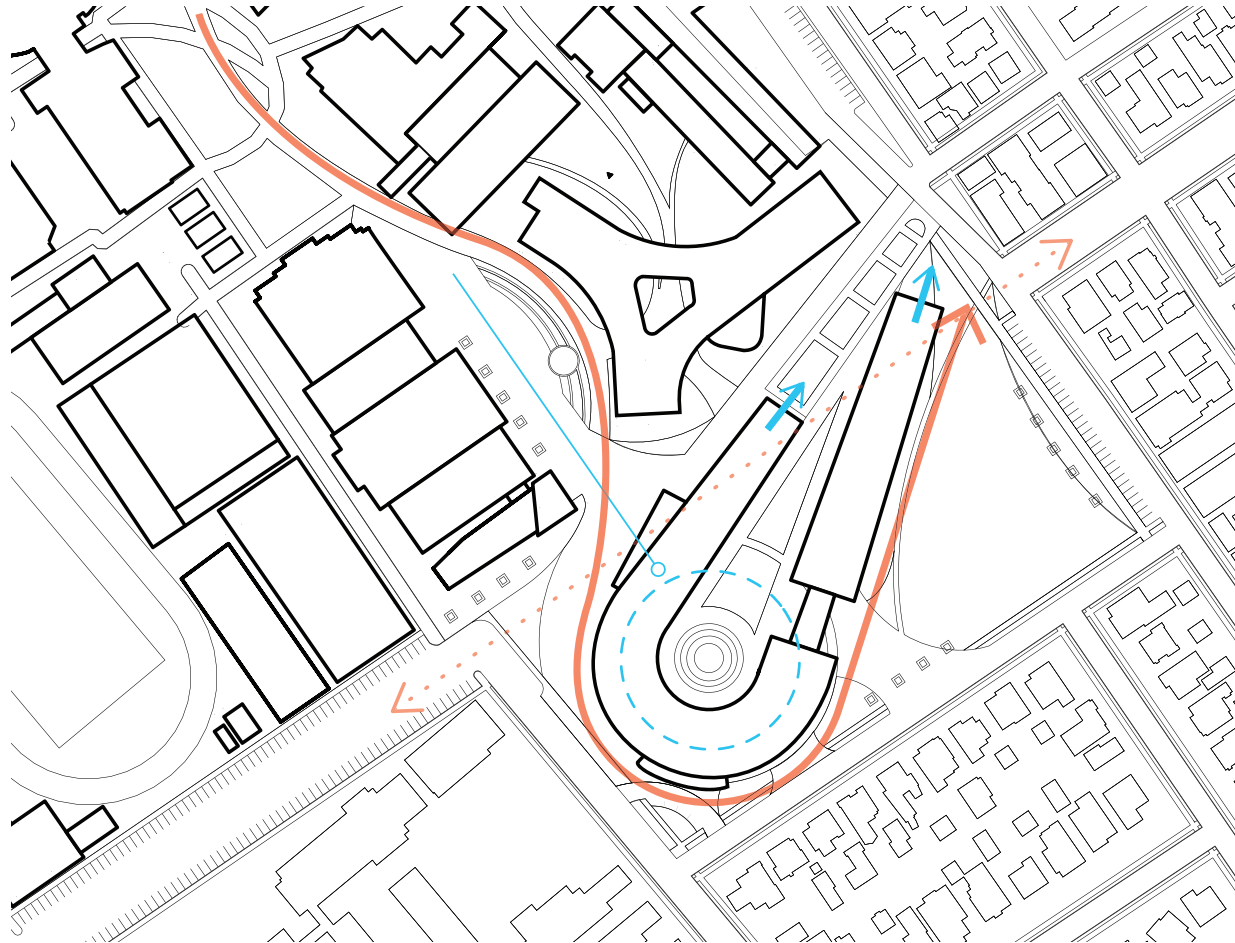
The Existing.



EXISTING SITE CONDITION

Fig. 84 | Existing

The existing site condition diagram shows the disconnect between the site and the campus as a whole. Interweaving the proposal with the lines of the current campus buildings was a major driving factor in the design.



PROPOSED WITH AXES OF INFLUENCE

Fig. 85 | Proposed

Acting as a threshold to the campus. Some major changes have occurred as Pearl Street was closed off. The building wraps in on itself along the tangent of the existing infrastructure to become a gate to the campus. The form is also driven by the views to the mountains to the north and the ocean to the west.

THE FORM

Disruption in order.

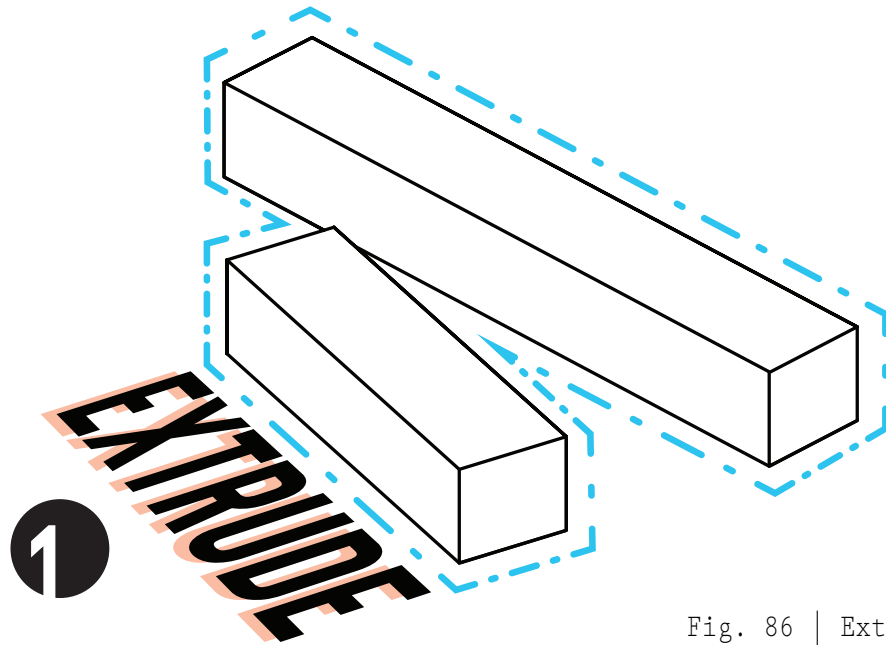


Fig. 86 | Extrude

Extruding two rectangles to become the main part of the mass. Two bodies the child and parent.

THE FORM

Disruption in order.

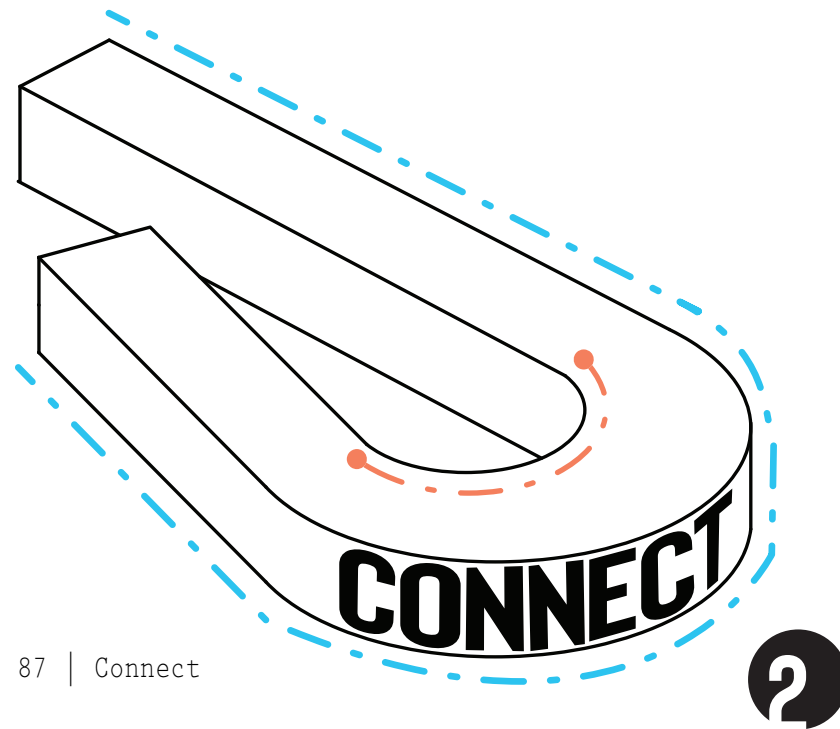


Fig. 87 | Connect

Connecting them at the heart to form a courtyard which allows the students to view and observe the community in which they live in.

THE FORM

Disruption in order.

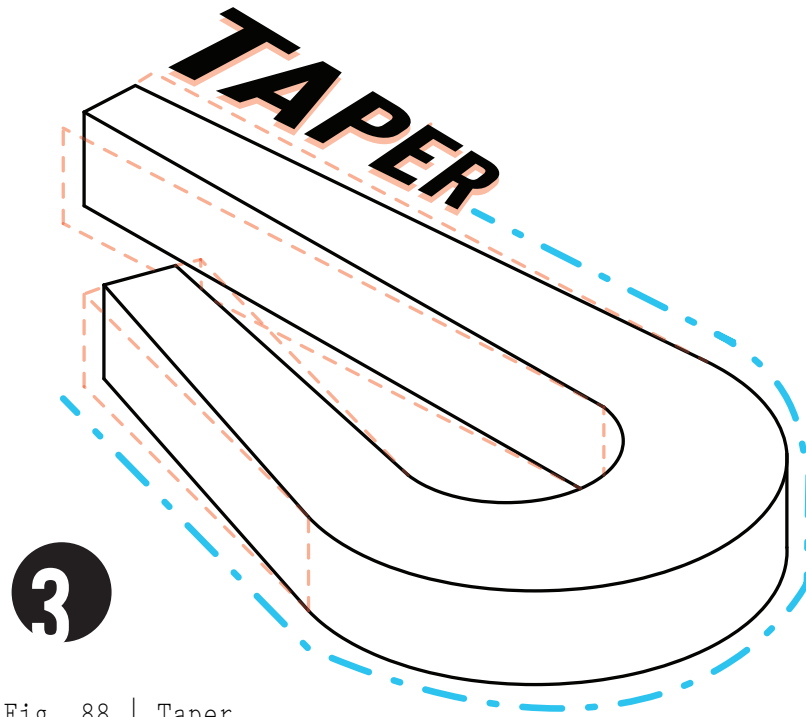


Fig. 88 | Taper

Tapering the ends of the main mass allows for tension to be released from the courtyard and provides views to the Santa Monica Mountains in the distance.

THE FORM

Disruption in order.

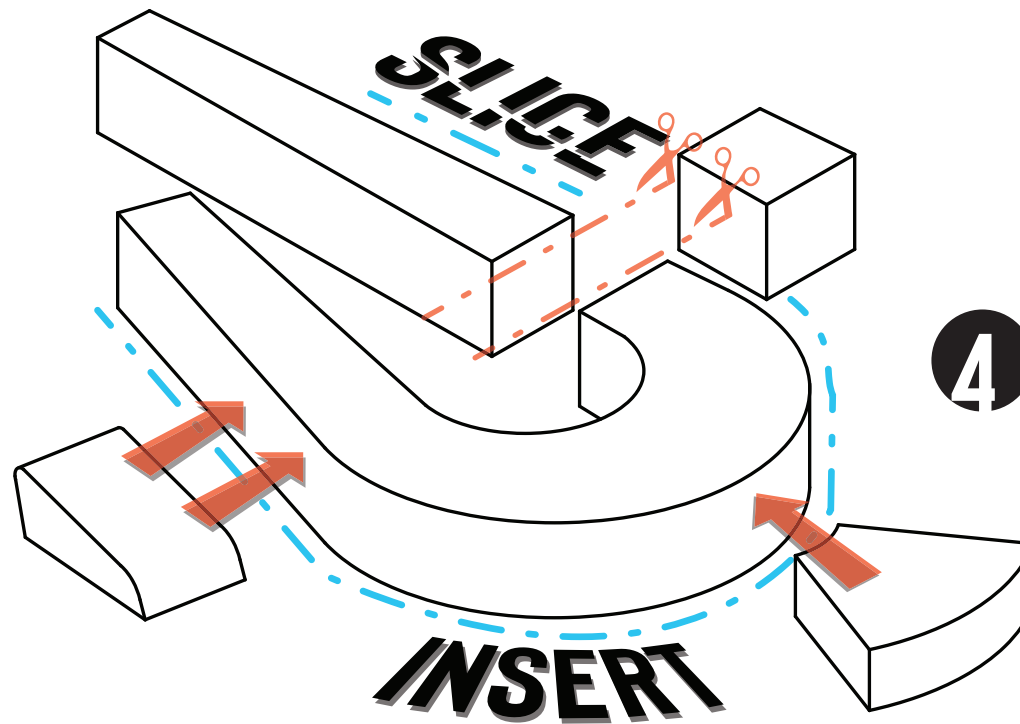


Fig. 89 | Insert

The makerspace is inserted into the mass on axis with the existing quad. The Residence hall's main entry is inserted to allow for the rite of separation between the parent and the child to occur. A slicing the of the form allows for a transitional liminal bridge between the now separated forms.

THE FORM

Disruption in order.

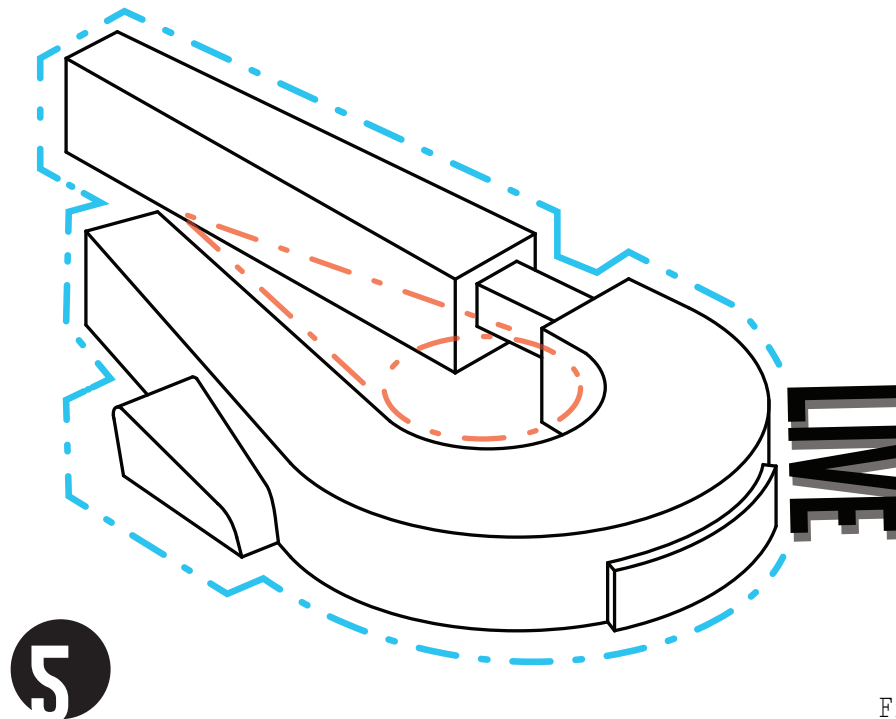


Fig. 90 | Live

The building itself is supposed to be a centering and grounding act for the campus.

It's all in the numbers.

1 EMPHASIS ON IDENTITY EXPLORATION

Identity building is a main focus of the design and is crucial to the development of an emerging adult.

2 EMPHASIS ON SOCIAL SPACES

With their previous social circles destroyed residents must develop and maintain new ones while managing their studies.

3 225,000 SQ. FT.

This building while large argues for a mixed-use academic typology rather than the single-use model often found on campuses all across America. This building provides a mixture of housing, offices, academic, and retail spaces necessary for development.

4 APPX. 810 BEDS

The building provides just over 800 beds for a campus that has no housing on it whatsoever. This is just the first step to creating community where no community once stood.

THE SITE PLAN

The building as a threshold.

The building wraps in on itself to become the gate to the campus. It acts as threshold between home, the residential neighborhood to the south-east, and world. Major project elements in the site plan include a courtyard with a sculpture garden and amphitheater. Students can sell their work made in the makerspace in the sculpture garden and develop their political identity at a scheduled debate happening in the amphitheater. Or students can accept their new responsibility to provide for themselves by gardening in the community garden. As the building turns it creates a pie shaped food truck plaza that allows students to discover different identities through food at the many diverse food truck options that will stop by throughout the day. A new campus lawn is created on the east side of the site to allow for the students to fill it with energy and excitement on a nice day. The form itself allows for increased views to both the ocean to the south-west and the Santa Monica mountains to the north. The building itself will shade the courtyard during the day and keep the green field protected from the setting sun at night.

KEY

- 1 Campus Quad
- 2 Food-truck plaza
- 3 Hall Drop-off
- 4 Services/Ramp Entry
- 5 Campus Threshold
- 6 Campus Field
- 7 Amphitheater/Skatebowl
- 8 Courtyard Green
- 9 Community Gardens

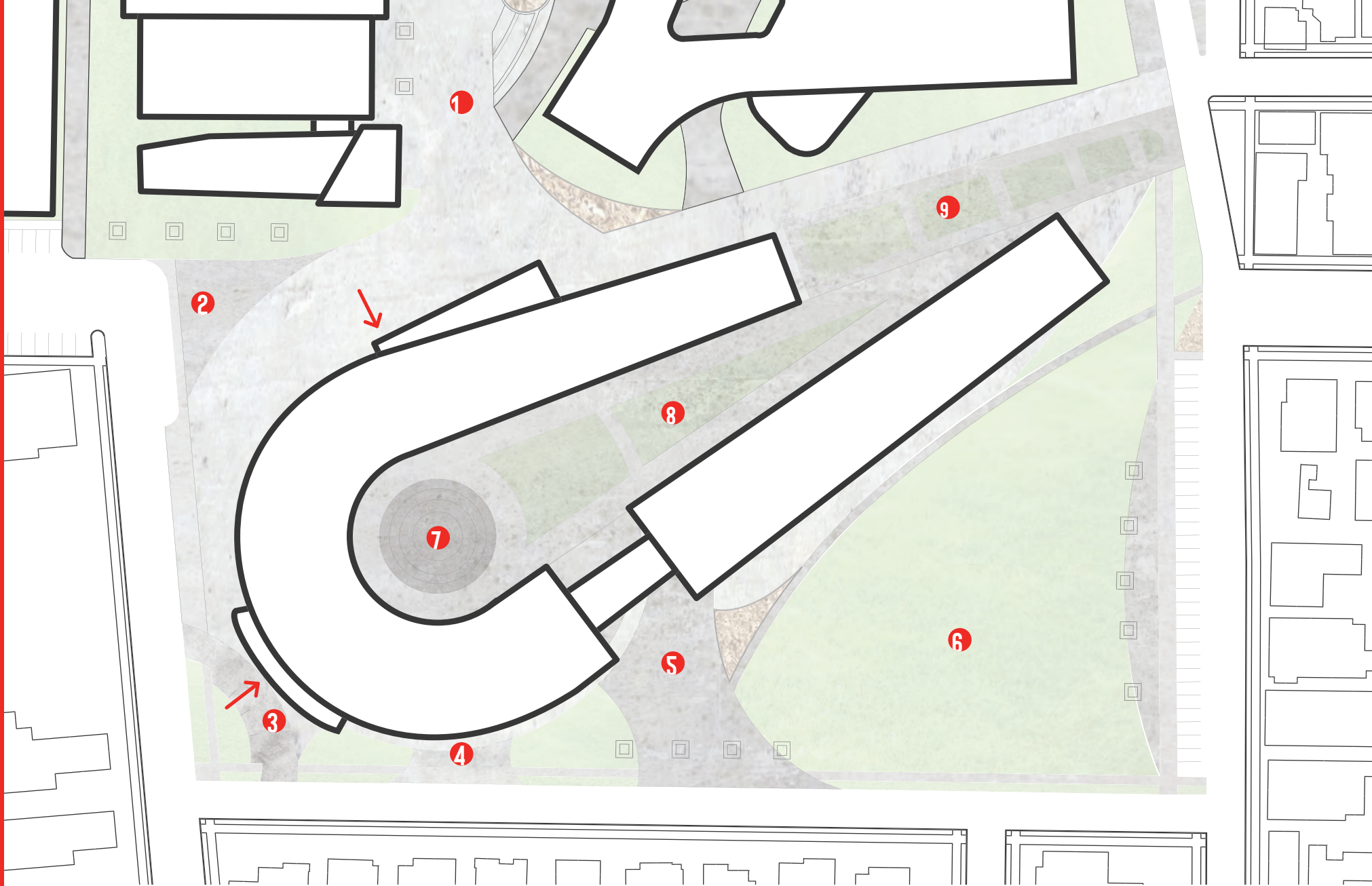


Fig. 91 | Site Plan

SITE PLAN



THE FIRST LEVEL

On the first level you will see the multi-story Residence Hall Separation Lobby where children say goodbye to their parents. You will also find a multistory makerspace containing a collaboration area and a career viewing platform that leads to the courtyard. A smaller coffee shop/bar is right next to the makerspace, fueling the greater campus with the responsibility of managing money. A smaller grocery located near the threshold gates allows residents to shop for themselves. They can choose which food to eat and when with no criticism from their parents. Additional spaces include 2 department offices and 4 collaboration classrooms of various sizes, increasing the live and learn aspect of the building.

KEY

- 1 Hall Atrium
- 2 Makerspace
- 3 Coffee Shop/Bar
- 4 Dept. Office
- 5 Mechanical/Ramp Entry
- 6 Grocery/Retail
- 7 Classroom
- 8 Obstacle Plaza

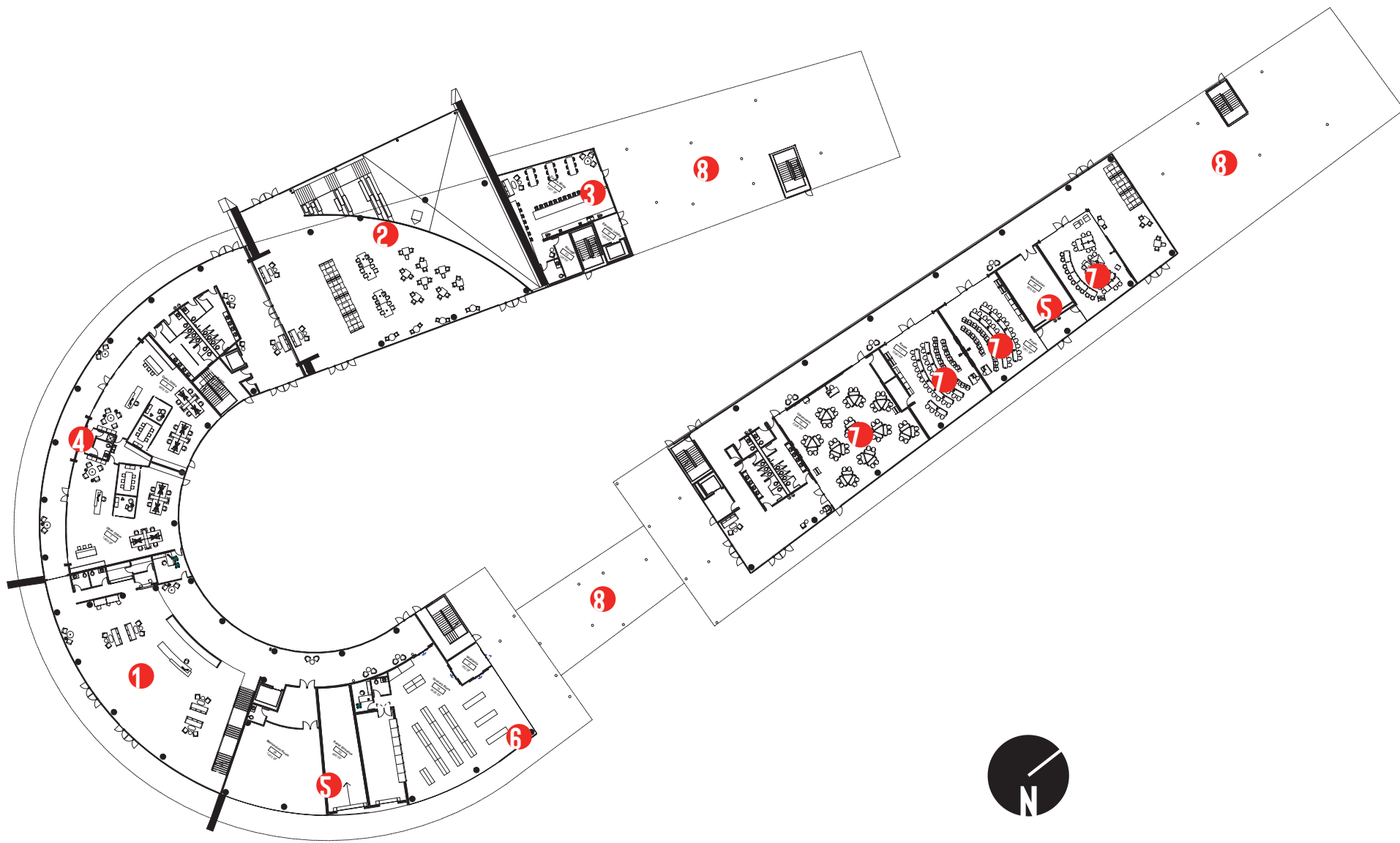


Fig. 92 | Level 1

THE SECOND LEVEL

*Level 3 Similar

On the second and third levels you will find a series of social lounges that provide a moment of release as one walks down the halls. These Social Lounges are sometimes multistory or single story depending on the level you are on and where you are located in the building. They contain both a social kitchen to prepare meals and a social laundry room for the residents. At the end of the halls on every floor are the identity exploration rooms. These range in use and can change based on the student needs and makeups.

KEY

- ① Hall Atrium
- ② 1-Story Social Lounge
- ③ 2-Story Social Lounge
- ④ Identity Rooms/Balconies

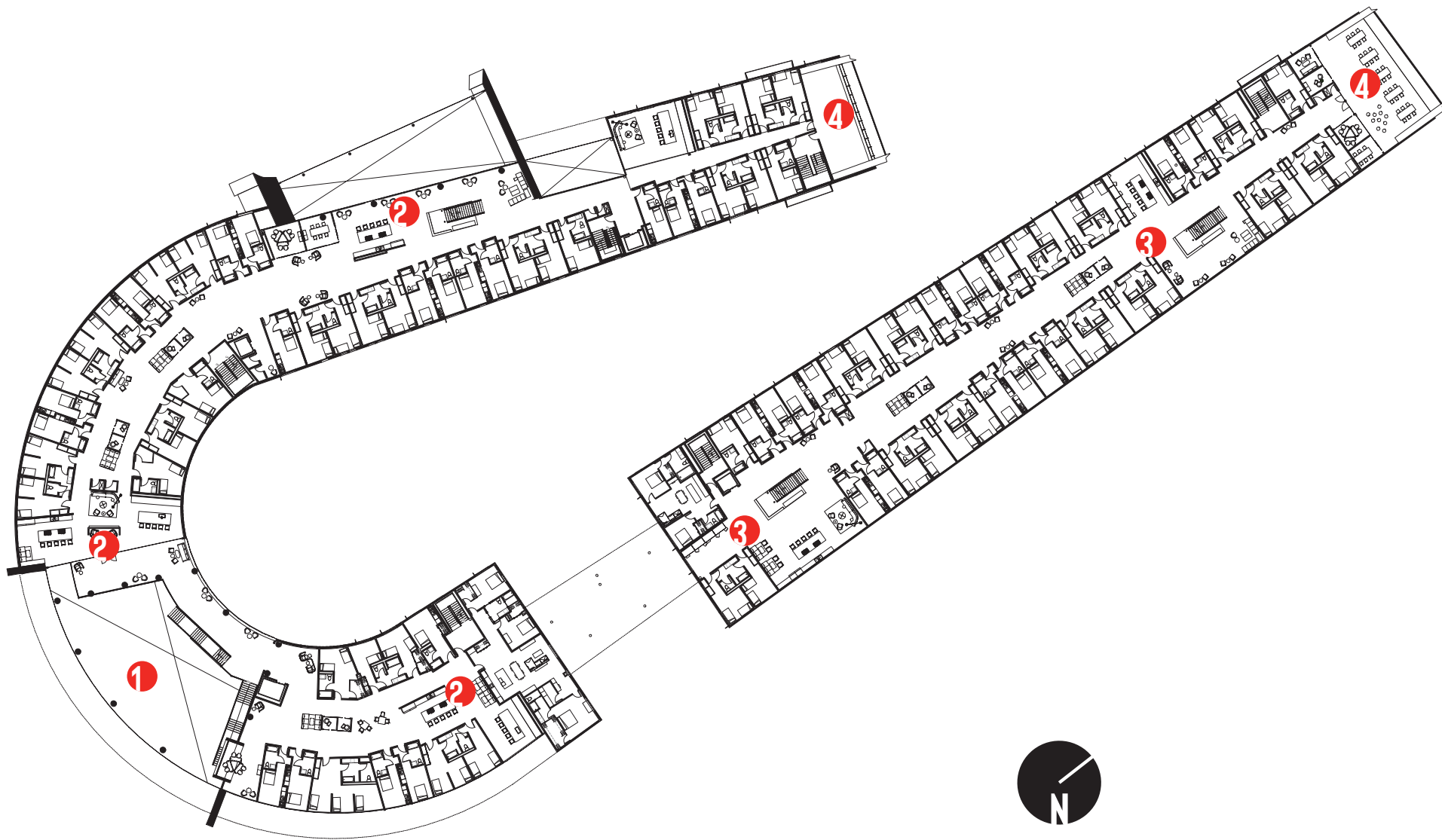


Fig. 93 | Level 2

THE FOURTH LEVEL

*Level 5 Similar

The fourth and fifth level reveals a similar layout but also shows the liminal bridge between the two building masses where students will walk back and forth at all times of the days. An actual representation of a liminal condition.

KEY

- ① Liminal Bridge
- ② 2-Story Social Lounge
- ③ Identity Rooms/Balconies

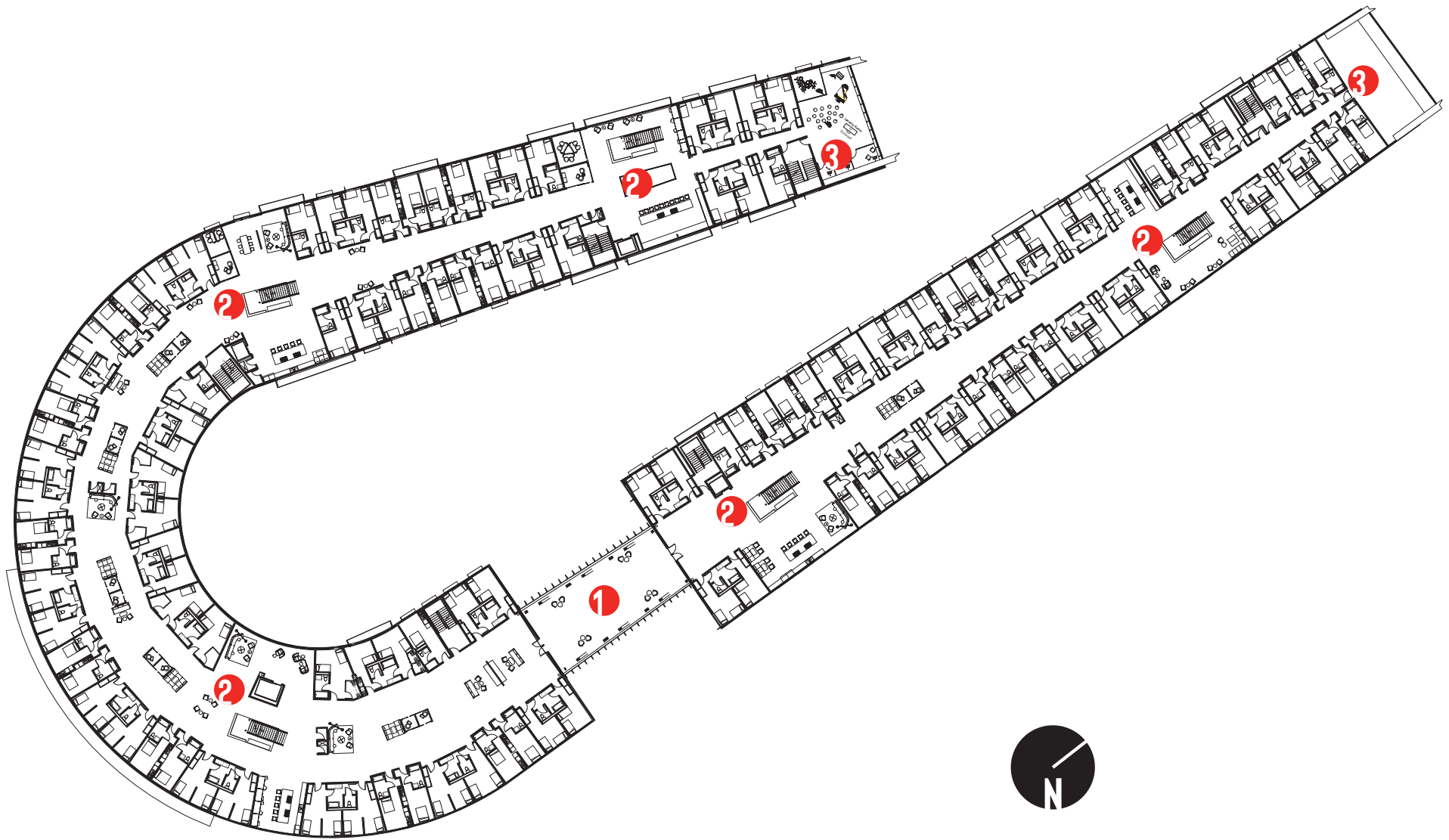
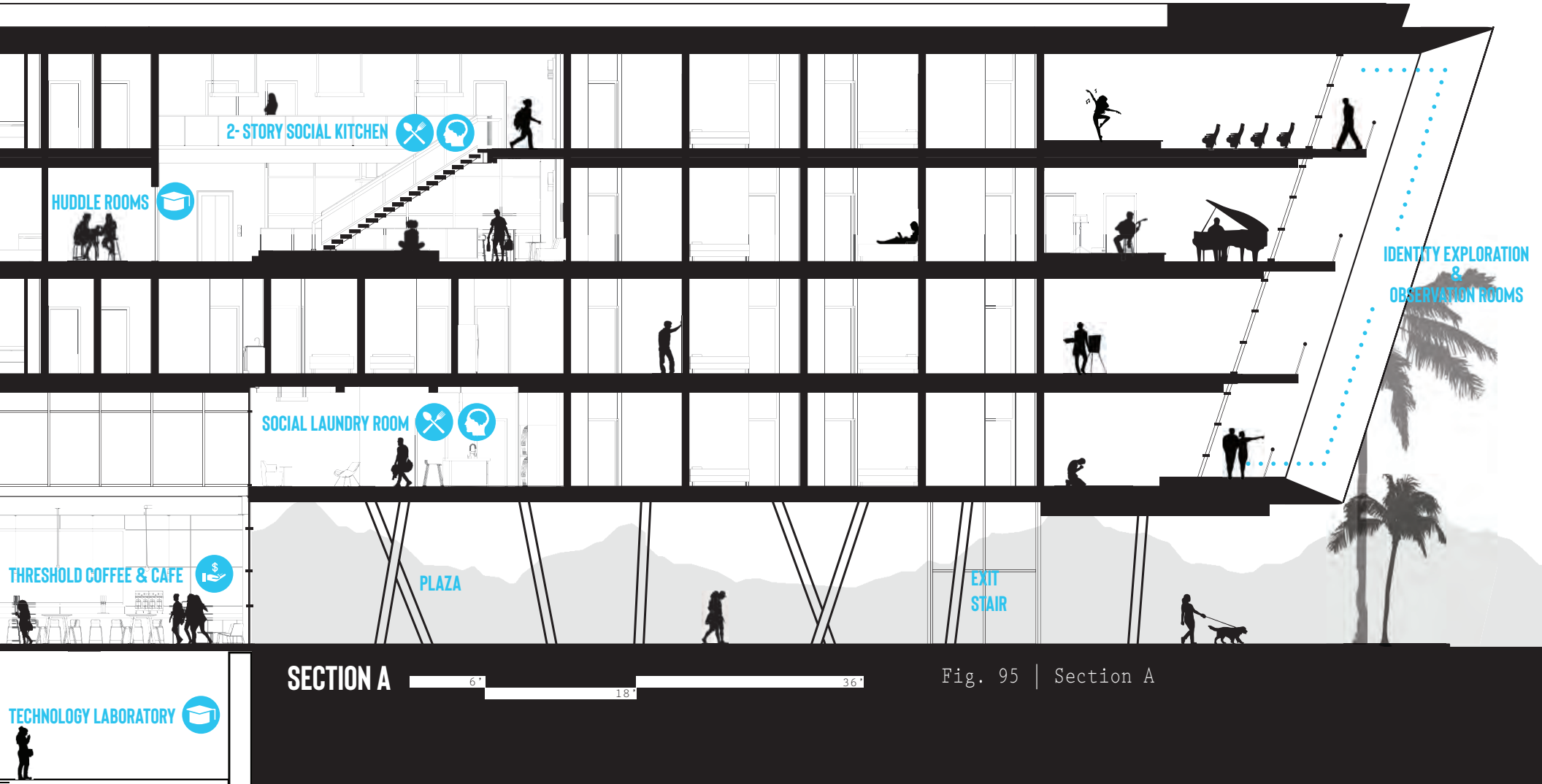


Fig. 94 | Level 4

THE SECTIONS

Focus on identity.

The building sections show the how the identity rooms sit in endcaps of the building. Essentially, they act as a lantern of activity and contain spaces for creative expression and self discovery. Places for residents to practice and record music, create art to sell in the gallery on the first floor, or discover their inner meaning



SECTION A

Fig. 95 | Section A

and self-worth in a small nondenominational chapel. Residents can also gain public speaking skills by hosting a show or program in the black box theatre. Huddle rooms adorn the building and act as small collaborative workstations throughout the building for the residents' study.

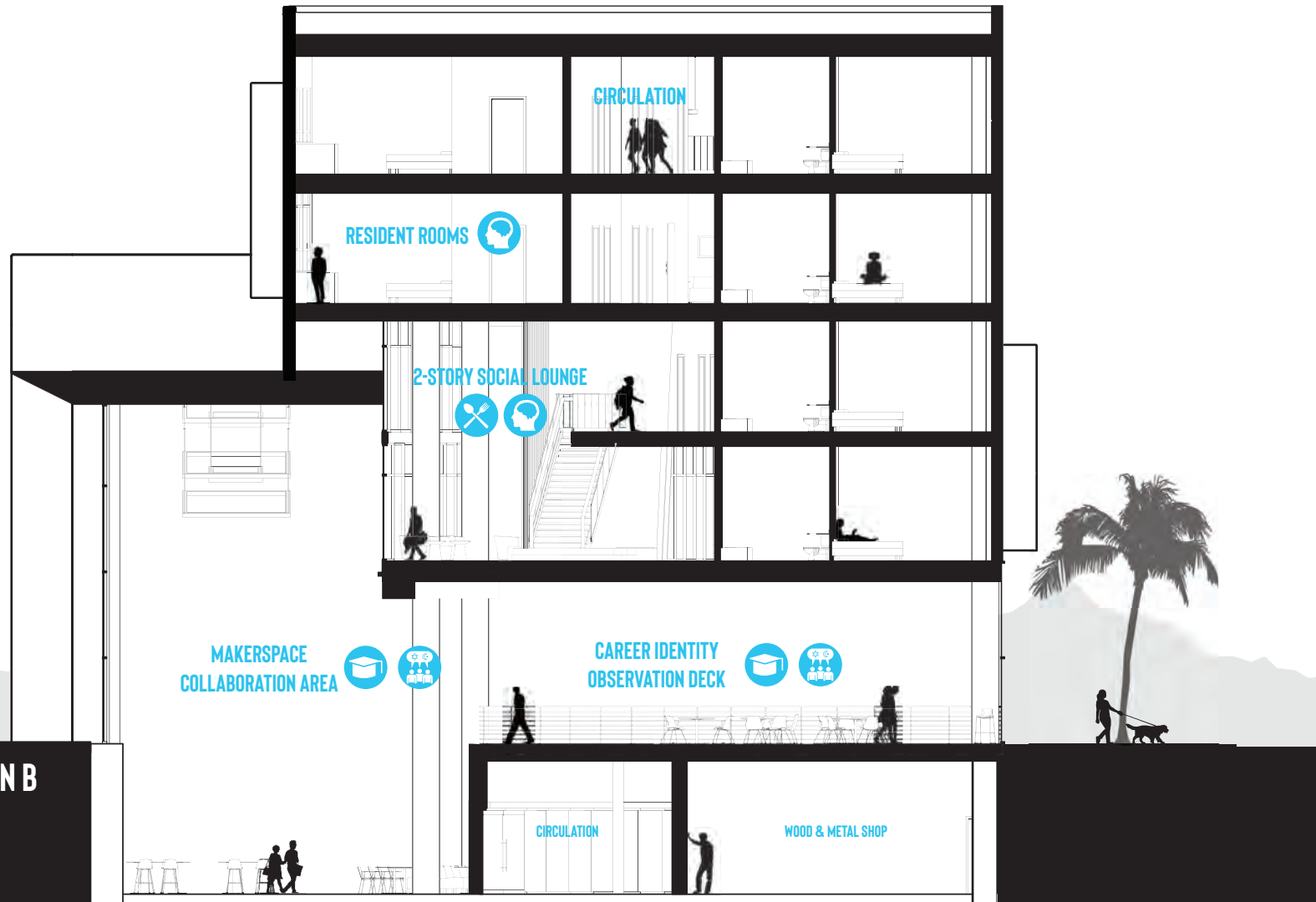


Fig. 96 | Section B **SECTION B**

3 STORY UNDERGROUND PARKING GARAGE

THE UNITS

Because one size doesn't fit all.

THE SOCIALITE

4 Person Suite

- Recent high-school grad
- Developing social-network
- Acquiring conflict management skills
- Looking for the quintessential college experience.

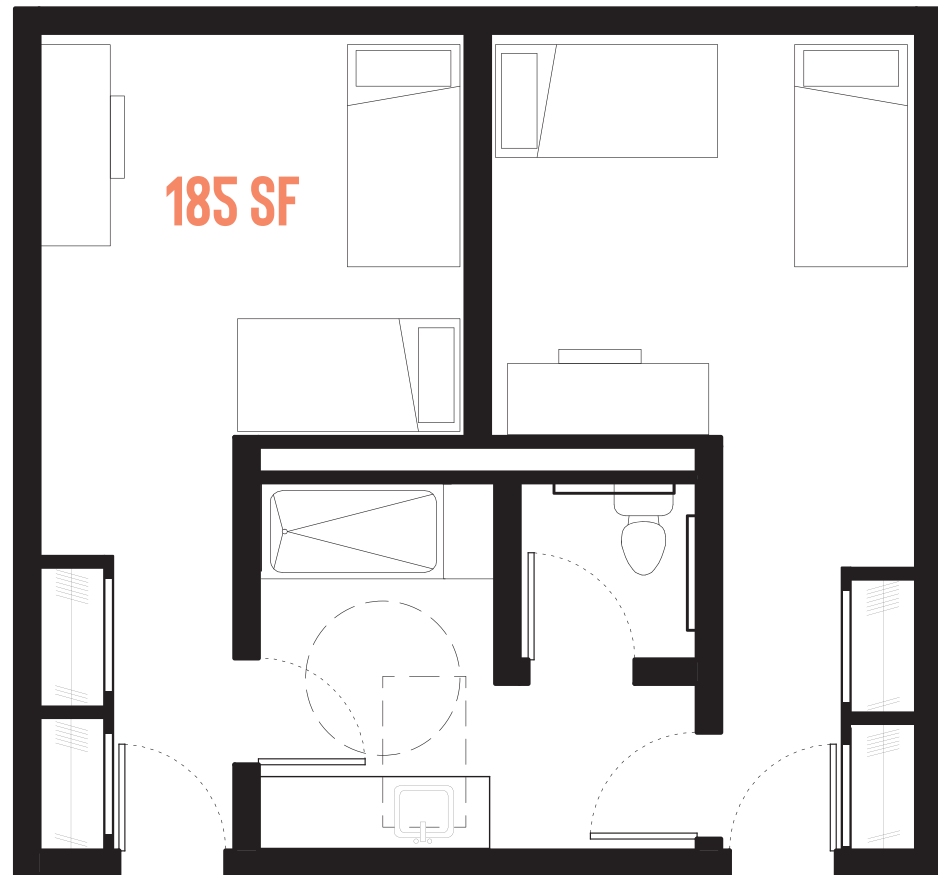


Fig. 97 | Socialite

The Socialite is your quintessential college experience room layout. This student is probably a recent high-school grad who is looking to develop their social network and probably needs to build some conflict management skills by living with a roommate. Living closely with someone is necessary to one's personal development.

THE CAUTIOUS

4 Person Suite

- Recent high-school or 2nd year student
- Needs a physical representation of privacy.
- Reserved yet wanting to develop social-network
- Looking for the close to quintessential college experience.



Fig. 98 | Cautious

The Cautious is for the reserved resident. The one who needs a physical definition of privacy in their space but needs to develop a social network. Their looking for the close-to quintessential college experience.

THE SELF-RELIANT

2 Person Suite

- Upperclassman or non-traditional youthful student
- Involved and socially developed
- Spends very little time in the room due to their busy schedule
- Looking for a place that offers them the responsibility and independence they seek.

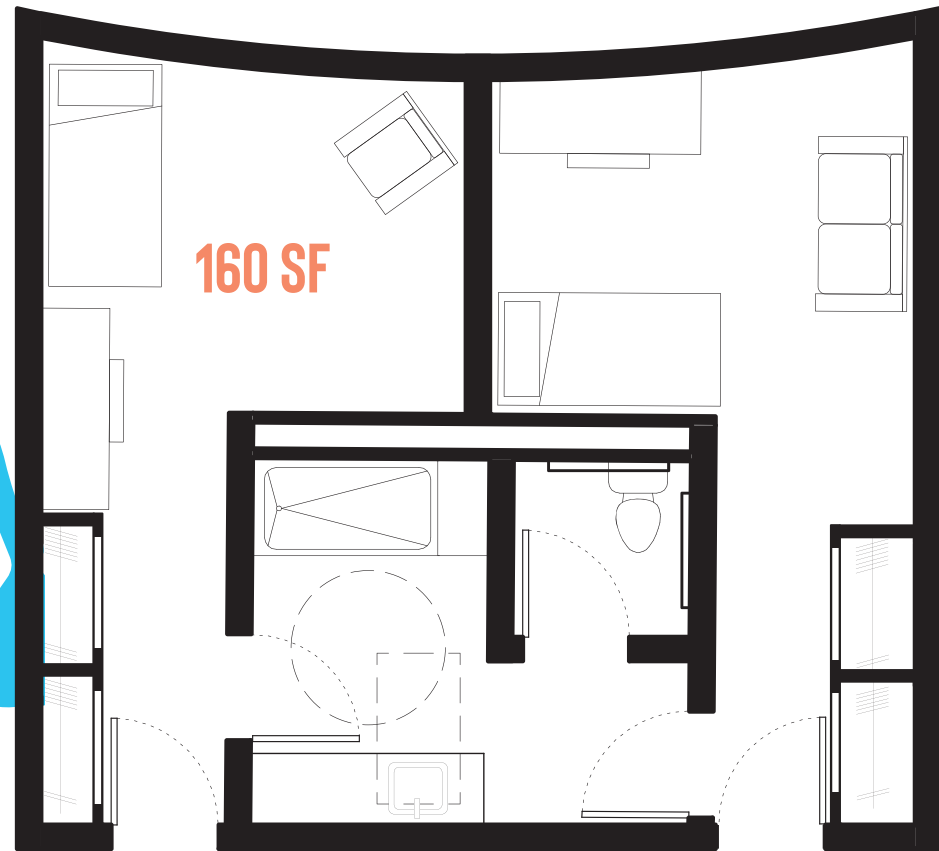
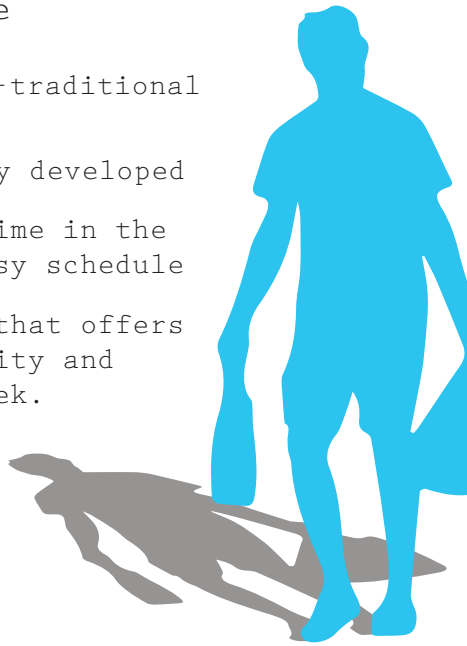


Fig. 99 | Self-Reliant

The Self-reliant is a single room two person suite. This allows for the privacy and independence that an older 2nd year student may be requiring. They want their own space but don't necessarily need an apartment due to their busy schedule.

THE INDEPENDENT

1+ Person Studio

- Non-traditional student who may be older in age than their peers.
- Can live on their own with ease and may be caring for others.
- May be needing temporary housing to allow for a major life change in their life
- Needs a place to live that allows them to live their life totally independent of others.

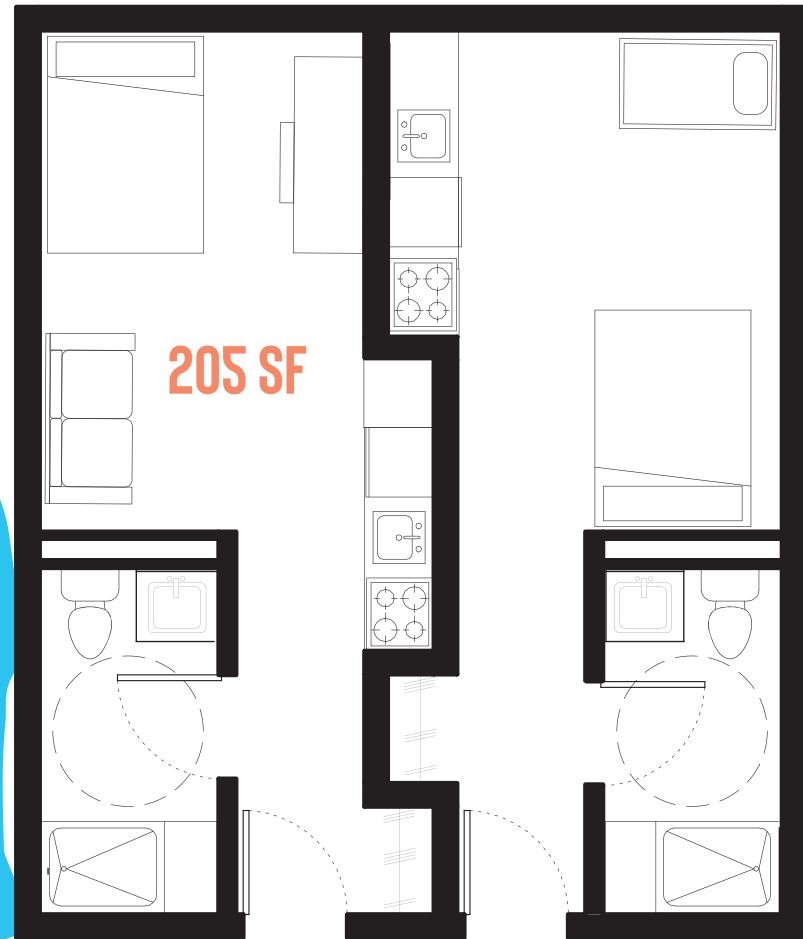


Fig. 100 | Independent

The Independent is for your non-traditional student who may be older in age than their peers. They may be going through a major life change and needing a place to stay while that change happens. They've already been able to live independently on their own for a awhile now and will be able to share their wisdom to the other residents in the building.

THE MAKERSPACE

Discovering the unknown.

This rendering shows an image of a bustling makerspace. The collaboration area below contains various spaces for residents to meet and work on their projects with their peers. The learning stairs connecting the two levels offer a place for students to stop and observe the world and identities around them. Below the observation deck are the wood shop, metal shop, technology labs and fabrication spaces that students can use to explore and test their career skills. Meanwhile residents in the 2nd floor lounge can observe all of this from above.





MAKERSPACE

THE SOCIAL KITCHENS

Understanding new roles.

The social kitchens periodically scattered throughout the hall take advantage of the residents need to accept responsibility for making their own meals. Residents will also have to clean up after themselves, but can learn a valuable lesson in self care. In most residence halls the kitchens are few and far between, oftentimes being shoved into the basement because the typological model is directly relying on another campus amenity, the dining center. With no dining centers in sight residents of this building will have to manage enough time into their days to be able to prepare a meal. Kitchens are often the heart of the home and as humans we often bond over food, so allowing spaces like this to be social will help residents develop and strengthen their social network. Views to the outside are necessary in spaces like these and offer a release as residents walk down the halls to their rooms. The open stair provides a visual connection to the upper floors of the community to allow for both floors to feel welcomed into their one collective space. The stair acts as a piece of furniture therefore providing residents the ability to stop and talk when in passing. Openings to the floors below force passing through residents into the social spaces and allow sounds to travel throughout the building which may lead residents to investigate what all the commotion is all about.





5

4



SOCIAL KITCHENS

THE SOCIAL LAUNDRY ROOMS

Accepting new responsibilities.

Like the social kitchens, the social laundry rooms also take advantage of an otherwise neglected space. Spaces like these provide the opportunity for residents to practice self-care and accept responsibility for their newfound independence. They will learn from their mistakes as they must clean up after themselves after placing a tide pod in the dryer. Once completing the tasks of washing, drying, ironing, and folding it will give the resident a sense of self confidence and self-worth. Making these spaces social may allow individuals to bond over their clothing, an article so directly related to one's identity.





SOCIAL LAUNDRY ROOMS

THE THRESHOLD COFFEE & NIGHT LOUNGE

Managing social situations.

The threshold bar and coffee shop allows residents to manage and cope with new peer pressures found in emerging adulthood. They may come here to study or develop a new social circle. Residents will have to practice impulse control as they manage money and their drinks. This space allows individuals to accept and deal with uncomfortable experiences that are present in fluid social situations. The residents can share and debate their ideas with different identities in flexible seating arrangements under a comfortable and simple material pallet of wood, stone, and concrete.



RESHOLD

Santa Monica College.

DRINKS		BITES	
Tea
Waffle
Juice
Brew
Smoothie

BREWS	GRABS
...	...
...	...
...	...



BARS, CAFES & COFFEE SHOPS



THE COURTYARD AND SKATE BOWL

Partaking in risky behavior.

The courtyard is a greenspace that allows residents to gather and see that they are a part of a collective whole. A global citizen. The amphitheater seating allows individuals to observe the identities presented before them in a dance in the bowl below. The skate bowl offers residents the chance to partake in a risky behavior that is seen necessary to their personal development in a safe way. Students may find themselves presenting their work in the sculpture garden in the distance or passing through the liminal gates towards the campus field for game of frisbee. Here community is brought to life in architecture by allowing the people to infiltrate a fluid transitional space inbetween.





COURTYARD

THE ENTRY APPROACH

A pathway to adulthood.

I hope this gives you an idea of the transformative power that a building like this can have on an individual's life. While the approach to student housing has been stuck in the past this proposal gives opportunity for students to paint their own picture, fill their own silhouette with the identity of their choosing, and move through liminal conditions on the pathway to adulthood with ease.





THESIS APPENDIX

REFERENCE LIST

- Arnett, J. J. (2001). Conceptions of the Transition to Adulthood: Perspectives From Adolescence Through Midlife. *Journal of Adult Development*, 8(2), 69-79. doi: 10.1023/a:1026460917338
- Arnett, J. J. (2015). *Emerging adulthood: the winding road from the late teens through the twenties*. New York: Oxford University Press.
- Arnett, J. (2007). *Adolescence and emerging adulthood A cultural approach*. Chicago: Pearson.
- Blimling, G. S. (2015). *Student learning in college residence halls: what works, what doesn't, and why*. San Francisco: Jossey-Bass.
- Deioma, K. (2019, February 25). Good Times in Santa Monica, California. Retrieved from <https://www.tripsavvy.com/fun-things-to-do-in-santa-monica-1587012>.
- Fuller, T., Singhvi, A., Gröndahl, M., & Watkins, D. (2019, June 4). Buildings Can Be Designed to Withstand Earthquakes. Why Doesn't the U.S. Build More of Them? Retrieved from <https://www.nytimes.com/interactive/2019/06/03/us/earthquake-preparedness-usa-japan.html>.
- GENNEP, A. van., Vizedom, M., & Caffee, G. L. (1960). *The rites of passage*. United States of America: The University of Chicago Press.
- MAHDI, L. C. (1987). *Betwixt and between: patterns of masculine and feminine initiation*. La Salle, IL: Open Court.
- Meyer, J., Land, R., & Baillie, C. (2010). *Threshold concepts and transformational learning*. Rotterdam: Sense Publishers.
- Andrews, K. (2016, February 11). Smart student unit by Tengbom. Retrieved October 9, 2019, from <https://www.dezeen.com/2013/09/29/smart-student-units-by-tengbom/>.
- Becker, L. (2003, August 1). Retrieved October 9, 2019, from <http://www.lynnbecker.com/repeat/Jahn/jahn.htm>.
- Bygningen og tankerne bag. (2019, March 19). Retrieved October 7, 2019, from <http://tietgenkollegiet.dk/bygningen/>.
- Castro, F. (2013, September 24). Studentboende: Student Unit / Tengbom. Retrieved from https://www.archdaily.com/430047/studentboende-student-unit-tengbom?ad_source=search&ad_medium=search_result_all.

Hakka walled village. (2019, July 27). Retrieved October 7, 2019, from https://en.wikipedia.org/wiki/Hakka_walled_village.

Hybel, J. H. (2013, March 6). Tietgen Dormitory / An Imaginary Journey Around A Real Building. Retrieved October 7, 2019, from <https://arcspace.com/bookcase/tietgen-dormitory--an-imaginary-journey-around-a-real-building/>.

Idea 95474: STATE STREET VILLAGE in Chicago, United States. (n.d.). Retrieved October 9, 2019, from <https://architizer.com/idea/95474/>.

IIT State Street Village. (n.d.). Retrieved October 9, 2019, from <https://www.jahn-us.com/iit-state-street-village>.

LUNDGAARD & TRANBERG ARKITEKTER A / S. (2018). THE TIETGEN DORMITORY. Retrieved October 9, 2019, from <http://www.ltarkitekter.dk/tietgenkollegiet>.

Perez, A. (2010, June 21). Simmons Hall at MIT/ Steven Holl. Retrieved October 7, 2019, from https://www.archdaily.com/65172/simmons-hall-at-mit-steven-holl?ad_source=search&ad_medium=search_result_all.

Santa Monica, California. (2019, December 15). Retrieved from https://en.wikipedia.org/wiki/Santa_Monica,_California

Sánchez, D. (2014, February 7). Tietgen Dormitory / Lundgaard & Tranberg Architects. Retrieved October 9, 2019, from <https://www.archdaily.com/474237/tietgen-dormitory-lundgaard-and-tranberg-architects>.

Student Unit - mini compact house for students by Tengbom Architects. (2015, October 31). Retrieved October 9, 2019, from <https://homeworlddesign.com/student-unit-mini-compact-house/>.

Strange, C. C., & Banning, J. H. (2001). Educating by design: creating campus learning environments that work. San Francisco: Jossey-Bass.

Simmons Hall Residence - Data, Photos & Plans. (n.d.). Retrieved October 7, 2019, from <https://en.wikiarquitectura.com/building/simmons-hall-residence/>.

Yanni, C. (2019). Living on campus: an architectural history of the American dormitory. Minneapolis: University of Minnesota Press.

REFERENCE LIST (PHOTOS)

Andrews, K. (2016, February 11). Smart student unit by Tengbom. Retrieved October 9, 2019, from <https://www.dezeen.com/2013/09/29/smart-student-units-by-tengbom/>.

Black Box Theater. (n.d.). Retrieved from <https://www.mainstreetlanding.com/performing-arts-center/event-meeting-spaces/black-box-theatre/>.

Building America climate zone map. (n.d.). Retrieved from <https://baso.pnnl.gov/images/building-america-climate-zone-map>.

Byrne, M. (2017, May 9). The Absolute Best Coffee Shop to Work at in New York. Retrieved from <http://www.grubstreet.com/bestofnewyork/best-coffee-shops-to-work-in-nyc.html>.

Castro, F. (2013, September 24). Studentboende: Student Unit / Tengbom. Retrieved from https://www.archdaily.com/430047/studentboende-student-unit-tengbom?ad_source=search&ad_medium=search_result_all.

Climate Santa Monica. (n.d.). Retrieved from https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/santa-monica_united-states-of-america_5393212.

Filter Projects. (n.d.). Retrieved from <https://www.dlrgroup.com/work/santa-monica-college-performing-arts-campus-east-wing-expansion/>.

Longwood University Stubbs Residence Hall Renovation. (n.d.). Retrieved from <https://www.vmdo.com/longwood-university-stubbs-hall.html>.

Idea 95474: STATE STREET VILLAGE in Chicago, United States. (n.d.). Retrieved October 9, 2019, from <https://architizer.com/idea/95474/>.

IIT State Street Village. (n.d.). Retrieved October 9, 2019, from <https://www.jahn-us.com/iit-state-street-village>.

Perez, A. (2010, June 21). Simmons Hall at MIT/ Steven Holl. Retrieved October 7, 2019, from <https://www.archdaily.com>.

com/65172/simmons-hall-at-mit-steven-holl?ad_source=search&ad_medium=search_result_all.

Santa Monica College - Student Services Building. (n.d.). Retrieved from <https://www.huitt-zollars.com/projects/higher-ed/santa-monica-college-student-services-building>.

Student Unit - mini compact house for students by Tengbom Architects. (2015, October 31). Retrieved October 9, 2019, from <https://homeworlddesign.com/student-unit-mini-compact-house/>.

US Map : United States Map Vector Silhouette Save Outline Transparent Usa State America Png united states map in vector. (n.d.). Retrieved October 9, 2019, from <https://surpricebox.com/149090/cm149111/>.

PREVIOUS STUDIO EXPERIENCE

2ND YEAR

Fall: Charlott Greub
Tea House | Moorhead, MN
Montessori School | Fargo, ND
Spring: Cindy Urness
Dance Academy | Fargo, ND
Small Dwelling | Marfa, TX

3RD YEAR

Fall: Paul Gleye
Mixed-Use Building | Fargo, ND
Visitors Center | Fargo, ND
Spring: Regin Schwaen
Visitor Center | Fargo, ND
Affordable Housing | Fargo, ND

4TH YEAR

Fall: Bakr Aly Ahmed
High Rise Bldg. | Miami, FL
Spring: David Crutchfield
Mortal Engines Studio | Atlantic Ocean, World
Marvin Dwelling | Fargo, ND

5TH YEAR

Fall: Ganapathy Mahalingam
Research Report | Fargo, ND
Journal Article | Fargo, ND
Spring: Ganapathy Mahalingam
Thesis Design | Santa Monica, CA



FAKE IT

— til' —

YOU MAKE IT

-Kristopher Kohlgraf