

DESIGNING FOR IMPACT

SUMMER 2017 INTERNS

RESEARCH PROJECT

GENSLER

05

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what is design

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this is not the end.

WHAT IS DESIGN?

TODAY? TOMORROW?

01

*An introduction
to design and
its status in our
world today. A
look into what
we do and how
we do it.*

WHAT IS DESIGN?

TODAY?

DEFINITION

Design plays an important role in our society, even when people don't realize it. Everything is designed: the bed we wake up in, the car we drive, and the congested freeways we take to work. All man-made objects are designed to accomplish a goal, and to make life easier.

“Design has and always will be about solving a problem. The ways in which we solve that problem changes over time due to the influence of technology, but the overall purpose remains the same.”

– *Anonymous (public interview)*

“Design is a combination of art and function and how you put them together in a way that is beautiful but still does something”

– *Malia Aeryn (public interview)*

CURRENTLY

Today, society has become more interconnected than ever before. With this interconnection, the importance of speed, efficiency, and novel aesthetics continue to have a greater significance in the design industry.

For example, the expectation of using an app on an iPhone is that it should be user friendly, easily understood, and functional. When driving in a car, on the other hand, the commute as well as the ride itself is expected to be efficient, effective and an aesthetically pleasing experience.

The expectation of consumers has increased dramatically with rapid technological advancements. The higher standard of living stemming from these advancements calls for design to better meet the needs of consumers. New products not only improve on efficiency, they are aimed at outdoing the design and/or function of its predecessor. Making the design process eternal.

In the design industry, the debate of form and function will always persist. The two contrasting beliefs at play, give rise to varied designed outputs.

WHAT IS A DESIGNER'S ROLE TODAY?

A designer's role is to develop (from scratch or within a framework) a solution to the problems of the world relying on research, innovation and collaboration. Distilling information gathered from a pool of resources, design producers choose to take on topics that are important to the client and themselves, most often keeping in mind the context of things. The role of a producer does not begin or end with a designed output; it has far reaching future implications as well as precedent-comprehension. A designer's role cannot be restricted to specific tasks and/or responsibilities, because it is continuously evolving the process.

WHAT WILL DESIGN BE TOMORROW?

Predictions and forecasts are transient, more so in the case of design. Being extremely intertwined in multiple fields of study, design is likely to evolve and reflect on attributes that design producers [and sometimes consumers] choose to follow individually.

In today's world, some producers [and consumers] seem to become more conscious about how green a product is — its lifespan, chemical off-gassing, environment contaminants, and the re-usability or sustainability of products.

Regardless of what matters for each individual, design is more than likely to play a larger role in approaching how people live their daily lives. Technology that makes people's lives easier from self-driven, solar powered cars to high performing net-zero energy buildings, all fall under design efficiency and impact. Producers have a real potential to impact the future, and by choosing

designs of this kind, consumers play a larger part for the same.

Today, producers have access to cutting-edge technologies such as virtual reality and data mining, to not only understand the final product better but also engage in crafting the consumer experience. The involvement of consumers at such a nascent stage of a designed output helps create a level of comfort and trust with the producer, eventually leading to a satisfied client.

**DESIGN WILL BE
EVEN MORE ABOUT
SPEED, EFFICIENCY,
AND SUSTAINABILITY;
FROM ON-DEMAND
SOLUTIONS TO SHARING
ECONOMIES**

HOW ARE DESIGNERS EDUCATED?

Students receive training in various fields of the design industry on a yearly basis. While NCARB has set the standards that architecture schools are required to meet; each program varies in their approach on how they meet the standards. First year architecture students often start with hand drawings (e.g. sketches, drafting), learning to think compositionally or spatially; which ultimately sets the foundation and introduce basic design principles. During the second year of architecture school, conceptual and technical aspects of the program are introduced. Most likely, students use computer software, and familiarize themselves with different tools to pursue their design iterations or final products. Third and fourth year architecture students delve deeper into the conceptual and technical aspect with a combination of programmatic design with enhanced visuals. Throughout this process, students are encouraged to take part in internships or other community organizations to get a taste of the real-world, while developing

their skill sets. A fifth-year student is immersed in a specific design problem in pursuit of a creative solution as part of his/her thesis.

Graduate students experience a compressed time line that range anywhere between two to three years, depending on their undergraduate educational background. For those without architecture/interior design related degrees, students are enrolled into three-year tracks. The structure and process of introducing students to topics remain generally the same. However, students are expected to learn much of the basics on their own. School predominantly remains as a repository of resources in breadth and depth, and a center for developing critical thinking through guidance provided by the faculty.

For more details on the structure of architecture programs, please visit NCARB's website

HOW DO DESIGNERS PRACTICE?

The role of a designer is to produce solutions to problems. Most problems that require a design cannot be solved by just an individual. As such, designers work closely together, alongside end-users and professionals of various disciplines, incorporating a diverse set of expertise to produce a well-rounded product.

As products are ultimately designed for a user, designers must always design with the user in mind. Furthermore, every design decision must be supported by a credible reason that ties back to the goals of the design, allowing for users and clients to understand and the final product.

Design practice ideally enforces feedback and criticism as a way to reiteratively better the final product. As such, the responsibility of a designer is perpetual - as is the design process.

HOW SHOULD DESIGNERS PRACTICE?

As professionals, designers have the moral responsibility to conduct their work, with the intention of benefiting everyone in good faith. In other words, not only do designers have to aim at satisfying the client's intent, but they also have to take into account the project's impact on its surrounding context. From social activism to capitalist endeavors, designers are often juggling to find the ideal combination to deliver the best outcome in any given situation.

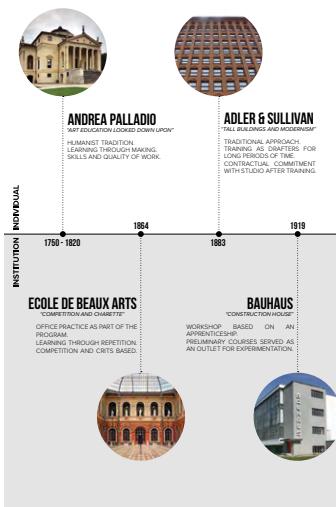
Many projects that designers encounter serve the mutual interests of both the clients and the public. Facilitating transparency, communication, and collaboration between the two parties tends to lead to the most successful projects. These are often the projects where the designer successfully mediates between the client and those affected by the project. This is not always the case, therefore when the clients and those affected don't meet eye to eye, designers have to act as a mediator between each of these parties. Whatever the consequences, the most critical truth in this process is the designers' good will to act in the interests of both sides.

STUDIO X

A crucial element to the education of design is the practice of formal and informal apprenticeships. These apprenticeships can include informal mentor relationships between a student and a professor, or a supervisor and subordinate, with varying durations and varying levels of acquaintance.

To study the concept of apprenticeship in the field of design, we participated in Studio X - a Gensler initiative that investigates key aspects of a designer's career and how education (being the foundation) impacts the career. Meeting every two weeks to discuss our experiences and findings, we arrived at various conclusions — conclusions that allowed us to envision how the education of design will evolve, and ultimately how to deliberately shape the way designers learn.

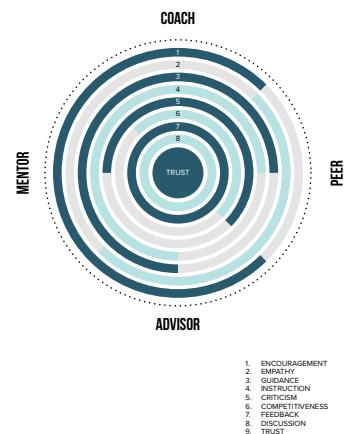
STUDIO X DIAGRAMS



HISTORY OF APPRENTICESHIP

Page 16-17

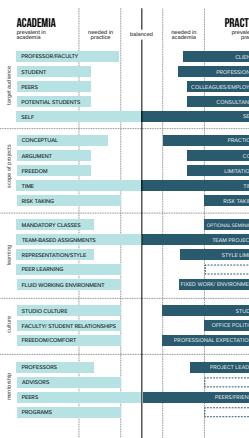
To begin, we explored the history of design education and apprenticeship relationships. This study allowed us to understand how the current structure of design education came to be, and how it could continue to evolve.



TYPES OF APPRENTICESHIP RELATIONSHIPS

Page 18

We then looked at apprenticeship today in attempt to capture the specifics a designers career at it's various stages as well as the variety of apprenticeship relationships. Here, we have broken apprenticeship into four main types of relationships - coach, advisor, mentor, and peer - all of which hold different connotations and levels of affinity. The diagram then characterizes and compares the various social qualities between each type of relationship.



ACADEMIA V. PRACTICE

Page 19

This diagram discerns the dominant qualities between academia and practice today, in attempt to distinguish the qualities that need to be improved on in order to bridge the gap between academia and practice.



SELF MENTORING

Page 20

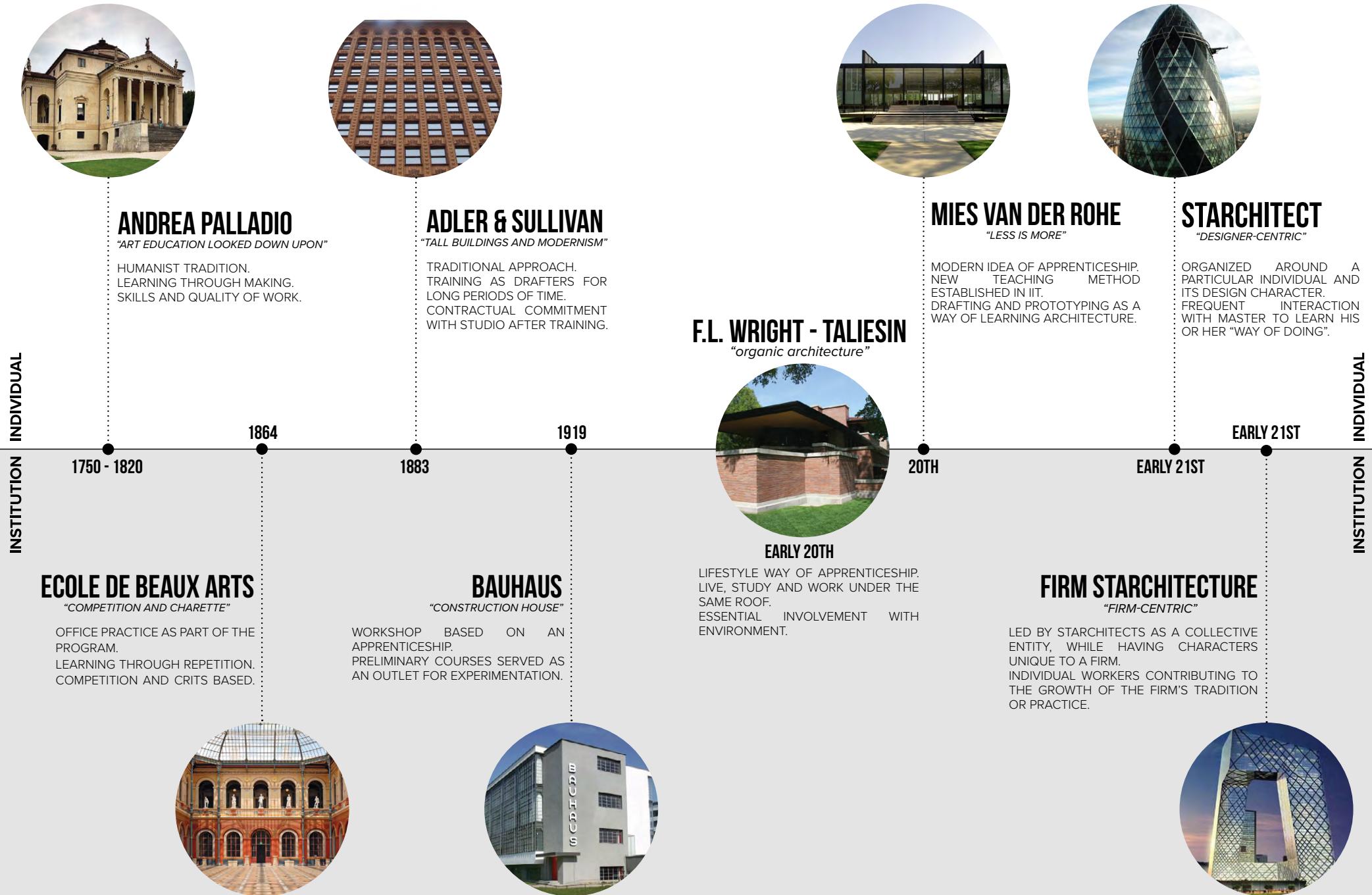
Although much of a designers education is established under the realm of academia or practice, much of it also falls under the designer's responsibility to self educate. Much of what a designer has to personally grasp are professional personality traits, that although are not spoken of very much in the light of education, are crucial to the designer's success.



THE IDEAL CURRICULUM

Page 21

Based on an understanding of past and current design education, this diagram depicts the qualities of what would conceivably be an ideal curriculum. The consolidation of both academia and practice allows for a smoother transition between the chronological stages of a designer's career.



MENTOR

COACH

TRUST

ADVISOR

1. ENCOURAGEMENT
2. EMPATHY
3. GUIDANCE
4. INSTRUCTION
5. CRITICISM
6. COMPETITIVENESS
7. FEEDBACK
8. DISCUSSION
9. TRUST

PEER

ACADEMIA

prevalent in academia

needed in practice

balanced

PROFESSOR/FACULTY

STUDENT

PEERS

POTENTIAL STUDENTS

SELF

CONCEPTUAL

ARGUMENT

FREEDOM

TIME

RISK TAKING

MANDATORY CLASSES

TEAM-BASED ASSIGNMENTS

REPRESENTATION/STYLE

PEER LEARNING

FLUID WORKING ENVIRONMENT

STUDIO CULTURE

FACULTY/ STUDENT RELATIONSHIPS

FREEDOM/COMFORT

PROFESSORS

ADVISORS

PEERS

PROGRAMS

PRACTICE

prevalent in practice

CLIENTS

PROFESSIONAL

COLLEAGUES/EMPLOYER

CONSULTANTS

SELF

PRACTICAL

COST

LIMITATIONS

TIME

RISK TAKING

OPTIONAL SEMINARS

TEAM PROJECTS

STYLE LIMITS

FIXED WORK/ ENVIRONMENT

STUDIO

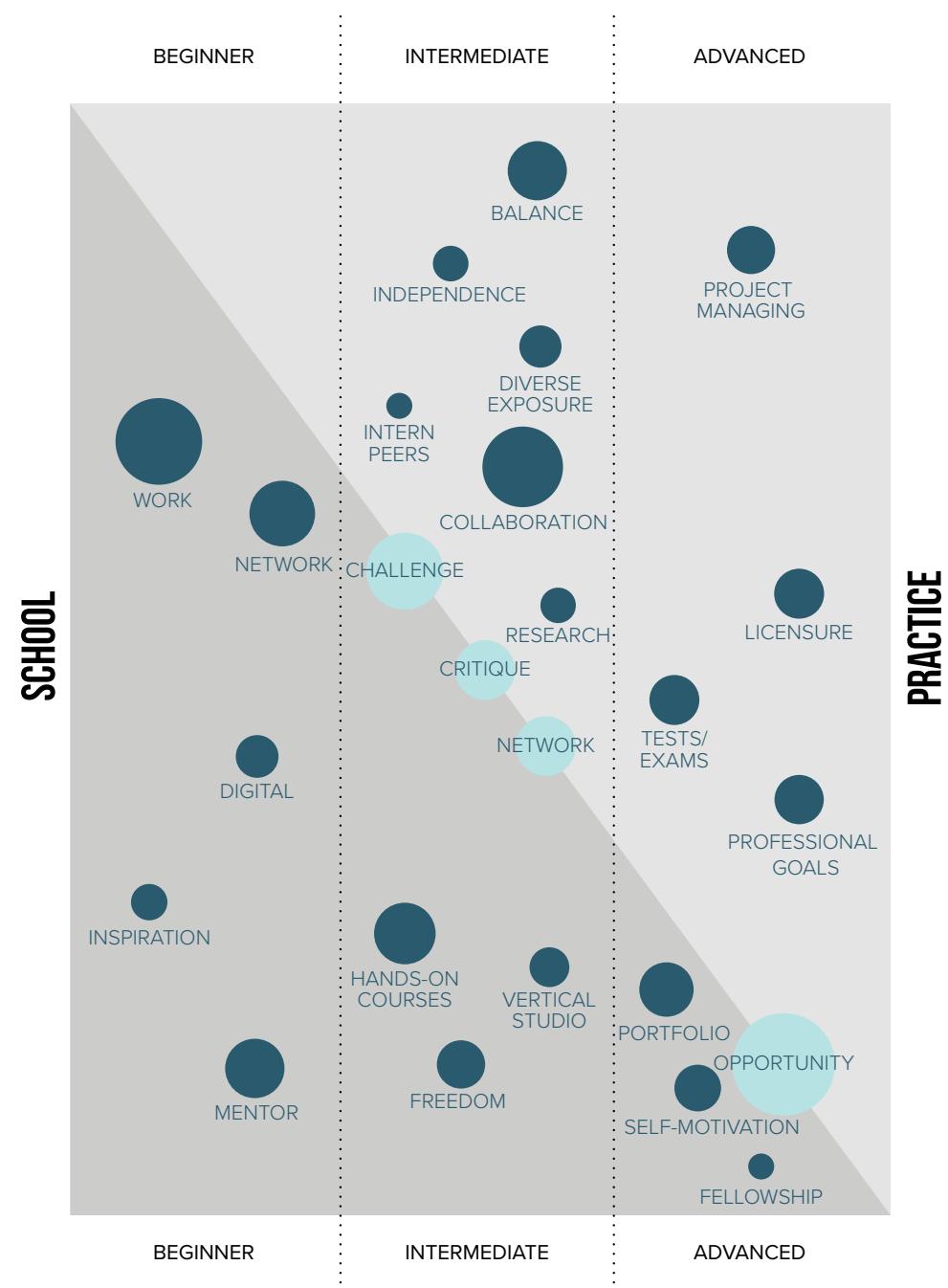
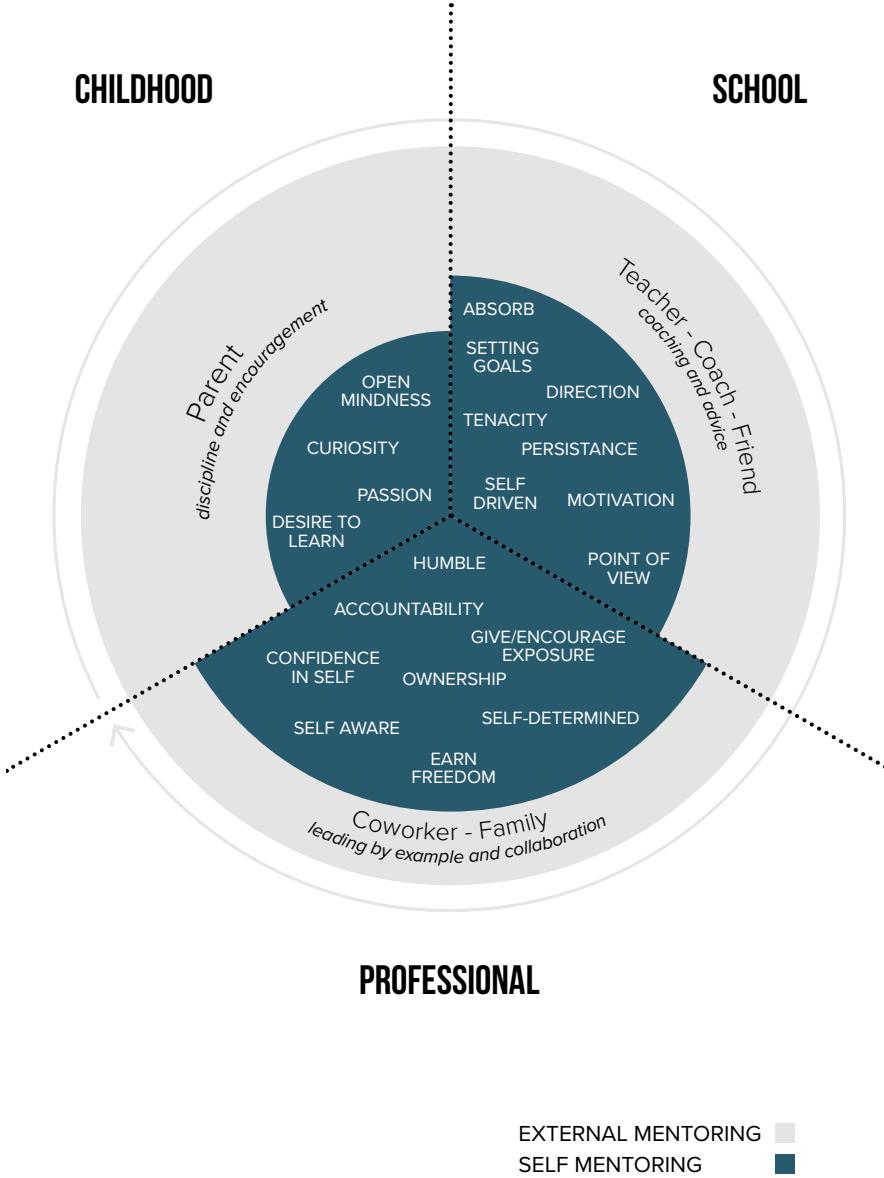
OFFICE POLITICS

PROFESSIONAL EXPECTATIONS

PROJECT LEADER

PEERS/FRIENDS

PROGRAMS



RESEARCH PROCESS

WHAT IS OUR PROJECT ABOUT?

02

*A process of
narrowing down
and refining the
question(s)*

WHAT IS THE PROJECT ABOUT?

The 2017 Summer Intern Research Project for Gensler began with a seemingly simple question.

Why does design matter?

This is deceiving because although the question seems rather straightforward, there is an endless array of answers. The potential this question holds motivated the intern 2017 group to dive straight into the research process head first. We began trying to understand the question by exploring and analyzing the various perceptions people have about design. Collected as data from interviews conducted on the streets, and different workplace settings, the research aims to shed light on the importance and value of design in everyday life. This project intends to initiate a dialogue about the research of design and its potential to change the world.

Why research about design?

The world is constantly changing; growing, evolving, and revolutionizing. We as designers, often see ourselves at the forefront of these changes and consider it our responsibility to ensure these changes will have a positive impact on our world. In order to do this, we must take the time to familiarize ourselves with the constant state of our surroundings. It is crucial that we find the gaps in our society in the hope that we have the creative solutions to close them. Research helps us take a step back, look at the bigger picture, and think about the consequences of our actions. It is our actions that have the potential to create a greater positive impact on society.

WHAT IS OUR GOAL?

The goal of this research process is to discover the role design plays in today's society. By doing so, we have the potential to unveil any discrepancies which can then be used as the driving force for future solutions. Through a process of interviews and discussions, we hope to explore the ways in which designers can more successfully and effectively participate in guiding future developments of an ever-changing world.

“RECOGNIZING THE NEED IS THE PRIMARY CONDITION FOR DESIGN.” –Charles Eames

HOW DID WE APPROACH THE PROJECT?

PROCESS

To understand the overall purpose and necessity of design in the ever changing world from the perspective of both the producer and consumer, the process encompassed three repeating steps: **refine**, **develop**, and **conduct**. First, conversation among the researchers was conducted in order to answer the question “why does design matter”, coming to a realization that the answers derived from this exercise was incoherent and needed much refinement.

Consequently, the following four big questions were developed to further understand the question:

HOW will design impact our future?
WHEN has design failed you?
WHERE is design most effective?
WHAT is a designer's responsibility?

By asking these questions to fellow co-workers within Gensler, engaging conversations allowed identification of how producers understand design and the common themes that appeared throughout. With these themes identified, data was refined, ending with the discovery of four overarching categories: **community**, **environment**, **technology**, and **quality of life**.

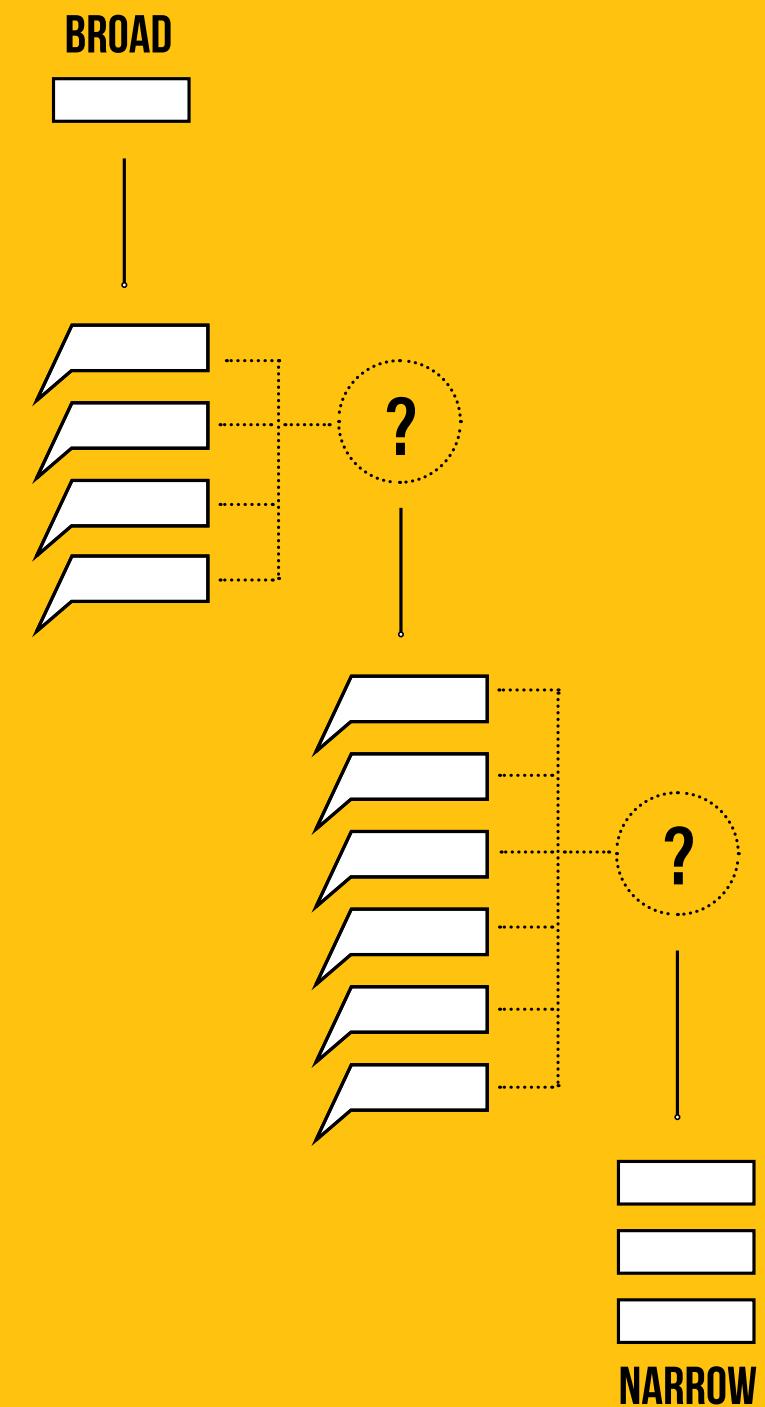
To understand these categories better, we transposed them into six more general questions:

How would you define design?
How do you get to work everyday?
What types of spaces do you feel most comfortable/ uncomfortable in?
What can technology bring to design?
What is one thing that improves your quality of life?
What makes a good design experience?

With these questions, a series of public interviews were conducted to understand design from the perspective of the consumers. Individuals of various professions and cultural backgrounds were surveyed, with varying opinions of design and why it matters. Further data were also collected and analyzed through panel discussions within the Gensler community, which uncovered three common themes that affect the impact of design:

Designer and end-user relationship.
Design ethics.
Transparency of the design process.

In hindsight, the cyclical processing of questioning and gathering data allowed for a more comprehensive set of data critical to arriving at the conclusion for this phase of the research.



USER EXPERIENCE

A COLLECTION OF INTERVIEWS

03

"A good design experience is something that is efficient, functional, and [visually pleasing] to the majority of the populace utilizing or appreciating it without being too overbearing."

*– Eric Zhang,
University of
Minnesota*

INTRODUCTION

To collect the majority of our data, we conducted several interviews with a variety of people. The means in which we interviewed included phone calls, video calls, and in person conversations. We asked all our subjects the same set of seven questions relating to the four themes of, community, environment, technology, and quality of life. After recording each interview we analyzed and categorized each one. Reviewing these answers, we found patterns in the responses we got between designers and non designers. As a result, we split them into two categories: design consumers and design producers. We created a series of diagrams depicting each finding for each question.

COMMUNITY
ENVIRONMENT
TECHNOLOGY
QUALITY OF LIFE

QUESTIONS

- 01 HOW WOULD YOU DEFINE DESIGN?
- 02 HOW DO YOU GET TO WORK EVERYDAY?
HOW IS THAT EXPERIENCE FOR YOU?
HOW WOULD YOU IMPROVE IT?
- 03 WHAT TYPE OF SPACES MAKE YOU FEEL
COMFORTABLE/UNCOMFORTABLE?
- 04 WHAT CAN TECHNOLOGY BRING TO DESIGN?
HOW CAN DESIGN CREATE USER-FRIENDLY
TECHNOLOGY?
- 05 WHAT IS ONE THING THAT WOULD IMPROVE
YOUR QUALITY OF LIFE?
CAN DESIGN SOLVE THAT PROBLEM?
- 06 WHAT IS THE ONE THING YOU THINK WILL
IMPACT THE FUTURE THE MOST?
- 07 WHAT MAKES A GOOD DESIGN EXPERIENCE?

01

HOW WOULD YOU DEFINE DESIGN?

THE PERCEIVED DEFINITION OF DESIGN

With extensive topics and diversity of everyone's personal opinions, defining design is challenging for both design producers and consumers. Upon interviewing both producers and consumers of design, common differences between the two were identified. With regards to who and what design is for, producers look to collective good and the big picture; meanwhile the consumers consider individual needs and the present more significant. The producers considered design as a problem solving tool, while the consumers considered it merely an aesthetic pursuit. As [the importance of] design process is not communicated clearly to the design consumers by producers; the finished look and the immediate benefits of the product was of greater importance in the eyes of consumers - more so than the long-term benefits and the bigger picture that designers intended to paint. This leads to a conclusion that producers need to design with consumers' needs in mind, while also rendering design process more transparent in order to get the design intentions and its importance across to consumers.

DIFFERENCES

Design Producers: *Design is...*

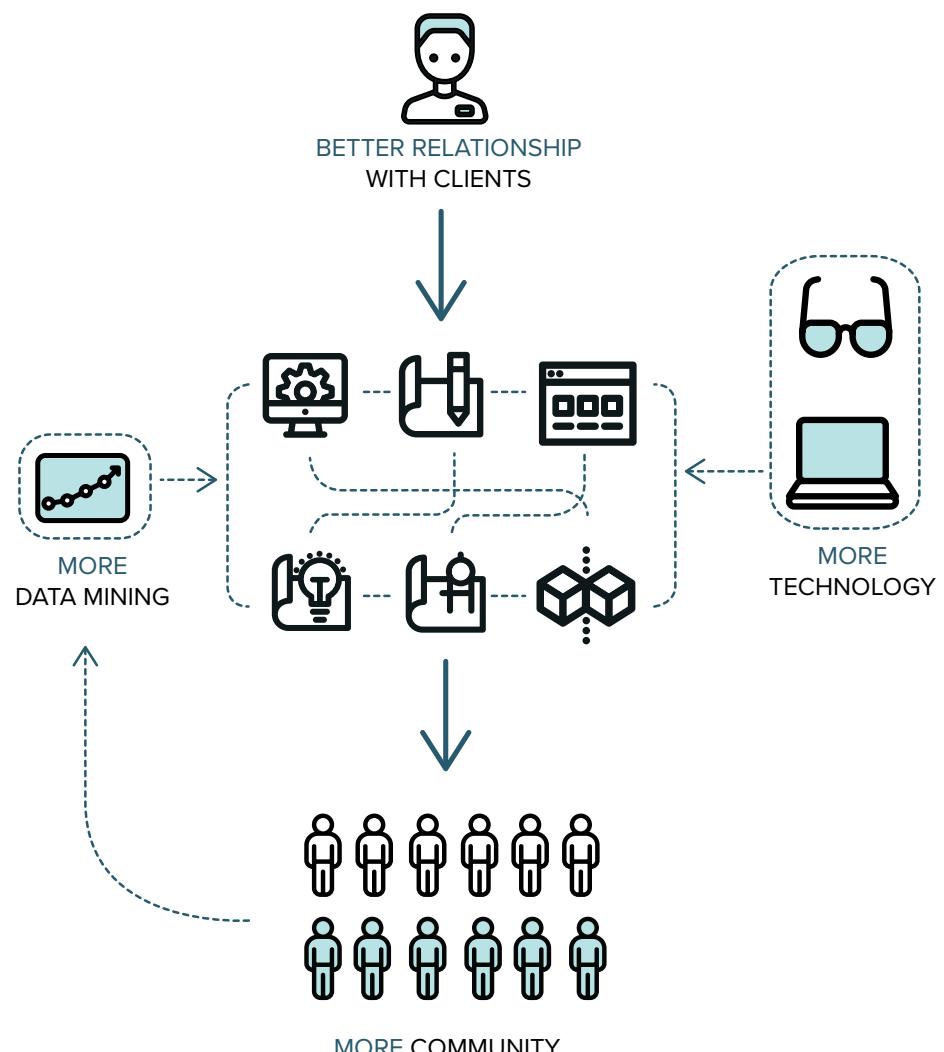
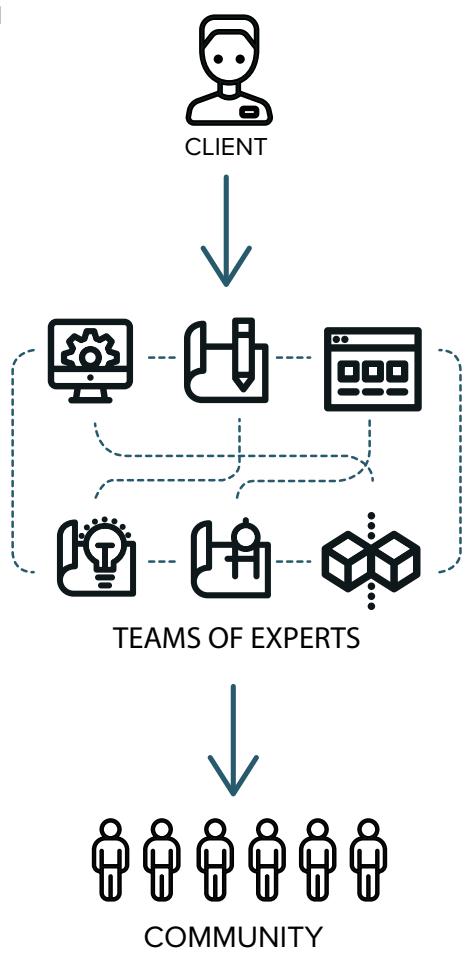
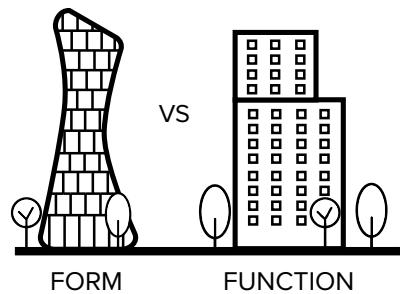
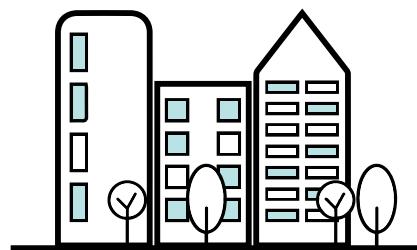
1. Everything
2. Problem Solving
3. Communication
4. Creative Process
5. Holistic Intervention
6. Thoughtful Making

Design Consumers: *Design is...*

1. Many things
2. Combining Process
3. Human-Centric Intervention
4. Expressive Making
5. Aesthetic



DESIGN
PROCESS





“Design is an interrogative investigation that looks at not only the outcome but also the process.”

Neil Frankel

SAIC Professor

I mostly go to work by walking so that I can collect information as an accumulative results for design inspiration.

About comfortable and uncomfortable space, I think it depends on what you're looking for because there's complexity in each of us that we have a wide range of aspiration. Some may say they are attracted by the spiritual spaces such as churches and temples, or some enjoy spaces that make them productive. For me, I am drawn by spaces that can inform my design decisions.

Technology brings me closer to information, but it is also discriminative at the same time since it narrow down my choices. To that, we should not edit our preferences to keep the journey objective. As for the impacts technology

brings to design, it improves performance and management that helps us align our experience with the goals given that none of us are monolithic individuals that are satisfied with single piece of technology.

I would like it to be more controlled and permissive. For working space, some may prefer facing a wall since that keep one focused on the problem one's facing. But thanks to human engineers, we learn to value our choices and the fact that one doesn't fit all.

Expanding the definition of design in terms of human sciences. You need to define what you want. The more you know yourself, the better you will achieve with the design.

02 HOW DO YOU GET TO WORK EVERYDAY? HOW IS THAT EXPERIENCE FOR YOU? HOW WOULD YOU IMPROVE IT?

EXPERIENCE OF MOVEMENT

Among the data collected, the idea of “choice” was identified as a critical factor in facilitating a type of experience that design consumers (users) acknowledged they expected and/or wanted through their daily self-observations. There were four subcategories of choice that dictated whether the experience is convenient/inconvenient, flexible/inflexible, comfortable/uncomfortable, and/or boring/interesting for users, all four categories of which are identified below:

TIME

Frequency and efficiency were key with respect to time. All factors involved in choosing transportation options were also conscious choices users made to craft their experiences as they’re on the move, including operation schedule, traffic congestion, and amount of time consumed.

PLACE

Breadth and efficiency were key with respect to place. All factors

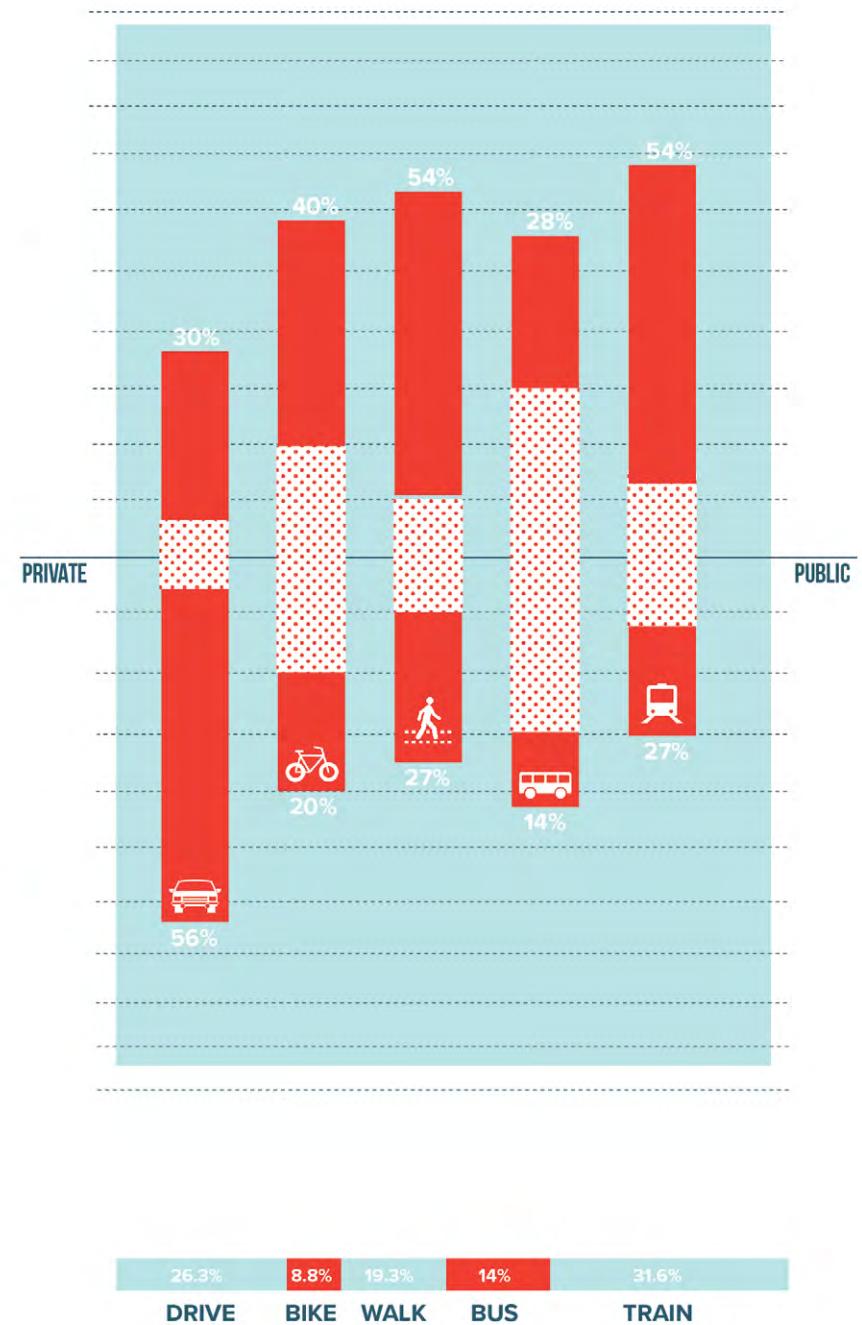
involved in choosing transportation options were also conscious choices users made to craft their experiences as they’re on the move, including types and amount of paths, as well as the numbers and locations of destinations.

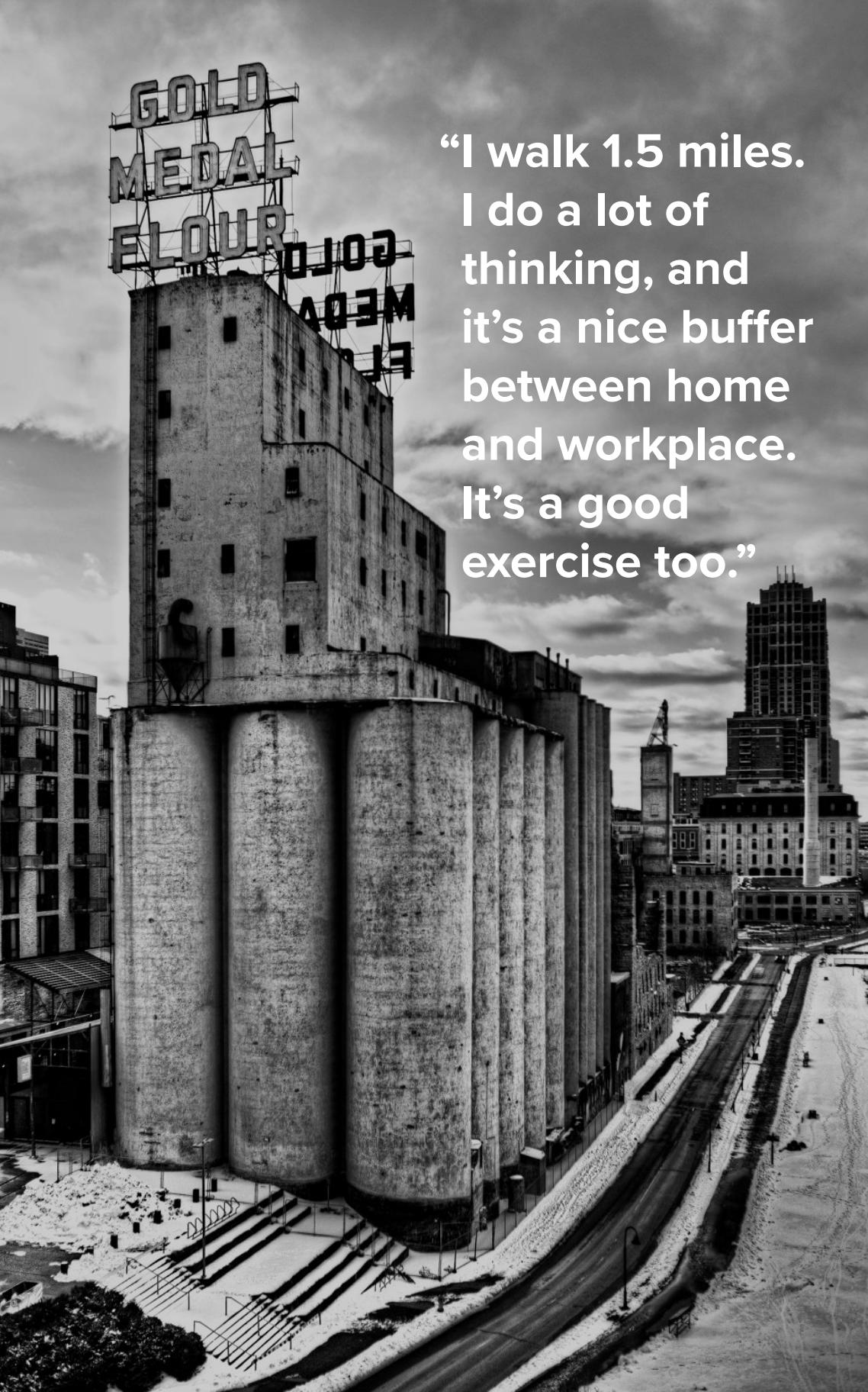
SPACE

Type and amount were key with respect to space. All factors involved in choosing transportation options were also conscious choices users made to craft their experiences as they’re on the move, including type and amount of personal space one feels physically and/or mentally comfortable or uncomfortable.

ACTIVITY

Variety and visibility were key with respect to activity. All factors involved in choosing transportation options were also conscious choices users made to craft their experiences as they’re on the move, including diversity and appropriateness of activities one can engage in while on the move (e.g. drivers can only engage in activities along the road in their car, unable to move very freely or do anything else but to drive).





"I walk 1.5 miles. I do a lot of thinking, and it's a nice buffer between home and workplace. It's a good exercise too."



Jawanza Barrett

Information Systems Technician

To me, design is something that helps visualize or otherwise showcase an idea. I walk to work every day, and because I have multiple sites, the amount of time taken is inconsistent. I usually try to walk faster or wake up early to get to work on time. Now, since I'm an introvert, I feel comfortable when I'm not in a place where I am the center of attention; opposite is the case when I am. I think technology and design goes hand-in-hand; each advancement in technology allows designers to design easier, by introducing new tools (such

as touch interfaces) for user interaction. I think finding a way to stay fit and healthy easily would improve my quality of life, and I don't think design will be able to make humans stop being lazy; design won't solve this problem. In terms of future, I think artificial intelligence will have the largest impact, because it'll be so integrated into our daily lives. Good design experience will make things easy to use.

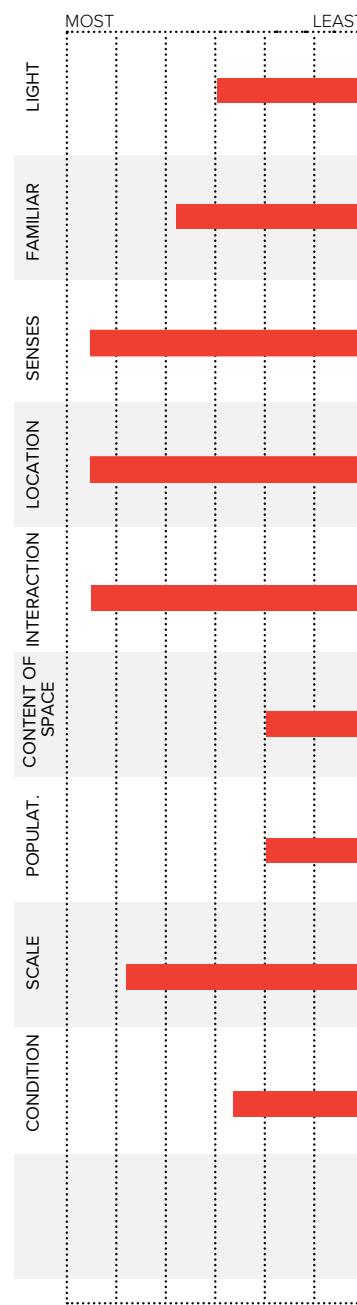
03

WHAT TYPE OF SPACES MAKE YOU FEEL COMFORTABLE/UNCOMFORTABLE?

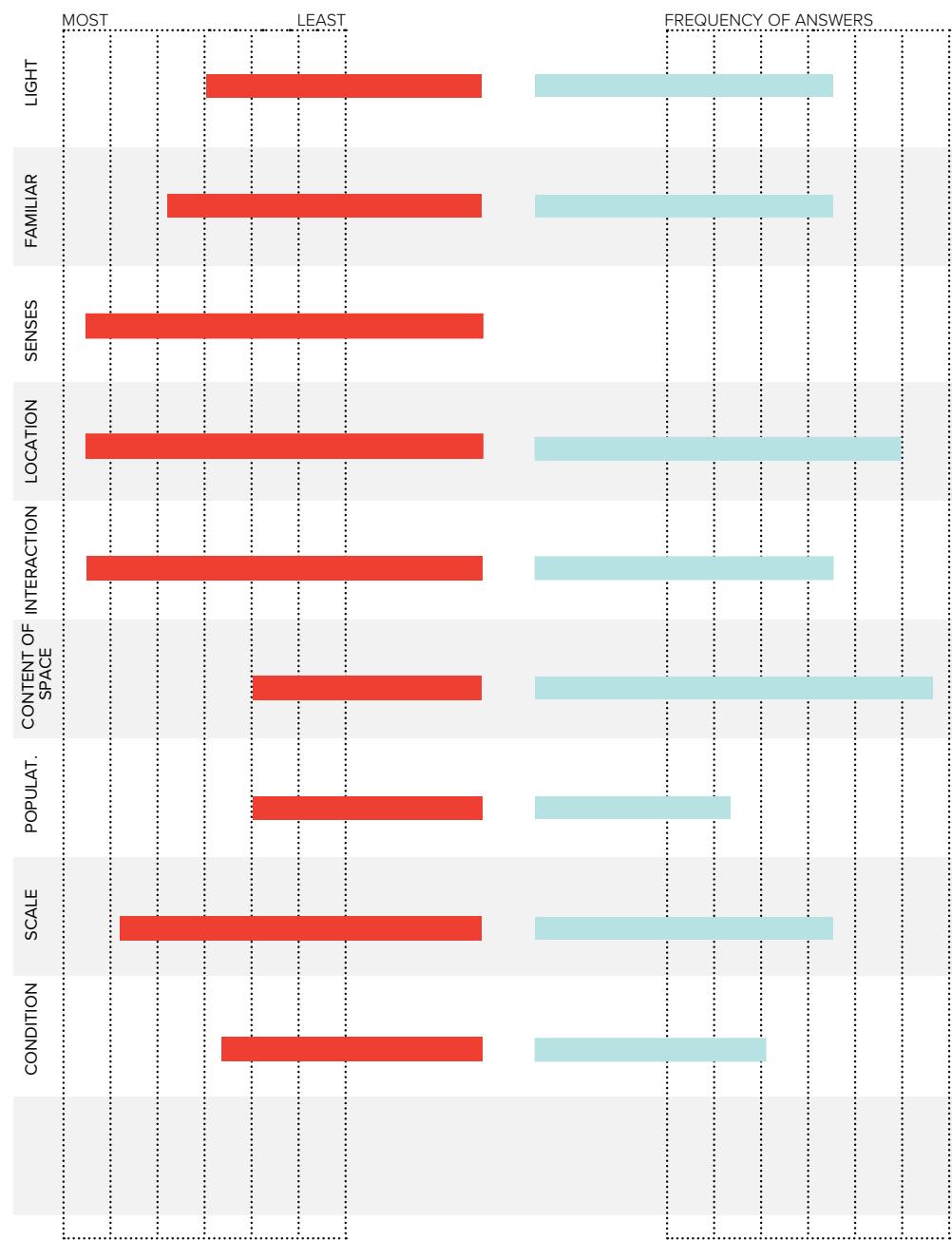
TYPES OF SPACES

Multiple factors come to play when determining one's comfort or discomfort level within a space. Factors such as light, familiarity, senses, scale, and condition, inform and influence users' feelings and emotions to varying extents. However, varying levels of control over the space was identified as a critical factor in determining the comfort of users in spaces. With everyone being unique, one's comfort or discomfort level within a space also depends on their unique attributes including personality and characteristics. By giving users control over their own spaces, they can craft the experience they desire. However, since not everyone desires to craft their own spaces or know what they want, it is important for designers to balance between prescribing and providing control or choices.

DESIGN PRODUCER

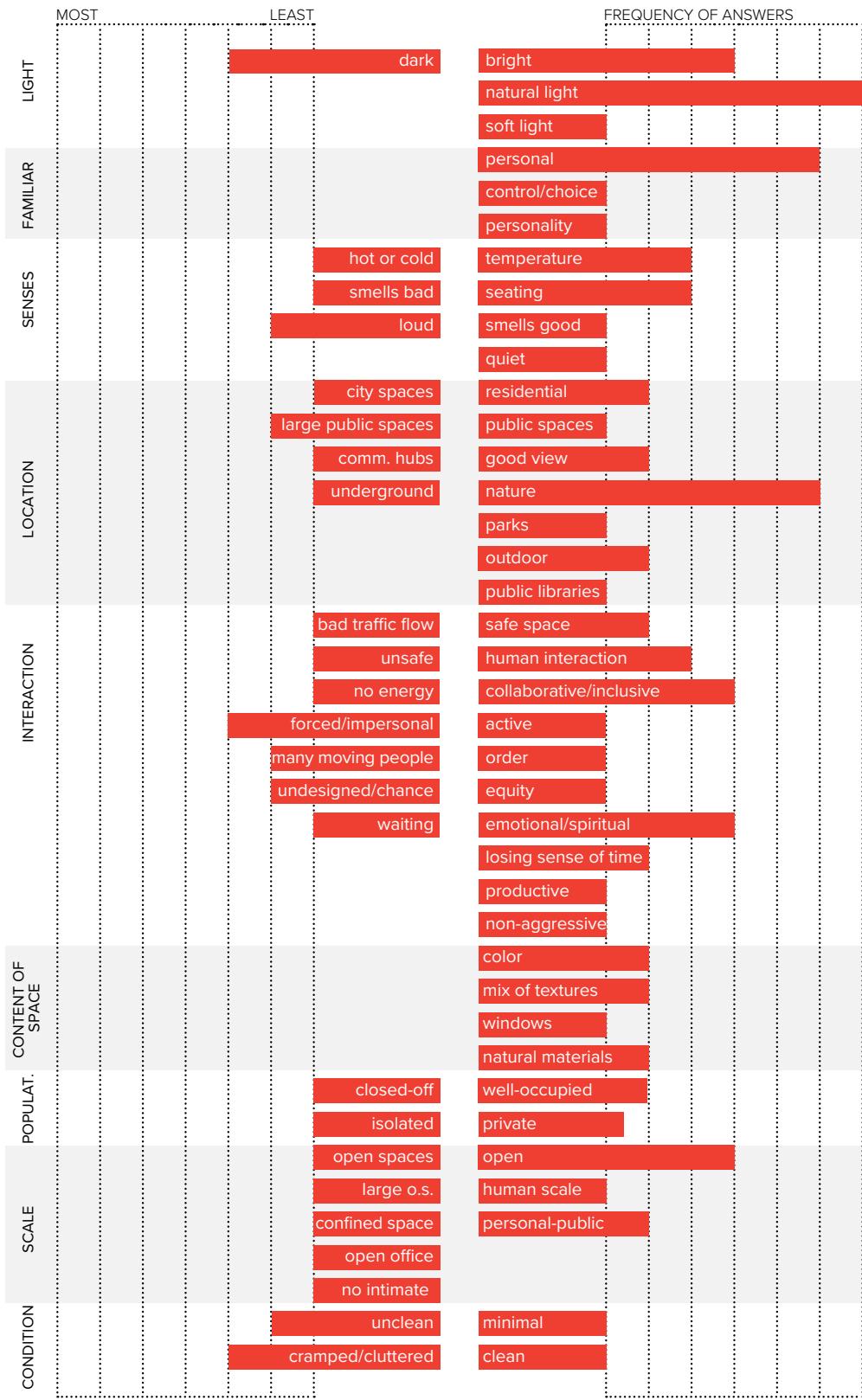


DESIGN CONSUMER

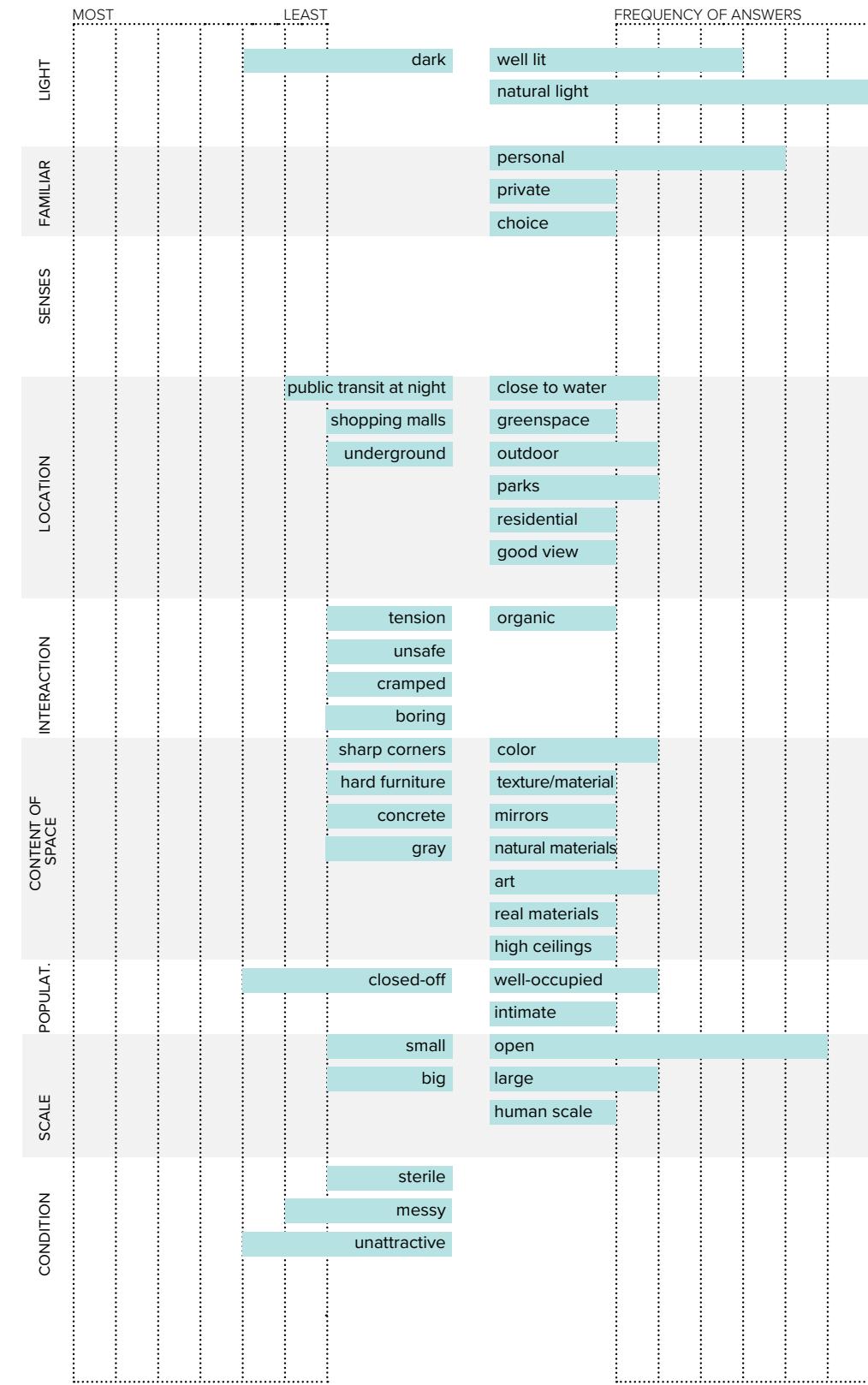


DISCOMFORT

COMFORT



DISCOMFORT



“I have been thinking a lot about the term 'safe space' recently in the framework of teaching. And when people talk about safe spaces it is actually never about the physical space they are in, is about creating a safe discursive environment, where people feel that they can share their thoughts and take risks, and say things that they haven't totally figured out yet. So in a way that comfortable space or safe space can happen anywhere.”



Ann L Liu

*SAIC Assistant Professor
Future Firm Founding Partner*

04

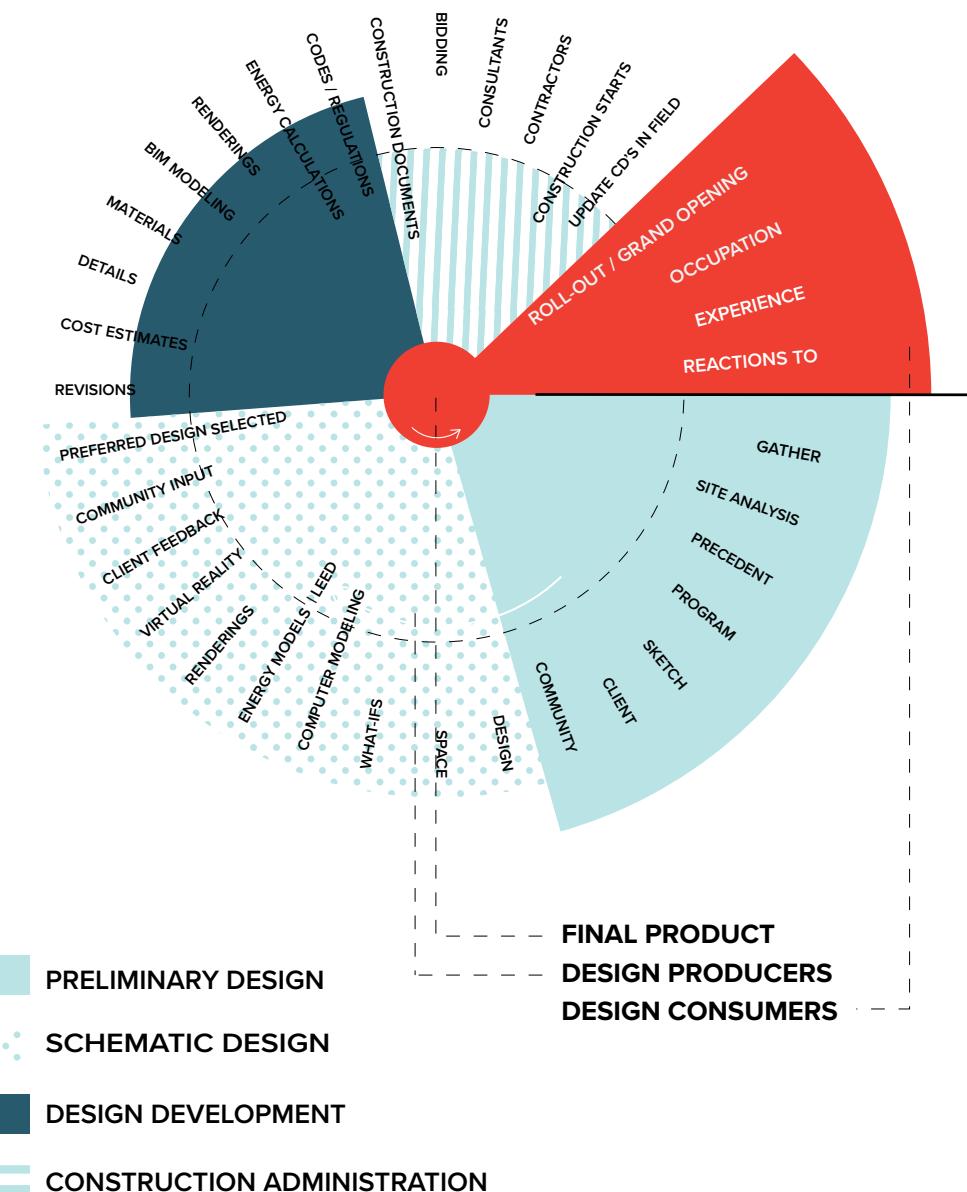
WHAT CAN TECHNOLOGY BRING TO DESIGN? HOW CAN DESIGN CREATE USER-FRIENDLY TECHNOLOGY?

IMPACT OF TECHNOLOGY

Technology can bring a multitude of design possibilities, continuing to push forward its boundaries. From parametric facades to 3D printed human tissue, technology and design share a close relationship, often being one and the same.

In the hands of a designer, technology is a powerful tool, but not a final product. Designers must recognize that technology is simply part of the design process - one of many tools that will help iterate, understand, and recreate their processes efficiently in pursuit of elevating the design experience.

Consequently, technology should help create solutions that understand the needs and wants of the design consumer. All the while suggesting further possibilities in terms of user experience including the ease of use. Going a step further to inform viable application of technology in tackling the next design problem. This is the role of technology in design.

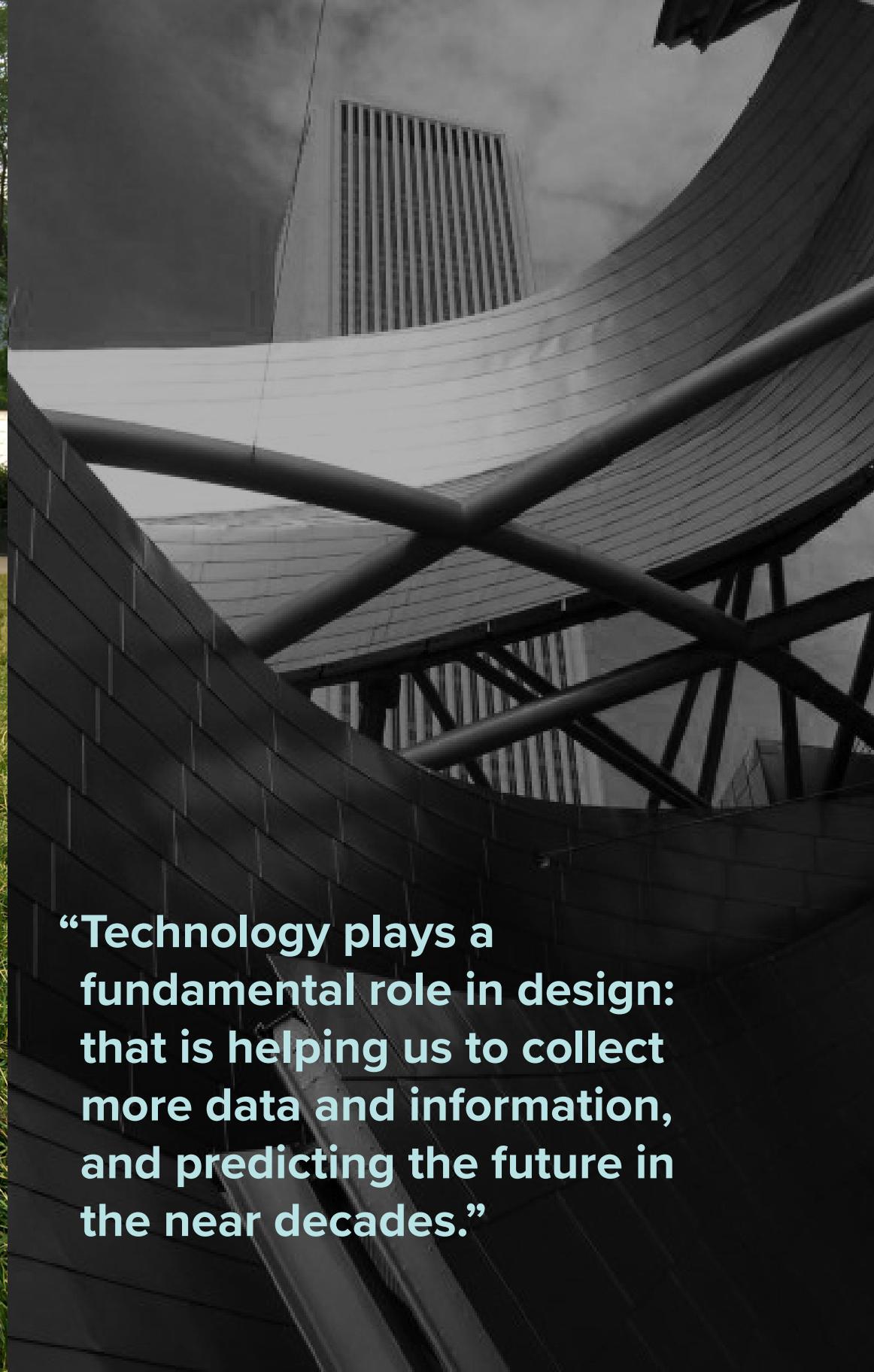




Laura

Hospitality and Marketing Student

“My favorite experience with technology is being able to connect with someone that is on the other side of the world. Also having google as a search engine. There is nothing that you cannot know.”



“Technology plays a fundamental role in design: that is helping us to collect more data and information, and predicting the future in the near decades.”

05

WHAT IS ONE THING THAT WOULD IMPROVE YOUR QUALITY OF LIFE? CAN DESIGN SOLVE THAT PROBLEM?

POSSIBILITIES OF DESIGN

Design has the potential to elevate the quality of life and bring solutions to many world problems. We asked a variety of people what they believed could improve their quality of life. Although a tough question to answer, we were able to receive a wide range of answers that expose a variety of social problems clearly where the major problems lie in our society. We then asked questions based on each subject to help us think about how to picture a better quality of life in the future.

These categories were further divided into factors one can control and factors one has no control over, which is illustrated in the following diagram.

ENVIRONMENT

Climate Change:

How will design respond to changes in environment?
What is design's role in climate change?

TECHNOLOGY

Autonomous Vehicles / Driverless Cars:

How will our cities look without drivers?
What will happen to all existing parking infrastructures?
What is the role of public transportation?

Artificial Intelligence (4th Industrial Revolution / Technological Revolution) What is the boundary between humans and machines?
How and what will be the role of ethics?

Robots (4th Industrial Revolution / Technological Revolution)

What are robot's roles and responsibilities?
In what place do robots exist in our society?
How will built environment change as a result of robots?

SOCIAL MEDIA

How can designers help people stay connected and/or disconnected? And how will environment behave in this process?
What is private and public?

Does design play a role in defining the boundaries?

The Next Revolution (4th Industrial / Technological)

How can design inform people and encourage them to participate?

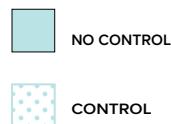
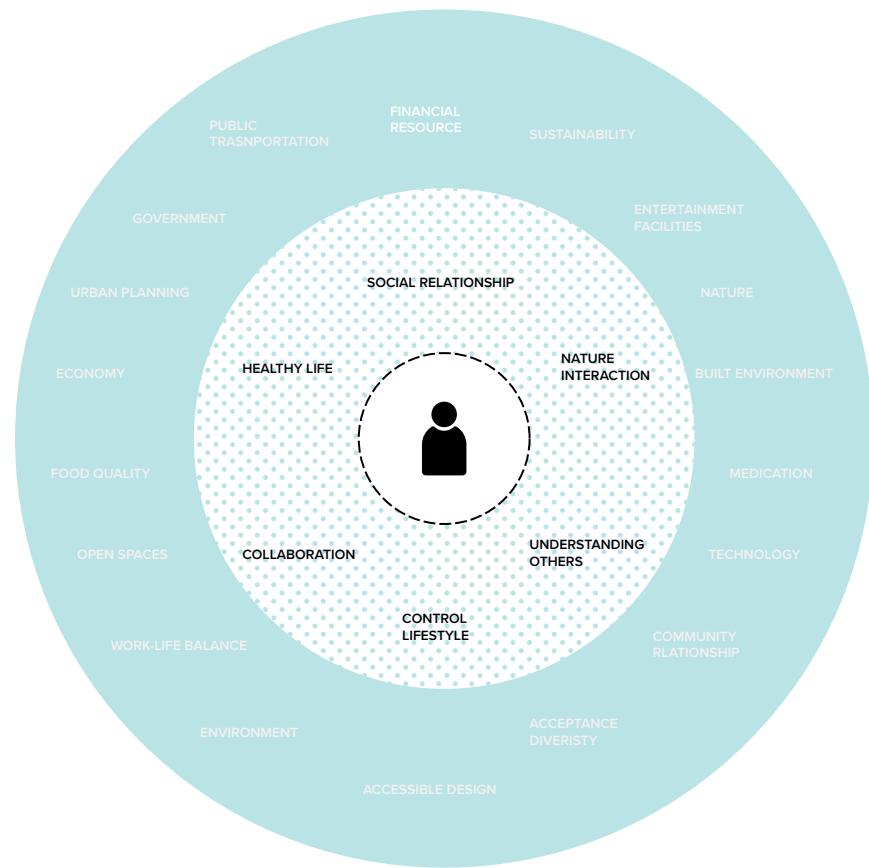
COMMUNITY

Social Equity:

How can design remove barriers?
How can designers challenge the traditional "one size fits all" model?
How can designers influence our dependence on limited resources?

POLITICAL CLIMATE

Will design provide insight for people to make informed decisions?
How can design bridge the gap between diverse groups of people?



“PERHAPS DESIGN COULD CONTRIBUTE TO THE SOLUTION. PART OF THE SOLUTION RESIDES IN MY OWN ABILITY TO PRIORITIZE BUT PART RESIDES IN THE ABILITY OF THE WORLD AROUND ME TO OFFER SHORT BREAKS FROM THE INTENSITY OF WHAT I EXPERIENCE EVERY DAY.”

Lynn Dearborn
UIUC associate professor

“Designing processes in ways that make [them] easier to accomplish [something] with as little frustration as possible while still looking good would be ideal.”

Eric Zhang

Facility Manager & Webmaster

Design is utilized and expressed in countless ways everywhere, but it is the planning and creation of look, personality, aesthetics, function and delivery, as a building block and framework for end goal.

I drive to work every day, and though it is a consistent experience, I wish there was no traffic and consistent travel time.

Comfortable spaces are somewhere in between small and big spaces, which isn't too spacious or connected. The role of technology in design is to unlock a new level of design that wasn't explored before, allowing people to understand and commit to something; making things more efficient, effective, and therefore

making technology easier to use through expanded understanding.

About improving the quality of life, I think make things less frustrating to use while still looking good would be able to, and that can be achieved through the designing processes.

Talking to the impact and future, I think the continued improvement of technology will impact future most, by allowing design experience to be efficient, functional, and aesthetic to many people and allowing them to utilize and appreciate without being overbearing.



06 WHAT IS THE ONE THING YOU THINK WILL IMPACT THE FUTURE THE MOST?

FUTURE OF DESIGN

From the research data collected, not a single interviewee (including the designers) explicitly stated design as something that will and can improve the future. Specifically, designers felt that design performs merely as an intermediary. Meanwhile for non-designers, design is something that can influence, but does not know how it will do so. In other words, designers knew much more specifically how the society will change, and the possibilities of design's impact on the future, meanwhile non-designers did not. Furthermore, both designers and non-designers had an apprehensive outlook of the future, though none of the answers were exclusively positive or negative. Overall, it seemed as though the general understanding of the public sees design as a practice ineffective at generating an impact. Perhaps, designers are to blame for the lack of public interest and awareness in design's [potential] impact, by making overstatements about designs' abilities.

Research Question Statistics:

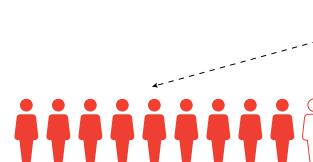
Only half of non-designers answered this question vs. only 10% of designers
 16% of non designers and 18% of designers leading to 17% overall.
 23% of respondents answered with technology
 $\frac{3}{4}$ from designers $\frac{1}{4}$ from non designers.



DESIGNER



NON-DESIGNER



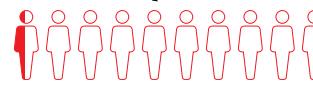
ABILITY TO RESPOND

The design profession may be more aware of the specific ways our society will change in our future than non designers but **lack communicating** these discussions to non designers. Even designers who answered with design seemed to acknowledge that design is not as impactful as we say it is in its current form.



TECHNOLOGY DOMINANT

Out of all of the responses, **23% of responses were technology/digital related subjects**. Out of this portion, an overwhelming **3/4ths** of responses came from designers suggesting that there is more direct impact of technology in the profession's day-to-day than other non-designer professions.



DESIGN ABSENCE

Interestingly **not a single person** explicitly stated design as their direct answer. Perhaps we as designers overstate our impact on the future. Although it wasn't stated explicitly between designers and non designers, designers answered through subjects that design performs as an intermediary.

Half of non-designers did not answer this question, opposed to only 3 designers who did not answer the question, which could be due to multiple reasons. This may conclude to designers being more aware and confronted with this topic of the impact of design in our future thus giving them more information and background knowledge on this subject.

A surprising **1/4th** of technology related responses came from the non-designers category in regards to this question. Technology may not be impacting the day-to-day for this audience as much as designers expect.

Opposed to designer's highly specific theories as to how design will impact our future, non-designers only answered with topics other than design without support as to the "how" design can influence these topics, thus hinting at a lack of information on the processes behind design's impact.



Ung Joo Scott Lee
Morphosis Architects Principal

"The critical issue for the future impact will be the relationship with the city, the urban living experience, and the quality of life. The future will be about rethinking and redefining the city."

07 WHAT MAKES A GOOD DESIGN EXPERIENCE?

COMPREHENSIVENESS OF EXPERIENCE

With individual personalities, characteristics, and attributes, “good design” can be a very subjective term. The concept of Universal Design is one aspect of design practice that attempts to address varying experiences from a human perspective, however it still fails to be truly “universal”. When asked about what makes a good design experience however, two categories were identified:

Clarity of Intent

Intuitiveness of use: simple to use requiring little to no instructions.

Accessibility of use: physically accessible and for everyone

Breadth of Scope

Relationship between users and environment: encouraging interaction between a diverse group of users within a given context (regardless of background, age, sexual orientation, abilities, etc)

Aesthetics: designs not only need be functional, but also beautiful in order to attract consumer attention.

Responsiveness & Integration:

fits within a given context, being influenced and informing it in a way that benefits both the design and its context.

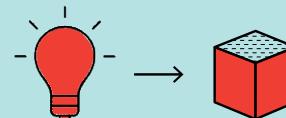
Interestingly, the difference between individuals were also evident when design producer's and consumer's answers were juxtaposed:

Audience/Reach
Design Consumers
Design Producers

| | Design Producers | Design Consumers |
|--------|-------------------------------|--------------------------------------|
| Reach | Collective (Inclusive design) | Personal (Individual experience) |
| Effect | Invisible (refined) | Noticeable (wow factor) |
| Role | Functional & problem solving | Superficial (aesthetically pleasing) |

WHAT IS THE PROCESS OF DESIGN?

A PURSUIT OF AESTHETICS



“TIDY WORK SPACE EQUALS A GOOD EXPERIENCE. IT CAN IMPROVE EFFICIENCY AND HAPPINESS, WHICH LEAD TO MORE INSPIRATION FOR DESIGN.”

WHAT IS THE IMPACT OF DESIGN?

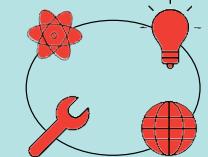
THE HUMAN ENVIRONMENT



“A GOOD DESIGN EXPERIENCE IS SOMETHING THAT IS EFFICIENT, FUNCTIONAL, AND AESTHETIC TO THE MAJORITY OF THE POPULACE APPRECIATING IT WITHOUT BEING TOO OVERBEARING.”

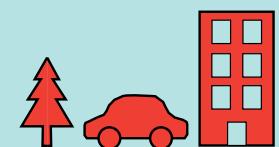
DESIGN PRODUCER

COMPREHENSIVE REITERATION



“A GOOD DESIGN PROCESS IS GROUNDED IN RESEARCH PLUS DEEP UNDERSTANDING OF THE PROBLEM, AND DRAWS FROM MANY PERSPECTIVES PLUS SKILLSETS TO GENERATE SOLUTIONS.”

THE IMPROVEMENT OF ALL PROCESSES



“A GOOD DESIGN EXPERIENCES IS ONE THAT FULFILLS A REAL PURPOSE OR NEED, AND CAN BE USED TO SOLVE THAT NEED BY MANY - NOT A LIMITED FEW.”

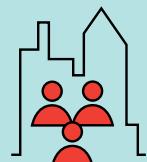
WHO IS THE AUDIENCE OF DESIGN?

INDIVIDUALS



“A GOOD DESIGN EXPERIENCE IS ONE THAT IS OPEN; ONE THAT GIVES PEOPLE A SENSE OF PEACE AND BELONGING”

HUMANITY



“THOUGHTFULNESS FOR WHO YOU ARE DESIGNING FOR. AS CONSULTANTS AND DESIGNERS TOO OFTEN OUR SOLUTIONS AND IDEAS ARE TOO SHORT-SIGHTED.”



“Experience? A good design experience is one that is open to all, inclusive of all voices, free-flowing in its process and outcomes and cyclical in its return to key themes and ideas.”

Lynn Dearborn

UIUC Associate Professor

I think design is the creative process of intentionally thinking, imagining, and planning the settings or fabric within which living beings in the world exist, and conduct both the activities of everyday life and those activities that are special or sacred.

Technology can offer many things to design and enable adaptability. It has to be more user friendly and not expensive. User-friendly technology will require that we consider who isn't using the technology and why they are not. Once we have fully evaluated those questions, we can design to make technology accessible to everyone. It is

also important that people have a choice of whether to use technology. Is there an analog option? Maybe some people will choose analog because they don't always want what technology can offer.

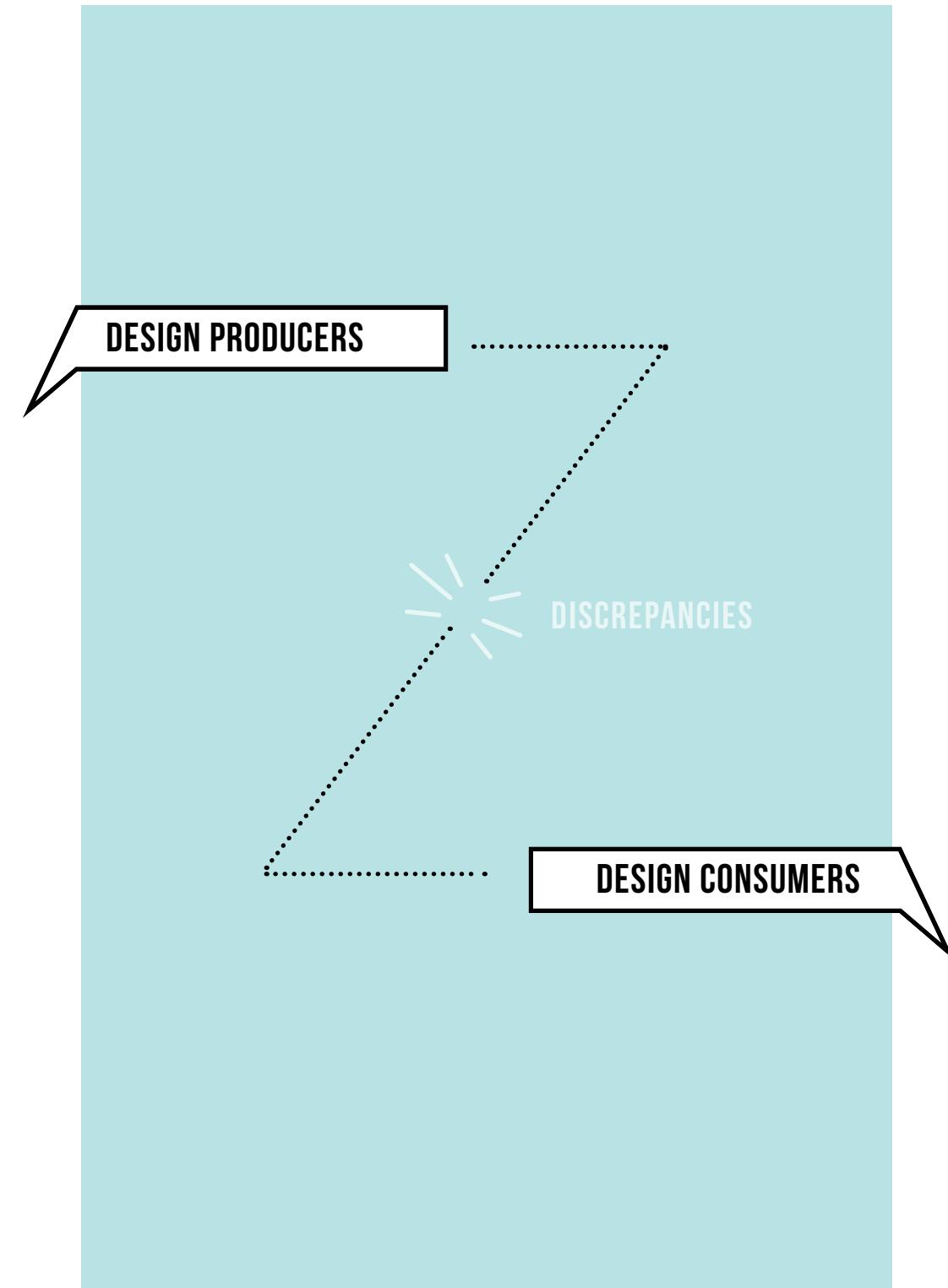
To improve our quality of life, perhaps design could contribute to the solution. Part of the solution resides in my own ability to prioritize but part resides in the ability of the world around me to offer short breaks from the intensity of what I experience every day.

THEME

01 DESIGN PRODUCER/CONSUMER

The interviews brought to light a discrepancy in the answers of design producers and consumers. When asked a list of questions about design, design producers had specific answers whereas the consumers did not. For producers, they knew the what, when, where, how and why to each of the questions, but the consumers only knew the answers to the what.

Through further investigation, the point of disconnection became apparent; producers respond often [only] to the concerns of the clients, sometimes leaving behind the user's needs and wants. This is particularly the case for design professions as clients and end users are not always the same. As a part of the service industry, designed products are successful if at the end the intentions of the design are well-understood and valued by end users. If not, the effort is in vain. There is a dire need to build a relationship between users, clients, and designers, and designers as mediators of this relationship carry the responsibility to bridge the gap in order to create satisfying results for both sides.



DESIGN ETHICS

WHAT WE FOUND

04

Through various discussions, a common theme we came across was the concept of design ethics. What it means and how it influences design as well as designers.

THEME 02 DESIGN ETHICS

ETHICS AS IT RELATES TO SOCIAL IMPACT

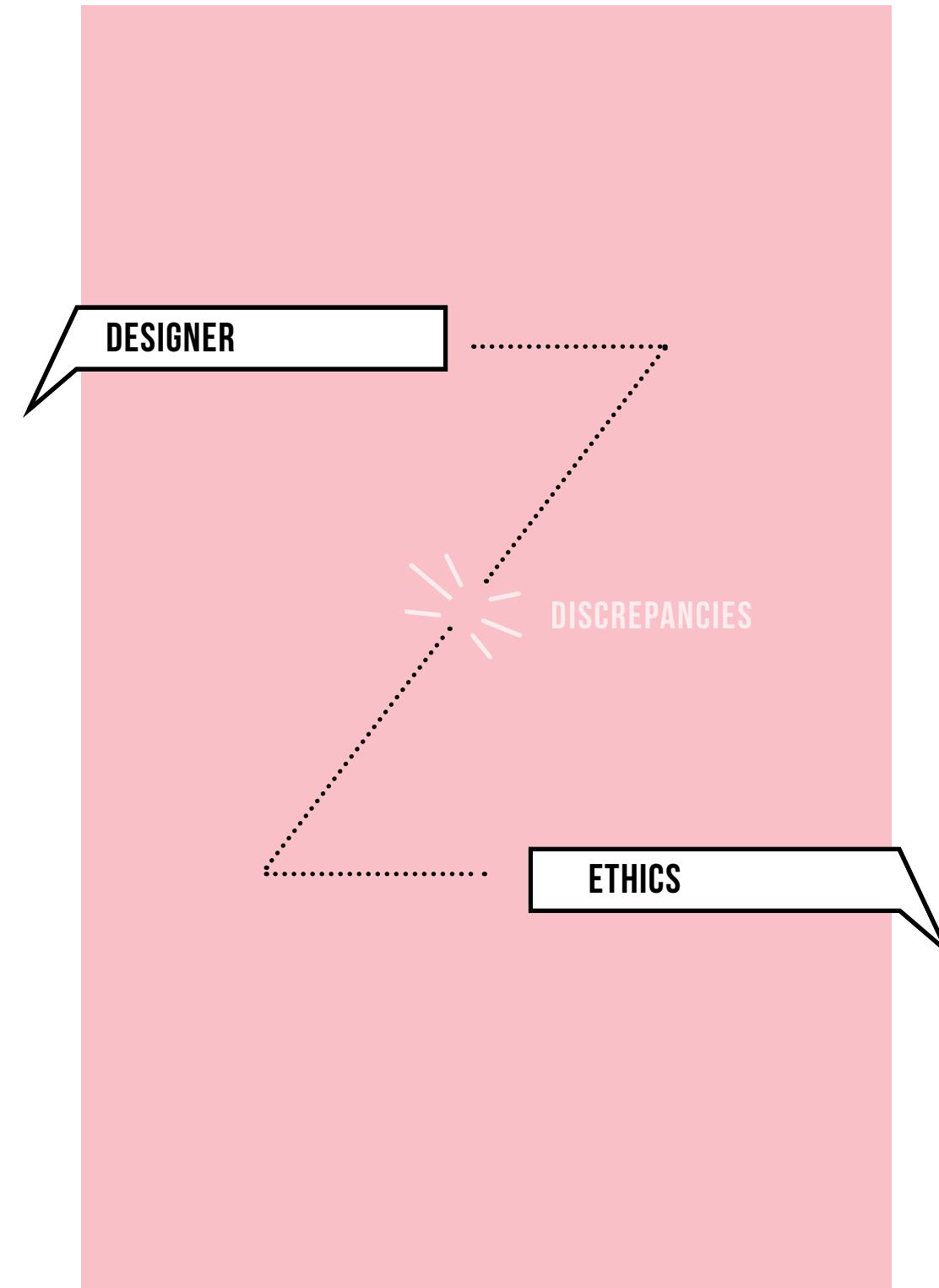
How do we evaluate design impact? We have chosen to answer this through looking into social impact; we believe that the best way to answer that was through researching ethics as it applies to architectural professional practice. Ethics in architecture is treated as one of the many guiding forces in ensuring the health and well-being of the general public. In this we will discuss the connection between Ethics and Social Impact, the AIA Code of Ethics, as well as look into how this knowledge is impacting our profession and how it can impact our future. The discussion of ethics in the design process should encompass more than what the designer can provide as well as include all voices involved in the process. As designers we can begin to discuss how our judgments and our voices can lead to a greater impact. More importantly, how we can use our knowledge as a platform to speak against the grey areas where something is not breaking the law but is unethical.

According to the business dictionary, In the world of design, ethics and social impact go hand in hand. Ethics can be defined as - "The basic concepts and fundamental principles of decent human conduct. It includes study of universal

values such as the essential equality of all men and women, human or natural rights, obedience to the law of land, concern for health and safety and, increasingly, also for the natural environment." While Social Impact can be defined as - "The effect of an activity on the social fabric of the community and well-being of the individuals and families."

An understanding of the in and outs of Ethics are important when evaluating social impact. So why is this important for architects? Architects are responsible for the health and well-being of the general public, and it is the designer's responsibility to create something that fulfills their client's needs while servicing the greater community.

For example, we will discuss the controversy of gender assigned public bathrooms. In the early 19th and 20th century bathrooms were separated on the basis on sex, race, class and sometimes even religion; but only separation by sex remained the norm coming into the 21st century. Over these past recent years, gender assignments and gender-neutral public washrooms have become a major topic of controversy. Issues of equity and human rights have been addressed in regards to those who identify outside of



the gender-norm; however, the lack of gender-neutral bathrooms impacts people with disabilities who may need assistance from someone of a different gender, and parents with toddlers. While concerns have been raised about the increase in harassment towards women and children, there isn't enough research/ evidence to support the concerns.

The continuation of toilet assignment based on what is binary can potentially lead to a disservice to everyone. College campuses are taking lead in support of this issue, by creating all gender-neutral toilets in their residence halls and public facilities; their support can lead to evidence of support that gender-inclusive bathrooms can provide a safe space for all that is involved. While this is not a problem solved by designers, it is simply another example of the importance of other entities in design decisions. Similar to many social movements in the past, this will take time for adjustment. While this subject is much broader and deeper than what is written here, it is a great example of how design can play a roll in the health and well-being of the general public while being supportive of our changing social/ societal needs.

AIA CODE OF ETHICS*

As stated in the AIA code of conduct, if a member of a project becomes aware of a decision being made that is unlawful, it is their duty to speak up and report this information to appropriate individuals. What happens when a decision that is being made is not unlawful, but will provide social, economical, or psychological damage to the end users? As designers, when do we make that judgment, and how do we go about addressing it?

FUTURE OF DESIGN:^{*2}

As a profession, if we are truly in support of this idea of social impact, and how our designs will impact the public; we have to first evaluate the current and past structure of our practice and the social impacts it's had/ continues to have on the many people working within it. Equity by Design, an initiative that began in 2014, used a survey from all 50 states in the US and 6 nations on different continents; and places that information into quantitative data that can be analyzed. Upon sending their survey, they sought answers from different aspects of a person's architecture career, beginning with students in architecture school and extending to licensed architects with many years of experience. The surveys also collected information based on gender, race and ethnicity; and as a result they receive 8,664 participants..

Equity by Design's mission statement.

Equity by Design is a call to action to realize the goal of equitable practice for everyone, advance the profession and communicate the value of architecture to society. Our mission is to understand the pinch points of career progression and promote the strategic execution of best practices in the recruitment, retention, and promotion of our profession's best talent at every level of architectural practice.

Equity by Design stance on Equitable Practice

"Equitable practice promotes the recruitment and retention of the most diverse talent while building stronger, successful, sustainable practices. The equitable inclusion of professionals allows us to better represent the people we are meant to serve."

Equity is for everyone - architects, design collaborators, clients, and our communities."

We believe that equity in architectural practice is an important talking point in addressing ethics as it relates to social impact. As designers, we are consistently considering the impact that our designs have on our end users. By supporting equitable opportunities for minorities within the profession; we're supporting the idea of diversifying

voices in the decision making process. Bringing together people of different backgrounds, with different perspectives and outlooks on life; creates platforms of growth, spaces for knowledge to accumulate, and most importantly allows voices that would normally be silenced to speak on behalf of the social impact our designs will have.

Why does design matter? - because the spaces we design have an impact on the people who use them.

"The equitable inclusion of professionals allows us to better represent the people we are meant to serve" —Equity by Design

* <https://aianova.org/pdf/codeofethics.pdf> *² <http://eqxdesign.com/>

SO.....

YES

BUT NOT IF PEOPLE CAN'T SEE IT.

CONCLUSION

WHAT WE UNVEILED

05

*"Everybody
recognizes design
when they see it.
But this is a rarity,
as design can often
be overlooked.
In order to notice
design we must
understand how it
came to be."*

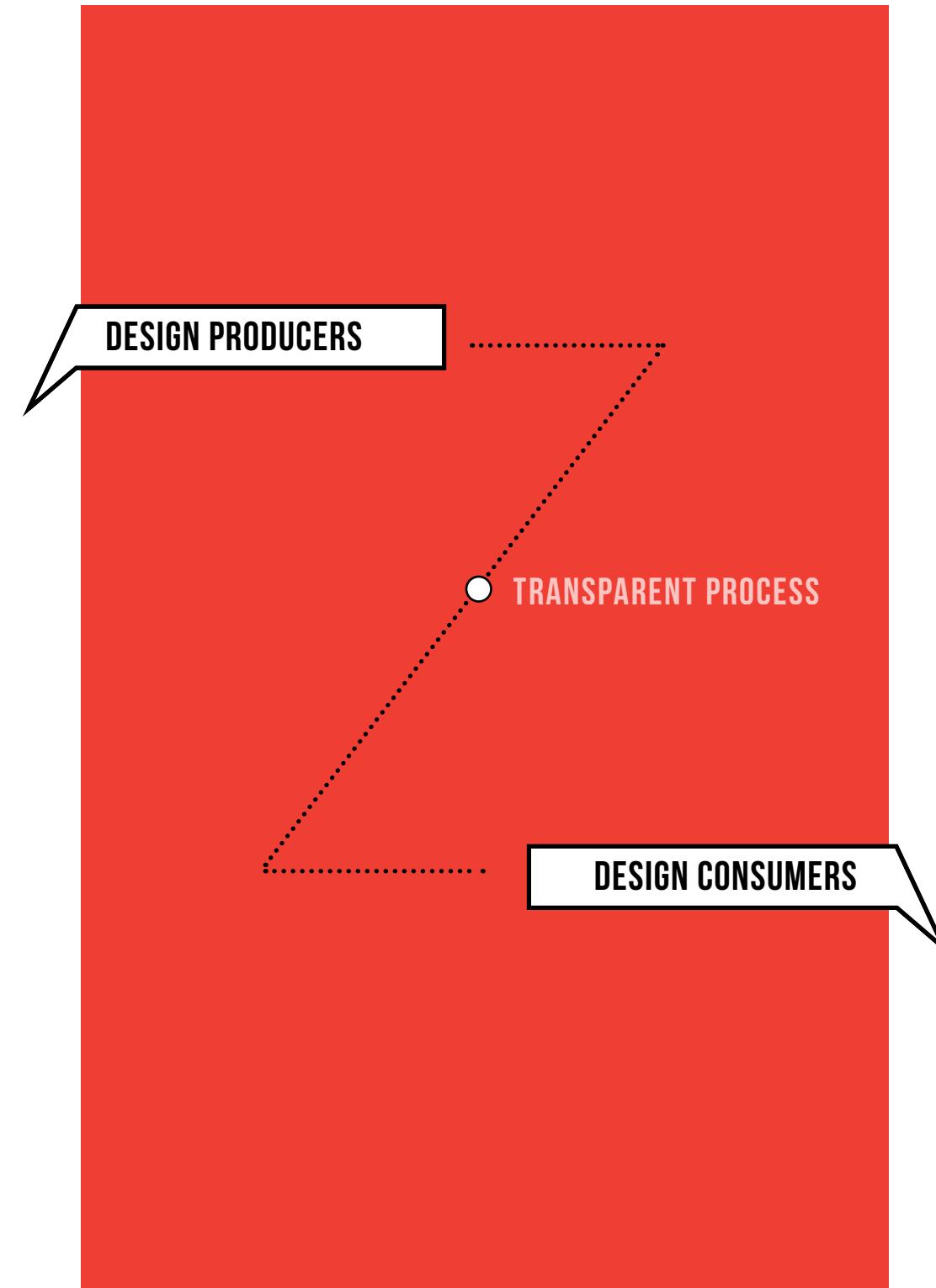
THEME 03 TRANSPARENT PROCESS

After conducting our interviews we began analyzing the answers, and found a few common themes throughout. We began by splitting the interviewees into two groups. Design Producers: the creators of all things designed, and Design Consumers: the end users of design products. We found that the interviews brought to light, a discrepancy between the two parties, the answers given by design producers were more specific, while design consumers answered with terms that were more significantly vague. The producers went beyond the initial question often diving further into bigger design ideas. Whereas consumers stayed within the parameter of the original question. Everybody recognizes design when they see it. But this is a rarity, as design can often be overlooked. In order to notice design we must understand how it came to be. Thereby recognizing the value and impact of design. This can be achieved by illuminating the overall process of design.

From an outside viewpoint it seems as though the design process always starts with a problem. And after an arduous search, often burning the midnight oil, the producer eventually arrives at a design. When the design is revealed, it is the first time the end user is exposed to the product. Everyone has a reaction, an opinion, but most don't understand the intent - the trial and errors to get to where

the product is now. But for a design to be optimal for its end user, it has to jump from paper to reality bringing the ideas embedded within the design to life. This is where we identified a problem. Through the process, the producer seems to respond only to the concerns of the client, sometimes cutting out the needs and concerns of the end users, the most important factor in the equation of a successful design. This is particularly true since Clients and end users are not always the same. But like every design problem, there is always a solution.

We believe that by making the process of design accessible, each design decision has the potential for a greater impact, and people will have a better insight into how the design came to be. We as designers know that there is thought process behind every design decision, which is based on a number of varying influences (form, function, brand, context, material, environment, etc.) If these decisions can be better perceived by design consumers, their understanding of the product increases. This allows for better feedback on products and even better future end results. Having a transparent design outcome ensures that the end user has a greater appreciation for both the design and the designer. So yes design matters, but more importantly, so does a transparent design process.



WHAT CAN BE ACHIEVED BY A TRANSPARENT DESIGN PROCESS?

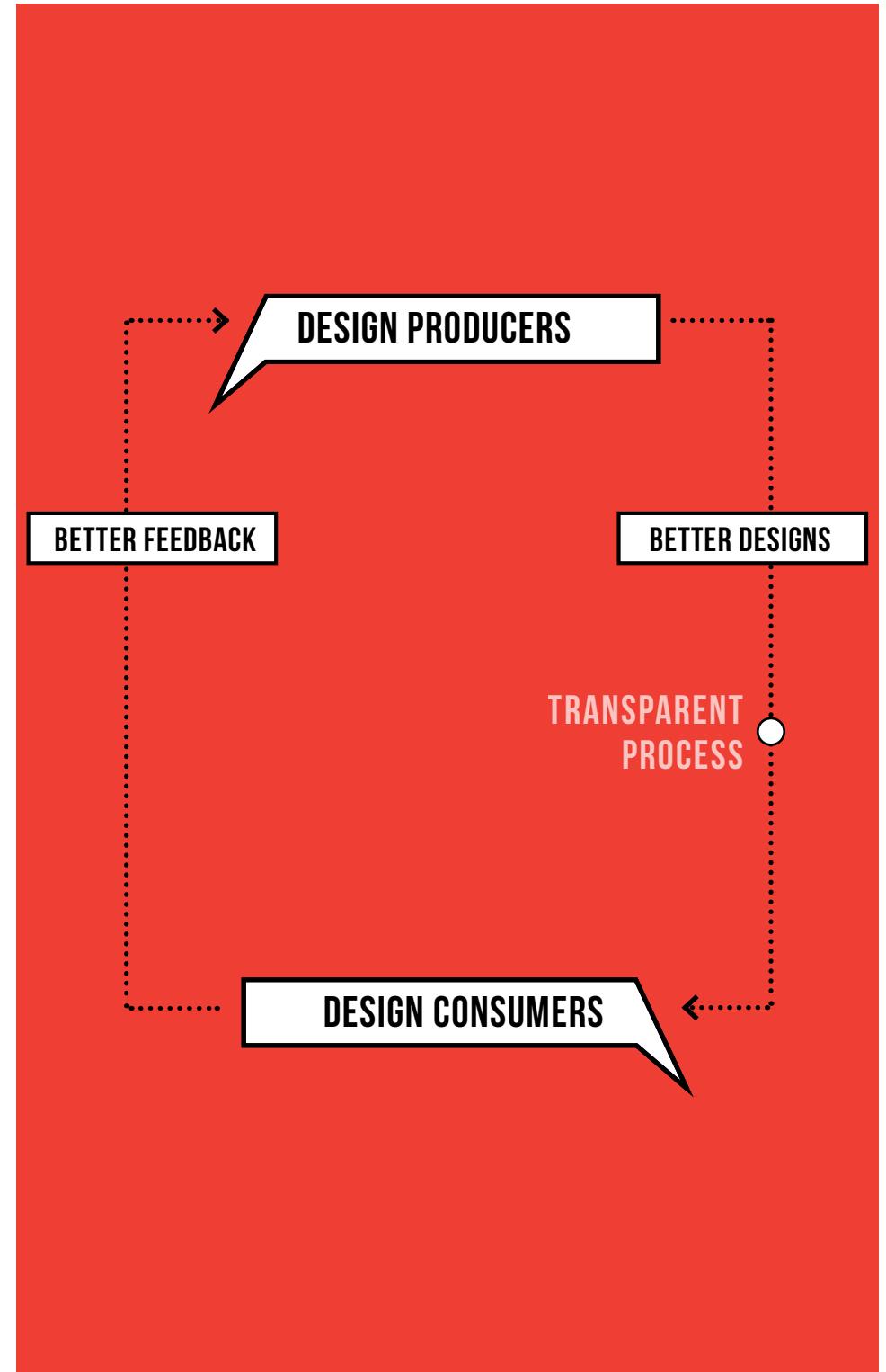
HERE'S WHAT WE THINK

If end users understand the design process, they can better respond to our design decisions with a similar level of literacy. With better feedback comes a better chance to improve that particular design.

We believe this understanding can also be applied to client designer relationships. If the client can fully visualize the design process, and see the effort and time put into the project, they might have a better appreciation for the design as well as the designer.

If users understand the design process, they will have a greater appreciation for the design. With that greater appreciation, people might be more willing to subsidize cost for design.

By showing insight into why we make the decisions we do can help establish our profession. We have the design knowledge and experience, yet designer's decisions are often seen as opinion driven rather than experience driven. It is important that the client see our process in order to validate our decisions in their eyes.



THIS IS NOT THE END.

Although we are marking the conclusion of our summer research project, we feel as though this conversation has not reached its full potential quite yet. And so, we leave you with three questions, in hopes of sparking new discussions and alternative solutions.

DESIGNER — END USER

DO DESIGNERS UNDERSTAND USER EXPERIENCE?

DESIGN ETHICS

WHAT IS A DESIGNERS RELATIONSHIP TO ETHICS AND SOCIAL IMPACT?

TRANSPARENT PROCESS

DOES DESIGN MATTER IF PEOPLE DON'T RECOGNIZE IT?

“GOOD
DESIGN
IS OBVIOUS
GREAT
DESIGN IS
TRANS
PARENT”

Joe Sparano