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# “Focus on the Users”:

# Empathy, Anticipation, and

# Perspective-taking in Healthcare Architecture

A dissertation submitted in partial satisfaction of the requirements for the degree

Doctor of Philosophy in Anthropology

by

Christopher Shawn Stephan

2020

ABSTRACT OF THE DISSERTATION

"Focus on the Users":

Empathy, Anticipation, and

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Professor Christopher J. Throop, Chair

Healthcare environments, including hospitals, medical office buildings, skilled nursing facilities, and outpatient surgical centers (amongst others) pose a two-pronged challenge for the medical social sciences. On the one hand, social scientists of medicine have called for concerted effort in developing overarching theoretical frameworks and more in-depth empirical findings that help position existing healthcare environments within the total ensemble of biomedical practices and technologies. On the other hand, they also observe a need to understand the design of healthcare environments itself as a social process that seeks to produce some balance in the varied interests, constraints, and modalities of care, ultimately giving rise to a particular configuration of the built environment. It is toward the latter project that this dissertation directly contributes.

The history of architecture shows that designers are always at risk of reducing the built environment to its material and aesthetic aspects—and, consequently, of marginalizing the less visible, more difficult to trace and represent, practical involvement that people have with their surroundings and with one another within them. At its most extreme, architects have been criticized for treating their users like mere functionaries of the built environment. The present-day alternative within architectural discourse sets specialized techniques for understanding and responding to how particular groups of people act within and make meaning of the built environment as the condition of possibility for good design. Since the 1960s, many architects have taken up an orientation toward design that I herein refer to as "Methodological User-Centricity" (MUC). The premise is simple: better design hinges on better knowledge of the people being designed for, and that knowledge is best acquired by empirical, often social-science-inspired methods.

One of the most influential encapsulations of this orientation in design today (in architecture and beyond) is "empathy". Designers, in this popular construal, must go beyond merely understanding the preferences and patterns of behavior of their users; they must connect with the principle of those preferences and behavior, to anticipate the user's experience of the designed thing. The healthcare architects with whom I conducted ethnographic research talked about "empathic" knowledge of "users"—including patients, doctors, nurses—as essential to improving healthcare, and sought to develop this understanding of occupants through games, interviews, and other methods for learning about users' needs, values, and experiences. In aiming for "empathic" understanding, architects hope to design built environments that will improve the quality of patient-provider interactions and all users' overall wellbeing.

Based on 12 months of ethnographic fieldwork with architectural designers in the San Francisco Bay Area and situated in a context wherein MUC is the dominant orientation toward design, this dissertation details how architectural designers derive and enact their understandings of the healthcare professionals and patients for whom they design. I examine the background premises, the manner of inquiry and the modes of appearance through which architectural designers enact their specific forms of constituting others and intervening in the surrounding world on their behalf. Working from data running the gamut of architectural activities from conceptualization in user meetings, to completion and retrospective evaluation by both designers and end-users, I documented each stage of architectural projects from when a project is first awarded to the final stage when architects work with contractors to oversee construction. Carrying out a phenomenological analysis, I unpack the relationships between aspects of architectural practice, including methods of approach to others, and modes of intersubjectivity. In doing so, I approach architecture as a polymorphous response to others, one ultimately rooted in manifold forms and degrees of social understanding.

The dissertation of Christopher Shawn Stephan is approved.

Keith Murphy

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Alessandro Duranti

Christopher J. Throop, Committee Chair

University of California, Los Angeles

2020

To Bobba,

for his inspiration

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My greatest debt is to the architectural designers who participated in this study, especially to those at the focal firm. Ultimately, this dissertation draws on but a small subset of my data. Consequently, several of my participants won't find themselves represented here. I owe them nothing less, and I'm confident that in the future I will on many occasions rely on and recount some small part of what they taught me.

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I owe a debt of gratitude to the staff of the anthropology department for many, doubtless undercounted, acts of support—including the fundamental work of keeping the institution running; thank you for making a place for thinking. I would like to particularly recognize Ann Walters, Kate Royce, and Tracy Humbert. The anthropology department has also offered the benefit of many wise teachers and friends. In that regard, in addition to the members of my committee, I would single out Elinor Ochs, Linda Garro, Alan Fiske, and Aomar Boum. Finally, portions of this dissertation research were funded with research grants from the UCLA Department of Anthropology pre-dissertation and dissertation research grants and UCLA Graduate Division.

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and besides that we had a good time. Many, many thanks to my immediate family for their love and moral support throughout the years. To my parents, siblings, and grandparents, I hope you know how far even the thought of you moves me along. Lastly, I want to acknowledge Devin Flaherty for being my most wonderful colleague and companion.

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2019 (with Devin Flaherty) "Experiencing Anticipation: Anthropological Perspectives". *The Cambridge Journal of Anthropology* 37(1): 1-16.

"A Generative Theory of Anticipation: Mood, Intuition, and Imagination in Architectural Practice". *The Cambridge Journal of Anthropology* 37(1): 108-122.

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# Introduction

Foresite Design is an architectural firm specializing in healthcare. The firm's San Francisco office is located in one of the financial district's tall, narrow, Sullivan-esque office buildings that dot the area around Market Street. Emerging from Powel Station for my first day of fieldwork, I pick my way through a crowd quickly thinning with each intersection as morning commuters peel off toward their unique destinations. Foresite's San Francisco office is fairly small, especially compared to the lavish scale of giant firms like Stantec and HOK. I almost miss the modest entrance. Most of the ground floor of the building is taken up with fashion retail. The remaining square footage leaves just a narrow sliver of an entrance, beyond which is just a cramped foyer leading toward an even narrower hall lined on one side with elevator doors. Most of the foyer is taken up by the person of a uniformed concierge and the hostess stand that serves as her desk. Upon hearing I have an appointment at Foresite, the woman points me back toward the elevators and tells me to go to the second floor.

The moment the elevator doors open out to the second floor I find that I'm immediately in the middle of the office. The large, open plan office is half empty, and the half dozen designers who are already at work this morning are preoccupied with work. Only a few glance up to see whom the elevators have brought into their space. Right in front of the elevators, facing the entrance is a large white, trapezoidal reception desk. Behind it, Bernice, the office coordinator, pauses working on an email and swivels to face me with a smile, pivoting into the

role of a receptionist. I explain that Marc, the director of the San Francisco office and one of the Principles at the firm has agreed to let me shadow him for my first day of observations. We'd tentatively agreed to start at 9:30, but Bernice explains that Marc's day is already running a bit behind schedule and he hasn't yet made it to the office. I'm invited to take a seat in the "lounge," a small room with generous seating set up to house waiting visitors, private meetings, and group conference calls.

Most of the floor is open plan, so as I wait behind the plate glass windows of the lounge, I can see all but the most offstage of spaces. The rest is plain to see, low and open and lit by double-height windows wrapping two sides of the floor. The bulk of the office is made up of sixteen workstations, each equipped with dual monitors. Only twelve of these stations are in regular use in the beginning, but by the time I finished fieldwork the San Francisco office was at

around 18 full time employees.[1] The workstations are set in two rows, each with eight stations arranged in pairs facing one another. Some of the desks are ornamented with family photos and personal trinkets. The rows of desks are separated by 'layout' tables upon which the designers arrange and consult construction documents and large binders detailing the latest building codes. A few of these tables are at capacity with stacks of rolled up drawings or and samples of flooring and fabric swatches.

Aesthetically, the office is a tasteful juxtaposition of styles and materials. White walls, white, minimalistic desks, and low-pile carpeting, gray with streaks of electric blue, are offset by on accent walls and pieces of furniture in canary yellow. The yellow color is a part of Foresite Design's visual brand, featured also in pamphlets and on their website. Exposed steel, plate glass, and rustic wood paneling contrast with a Victorian ornamental ceiling that hints at the floor's former life as a show room. It's still a show room, in a sense. All architectural studios I have ever visited are ongoing projects – case studies in the firm's own taste and finesse, and an exhibition space for past projects and branding. Framed awards and trade magazine covers deck any available wall space. At the midpoint of the workstations, along a feature wall, a 60-inch flat screen runs through a continuous slideshow of architectural photographs showcasing the most visually appealing work of all three regional offices.

The images are largely vacant of people and the messy traces of their activity. What they foreground are the material and aesthetic features of the environment. Implicitly, each photograph asks that the space pictured be judged on these merits alone. Surfaces are new and lustrous. Countertops and reception desks remain uncluttered by medical files, invoices, and personal effects. When, on occasion, a human figure appears, usually in scrubs or a lab coat, a

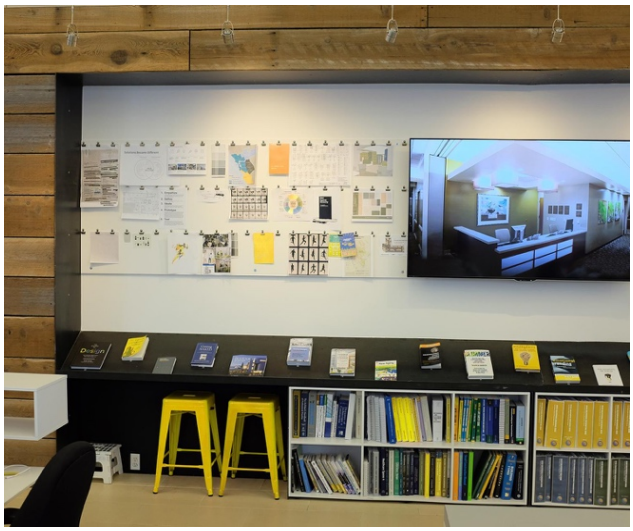
[1] In 2018 the office once again had to be relocated to accommodate new hires. Many of the features of Foresite's office during my time in the field have not been duplicated in their new location.

long exposure blurs the individual's features. The blurring manages at once to demonstrate movement and to ensure that the only details the image retains are architectural. Architectural photography traffics in a kind of fantasy. By abstracting away from the space as lived in, these images present a built environment in which "fit" isn't a problem: the suitability of these spaces for their different occupants never manifests, let alone comes into question. It was images like these that brought me to my research topic. The popular depiction of architecture is so often of a place already designed. In these depictions, every contingency worth note has already been handled, and all necessary and desirable forms of "use"—all the human activity and attendant forms of experience—have already been provided for (or not). As an anthropologist, I wondered when and in what form the people, who are so often only implied, actually appear during the design process.

My train of thought is interrupted when Marc enters. He's newly middle-aged, with thinning sandy hair. He wears a cerulean dress shirt (including a tie, today, because he has come from a meeting with clients). His voice is soft, slow, and affable. He seems always to be thinking carefully about to how to say what's on his mind, but he warms up to people quickly and comes across as easy going. These character traits are, I'll find out, major professional assets.

Marc offers to take me on a short tour of the office. It doesn't take long, but the features he highlights strike me as an interpretive key for the firm's design philosophy. Looking around the office, already I begin to notice aspects of Foresite's approach to architecture that would later become central to my ethnography. This doesn't require me to be particularly astute. In some cases, it's literally spelled out for the visitor. Marc draws my attention to the long feature wall along which the elevators are located (bottom of plan above, and in photo on right). The length of it is clad in reclaimed wood, except for a cove where the designers stash and display

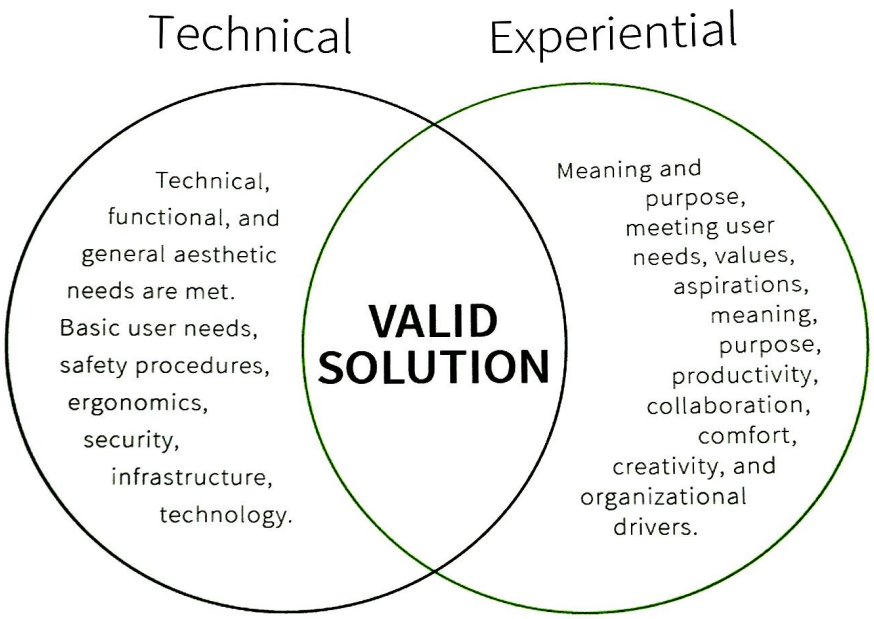
influential books and binders of building code. Above these are a massive monitor that cycles through a slideshow of photographs from Foresite Design's finished projects. Just next to the screen is a large board where various employees have posted inside jokes, exemplary samples of work from past projects, and inspirational imagery and charts related to design.



Marc singles out a few of these inspirations. Many of these communicate a great deal about Foresite's ideal of design. There is an 8.5x11 sheet with several color photos printed on it displaying young people gathered around whiteboards in a large, industrial-looking room. Marc tells me that this comes from Stanford's D-School. Some of the Foresite team did a workshop down there to learn about how they approached "design thinking." It was there that they got the idea for their own design lab. There are other notable items on the board. One sheet features five steps: 1. Empathize. 2. Define. 3. Ideate. 4. Prototype. 5. Test. These, I would later learn, were the prescribed steps to doing "Human-Centered Design," a stylized approach popularized by Bay-Area design firm IDEO.

The board is full of Foresite's own branded media on their design process as well. One of these is a Venn diagram with two circles, labeled "technical" and "experiential", overlap to create an intersect called "valid solution." Whereas the technical side features words like "function," "safety," and "ergonomics" the experiential side exhibits "values," "meaning," and "creativity." The two regions track with divisions between "objective" and "subjective"

measures of quality. Here, posted on the wall, it functioned as a reminder that Foresite's standards should be to satisfy both the "technical" and the "experiential" conditions.




Turning away from the feature wall, Marc brings me to the 'design lab', a room with two standing-height tables, surrounded by stools and covered in paint chips, fabric swatches and other sample materials. The design lab is intended to support creative collaboration and socializing, I'm told. Some of the features of the design lab are intentionally modeled on the example of the D-School Marc had called to my attention earlier. Except for bookshelves, every piece of furniture is chosen for its mobility so that the room can be easily re-configured in minutes to accommodate whatever activity the designers have in mind. Marc notes that they could use the space for simulations, if they wanted to prototype a room configuration, for example. Apart from the rolling tables and the stools, the lab houses the office's library of samples, their office supplies, a wheeled whiteboard, and, notably, a dedicated beer fridge and a wine cooler. "You can't do good design without alcohol," Marc says, smiling with a mischievous glint, "You can quote me on that."

Marc leads into a corridor from which one can access the kitchen, call room, and bathrooms. He takes a moment to call attention to a large, decaled window between the call room and the hall. It's another point of pride and branding for the firm. Printed on the window are individual words and phrases intended to inspire and project the identity of the firm. This was a new touch, Marc told me–something they put in just a few weeks ago in advance of an open house celebrating their new office. The office had actually been occupied by Foresite for roughly a year, but renovations had been gradual.

Marc directs my attention to a few of these phrases, using them as an opportunity to discuss the philosophy behind the slogans. The most prominent of these slogans, printed in all caps, reads "WE ARE A DESIGN FIRM". Marc singles this out. Using the word 'design' in their name and in this slogan is very purposeful, he explains to me: they are not "just" architecture, merely technical work; they were more conceptual, and more holistic in the way that they approached the institutions that hired them. I gaze at the window for a moment longer. Other phrases catch my eye. "Making a Difference," reads one. Another: "Focus On Users." Like the Venn Diagram just before, the slogans in the window suggest that Foresite Design is striving to exceed the basic

requirements of a functional and aesthetic architecture—a supererogation they achieve by attending to the "experiential" aspects of occupying and working in the built environment.

One of Marc's first official acts of welcome is to invite me to take an open desk amongst the designers. He picks one out—on his same row, so that I have easy access to shadow him for the rest of the day. I start to set down my things when Raj, my new neighbor, realizes he has stuff, mostly single sheets of handwritten notes torn from a Foresite-branded, graphing notepad, strewn all over the desk I've been offered. He grabs them up, apologizing. The papers, I come to find out, are a trace of his specialty. They're notes from meetings with medical staff who are advising on an ongoing project. Raj's job is that of a "strategist." At Foresite, this means he's responsible for teaming up with the architects to sus out how a facility's different user-groups work and interact, what concerns they have about their current work environment, and what expectations they have for a new one. While it is the whole team's job (including licensed and unlicensed architectural designers, and interior designers) to translate these "user needs" into design features, the work of researching, documenting, and distilling falls largely to Raj. Here, then, in the execution and at the conjunction of these two steps, user research and design, is the ethnographic scene I have been looking for.

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The history of architecture shows that designers are always at risk of reducing the built environment to its material and aesthetic aspects—and, consequently, of marginalizing the less visible, more difficult to trace and represent, practical involvement that people have with their surroundings and with one another within them. At its most extreme, architects have been criticized for treating their users like mere functionaries of the built environment. Architectural educators Russel Ellis and Dana Cuff (1989:8) have observed that,

> … in moving through the designs with some architects one gets the impression that an indistinctly motivated lump of somatic stuff—born in and taking shape in bubble diagrams—is being directed by arrows along paths of circulation to loci of living, eating, and bathing. This little puppet, though animated by the designer, tends to be passive and unobtrusive of the design's flow.

Ellis and Cuff's critical presentation of the "lump of somatic stuff" follows in the well-traveled tracks of the last half century of critiques from within architecture and without. The dominant alternative, one Foresite Design makes efforts to exemplify, sets understanding and responding to how particular groups of people act within and make meaning of the built environment as the goal for design. In this respect, I came to understand that Foresite is an example of a larger movement—one approach among many that in one way or another cast design as observant, receptive, and conducive. Since the 1960s, architecture has taken up an orientation toward design that I herein refer to as "Methodological User-Centricity" (MUC). The premise is simple: better design hinges on better knowledge of the people being designed for, and that knowledge is best acquired by empirical, often social-science-inspired methods. The operationalization of this premise (the actual methods) and the conceptual means by which designers articulate this orientation vary.

One of the most influential encapsulations of this orientation in design today (in architecture and beyond) is "empathy". The primacy of empathy reconfigures not only design's objective but its form of efficacy. Designers, in this popular construal, must go beyond merely understanding the preferences and patterns of behavior of their users; they must connect with the principle of those preferences and behavior, to anticipate the user's experience of the designed thing. The healthcare architects with whom I conducted research talked about "empathic" knowledge of "users"—including patients, doctors, nurses—as essential to improving healthcare, and sought to develop this understanding of occupants through games, interviews, and other

methods for learning about users' needs, values, and experiences. In aiming for "empathic" understanding, architects hope to design built environments that will improve the quality of patient-provider interactions and all users' overall wellbeing. In the logic of Methodological User-Centricity, "empathic" understanding of users requires its own method of approach, and for this one needs specialists (see Ellis 1971, cf. Ellis 1989). MUC is not without its shortcomings in principle or practice, that much will become clear. Nevertheless, my primary interest is in detailing how architectural designers derive and enact their understandings of the people for whom they design.

One of the enduring projects of psychological anthropology has been a close examination of the ways that culture (including expertise) patterns individuals' attention to and inferences about others (Csordas 1994, Hallowell 1955, Hollan and Throop 2011, Luhrmann 2011, Robbins and Rumsey 2008). In this dissertation, I examine the background premises, the manner of inquiry and the modes of appearance through which architectural designers enact their specific forms of constituting others and intervening in the surrounding world on their behalf. Carrying out a phenomenological analysis, I unpack the relationships between aspects of architectural practice, including methods of approach to others, and modes of intersubjectivity. In doing so, I approach architecture as a polymorphous response to others, one ultimately rooted in manifold forms and degrees of social understanding.

Based on 12 months of ethnographic fieldwork among 6 architectural firms in the San Francisco Bay Area, my research documents and theorizes the practices through which architects work to understand and respond to the needs and experiences of healthcare professionals and patients. The ethnographic focus of this dissertation is the San Francisco office of the focal firm in that study, a group I call Foresite Design. Working from data running the gamut of

architectural activities from conceptualization in user meetings, to completion and retrospective evaluation by both designers and end-users, I documented each stage of architectural projects from when a project is first awarded to the final stage when architects work with contractors to oversee construction. This dissertation focuses on the early phases of health architecture projects, paying particular attention to the variety of ways the users of a nascent healthcare facility figure in the design process.

Throughout the dissertation, I examine a variety of intersubjective modes of attunement mediating the way architectural teams stage and incorporate user input into the design process. These include a phenomenal range of anticipatory experiences through which designers produce of users' possible activities and self-awareness of the needs those activities entail. That process further includes different instantiations of empathy[2] (*Einfühlung*), as when designers meet with those users in-person and, in some cases, learn about still others through their secondhand accounts. Finally, this dissertation considers how those empathic moments are differentially oriented toward in the materially mediated perception of users' possible experiences in the incipient built environment.

**Why Study the Design of Medical Facilities?**

Healthcare environments, including hospitals, medical office buildings, skilled nursing facilities, and outpatient surgical centers (amongst others) pose a two-pronged challenge for the medical social sciences. On the one hand, social scientists of medicine have called for concerted effort in developing overarching theoretical frameworks and more in-depth empirical findings that help position existing healthcare environments within the total ensemble of biomedical

[2] As I explain in greater detail later, "empathy" as talked about in interdisciplinary design circles differs in some fundamental ways from empathy (*Einfühlung*) as understood from a phenomenological standpoint.

practices and technologies (Bromley 2012, Martin el al 2015). On the other hand, they also observe a need to understand the design of healthcare environments itself as a social process that seeks to produce some balance in the varied interests, constraints, and modalities of care, ultimately giving rise to a particular configuration of the built environment. This latter project is the least fulfilled, and it is the one toward which this dissertation contributes most directly.

Social scientists have long argued that the built environment plays a key role in the inscription and reproduction of cultural ideologies and modes of experience (Bourdieu 1970, Buchli 2013, Hall 1966, Lawrence & Low 1990, White 2005). To date, however, there has been little systematic attention to medical architecture in the social sciences, with the greatest deficit pertaining to the process of their production (Martin et al 2015). In existing writings on healthcare facilities have medical anthropologists (Bromley 2012), medical geographers (Gesler 1992, 2003), medical sociologists (Bell 2017, Martin et al 2015, Rosen 1963) and historians (Adams 2007, Galison and Thompson 1999, Yanni 2007) have observed that the architecture of hospitals and clinics variously encode historically and culturally specific models of illness, healing, and therapeutic relationships. As a case in point, one can readily see the interweaving of biomedical knowledge and cultural ideals about care and illness experience in the many architectural books on best practices and case studies of extant sites (e.g. Leibrock & Harris 2011, Rainey and Mullen 2018, Sternberg 2009, Verderber 2005, Wagenaar 2006).

The symbiosis of care modes and built form emerges through a flow of ideas from medical practice to design and *vice versa*. Exemplifying this point, Beth Bromley (2012) has examined this transmission and confluence in the case of the notions of "patient-centeredness" in hospital design. As one finding of her case study, Bromley shows that healthcare designers ultimately expressed the values of patient-centeredness in aesthetic and programmatic choices

that mask equipment, backstage spaces, and—ultimately—the work of care itself in an effort to make the hospital more like a hospitality space. Ironically, the design features manifest assumptions about the social world that may ultimately undercut certain stated goals of "patient-centered care" (including by introducing greater distance between care providers and patients) as first articulated in the medical profession (see Laine and Davidoff 1996). And yet, the architecture of the hospital Bromley profiles was intended as part of a broader strategic shift on the part of the healthcare provider that went hand-in-hand with retraining and new hiring practices, both of which emphasize customer service style interactions. Instead of parroting back the premises of patient-centered medicine, architects participated in reshaping (and perhaps radicalizing) them.

In another recent permutation in the relationship between the built environment and health can be found in the movement known as evidence-based design (EbD) (Sternberg 2009, Verderber 2005, Wagenaar 2006). Like patient-centered design, evidence-based architecture has a direct analogue in the emergence of evidence-based practice in medicine (See Timmermans and Berg 2010). Drawing on the same logic as evidence-based medicine, the goal of EbD is to use controlled studies to identify and measure the appreciable impact of variables in the built environment upon experience, overall health, or speed of recovery in order to use this knowledge to design environments guaranteed to facilitate better health outcomes (Verderber 2005, Zimring et al 2008). Hence, in evidence-based design, architectural practice is cast as an extension of the biomedical model of care, on that turns the built environment into an instrument of palliation and healing (Sternberg 2009). Completing the cycle, there are now architectural certifications in Evidence-based Design that place architects in a position of authority to suggest design features and explain the potential health benefits to medical administrators and professionals.

I point out these correspondences between trends in medicine and trends in healthcare architecture to underscore that what their reciprocity produces are more than straightforward, materially transposed or symbolized but otherwise unchanged modes of care. Rather, even as ideologically charged tropes like "evidence-based" and "patient-centered" care transmit across from biomedicine and find meanings within architectural practice they require acts of interpretation and operationalization carried out by particular and situated actors. As successive failures to produce standard metrics for "design quality" in healthcare have gone to show (see Anåker et al 2017), there is no one-to-one equivalence between a care model or biomedical ideology and built form. Healthcare architecture is a social process in which architectural teams play a substantial part, in no small part through the process of coming to know, in various and differential respects, the people for whom they design. The operationalization of any mode of care plays out through architects' acquired understandings how these care providers and other users will act as well as through architectural designers' emergent reckonings with how the materiality and form of the designed space may affect those users' experiential possibilities. Those forms of understanding are embedded in the epistemic worlds of design.

Aside from the well-established point that architecture participates in the care modes and clinical cultures of its day, the added benefit of studying the design process is that healthcare architects are employed precisely at those moments when healthcare organizations are gearing up for institutional change (cf. Cuff 1995). While architecture must always construe and prioritize certain aesthetic values and use cases, since the 1960s architects have increasingly positioned themselves as strategic partners in organizational transformation (Montgomery 1989). Studying healthcare design, particularly if we attend to it as an ongoing social process, offers a chance to see the ideas, values, and modes of experience concerned lived out and deliberated (often

indirectly) among differently motivated and informed social actors. In this process, architects' understandings of patients and care providers are emergent and phenomenally textured. To understand that aspect, there is no substitute for being there throughout the architectural design process. This study is the first of its kind to focus on healthcare in this way.

**A Phenomenological Approach: From Intersubjectivity and Empathy to Social Action**

Throughout this dissertation, I employ conceptual frameworks adopted and adapted from classical philosophical phenomenology. I adopt these theoretical frames of reference, because phenomenological theory offers a perspicuous vantage on the manifold of ways in which we are attuned to and through a public and plural world. Phenomenological theory explicates the intersubjectivity already implicit in all experience as a condition of possibility for having a world (Husserl 1960; 1983, §151). From this basic beginning emerges the generative "lifeworld" in which we encounter our surroundings and others as already given within a horizon of more-or-less known individuals, social institutions, and courses of events (Husserl 1960, §58-59; Schutz 1967). The world of everyday things beckons with intimations of familiar activities. Intersubjectivity, with respect to our experience of objects, is not only or initially an implication of their meaning, but more properly the condition of their appearance as elements of the human world. Even the very perception of something as human-made gives us, indirectly, some access to the lives of others (Heidegger 2010, Merleau-Ponty 2012, Schutz 1967). For instance, in the perception of ancient ruins what is given, in varying degrees of concreteness, is what Alfred Schutz called the world of our predecessors.

Yet, an anthropological study of design must also adapt phenomenology – not in the least because philosophical phenomenology rarely grapples with the problems of intersubjectivity that

come into view when we try to consider the experiential understanding of others that must be operative in the act of fashioning objects and environments for their use. In the foregoing observations, which recur throughout this phenomenological literature, the materialized human world already exists. Hammers and tables, homes and temples are there to be passively grasped as a part of our everyday environment, formative constituents of the lifeworld. And so, the question of how it is that we are given the existence of others in these "cultural artifacts" is often paramount (see Merleau-Ponty 2012, part 2 section 4). The material world, in classic phenomenological accounts of intersubjectivity, is not one that is typically undergoing active transformation. But intersubjectivity is also the condition of possibility for the conception of places and objects in the making. Every material vestige was once a relation that had yet to be constituted. So, the question of the co-givenness of others and the material world is also one of how intersubjectivity manifests the world *as it could be given* to others.

If there is a single most fundamental premise of this dissertation it is that designing is a form of social action (cf. Murphy 2008). In the course of his project to clarify and phenomenologically extend Max Weber's sociology, Alfred Schutz' (1960:215, 1967) conceptualizes "social action" as all actions that were oriented to other's actions and attitudes. As a premise for ethnography, studying architectural design as social action means studying those aspects of design where others' ways of experiencing and acting in the built environment demonstrably figure into designers' own reasoning and actions. If the descriptive project of this dissertation is to bring these intersubjective moments into focus, the theoretical project is to enlist and extend phenomenological insights into intersubjectivity itself in order to understand how it is that we go beyond what is already given to create something new.

By bringing together phenomenological theories and ethnographic descriptions of design practice, I am particularly focused on a kind of social action Schutz referred to as "affecting-the-other" (which he also called “social affecting”). Social affecting always entails an attentional directedness to the other and a project to bring about, as a final or mediate end, “a certain conscious experience in the other person” (Schutz 1967:147). In affecting others, the products of our action become a context for the other’s subjective acts of meaning. If I, for instance, produce a sign for another to interpret, I am “affecting-the-other.” One of the most visible forms of social affecting is interaction; there the participants are mutually taking one another’s actions as the context for further, related acts. However, Schutz is quite explicit (and ordinary experience furnishes ample evidence) that social affecting can be one-sided. As he lay the groundwork for his analysis of social action, Schutz makes a passing reference to the intersubjective relation entailed the ‘one-sided’ case of creating a tool. “If I make a tool for others to use,” Schutz (1967:150) remarks, “then I ‘see to it’, in the future perfect tense, that they know what the tool is for.” Obviously in such cases the other to whom we are oriented needn’t always be within our immediate perceptual sphere. Rather, seeing to it that the other clearly experiences the thing’s purpose entails affecting-the-other by the activity of the tool’s design. The making is our way of seeing to it that another’s experience is affected as projected.

This capacity for affecting others as projected hinges on our understanding of those others. “[C]ases like this,” Schutz (pg.159) argues, “are a derivative form of the pure situation of affecting-the-Other.” As Schutz makes clear elsewhere, the “pure situation” of all interpersonal understanding is one of ongoing attention in bodily co-presence (the face-to-face situation). The type of social affecting we can enact tracks with the degree and particularity of our knowledge of

the other.[3] While we can affect others at a remove through acts of designing, having some sense of how to affect-the-other points back to either an ongoing contact with the other, or some prior moment in which our understanding of the other was founded. Thus, ultimately Schutz' account of social action refers us to the experience of empathy.

As articulated by phenomenologists—most notably Edmund Husserl (1960, 1983) and Edith Stein (1989)—empathy (*Einfühlung*) is a mode of attention to another person in which our "intentional object" (what our consciousness is directed toward) is the other person's experiencing. As I detail later on in the dissertation (chapter 5), empathy can give us quite rich but always partial access to another's experience. Empathy can also give us access to another person's own empathic experience (and, hence, be "reiterative" [Stein 1989]). That is not to say that empathy is the sole source of social understanding grounding our capacity to act in order to affect-the-other. Far from it. A panoply of intersubjective modalities attunes us to the surrounding world, the social world at large, and each concrete interpersonal encounter and relationship (see Duranti 2010, Zahavi 2001). Nevertheless, following phenomenological arguments put forward by Stein and others (e.g. Husserl 1983, §151) that all social understanding can be traced back to face-to-face encounters, it is clear that the interpersonal processes detailed in the phenomenological account of empathy are primary and thus ground the eclectic and successive enactments of social understanding through which architectural designers work to affect others.

[3] This is equivalent to saying that the level of social understanding necessary to affect-the-other depends upon our project. If I want to affect-the-other only as a type, I need only to know how to formulate my action so that 'this kind of person understands', and whatever I do toward him would have affected anyone else in his position equally (so far as I am concerned). For those purposes, I don't need to have empathic experience of "what it's like" for this type of person to do what he does. But this ability to affect another generically depends upon some prior encounter. (At the most extreme, Schutz [1967:148] allows that purely rote 'if this then that' actions are possible given that we have introduced some "maxim" into our scheme of experience.)

While empathic experiences are the foundation of all our knowledge of specific others and of the social world more generally, the quality of our empathic understanding (and, partially, by extension, our ability to affect others) is variable, depending upon a myriad of factors including in current interests and attitudes, our familiarity with the person and kind of experience in question, and the form of our engagement with the other (are we just observing or interacting, are we co-present for an extended period or for a brief moment, etc.). In short, empathy is situated and lived out by persons with particular histories and concerns that will always come to bear on any given instance of empathic understanding. In kind, the particular moments and others who exert an empathic "pull" on us, the modes in which empathy is rendered recognizable and appropriate, and the relevant experiential domains, explanatory depth, and affordances for affecting-the-other taken to pertain to empathic experiences vary across cultures and social relations (Hollan 2012; Hollan and Throop 2008, 2011; Throop 2008, 2010, 2012; Throop and Duranti 2015).

One of the most significant entailments here is that skill interposes in and contours empathic experience and our efforts at affecting-the-other. *To be able to…* shows up in what we attend to, what the empathized experience means to us, and how we formulate our response. Hence, affecting-the-other is also a product of some orientation and bodily facility in the world. We must also be able to fashion the means by which to affect the other's experience. This dissertation concerns how architectural designers attend to others in the context of design projects. Those forms of attending to others are a panoply of anticipations, typifications, perspective-taking, and empathically-founded ways of attending to the environment. All of these feed forward into and emerge reconfigured on the other side of empathic moments. That is not to say that all forms of social understanding are thus reducible to empathy, but rather to observe

that empathy is a hinge point—the moment where present understandings and capacities, abiding in whatever phenomenal or pre-phenomenal form, meet with some other, making possible the emergence of something new. In a sense, our affecting-the-other is the actualization/realization of our understanding. In that respect, really understanding empathy— not just theoretically but as a force in the social world—means setting it in relation to what comes next.

**"Empathy" in Design**

The phenomenological description of empathy differs from common American usage. The originary conceptualization of *Einfühlung* emerged in the late 19th century through the work of Robert Vischer and then Theodor Lipps (see Alesch 2017). Transplanted from its initial context, *Einfühlung* would receive the English neologism "empathy" in the work of British and American psychologists, who then variously applied the term to describe emotional projection, emotional resonance, or compassionate attention and reasoned inference (Lanzoni 2018). In Susan Lanzoni's (2018) recent book on the history of the concept of empathy, the author notes that by the mid-twentieth century the term had already become a common part of the American lexicon. By that time, as now, it had acquired an amalgamated connotation of an "emotional and reasoned understanding of others" (see Lanzoni, pg.213), which was often tinged with moral and imaginative connotations. But, as Lanzoni notes, the word was far from having a common meaning in the diverse academic fields where it first took conceptual root, and that plurality and confusion of meanings pervades the post-war appearance of the term in popular media.

Starting in the 1970s, the numerous figures within the architecture discipline began appealing to "empathy" in normative accounts of the kind of understanding architects should achieve (and students should be trained into) in order to design well for others (see chapter 2).

"Empathy", as invoked in architecture (and later in the transdisciplinary design world) bore several distinctive, though often unarticulated features. "Empathy" was especially lauded in instances where the architect would be unfamiliar with the users' lifeworld, including various physical disabilities and in institutional projects like public housing and healthcare where the client—with whom architects were in direct contact—would be distinct from the users. In that respect, "empathy" functioned then (as now) as a marker of social distance—if one that also staked out a methodology for bridging the gap between designer and end-user. In the late 1990s and early 2000s that conception of empathy emerged as a buzzword in transdisciplinary design circles (e.g. Leonard and Rayport 1997, Koupri and Visser 2009). In contemporary usage, "empathy" often takes a connotation of insight not only into users' current experiences but into the motives and principles that subtend those experiences. Thus, in design circles, "empathy" often implies an apprehension of the users' possibilities for experience as well as a comprehension of their current experiences. Further, as my use of the plural "users" throughout this paragraph connotes, the interdisciplinary design discourse on "empathy" commonly depicts empathizing with groups of people who all share a more-or-less similar situation (most generically, that of being users of the designed object or space). Design's "empathy" may make extensive use of what is experienced of individuals, but those individuals inherently stand in for a more-or-less determinate group of others of whom they are seen as representative. Finally, there is some equivocation as to whether empathy requires designers directly and immersively involving themselves in users lives or, on the other extreme, whether designers can empathize by imaginatively projecting themselves into a situation they have learned about from a remove. These are not strict, universal distinctions. Design "empathy" as it appears in trade publications, tutorials, and popular print is not robustly conceptualized (though there is also an academic field

of design scholars who write about "empathy"). And where there have been academic attempts to summarize depictions of empathy it has become obvious that there is considerable variation in designer's ideas—which often play selectively upon one or another popular or psychological sense of the term (see Koupri and Visser 2009). Yet the features I have observed here are quite common in my experience, and, more importantly, track well with "empathy" as it was talked about at Foresite Design.

At Foresite Design, designers who were describing empathy would fall back on common American idioms like "walking a mile in another's shoes" to encapsulate the experience. A few times I offered probes, hoping to instigate reflections that would provide me with a more precise semantic grasp of their meaning: 'it seems you're speaking of empathy mainly when you describe talking with people; is it also empathy when you're observing their workplaces?' The designers appreciated my questions, but I never received a more elaborate description. Design notions of "empathy" adequately gloss the ways "empathy" was described at Foresite, but those abbreviated conceptual glosses hardly compare well with the range of activities and forms of understanding evidenced in their practices. From the standpoint of a phenomenological anthropology, I believe that, somewhat paradoxically, the architectural designers were at one and the same time overselling "empathy" and underselling the complexity and intersubjectivity of their practice. Overselling "empathy", because it has come to stand for more than the intentional givenness of another's experience to which, in the phenomenological view, it denotes. Underselling their own practice, because the range of intersubjective modes involved in even the simplest task of designing for others sometimes make "empathy" look like the easy part of the job. My purpose in employing the phenomenological sense of empathy (*Einfühlung*)—as is the case with my use of phenomenological concepts more generally—is an attempt to give voice to

otherwise unarticulated dimensions and conditions by which architectural designers' practices are affected by and fashioned to affect others.

As should be evident, the accumulated (and often confounded) meanings of "empathy" in American popular culture and in transdisciplinary design discourse bear a complex and inexact relationship to the concept of *Einfühlung* developed in early phenomenological philosophy by figures like Husserl, Stein, and Scheler. Unlike some common connotations of the popular American usage, the phenomenological description of empathy does not entail any projection or inference (though empathy can be the basis for and track alongside of inferential processes), nor does the phenomenological meaning pack any presuppositions about the emotional state of the empathizer. (In fact, phenomenological descriptions have often pointed out that being emotionally affected by the other person's state presupposes an empathic understanding of their experience.) Unlike the "empathy" that surfaces in architectural discourse, phenomenological conceptions of empathy correspond to acts of tracking with the experiences of a perceptually given individual.

Despite these differences, there are regions of commonality between design and phenomenology. Both design "empathy" and phenomenology's *Einfühlung* suppose that another's experiencing can be phenomenally given to the empathizer. Both emphasize that empathy articulates across difference (which is necessary in order for the experience to be the foundation of social understanding). Both point out that empathy can give us others' experiences in a manner that discloses a style or set of dispositions amenable to typification. Both hold that empathy is in some respect a necessary antecedent to effective social action.

While there are important differences in the concept of "empathy" employed within design and the theory of *Einfühlung,* they are related—not only because they share some

historical and conceptual common ground, but because I believe the phenomenological approach to empathy is useful for explicating the processes of understanding and affecting others that designers gloss with "empathy". It is thus necessary to distinguish the phenomenological concept of empathy I utilize here from the popularized notion that spawned design's "empathy". Throughout the dissertation, I distinguish between empathy as I mean it for analytic purposes (and, thus, phenomenologically) and the term as it is meant when others, including designers, use it by marking its ethnographic appearances as a special-case usage. I employ full, double quotation marks (evoking the discursive) when I intend to emphasize that the sense in which I am using the term refers back to the word as I heard it used and described by architectural designers during fieldwork: "empathy" as a loosely conceptualized discursive object glossing a methodological orientation to designing for users.

**Design Studies and the Anthropology of Design**

The last decade has seen the publication of a number of edited volumes (Clarke 2011, Gunn and Donovan 2012, Gunn et al 2013, Milev 2013, Pink et al 2018, Smith et al 2016), review articles (Gregory 2018, Murphy 2016, Suchman 2011), and individually authored books (e.g. Escobar 2018, Ingold 2013, Miller 2017, Yarrow 2019) documenting, interrogating, and theorizing the relationship between design and anthropology. The conceptual and practical territory covered by these works is crisscrossed with a diverse array of intellectual trajectories which do not all converge into a unified project. It has become common to draw up a set of distinctions marking out three lanes (e.g. Gunn and Donovan 2012, Murphy 2016). The clearest of these, from the standpoint of academic anthropologists, is the anthropology *of* design. Here we have the traditional formula of an anthropologist approaching a particular design community as

an ethnographic context. The second formulation is anthropology *for* design—cases of trained anthropologists working for or with designers toward the practical ends of design. A third lane receives various formulations. In some instances, design becomes, reciprocally a model for anthropology (see Murphy 2016), while in others an equal partnership between design and anthropology creates an entirely new field of inquiry. The volumes edited by Alison Clarke (2011), Yana Milev (2013), and Rachel Charlotte Smith et al. (2016) appear to hew most closely to that transdisciplinary concept. This latter genre of design anthropology is the one which is most prolific in the last decade.

This dissertation is an anthropology *of* design, and more specifically of architectural design. It is difficult, however, to maintain absolute distinctions. Treating architecture first and foremost like architecture, as a discipline with a unique history and cultural significance, and practices that have a distinctive temporality and materiality is, I believe, one of the best ways to respond to calls to deconstruct the amalgamated and decontextualized notion of "design" that often pervades design publicity and scholarship alike (e.g. Kimbell 2011). And yet, this dissertation does speak to a generalized notion of "design", in large part because Foresite Design, the firm I worked with most closely, identified most closely and had recently renamed themselves to align with this transdisciplinary notion of design. It's no small thing that an architectural firm (for decades one of the most recognizable and prestigious professions in the US) would seek distinction by taking on what would seemingly be a more generic title. As I illustrate in the dissertation, that decision is traceable not only to the cultural cache of design, but to the actual conglomeration and proliferation of "design" professions which has been enabled, in part, by the assimilation of design to a style of thinking. What has come to be called "design thinking" positions designers as forward-looking mediators of cultural change (see Kimbell 2011

for a review and critique of this ideology). While "design" has long been a kind of cultural code for "added value" in the post-industrial world (see Murphy 2015), the advent of the idea of "design thinking" as a distinctive cognitive style (see Rowe 1987) and its subsequent reimagination and popularization as a teachable method of creative problem solving (Cross 2011) has made "design" a byword for innovation (e.g. Brown 2009). This close association figures, for instance, in Lucy Suchman's (2011:5) critique of the "cultural imaginary" of innovation, which "posits a world that is always lagging, always in need of being brought up to date through the intercessions of those trained to shape it: a world, in sum, in need of design."[4]

Design anthropologists have taken a perennial interest in the way design manifests as a form of social knowledge and as an anticipatory practice. As I make clear in this dissertation, that premise itself has recent historical origins; what I call "Methodological User-Centricity" arose at a similar interface of design and the social sciences to that in which design anthropology now practices. While architecture in particular is rarely in focus (but for a related literature see Buchli 2013, Low and Lawrence-Zuniga 2003, Vellinga 2007, Yarrow 2018), when design anthropologists trace design processes and find them full of thrifty methods of social research we should understand and take an interest in the fact that we are entering prepared ground, retreading a worn but often overgrown path. To date, when design anthropologists often mischaracterized design's methodological focus on users as being of much more recent emergence (e.g. Bezaitis and Robinson 2011, Hunt 2011). This dissertation (Ch. 2) documents this tradition, which arose within mid-century North American architecture, fusing design methods and social research.

[4] the firm renamed themselves ("Foresite Design") partly to participate in this notion of design. They wanted to be seen as cutting edge (see chapter 3). Their transformation included changing their way of working to live up to the conditions of possibility for that way of working. The most notable of those changes was taking up MUC.

I do not want to suggest, however, that the connection between design and social understanding itself is reducible to a particular framework that just happens to hold sway at this historical moment. Design is quintessentially social action. As Keith Murphy (2016:435) observes, "given that much of the artificial world is designed in some way, design represents perhaps the most common channel through which humans intervene, directly and indirectly, in the lives of other humans." By necessity, design inherits—and, in some respects, augments—all the epistemic, cultural, logistical, and ethical entailments of any case of "affecting the other".

**Overview of Chapters**

In the first chapter, I give an overview of my research methods and introduce the San Francisco Bay Area and healthcare architecture as research fields. Healthcare architecture is a highly specialized area of practice, involving a small minority of architectural firms in a largely consolidated market. For that reason, it was important to select a site that would have the critical mass of healthcare facilities necessary to maintain an adequate number of healthcare specializing firms. In the site and methods chapter, I explain why California, and the Bay Area in particular, was an opportune place to locate this study. I also typify the types of data this study produced as well as the process of recruiting participants. While my research involved the participation of designers and project managers from several organizations (firms and client institutions), in this dissertation I focus on one firm. Foresite Design (a pseudonym), a California-based firm, gave me unmatched access to their San Francisco office. I was given the opportunity to collect data there on a daily basis for 11 months. Even though my ethnographic study is best framed as a study of one firm, I do generalize some findings where the overwhelming impression (and corroboration) I received has led me to believe that matters I am describing are not unique to

Foresite. Nevertheless, conducting ethnography at Foresite Design greatly informed the overall framing of this dissertation. In particular, though there were significant areas of overlap between Foresite and other architectural firms involved in my study, Foresite Design stressed more overtly than the others features of contemporary interdisciplinary design discourses, including Design Thinking (Cross 2011), and Human-Centered Design (Brown 2009). Ultimately my curiosity about the basis of the firm's attraction to these ideas and the architectural designers' style of implementing the methodological entailments spawned the framing of this dissertation.

Foresite Design advocates a "focus on the users". Confronted over the course of my research with the eclecticism of Foresite's contemporary influences, I offer the coinage "Methodological User-Centricity" as an encapsulation of these diverse practices. That is, what each of Foresite's primary influences have in common is a foundational assumption that knowledge of users is essential to effective design, and that an understanding of users must therefore be obtained and utilized as a matter of course in the design process. While sometimes taken for granted in the present day, this cultural notion of design had to be invented. While the current day champions of this methodological orientation (including User-Centered Design, Human-Centered Design, Participatory Design, and Experience Design) often give a truncated historical context (or none whatsoever), in architecture the invention of this ideology has a definite source era. This chapter offers a history of the origins of Methodological User-Centricity in Mid-Century American architecture. That history, I note, evidences a "rhetorical drift"—a gradual, subtle, but pervasive shift in its discourses over two decades. Starting out as a discursive appeal on the need for scientific validation of how users would be affected by design decisions, the architectural sources of MUC began to focus much more on a humanistic understanding of "the user"—an effort that would come to be called "empathy".

Like other architects had to greater and lesser extent in the preceding decades, the architectural designers at Foresite latched onto "empathy" as an encapsulation of their intention to "focus on the user". In the third chapter, I consider how "empathy", so-called, gets operationalized within the architectural design process. In line with the notion that user-centricity is above all a methodological orientation, I emphasize here that what is paramount in the designers' talk about "empathy" is not a concept of a particular process of consciousness but a gloss for a methodological orientation toward social understanding as necessary to design well for others. "Empathy" is designers practice it is not, for that reason, not an isolatable moment of grasping another's meaning (or, in the popularized notion, sharing their experience). It is rather a rationale that extends into and through all acts of design. In considering Foresite Design's process model, including a review of the phases of an architectural project and the methods Foresite's designers use to learn from and about users, I endeavor to show the variability and tenuousness of that extended moment. As I go on to demonstrate in the following chapters, the range and quality of architects' understandings of different users is sedimented through a delicate linkage of phases within architectural projects—from the earliest stages, in which designers must prepare their inquiries to the latter moments during which impressions they have received motivate their interest and perspective upon features of the incipient healthcare environment.

Chapter four thematizes and theorizes experiences of anticipation. Designer's anticipatory activities are most paradigmatically on display in the work of planning itself, and most analyses of design that deal with its anticipatory dimensions locate their analyses there. This chapter contributes to those conversations but does so by focusing instead on the early stages of architectural projects, when architects are still in the process of formulating their sense of what they will need to know in order to produce a successful design. Methodological User-

Centricity comes to bear directly on this process; since architectural designers will attempt to learn about the user through questioning and other planned forms or interface, understanding a user and her activities well enough to design (and thus, to anticipate again, in another mode, on her behalf) requires, in turn, that they anticipate something about what will be topically relevant, what the user will likely be able to report on or what she may leave out, and so on. It is at this moment of anticipating the other that I locate my primary ethnographic data. As a way of ethnographically tracking with the process of trying to understand the user, this chapter considers how the experiential structure of anticipation comes into play in how two architectural designers, Marc and Raj, attempt to anticipate what they can learn from a user and how best to find out.

The architectural designers were not always successful in securing the participation of all of the people comprising the different "user types". It was quite common that just a few persons would represent a whole group, or that whole classes of people would not participate in the design team's meetings. Most notably, I never knew patients to be consulted, despite the designer's efforts to get their clients (care providers) to furnish access to them. Chapter five considers one dimension of the resulting scenario: the necessity of relying on others' impressions of the activities and experiences of these missing persons. In order to do this, I introduce and expand upon Edith Stein's (1989) phenomenological theory of empathy, drawing out the implications of two of Stein's overlooked ideas: those of "empathic valuing" (when we value something by virtue of experiencing another person's valuing of it) and especially of "reiterative empathy" with a third party. Reiterative empathy is the capacity to empathize with another person's empathizing. While it has often been drawn into conversations about the intersubjective constitution of personhood, communication, and performance, all of these analyses (including those conducted by Stein herself) consider reiterative empathy only in its "reflexive" mode as a

looping between two interactional partners. Following Stein's own suggestion, I elaborate the "extended mode" of reiterative empathy: the situation in which a second person's empathic experience gives me indirect empathic access to the experience of a third. Each of these observations (of empathic valuing and reiterative empathy), I argue, points toward a tendency to inherit, to some extent, the view of the person with whom we are empathizing directly. I work in this chapter to detail an essential aspect of how architectural designers can take themselves to know something about the experiences of people they haven't always met in person—a project I conduct with no small bit of help from Alfred Schutz's (1967) phenomenological sociology of the lifeworld. While designers often cobble together a composite sense of what a kind of experience is like, I found that when seeking understanding of users who have not been included in the design process the architectural team most of all relies on the accounts of those users they do have access to who have some direct experience of the others. However, this passage through others' understandings can have substantial drawbacks. As I demonstrate at the end of the chapter, this situation is both one of which the architectural designers are generally aware and concerned and one that is proven can have deleterious effects for the missing users.

If chapter 5 lays the groundwork for grasping how interactions with users can have a concrete impact on the direction and interest of architectural designers' attentions, chapter 6 moves forward to examine how the resulting modes of attention are enacted within the material ecology of design. Architects have no means of realizing others' possibilities except through the possibilities of their design materials. In light of this, I emphasize that understanding users is by no means complete when architects sit down to sketch and diagram. Rather, those understandings emerge through a process of turning back to the materials with something about some particular set of users in mind. Something a user expresses in a meeting can alter the

experiential affordances a designer perceives in the environment, leading to a shift in the design. Likewise, some possibility that architectural designers have come to espouse can become the basis for rejecting or mitigating other options that have concomitantly come to be seen as imposing or compromising. It is in this process that designed spaces come to be "oriented" (Ahmed 2006, Boys 2017) toward some users or forms of use to the partial exclusion of others.

In concluding the dissertation, I offer some reflections on themes running through the chapters. These include further remarks on Methodological User-Centricity, the layered and processual nature of intersubjectivity in design, and the insinuation of biomedical cultures into design.

The organization of the ethnographic chapters is loosely based on the order of events within the first phases of an architectural project. Each of the chapters (three through six) deals with an ethnographic slice from a different moment in the design process that accentuates a distinctive facet of architectural designers' efforts to understand the various people who will inhabit the incipient build environment. Chapter three deals with the considerations and negotiations architects undertake in order to win jobs and then secure access to users, including the factors limiting the mode and duration of that access. Chapter four deals in part with the preparations architects undertake before they meet with users during the opening, exploratory phrase of a project when they need or organize their inquiries so as to result in specific criteria they can design to satisfy. The fifth chapter examines the way architectural teams source their information from users as they begin to develop design concepts. Finally, chapter six moves forward into the moments where architectural designers are interpreting what they have gleaned from various users (initially and through feedback on design prototypes) as they produce

concepts and sketches that actualize, prioritize, and embody the designers' achieved understandings.

Where the dissertation leaves off is at the moment where architectural teams transition from pliable concepts that are still very much part of the back-and-forth between designer, end-user, and client to the moment where a design has been agreed upon and what remains is to work out finer details then manage the project to completion. While I conducted observations and interviews that included these later phases, I have left them out of the dissertation. This is a choice I have made for a principled reason, but not without reservations. My reason is that user-engagement usually drops precipitously during the later stages of design once the major decisions have been made. Since the dissertation focuses mainly on architectural designer's achieved understanding of users, the transition point made for a convenient and justifiable cutoff. Nevertheless, I do not mean to imply that architectural teams cease responding to users at some moment in the design process. In fact, my reluctance to end the story here stems partly from my awareness that considerations of what the user may do, feel, and need carry on to some extent as the design is developed toward a final set of plans. My other reservation is that I have found that ethnographic and other naturalistic studies of design often emphasize the early, conceptual moments in design, sometimes leaping directly from sketch to final product. In fact, when it comes to architectural projects, a great deal is (re)determined in the process of drawing up plans, creating "spec sheets" for finish materials and furnishings, and working with subcontractors to account for details outside of the architects' purview. My consolation is that I have determined these topics are best suited to a somewhat different set of questions that those addressed in this dissertation.[5]

[5] Though these processes fell outside of my study design, there is also a need to link the political economy of investment, development, and speculation to the practices of design that they afford (cf. Appadurai 2013).

Each set of chapters has a dominant conceptual overlap. Chapter one, on site and methods, and the historical narrative of chapter two set up the ethnographic context for the dissertation. Chapters two and three introduce Foresite Design, and mutually staking out the ideas and practices that the architectural designers in this study most identify with, and separately detailing the methodological and processual commitments entailed. The main ethnographic example of chapter four and the section on design research methods in chapter three each contribute to the project of understanding how architectural teams work to make the most of their limited time with users. The primary thematic link between chapters four and five is an empirical inquiry into nature (and limits) of architects' discernments of what they need to know about users. Taken together, chapters five and six make up a small suite of phenomenological ruminations on the impact of disparate levels of user involvement in the design process—a process of thinking that I carry forward into the conclusion, where I reflect back upon designs' discourses of "empathy".

Fortunately, the surging anthropology of infrastructure—despite its emphasis on the scale of urban planning—offers one possible platform for this synthesis. (For examples that draw close see Mack 2019, Sadana 2018.)

# Chapter 1
# **Site and Methods**

Recruitment started in the Kmart parking lot on the island of Saint Croix. I had been in the US Virgin Islands for nearly a year while assisting with my partner's research. Now, as the months were racking up, I needed badly to make connections in the notoriously insular architectural community. I'd drive down to Sunny Isle, the mid-island shopping center, hunting for cell signal. Then I'd sit in the car with the windows down and dial the phone numbers of architectural firms in California, hoping to find someone on the other end who would take a few minutes to hear me out. Missed calls, dropped calls, repeating myself, firing off follow-up emails to overflowing inboxes: I didn't get far. But a few calls did get through—enough that it became clear that I would need to be on the ground to make any real connection. Thus, when I landed in San Francisco in September I didn't yet have anywhere to begin my fieldwork. The calls had been enough to pique some interest, but it was about three weeks before I got my first interview—around a month before I began participant observation at Foresite Design, the healthcare-specializing design firm that would become the primary site for my study.

I have already given a brief introduction to Foresite Design's somewhat unique approach to healthcare projects in the introductory chapter to this dissertation. In chapter 2, I furnish an historical account of the mid-century school of thought that gave precedent to this "user-centric" approach. In this chapter on site and methods, my primary objective is to talk about the San

Francisco Bay Area as a regional and economic context for studying healthcare architecture, to detail my methods for doing so, and to characterize the data set that resulted.

**San Francisco as a context for the study**

The San Francisco Bay Area is one of the most populous metropolitan regions of California. Despite covering only 47 square miles[6], San Francisco is the fourth most populous city in California with a 2019 population of around 870,000 (U.S. Census Bureau). The architectural designers in this study worked on projects that were usually located within the region designated by the United States Office of Management and Budget as the San Francisco-Oakland-Berkeley Metropolitan Statistical Area (MSA) (see U.S. Census Bureau 2018). The Office of Management and Budget designates MSAs by centers of economic influence. The San Francisco Metro Area, then, is the region over which San Francisco has greater economic influence than San José and other major urban centers. In territorial terms, the San Francisco MSA stretches across the counties of San Francisco at the center, Marin to the north, San Mateo to the south, and Alameda and Contra Costa to the east. The total population of this area is over 4.3 million. Some of the projects I followed also took place in parts of Santa Clara county (population 1.8 million) in the so-called Silicon Valley near San José. Wherever I refer to the "Bay Area" in this text, I generally mean the San Francisco MSA, plus the Silicon Valley area of Santa Clara County.

[6] If you ask city residents you'll likely be told the city is 49 square miles. Aside from the 7x7 figure being easy to remember, 49 is also a historical reference to the 'forty-niners' of the California Gold Rush—the fortune-seeking migrants that accelerated the area's transformation from the 1,000 resident, recently-conquered Mexican bayside settlement of Yerba Buena into the 25,000 resident American City of San Francisco in just two years (1947-1949) (Hanson, et al. 2019, Walker 2001).

One of the most compelling reasons for basing research on architectural design for healthcare in the Bay Area is the shear density of hospitals, clinics and other medical facilities. Using open data from the California Health and Human Services Agency, it is possible to calculate the total number of medical facilities in the Bay Area.[7] However, using this data makes it necessary that I clarify the meaning of a 'medical/healthcare facility' as I use the term(s) here. These data come from the California Department of Public Health and comprise all providers licensed either with the US Department of Health's Centers for Medicare and Medicaid (CMS) or through the CA DPH. One consequence is that while CHHS' database provides data on the names and locations of licensed providers, the provider having a physical address does not necessarily constitute being a medical facility in the sense that I intend it in this dissertation. In an effort to provide some meaningful definition to the terms "medical facility" or "healthcare facility" have excluded obvious outliers wherever possible. My litmus is that (A) a permanent, specialized facility must be a component of care delivery, and (B) the facility, as such, must provide care which is non-incidentally medical. The varieties of licensed facilities which have been excluded from my count of medical facilities are as follows:

> *Congregate Living Health Facilities* - these are medicalized senior living facilities which do not categorically offer actual medical care. CLHF's fail to satisfy criteria B; residents of CLHF's needn't require medical care, and not providing medical care does not exclude a facility from the category of CLHF.
>
> *Home Health* - by definition, these providers do not operate healthcare facilities. Home health agencies fail to satisfy criteria A.
>
> *Hospice* - Most hospices operate like home health agencies, so out of caution they were generally excluded except where residential hospice services were explicitly coded in the registry. Non-residential hospices fail to satisfy criteria A.
>
> I have also excluded one San Francisco-based "referral center" for victims of sexual assault since, as far as I can ascertain, the associated emergency medical treatments

[7] Data obtained from Center for Health Care Quality https://data.chhs.ca.gov/dataset/healthcare-facility-locations in September of 2019.

actually take place at Zuckerberg San Francisco General Hospital (which would result in a double counting of the physical infrastructure).

Holding to these criteria, I have calculated that as of 2019 these 6 counties host a total of 1,043 licensed 'healthcare facilities' as I qualify the term here. San Francisco County (which is coterminous with the city limits) is home to 134 qualifying licensed medical facilities. Alameda County has 314. Contra Costa County claims 141. Marin County holds 72. San Mateo County adds 116 facilities to the count. And, finally, 266 healthcare facilities are located within Santa Clara County.

Bay Area Medical Facilities

| Type | No. |
|---|---|
| ACUTE PSYCHIATRIC HOSPITAL | 22 |
| ADULT DAY HEALTH CARE | 38 |
| ALTERNATIVE BIRTHING CENTER | 1 |
| CHEMICAL DEPENDENCY RECOVERY HOSPITAL | 1 |
| CHRONIC DIALYSIS CLINIC | 118 |
| CORRECTIONAL TREATMENT CENTER | 1 |
| GENERAL ACUTE CARE HOSPITAL | 65 |
| HOSPICE FACILITY | 1 |
| INTERMEDIATE CARE FACILITY | 145 |
| PEDIATRIC DAY HEALTH AND RESPITE CARE FACILITY | 3 |
| PRIMARY CARE CLINIC | 316 |
| PSYCHOLOGY CLINIC | 7 |
| REHABILITATION CLINIC | 14 |
| SKILLED NURSING FACILITY | 206 |
| SURGICAL CLINIC | 105 |
| | **Total: 1,043** |

The scale of recent investment in healthcare architecture within San Francisco alone is staggering. One of my interview participants told me she was an architect on what she believes

was the first ever billion-dollar hospital. That level of expense is routine now, she assured me. She's right. Looking only at San Francisco during the time of my research there were multiple hospital projects with running costs at well over a billion dollars each. The new acute care building (at the newly and controversially renamed) Zuckerberg San Francisco General Hospital, completed around the time of my arrival in the city, cost just over 1 billion (Rauber 2015). Throughout my time in the city, Sutter Health was building an 11-story hospital on Van Ness that is budgeted for 2.1 billion. The Van Ness location opened in 2019. At the same time, Sutter was also building a new, smaller hospital in San Francisco's Bernal Heights Neighborhood. Sutter CPMC Bernal Mission cost over half a billion and opened in 2018 (Truong 2018). In the year before I arrived in San Francisco, UCSF opened their approximately 1.5-billion-dollar medical center at Mission Bay (UCSF 2014). In 2019, UCSF announced a new hospital project at their Parnassus campus that is expected to cost around 1.5 billion (Ho 2018). I omit here various renovations and new construction projects valued under half a billion dollars. Looking outside San Francisco, the time of my research saw Stanford investing in a 2-billion-dollar new adult hospital. At the same time, Stanford was putting 1.2 billion into their new children's hospital (Revis 2018). While I was in the field, Santa Clara Valley Medical Center was preparing to open a new pavilion that reportedly cost around a half billion dollars (Medical Construction and Design 2018). At the same time, Marin General Hospital kicked off a half billion-dollar project to replace its aging buildings (Medical Construction and Design 2016).

These are just the hospital projects, and only the largest ones at that. Financial figures are usually only widely available when a project is sizable enough to be reported by multiple news or industry-journalistic sources. My attempts to use news sources to produce a round figure for even these 'newsworthy' developments were mitigated by the fact that some members of the

healthcare industry, such as Kaiser Permanente, take up a more proprietary stance toward information on their projects than do others. Altogether, then, it is difficult to give an exact estimate of how much money is currently going into healthcare design and construction within the Bay Area specifically. Leaving to one side the exact figures, the pace of these projects alone is compelling.

A noteworthy contingent of this investment is being driven by the need for hospitals to retrofit or replace their facilities to be in compliance with California Senate Bill 1953. In response to the 1994 Northridge Earthquake, the California legislature mandated that all acute care hospitals retrofit or replace their facilities to maintain occupant life safety (non-collapse) in the event of an earthquake by a first deadline and by the second be able to continue to deliver essential services during and after a major seismic event (Preston et al, 2019). The current deadlines for compliance are January, 2020 for buildings in Structural Performance Category 1 (those with a collapse probability of greater than 1.2%), and January 1, 2030 for buildings in Structural Performance Category 2 (those with a collapse probability of less than 1.2%, but which would likely become inoperable due to damage from a strong earthquake).[8] SB 1953 also has a Non-structural Performance Category (NPC) that pertains mainly to the survivability of electrical and mechanical systems, and to the anchoring and operability of medical equipment. Hospitals can meet these requirements one of three ways. They can (1) retrofit or (2) replace the non-compliant buildings, or they can (3) retire those buildings from inpatient care and reappropriate them for other purposes. All three strategies require architectural services.

The Rand Corporation (Preston et al, 2019) has found that, as of 2019, there are presently 2,717 non-compliant hospital buildings in California. The same report estimates that retrofitting

[8] https://oshpd.ca.gov/construction-finance/seismic-compliance-and-safety/seismic-performance-ratings/

the 395 of 418 California hospitals that still have buildings out of compliance with SPC or NPC requirements will cost somewhere between 25.3 and 34.4 billion dollars. Completely replacing these same facilities will cost between $105-143 billion. Specifically within San Francisco, retrofits will cost between 740 million and 1 billion dollars, while replacements are estimated at between $3.78 billion and $5.13 billion. In the broader region associated with this study (including San Francisco), retrofits are estimated to run between $3.8 billion and $5.17 billion. Replacing those facilities instead could amount to investments totaling 17.88-24.24 billion dollars. A number of Bay Area hospitals have been opting for this latter approach. The ongoing Marin General Hospital replacement and the new Sutter CPMC Bernal Mission facility, each with price tags at over a half a billion dollars, and the new UCSF Parnassus hospital building with a projected budget of $1.5 billion are all examples of the replacement strategy.

Another factor in the choice of San Francisco as the location of this research is the concentration of healthcare-specializing firms. The San Francisco chapter of the American Institute of Architects lists 41 firms practicing in healthcare architecture within the Bay Area—most of these in the city itself.[9] Reviewing that list, I can attest to a couple firms omitted by the AIA's index. Still, the AIA's directory is indicative of the robust presence of the specialty, with roughly 13% of firms servicing the healthcare sector. Nevertheless, healthcare is a niche, and a relatively small one at that. To offer a few points of comparison, nearly 50% of the firms in the SF AIA's directory work in the residential market, around 43% serve the commercial sector, and over a third design for retail.

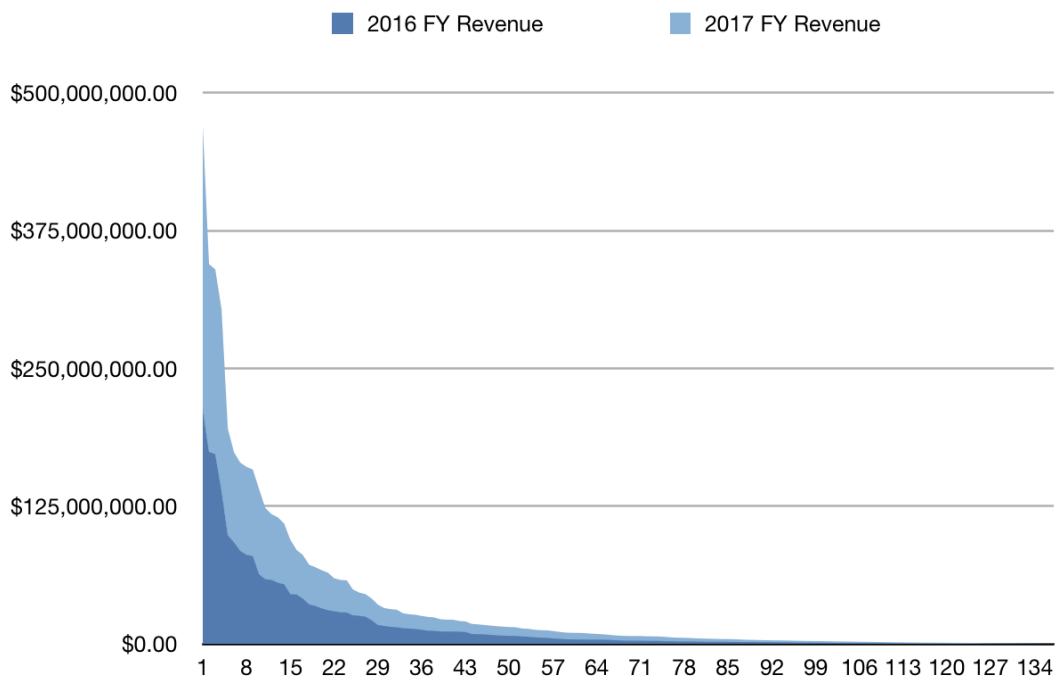
[9] Results were produced by accessing an inventory of all healthcare firms listed with the AIA San Francisco chapter at the AIA SF website (https://www.aiasf.org/search/custom.asp?id=3973). As of 2019, the AIA SF chapter literally lists 49 firms, but after removing duplicates and a few firms that are actually located in other regions the resulting census was 41.

While I haven't found a way to determine just how much money is being spent specifically on healthcare architectural services in the Bay Area or in California more broadly, it is possible to put a number on healthcare architectural fees for the country. Using data gathered from *Building Design+Construction*'s 2017 and 2018 "Giants 300" survey[10] of revenues[11] for architectural firms operating in the United States, I've calculated the average yearly healthcare project fees of all firms listed to be approximately 2.35 billion dollars. The 2017 and 2018 survey results cover the two fiscal years I was in the field (FY 2016 and 2017). Since the *Building Design+Construction* survey relies on firms self-identifying and self-reporting their healthcare project revenues the average revenues across those two fiscal years likely leave out some portion of the firms and projects.[12] So the $2.35 billion in architectural fees should be considered a ballpark figure. However, what the *BD+C* survey demonstrates clearly is that healthcare architecture is dominated by a small number of mega-firms that bring in a huge percentage of those earnings. To demonstrate the disparities at play I've constructed a graph showing the skewed curves in revenues reported across all responding firms from both fiscal years.

[10] BDC does these surveys every year. They rely on firms to self-report, but they require the contact information of someone who can verify the factuality of the reported revenues. They also provide guidelines for what qualifies as belonging to one or another building category, and their healthcare category matches very closely my definition (with the exception that they include veterinary).

[11] *BD+C* does not specify, but given my familiarity with a few firms that appear on the lists, I take "revenue" to mean "gross revenue", as a measure of how much fee in incoming rather than net revenue, as a measure of incoming fee minus costs. Architectural fees can usually be ballparked at around 10% of total project costs. A million-dollar project would be expected to include about $100,000 in architectural fees. This varies at the margin: small projects might require relatively higher architectural labor and larger ones relatively less. Architects are sometimes retained to produce masterplans, schedules of accommodation, briefs, or schematic designs for projects that never receive the capital funds to move into actual development.

[12] In fact, the 2015 fiscal year survey has been omitted from this data because it was too exclusive, ranking only firms that brought in $1 million or more (and probably not all of them at that). The distribution curve for revenues in 2015, however, is markedly similar to those I derived from the more inclusive 2016 and 2017 FY data. In that respect, while I take the 2015 survey to be an inaccurate representation of total revenues nationally, the figures that are reported corroborate my portrayal of the consolidation of the healthcare architectural industry.




The graph can be explained succinctly by extruding a few revealing figures. The top three percent of firms (count: 5) haul in 35% of the revenue ($413,316,000.00). Yet, in truth, even these top firms can have significant differences in their income. Revenues drop by more than half between first and fifth positions in the rankings. The drastic stratification carries on for quite a long way through the order. A firm ranked around 15th is billing less than a third of a firm in the top five. A firm ranked around 30th in the order is bringing in approximately one tenth of the average revenues of the firms ranked within the top five. There's then a long tail as incoming cash trails off from the tens of millions to the tens of thousands. To give a significant waypoint, by the point one reaches the 100th firm in the survey, annual revenues have diminished to about a million dollars a year, or less than half a percent of the top ranked firm.

The healthcare architecture market has undergone considerable change in the last decade. It has long been the case that architecture firms are consolidating through buyouts and mergers (Gutman 1988). This is no less the case in healthcare architecture. In fact, healthcare firms may

be feeling greater pressure to consolidate than before. Without yet having found a source that provides an analysis of the market, I could only speculate on whether the healthcare market is more or less consolidated than other architectural markets. But, anecdotally, participants characterized their industry as undergoing an intensified push in this direction since the financial crisis. The CFO at Foresite reported to me that during the Great Recession healthcare firms got lucky. Some projects were cancelled or put on hold, but on balance architecture firm executives reported to me that the healthcare industry had proved a haven from the economic downturn. The relative stability of healthcare as a sector of the economy, and of healthcare architecture in kind, attracted the attention of large firms that had never previously had healthcare practices. Often the quickest way to develop a healthcare design practice was simply to acquire an existing one. Over the course of my fieldwork I would hear many stories from participants who had friends or who had themselves worked at firms that were acquired. Today, most of the dominant firms in the healthcare architecture market are not niche specialists, but instead multinational mega-firms that operate across several industries, and in some cases across services (combining architectural design and construction services, for instance).

Healthcare architecture might be big business, but my participants insisted it was a small world. “I know everybody. Everybody does,” Marc, the director of Foresite’s San Francisco office told me in our first meeting. I heard nearly identical comments from nearly every senior designer I spoke to. The statement, of course, isn’t literally true. I had occasion to test it, but I needn’t have bothered. In most cases there are indeed very few degrees of separation, but the sentiment behind the expression was what mattered. It indexed not only the career status of the speaker, but also the importance of reputation and social capital (Bourdieu 1986) in a field where there are few opportunities for a designer or a firm that isn’t known to do good work *and* to be

easy to work with. I would witness many instances where the first thing an architectural designer would do when dealing with someone they hadn't met before would be to ask around the office and see if anyone knew them, personally or by reputation. The same protocols were applied to engineering and construction firms that designers were considering working with. And again, the same social vetting went into new clients. In a way that was sometimes bore remarkable parallels to sussing out users, the designers would co-construct sometimes elaborate accounts of who these others were and how they typically behaved.

Knowing who's who in the world of healthcare design was complemented by a back-of-hand familiarity with the local landscape of healthcare facilities. For architects who specialize in healthcare, the San Francisco region's hospitals and medical centers are especially salient landmarks. I stayed with my in-laws in the Duboce Triangle—a small, mostly residential neighborhood sandwiched between the Castro to the south and the Lower Haight to the north. Most city residents I spoke to couldn't place the neighborhood. One slow Friday morning, when I and a designer named Zack were the only ones in the Foresite office, we got talking about places we'd lived. When it came to where I was staying in the city, I tried naming the nearby park, the N-train station and a few other landmarks but he couldn't place it. Then I vaguely described a hospital a block away and he not only knew the place and the name of the hospital, but he could tell me the cross streets and how far it was from where his kids went to school. In other instances, I would overhear architects citing the locations of various places in the city, not by the names of their neighborhood but by their nearest major healthcare facility.

**Sites and Participants**

In total, 34 architectural designers from six firms formally participated in this research. Another three designers from two firms consulted but were not officially inducted into the study. All but one of the firms with formally participating designers had offices based in the City of San Francisco. The exception was based just outside of Oakland. Two of these six firms fall within the American Institute of Architects (AIA Firm Survey Report 2018) range for mid-sized firms, those with employees ranging in number between 10 and 50 (both were on the larger end of that spectrum). Another 'firm' was an in-house design and project management team for one of the regional university health systems. I also successfully recruited participants from the San Francisco offices of two giant international firms. The consulting but non-participating designers were likewise from two such international firms. These 'megafirms' (not an official designation, since the AIA does not have a special designation for firms of this scale) have between 1,300 and 2,500 employees operating out of between a dozen and two dozen offices.

The bulk of the data for this dissertation was collected in interviews and participant observation at the San Francisco office of a firm I call Foresite Design. With a little under 80 employees, the AIA would categorize Foresite Design as a large firm. At the time of my research, Foresite comprised three offices. The oldest and largest of these offices had been in operation since the late 1970s. The San Francisco office was relatively new, having been established around 2012. Over the course of my fieldwork the San Francisco office grew substantially. At the time I began my fieldwork there were 13 employees at the office, three of whom had been hired within the preceding 6 months. By the time I left to return to UCLA, the office had hired seven more designers and was still recruiting.

All participants, clients and firms have been given pseudonyms. However, all of the personas appearing in this dissertation are based directly on unique individuals and real entities. I

do not present any composite persons, amalgamated firms, or hybridized projects. Several designers offered to appear with their real identities. I have opted not to take them up on this offer since doing so could ground a chain of inference and deduction that would first reveal firms, then colleagues, then in some cases clients and specific projects, and, ultimately, users. At times I give clients a unique pseudonym, but I generally stick to broad characterizations such as "a privately-owned hospital within the city" or "a nearby county health system." Where the location of a project might confirm the client's identity, I have opted to give the general rather than the exact location (e.g. "a new outpatient cancer treatment center near San José"). I take a similar approach to all firms except for Foresite Design, where maintaining a coherent identity for the firm is central to the argument and narrative organization of the dissertation.

**Site Access and Characteristics of the Data**

I spent most weekdays of the 11 months between October of 2016 and September of 2017 at Foresite Design, where I was given a desk and broad approval to observe, participate, and ask questions. It was with Foresite that I was also allowed to attend some client and user meetings and, on a handful of occasions, to participate in site visits and observational research. I estimate that I spent 1,100-1,200 hours at or with participants from the San Francisco office.

My access at Foresite Design was exceptional, not in the least when compared to the level of participation I was able to obtain from other firms. At all but two other firms my research activities were restricted to interviews and office tours. The exceptions were fairly minor. In one case I was invited to participate in a day-long trip to observe a new hospital under construction. In another, I was able to spend an afternoon shadowing a senior architect.

Difficulties with access are to be expected in "studying up" (Nader 1969) (though I have reservations about the term). Healthcare architecture is no exception, in no small part because there are few opportunities to conduct what Ortner (2010) calls "interface ethnography." Most healthcare providers in the United States are private, including roughly 80% of hospitals (see Frank and Salkever 1994, Henry J. Kaiser Family Foundation 2020, Ridic et al. 2012). Without the same transparency requirements as publicly owned institutions, those organizations leave designers in the healthcare sector with no public constituency with whom to "interface" in public arenas. Adding to that, with rare exception architects do not sell their services directly to the public. That means that to study architectural designers you have to get an invite into one of their studios. Fortunately, this is where the lack of interface with the public can be an unanticipated benefit. Owing to the fact that there's little expectation of interaction with anyone but clients and consultants, at nearly all firms even the most senior members of staff are directly accessible.

As noted at the beginning of the chapter, reaching out directly to healthcare studio directors and principles at healthcare specializing firms was how I began recruiting. Even when these efforts were successful they often took substantial time to materialize. As a case in point, one senior architect wrote me back three months after I had initially contacted her, apologizing and asking whether it was too late to still participate in the study. Ironically, she was actually my first participant. In turn, the first contact I successfully made in healthcare architecture ended up being one of the last people to enroll in the study, some 9 months after we had first played phone tag while I was in St. Croix. And so it went. The many reasons I was given for these delays and for the few times my requests were denied outright could almost be in themselves the basis for a sociology of the architectural profession.

One such reservation concerned worker productivity. The amount of a designer's time that goes toward services which are directly billable to the client comprise that designer's "utilization rate." Utilization targets are an important heuristic by which firms gauge their financial health. High utilization indicates that everyone is busy on billable projects. Low utilization can mean that designers are being paid to sit around, doing very little that contributes to the bottom line of the firm. But "high" and "low" utilization are relative. Targets vary depending on an architectural designer's rank and specialty. I know of no full-time employee of an architecture firm whose time was 100% billable. Even for junior designers there are some other tasks and responsibilities. At Foresite, the utilization target for an entry level designer was 80%. In the case of senior designers, like a principal architect, the utilization target could be around 30-40%. (This is largely because senior members of the firm are expected to devote substantial portions of their time to "business development": networking with other designers, promoting the firm with contractors, and meeting with potential clients.) Any designer in a management position is concerned with maintaining the best possible utilization rates, and any junior designer recognizes the need to be as close on target as there is work enough to permit.

To one extent or another, every firm I approached voiced concerns about the disruptiveness of observations and interviews. I am fairly confident it was the main factor in my study being declined at one major healthcare studio where there was otherwise much enthusiasm for the research. At Foresite Design I suggested we do a 'soft open' with a 2-week pilot, at which point we could revisit any issues that might have proven to be legitimate. When there hadn't been any objections to my presence over that pilot period, my invitation was informally extended. Fortunately, the only time in nearly a year that there was ever any significant conflict between the requirements of participating in my study and maintaining productivity was during

formal interviews. I was able to avoid the potential imposition on work time by taking my interviewees to lunch.

Aside from productivity, some firms were concerned about client confidentiality. Depending on the client, there may be more or less strict contractual stipulations about how much information can be shared with outside parties and who owns the "instruments of service" including drawings and reports. This is most often the case with private, for-profit health systems. Architects whose clients were more jealous in these regards tended to cite a potential conflict with my research interests as a reservation about participating in the study. I made it clear that I would anonymize clients, projects, and firms alike. Foresite, whose clients included public institutions whose business dealings were a matter of public record, believed that they could commit to participating at least in these public projects and that we could figure out the rest on an *ad hoc* basis. I believe that within a couple weeks of commencing daily observations it was sufficiently clear to leaders in the firm that the study posed little threat to their relationship with their clients and I was allowed to carry out my research with only minor compromises even in the case of for-profit health providers.

The difficulties of gaining admission to an architectural studio and carrying out comprehensive research without conflicting with the host firm's interests were not the only constraints on access. Time was also a significant factor. Architectural projects in healthcare are notoriously slow paced, making it very difficult to conduct ethnographic research of every phase of a project from start to finish[13]. By way of example, I was consistently given estimates that a

[13] Architecture is on the far end of the spectrum when it comes to slow-paced design. For my own research, this meant I had to select a portion of the larger design process, and never got to rigorously investigate the final outcome of design decisions or the factors and decision-making processes that motivated healthcare institutions to fund projects. This is a common problem. Ethnographies of design rarely undertake to analyze the documentation or designerly responsibilities during the manufacturing and construction process or to deeply investigate the priors that lead to something becoming a "design problem" in the first place. There are probably many reasons for this, including some cultural concepts (i.e. what 'design' is) smuggled into the research plan. One can't hope to

new hospital could take 7-9 years from design to finished construction. Medical office buildings (MOBs), the building type that houses doctor's offices and outpatient treatment centers, are cheaper to build, less restricted by building codes, and are less operationally complex. MOBs can still take several years to design and construct. Faster still are refurbishments or repurposings of existing clinical spaces. Most of the projects I witnessed during fieldwork were of this type. Yet even those projects often run between one to two years in length. Consequently, I would not see a single project go from contract to completion (though with a couple I got from contract to the construction phase). Instead, I would follow numerous projects at different stages of completion.

The bulk of my data comes from 14 projects, all but one of which comes from Foresite Design. Of these 14 projects, 13 were in healthcare and the outlier was in senior living (a project type that, in an intriguing cultural association, of gets lumped into the services of healthcare design studios). I have varied knowledge of these different projects. In a few cases I was in the right place at the right time and given adequate access to be quite comprehensive in what I could report about them. In other cases, I was able to witness design activities but only at later stages in the project, once the conceptual parameters of the design problem had already been more or less established.

For the sake of clearly qualifying the comprehensiveness of my ethnographic work on each of these projects I have established a range of five scalar variables in access. Each of these represents a significant waypoint on a scale from second-hand to first-hand knowledge (something that, in light of the central argument of this dissertation, I feel it is important to track

productively identify and chart all the frayed edges, but a reasonable response is to talk about why the selection at hand was made, including how it emerged out of the constraints on the researcher's time and resources. That frankness would help to adumbrate some of the inputs and outputs generally bracketed out of the description and analysis. This could show more clearly areas for further research and the places where design research could articulate with other social scientific interests (e.g. in materials, infrastructure, development, scientific management, planning, organizational culture, data science, etc.).

candidly). At minimum, I was able to review drawings and other documentation from the project and to interview one or more of the responsible architects. Since in these cases everything that was learned took place via the modifications of attention inherent to recollection, I take these projects to be adequate for giving account of how design problems were eventually solved and what political, technical, and financial issues prevailed in shaping the outcome. I do not count these as adequate to the task of describing how architectural designers go about gathering information, understanding their users, and making design decisions. Toward that end I achieved a significant epistemic step whenever I was able to witness design activities on the project in-person rather than in retrospect. My own comprehension of what was at stake in a particular deliberation improved still further when I was able to follow the project from its early stages or beginning. Finally, on four projects I was able to sit in on meetings with clients and/or users as an architectural team was gathering its primary information. In those cases, I am able to trace design decisions back to key interactional moments between the designers, clients, and users. The table below shows how these variables correspond to each of the 14 core projects in my data. Based on how many of these conditions were satisfied, I have separated the projects into 'tiers' with Tier 1 representing the greatest level of first-hand access and Tier 4 representing the greatest reliance on second-hand reports. The asterisk on the senior living project is meant to signify that I do not consider this project a part of my data on healthcare.

| | Reviewed materials from project | Interviewed architects/ designers about project | Attended internal meetings and design activities | Started following project in its early stages | Attended meetings with users and/or clients |
|---|---|---|---|---|---|
| **Tier 1** | | | | | |
| Legacy Health Medical Offices Remodel | ✓ | ✓ | ✓ | ✓ | ✓ |
| City Hospital ICU Schematic Design | ✓ | ✓ | ✓ | ✓ | ✓ |
| County Hospital Masterplan | ✓ | ✓ | ✓ | ✓ | ✓ |
| County Hospital New Medical Offices | ✓ | ✓ | ✓ | ✓ | ✓ |
| **Tier 2** | | | | | |
| Gastroenterology Project | ✓ | ✓ | ✓ | ✓ | |
| Pulmonary Health Project | ✓ | ✓ | ✓ | ✓ | |
| Linear Accelerator Project | ✓ | ✓ | ✓ | ✓ | |
| Blood Center Project | ✓ | ✓ | ✓ | ✓ | |
| Psychiatric Emergency Services Test Fit | ✓ | ✓ | ✓ | ✓ | |
| **Tier 3** | | | | | |
| County Health System Masterplan | ✓ | ✓ | ✓ | | |
| Interventional Radiology Project | ✓ | ✓ | ✓ | | |
| Senior Living Project* | ✓ | ✓ | ✓ | | |
| **Tier 4** | | | | | |
| Life Safety Documentation | ✓ | ✓ | | | |
| Outpatient Cancer Treatment Center | ✓ | ✓ | | | |

There were numerous projects about which I was informed but of which I could not give extensive report nor perform an analysis. At the extreme, those include cases where a designer brought up the project anecdotally to demonstrate a point made during an interview. More commonly these were projects that came up in numerous conversations during team meetings or office gossip or were given in an intra-office presentation. I could be familiar with basic

requirements of the program, and some specific sticking points that needed resolution, and I might have carefully documented a few key events, but in these projects I did not attempt to be systematic in following the course of the project nor to familiarize myself with the history of how specific concerns and requirements of the clients and users came to be known or to occupy the forefront in design activities.

The data I present in this dissertation nearly exclusively represents the work and experiences of architects on staff at firms that practiced architecture for healthcare. A small number of my participants, however, currently practiced or had practiced in the education or laboratory science markets. Thus, included in my data and contributing to my general understanding of architectural design are forms of design knowledge and practices that do not specifically represent the healthcare specialty. More significantly for my conclusions, many of my participants had experience working at other firms and would draw on those experiences in interviews. As a result, the data set I compiled sometimes presents a partial view of firms I was not able to include in the study. I did not, however, specifically collect data on how many firms participants had previously been employed with, or for how long. While my notes contain firsthand accounts of at least 6 additional firms specializing in healthcare, I am unable to verify the specifics of their practices. Nonetheless, much of the information I obtained from former employees of firms not included in the study has contributed to my understanding of the range of projects and specialties, and to my impressions of what is normative in healthcare architecture as an industry.

In general, I do not draw comparisons across firms. This is owing primarily to the design of the study, which was never intended to produce broad comparisons between firms. Secondarily, refraining from comparison is necessary given the lack of parity between the data

sets I was able to collect from architects at the participating firms. The one exception on this front is the interview data, which is sufficiently comparable across participants. For the most part, I have not undertaken to compare answers on common interview items in this dissertation.

## Methods

The data corpus consists of approximately 233 hours (exact total: 13,994 minutes) of audio recordings, 25 hours of video, 399 photographs, 800 pages of typed field notes, 1009 pages of handwritten notes and sketches, and a collection of assorted documents and drawings obtained from research participants.

### *Interviews*

This study included multiple kinds of interviews ranging from informal and unstructured to semi-structured and person-centered (see Bernard 2006). The most fundamental of which were "informal interviews"—just snippets of conversation throughout the day. A good deal of these shorter interactions never made it into my field notes, but they fed forward into observations that did merit writing up. Naturally, I wasn't always the one to instigate conversation. Despite being busy at work, every one of my participants created opportunities to chat. One way or another, the designers found ways to keep me a part of the action. In some of these conversations I was the primary respondent. I did not ever purposefully say anything to affect the way a project I was following was being carried out. But I did find that designers often found it gratifying and even occasionally endearing when I would voice my observations and (sometimes Byzantine) theories about everyday activities like, for example, how information about projects was stored or handed off between designers at the transition stages of projects. As have other anthropologists before

me, I found that sharing in this way often engendered a different mode of reflection in my participants than a simple interview probe would, and I benefited greatly from the elaborations, corrections, complications, and alternative explanations that frequently followed.

Next there were "check-ins," during which I would sit down with an individual designer and request a briefing on any major projects I was following. We would discuss anything of note that may have come up in meetings I was unable to attend and in their correspondence with clients, users, and other designers. Check-ins could be called 'semi-formal' and 'semi-structured' interviews since they were usually spontaneous but imposed a generic interview framework and had an exploratory but definite agenda. I conducted at least one such interview on a daily basis. A fraction of these were audio recorded, but in most cases I simply took scratch notes that I expanded in my field notes shortly afterward. Most of the "check-ins" were conducted at a designer's desk, so they often included an overview of notes or presentation slides from meetings, virtual tours of computer-generated models from Revit or SketchUp, and reports and construction documents (e.g. A-sheets and G-sheets) in draft.

The "Check-ins" interview style piggybacks on a style of interaction designers engage in frequently. For various reasons, including schedule conflicts, the cost of including members of the design team in every offsite meeting, or the necessity of handoffs wherein designers specialties require them to "onboard" and "offboard" a project as it changes phases, members of an architectural team are often in need of debriefing or consultation. As a result, one on one interactions that mirror the "check-in" almost exactly are daily occurrences in any architectural office. Even novice designers are fairly familiar and comfortable with the genre. As a result, "check-in interviews" were often my best opportunity not only to keep in regular touch with a range of projects and the team members assigned to them, but also to glean insight into

individual designers' unique perspectives and concerns about specific aspects of projects. In other words, I found that asking my participants to walk me through the most recent happenings on a given project wasn't just a necessary part of keeping in step with aspects of the architectural process that I couldn't otherwise access, it was also a good way to get to know people.

Finally, I conducted a total of 53 formal interviews with 21 of my 34 participants. I utilized two methods of formal interviewing. On occasion I conducted semi-structured with lead architects to develop comprehensive reviews of particular projects or to elicit explanatory accounts aspects of architectural work. On that latter count, much of what I can report about the business of architecture and firm management, about how architects market their services and develop their relationships with clients and contractors, about how architects meet code requirements with their designs and strategize leading up to agency review, about many of the heuristic devices architects use, about the communicative strategies architects use in annotating their drawings, and about medical planning is carried out is owing directly to these interviews.

The other set of interviews were unstructured and inspired[14] by the Person-Centered Interview method (Levy and Hollan 1998). This style of interview makes up the majority of my formal interview data (roughly 80%). Both of these interview styles were held in semi-private settings, either in isolated conference rooms within an office or over lunch away from the office. Both tended to run between 40 minutes and an hour in length.

*Observational Methods, Participation, and Notetaking*

[14] I prefer to think of the unstructured interviews I conducted as *inspired* by person-centered interviewing for a few reasons, two of which deserve direct explanation since they convey something about the nature of the resulting data. The first reason is that by training I've come to believe that person-centered interviewing best establishes and elaborates the "person as context" over a series of interviews. With those reservations noted, I would say that these interviews did maintain a close stylistic relation to person-centered interviewing in their vacillation between informant and respondent modes and their thematic attention to person as context.

Foresite Design was the only firm where I was given the opportunity to do any significant (multi-day) observation. There I was given the opportunity to come in and observe any day of the work week and provisionally allocated an open desk with the understanding that I would give it up when it was needed by designers from one of the firm's other offices or when the office needed the desk for new hires. 'My' desk was on the outside corner of a bank of desks set up in rows within the center of Foresite's open plan office. From there I could observe and listen in on most of what was happening within the office. I could usually see and hear what each person in the office was working on, and 'mine' was the desk everyone had to pass on their way to the main meeting rooms. Early on, when I didn't yet feel I had to rapport to impose, I got invited to a lot of meetings just by being where the designers would remember to ask me to come along. For about nine months 'my' desk usually remained open, after which time I floated to whatever workspace was available. Occasionally during that nine months I would take up different positions within the office in order to spend time with designers I was less familiar with or to be nearer someone who was working on a project I was following.

I shouldn't have been surprised that doing ethnographic work in an office would require me to live like an office worker. It's very likely that something like 90% of my ethnographic work took place in a seated position. As I underwent the necessary period of adjustment, I became fascinated by modifications to my perception of duration and my increasing sense of synchrony with the rhythms of office events. A lot of mundane but important ethnographic questions arose out of simply being out of sync with the designer's vicissitudes of attention, the endurance of their bodies, the envelopes of events, and so on. In those cases, I was sometimes left wondering what lent events their particular tempos.[15] As expected in any instance of long-

[15] For example, formal meetings within the office were not just events that naturally occurred around decisions that inherently take longer to make, they were staged events in which the participants purposefully slowed down, pooling

term participant-observation, I gradually become more adapted to the flow of office life and less preoccupied with its peculiarities.

Needing to maintain a passive participation in the bodily hexis of office workers also posed some advantages for my ethnography. The most important of these was that I could likewise carry on screen-based work, in most cases by typing up my field notes. With the exception of the few times that I spend entire days out of the office with architects, for meetings, site surveys, and various forms of observational design research, I seldom had to reconstruct events from much temporal remove. In fact, at times I was already at my desk typing up fieldnotes when designers would have important interactions regarding projects I was following closely. In those cases, I was able to produce summaries or short, broadly faithful transcriptions of conversations in real time or immediately after the fact.

To complement generalized observation, I would spend time shadowing particular designers. I did this once or twice a week in stints that ranged from just an hour or two to nearly a full day. This method was particularly helpful for conducting ethnography in a setting where most of the activity takes place on a computer. While shadowing I would sit alongside individual designers at their desks, join them for check-ins with other designers around the office, and travel with them to meetings. When shadowing I would rely on scratch notes and reconstruct an account of what I learned later in the day. My most frequent form of shadowing was to sit beside designers as they worked that their computers. At such times, I often used this method in conjunction with the 'check-in' style interview. I frequently audio recorded these sessions, and a

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their time and staging space for deliberation. The disjunctures between the tempos of these events and others that cued me in to the pleasures of deliberating. This is confirmed to some extent by the fact that when work was slow the designers found more things to deliberate about. The value constituted in deliberation was tethered to productivity. Since each individual's time is measured and billable, meeting time and meeting attendance corroborate and construct a parallel, monetized valuation of the decision under review. The reciprocity (but not strict equivalence) entailed in constructing something as 'worth meeting about' and 'giving the client their money's worth' suggests an ability to feel into proportionate uses of time.

few times I video recorded the screen when the work was visually conducive (that is, graphical rather than textual, pertaining to significant ongoing evaluations regarding care, and complex enough to be difficult to recount otherwise). Otherwise I would produce rough sketches and solicit explanations from the designers. Many of the designers I shadowed were adept at providing a running commentary of their work.

Direct (or active) participation was often more difficult to manage. Lacking any skill or credentials in design (and, perhaps more importantly, with modeling or logistical software), there was scarcely any task in the workaday life of an architectural firm for which I could be of use. Nevertheless, at Foresite the designers found ways to draw me, loosely into the rhythm of the firm's happenings. Their efforts included incorporating me into supplemental skills training at the firm. I participated with the designers in a course on Human Centered Design[16], and learned to "pull plan" (a scheduling technique I discuss in passing in chapter 4), among other things. We also shared less professional activities, like drawing spaceships and doing yoga together on the office floor during "recesses" initiated during the firm's "wellness month", or experimenting with some (frankly, unfortunate) cocktail recipes during the weekly happy hour, "Thirsty Thursdays".

I had two particularly significant opportunities to participate directly in design research. The first came when the designers needed to conduct a study of multiple waiting rooms at a campus of medical offices. I rounded out the team, providing a little help with creating and conducting a day-long spot sampling (Bernard 2006) exercise and then analyzing and interpreting the data in light of observational and interview methods carried out by the three designers who made up the rest of the research team. (Using me rather than another designer

[16] https://www.plusacumen.org/courses/introduction-human-centered-design

might have saved the project somewhere around $1,000-1,200 in fee, but it's quite possible that the firm would have simply opted for a different compliment of data had I been unavailable.) My second significant form of participation came when I was offered the chance to take part in Foresite Design's first ever Post-Occupancy Evaluation (POE) at a vein and vascular outpatient surgical practice.[17] The POE gave both Foresite Design and me a rare opportunity to see the results of a finished project. Some of what we observed there became the basis for a line of thought that eventually produced some of the key themes of this dissertation. I discuss this case directly in chapter 5.

*Visual, Auditory, and Textual Data*

As noted at the beginning of the methods section, in addition to interviews and participant observation, I gathered visual, audio, and textual data. In this subsection, I profile the main applications of my use of filming, photography and sketching, non-interview audio recordings, and textual/graphical materials from my field sites.

I used filming in five main instances: internal group design activities; meetings between designers and users; internal design reviews; focal recordings of individual designers working at their desks; and structured interviews with architects reviewing materials from past projects. Below I will briefly describe what each type of video data consists in and the situations in which these data were produced before closing with a summary of video data that doesn't fall within the five main categories.

[17] The POE is not counted among the focal projects of my ethnography. Nevertheless, it holds an important place in my fieldwork and in this dissertation. As the reader may note, my most evocative or well documented examples of an important theme in my fieldwork don't always come from these focal projects. For a description of Post-Occupancy Evaluation see Zimring (1980).

The first use of video was to gather multimodal interactional data on group design sessions within Foresite's San Francisco office. I have film data of this kind of four of the healthcare projects I followed most closely. These are: "Legacy Health Medical Office Redesign"; "City Hospital ICU Schematic Design"; "County Hospital Masterplan"; "Blood Center Project". In three of these cases (Legacy, ICU, and Blood Center), I have video data that covers both how architectural designers at Foresite convert user-communicated criteria for a new facility into a design concept. I also have similar video data for a workplace redesign for a network of senior centers, but I do not count that project among my focal set or as a strictly-healthcare project; while I did not follow this project closely, the film data makes for an excellent demonstration of how designers at Foresite go about organizing and synthesizing their firsthand observations of problems users were encountering with existing facilities. In the cases of the ICU, the County Hospital Masterplan and the Legacy Health Medical Office Redesign, I have data that demonstrates different techniques the designers use to internally arbitrate between different design options.

In the second instance, I was able to film several instances (4 meetings, totaling 5 hours and 46 minutes) of the architectural designers meeting with users for the "County Hospital Masterplan" and "County Hospital New Medical Offices" projects. Along with audio recordings and notes from meetings, these data provide my best record of how Foresite Design approached their queries into users' needs and preferences, and how the activities they used to organize users' meeting participation.

While I was at Foresite, the San Francisco office was working to establish a tradition of presenting work that was nearing completion—both to show what the designers responsible had learned and what they had done that was especially clever, and to gather comments and ideas

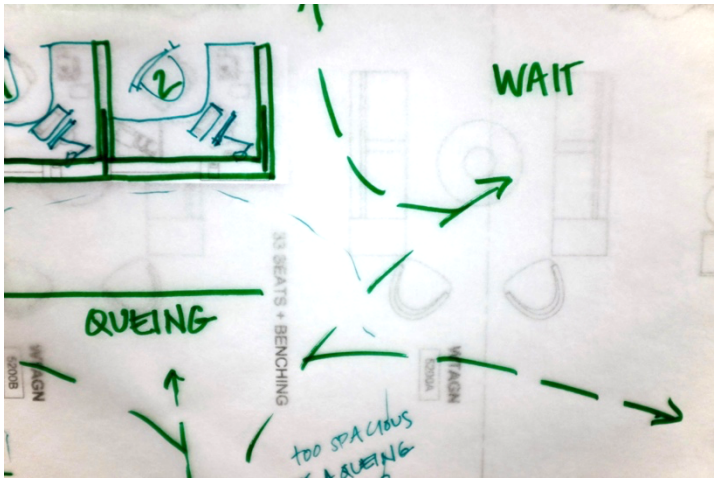
from designers who weren't on the project but might have insight into how some aspect of the plan could be improved. I began filming these presentations and the subsequent group discussions as they represented a naturalistic setting in which designers attempted to give their colleagues an overarching statement of the history of a project, their understandings of the main problems to be resolved, their proposed solutions, and the expected benefits to the users and/or clients. These recordings make up the third general category of film data.

The fourth category of film data arises out of my use of my video camera to supplement my notes and audio recordings when I was shadowing an individual designer. I used film in instances where the work that was being performed on screen was too complex or durative in nature to permit an accurate and analyzable textual record. In the most significant of these cases, I recorded a start-to-finish video of an architect at work performing a test-fit[18] for a gastroenterology practice.

When possible, I video recorded interviews with architects in which we reviewed the history and documentation of a project. In several cases I was unable to do this, largely because I found the opportunities to conduct such interviews spontaneous. I have video data from interviews of this kind that cover just two of the focal projects in my research (though there are others), so many of the cases where I am relying on architectural designers' retrospective accounts of projects are informed instead by audio recordings, guided reviews project documentation, and my notes.

[18] A test fit is an exercise in which an architect takes a "program"—a list of functional spaces and their recommended sizes—and develops graphical variants of how these spaces might best be arranged within the total allotted space. Since the point is always not only to find a way to fit the right number and size of spaces but also to consider the usability of the arrangement, the exercise often involves complex operational and experiential considerations including imaginatively walking through the space as different types of user (e.g. doctor, nurse, patient).

I mainly used photographic methods to produce visual examples of types of events and places. Prominent subjects in these photographs include designers at Foresite at work or in meetings. In addition to photos that document events, I took a series of photographs to document the workspaces of the Foresite Design office at the time of my ethnography (they have since moved), some of which appear in this dissertation with slight alterations to obscure the firm's identity. Another portion of my photographs from the field were taken to augment my audio recordings and notes, as when I would photograph a designer's screen or sketches to keep a record of the plans they were talking through with me or with another designer.




I also used photographs to produce a visual inventory of all the books that the designers kept in the office over the course of my fieldwork. At Foresite, there was a display shelf with popular texts (e.g. Don Norman's *The Design of Everyday Things* [2002]) that office displayed partly as recommended reading and partly as props by which a collective presentation of self (the firm identity) was vouchsafed (Goffman 1959). Added to these were several dozens of volumes on building codes and best practices. And many designers kept personal reference works on design methodology or business practices on hand at their desks. Many of these personal texts, like those on the display shelf in the office, were not specifically about architecture, nor even necessarily about design. Taken together with a smattering of research articles and industry reports, these texts composed a major portion of the local ecology of ideas. My hope in

compiling what is very nearly a comprehensive record of books and manuals that resided within or passed through the office at the time of my fieldwork I will be able to partially reassemble that ecology in later writings. (My historical chapter on the rise of Methodological User-Centricity is an initial step in that direction.)

As I discuss briefly in chapters two and three, Foresite Design undertook a significant project to change its brand image and substantially revise its approach to design. Since the resulting approach lends significant framing to this dissertation, I made a point of inquiring into the firm's previous incarnation. In addition to what information I could gather through interviews, I used an internet archive[19] to examine the firm's old website and blog. I gathered screenshots from those defunct webpages, including press releases relating to the firm's acquisitions and the first announcements of its new heading.

Adding to these and other screen shots from the contemporary websites of Foresite and other healthcare firms, I have also archived articles from industry publications that feature work by Foresite Design, and, whenever possible, the research summaries/trend analyses and a few peer reviewed publications that the designers at Foresite shared with me or referenced in their presentations to clients and users. Rounding off to these visual and textual resources, I have collected 433 pages of designs, project photography, and presentation materials. Those documents range from presentation materials, meeting minutes and other "logistical media" (Peters 2013) for client meetings, to project reports and other deliverables readied for clients at the end of a project or a project phase, to marketing materials featuring a recently completed buildings. Some of those documents are in PDF format, while others only exist as physical copies.

[19] The "Wayback Machine", https://archive.org/web/

Aside from my notes, my most prolific form of data collection was audio recording. I have audio recordings pertaining to every focal project (Tier 4 and above) listed in this chapter, save the outpatient cancer treatment center for which I filmed my debriefing with the project director. For each of the four projects where I was able to attend user and/or client meetings (Tier 1) I have some audio recordings of those events (depending on the extent permitted), and in the case of the county hospital projects I also have some film data. I also have audio recordings of internal meetings, design sessions, and discussions from every project with firsthand access levels from Tier 1 through Tier 3. Looking beyond the focal projects, another major segment of my audio data comes from in-house meetings at Foresite. These are of four most common types: (1) weekly "stand up" meetings (see chapter three for a description of these); (2) monthly "team meetings" where the whole office shared lunch together, managers shared important firm news, the team workshopped any internal problems they were having; (3) in-service seminars wherein Foresite Design staff members gave presentations to educate their fellow employees on some relevant rudiments of their specialty (to give a few real examples: observational methods; contract law; wayfinding; and biophilic design); (4) vendor meetings where sales representatives would provide box lunches and give (mildly) educational presentations (e.g. on infection control in hospitals) and introduce the related line of products they represented (e.g. surface materials that were more cleanable, less likely to harbor bacteria). Much of the remainder of my audio recordings document designer-to-designer interactions pertaining to projects that did not become focal to my fieldwork.

Chapter 2

# "Focus On Users": Methodological User-Centricity and the Reinvention of Foresite Design

> "I came into architecture with an interest in psychology and an interest in the human mind. [...] I loved behavioral psychology, and the way the mind works. I thought that was a path for understanding the user, ultimately. [...] You have to understand the human mind in some way in order to design for it. But I think more importantly, then I realized afterwards that it's really about behavioral psychology and sociology and the way that not just an individual may experience space but about how a group of individuals interact together or with a space. So that's where, for me, the social sciences that surround the built environment: I love it. I wouldn't consider myself an expert, but it's the kind of stuff I gravitate towards. 'Cause that's why I became an architect."

This is Marc, about mid-way through our first interview, telling me how he thinks, why he works at Foresite, and also why my fieldwork interests him. I had been in touch with several firms specializing in healthcare architecture, but Foresite was the first to open its doors. Even as the firm was still vetting me in phone calls and emails I began to learn that Foresite was in the midst of a major overhaul in their organizational structure and design process, one that would take inspiration from "User-Centered Design", "Human-Centered Design", and "Design Thinking", to name a few—all methodologically-oriented stylizations that have risen to prominence in the United States, and particularly in the Bay Area and Silicon Valley through the 1990s to the present day. The reboot had started around 2012, when Foresite hired a consultancy group to conduct a survey of the firm's past clients. With the help of the consultants the leadership of the firm became convinced that they needed to do more to distinguish themselves, and that the key to doing so was to take a "more holistic" approach to their architectural projects. Foresite needed—they became convinced—to approach clients' architectural problems in light of the healthcare provider's broader goals as an organization. To do that, the firm's leadership became

convinced, they would need to develop an in-depth understanding of their clients and the users of the facilities they designed. Foresite would need methods for gathering and synthesizing information on their clients and the end-users of their projects.

To facilitate this process, Foresite would create a new type of employee—called "strategists"—whose job was to master and utilize methods of information-gathering with clients (e.g. hospital executives and administrators) and end-users (e.g. doctors), organize and interpret the findings, and collaborate with other designers to make sure that knowledge of the client and end-users' needs and concerns was reflected in the architectural plan. Starting in 2012, Foresite began incremental changes in that direction. The firm reorganized and took a revised name: Foresite Design. Adding "design" was meant to signify their overall re-orientation and the broader scope of their services. Their goal now, Marc told me, was to be partners to the clients they worked for, lending strategic thinking that went beyond the built environment to encompass the whole way a client operated. Foresite's game plan, which has proved effective, was that they could be better at figuring out what works for clients and more profitable if they spend more time on preparation, listening and developing a consensus early on and less time on drafting and redrafting plans in response to granular critiques.

The San Francisco office was opened right around the time that Foresite began its transformation. Of Foresite's handful of offices, I was told by an executive at the flagship office, this one was the most excited about what the firm began referring to as "strategy-based design". Like the rest of the firm, San Francisco was very much still figuring out how to make strategy-based design work, the exec added. But owing to their enthusiasm they were in some respects ahead of the curve. In our interview, Marc was quick to insist the firm was still figuring out how to work this way.

Over the course of the 11 months I would spend at Foresite this experimentation would continue. Though to some extent, by the end of 2017, the San Francisco office had developed some routines, they remained in motion. Every time I have gone back to visit there has been more revision to their process, their staffing, and in minor ways to each individual's roles and responsibilities. But key aspects of the firm's philosophy, and of the perspectives of the individuals who are helping facilitate its transformation (and those who have joined since because they are attracted to its premise) remain quite stable. This chapter is about that broader orientation, the ideological commitments that orient the designer's practical innovations at Foresite Design.

If one were to look for a single most distinguishing feature of contemporary design practice it would be difficult to do better than to point out the bevy of methods and approaches for studying and making design responsive to "users". While I did not know it at the time, Foresite Design's vision of becoming a "design firm"—most salient in their initiative to "focus on users"—was unselfconsciously wrought from a mid-twentieth-century project to remake architecture in the likeness of the social sciences.

The contemporary concept of a "user" is a fairly recent invention in the design world. That is to say that despite the fact that all buildings have occupants, the notion that those occupants *should be grasped empirically* as a matter of course in the design process is an expression of an ideology that only gradually obtained broad acceptance[20] within the last six decades. Particular to architecture, historical sources note an emergence of interest in "users" on the part of practicing architects, students and educators during the 1960s (Conway 1973;

[20] In some design approaches, such as in "Human-Centered Design," "Service Design," "Experience Design," "Participatory Design," etc. this notion has obtained outright hegemony.

Montgomery 1989; Zeisel 1981). Institutional recognition of the need to empirically consider "users" came throughout the 1960s and '70s in the form of major architectural schools revising their degree programs and curricula, professional associations and mailing lists, and dedicated academic journals (Montgomery 1989; Sommer 1972). It was openly acknowledged at the time that the need for architecture to formulate and respond to "user needs" was a reaction to the politicization of the professions stemming from the broader cultural transformations of the sixties (Conway 1973). That attribution certainly does typify some of the connotations that adhered to the movement. And yet, its origins are actually older, and notionally more diffuse.

Helped to a great extent by social scientists, it was in the twenty-year period spanning the late 1950s to the late 1970s that design methods were significantly reconfigured to place "user needs" at the center of architectural problem solving. It was this movement that would directly and indirectly spawn the stylized practices of "participatory design" (Schuler and Namioka 1993, Simonsen and Robertson 2013), "User-Centered Design" (Endsley and Jones 2004, Lowdermilk 2013, Norman 2002), "design thinking" (Brown 2009, Cross 2011), "Human-Centered Design" (Cooley 1999, IDEO 2015, LUMA Institute 2011), "empathic design" (Mattelmäki et al 2014, McDonagh 2019, Postma et al 2012) and many others. Despite their (often subtle) differences (see Postma et al 2012; Sanders and Stappers 2008), and the fact that many of these design approaches are more closely associated with computer interfaces and other consumer electronics than architecture, these contemporary design stylizations draw not only from one another but from an often unstated common source era: a mid-century movement to make architecture a "social art" (Conway 1973; Sachs 2018) that drew upon social scientific data and methods to account for and intervene into the effects of the built environment on behavior and experience.[21]

[21] It should be noted that while the historical developments featured herein focus on architecture, similar and overlapping developments were taking place within other design fields. In fact, by virtue of a certain inter-culturally

The common inheritance of each of these styles of design —which I will refer to as *Methodological User-Centricity* (MUC)— is an ideological complex wherein an empirical grasp of prospective users' needs and expectations becomes formalized as the means to a viable design solution. And it is this fundamental assumption that presently functions as the primary point of convergence across design disciplines. This chapter examines the historical emergence of Methodological User-Centricity within American architecture and social science and its entailments for the design process. Throughout this chapter, I will argue that MUC arose as a methodologized way to cope with the historical thematization the social distance between the designer and user. It was the adoption and adaptation of MUC that played a central part in Foresite's firm-wide reboot. And, as will become evident in the chapter to follow, despite the designers being largely unaware of the historical origins of their aims and sensibilities, many of the notions about why and how designers should attend to users are still on display in Foresite's explicit reckonings of their evolving identity. This includes an historically derived notion of the role of "empathy" in design that informs Foresite's approach to users.

**Act 1: In which architects begin to seek empirical grounds for their designs and the initial terms of a partnership with social science emerge**

The concept of "user needs" became prominent in part thanks to the "environmental design movement" and the affinity its advocates had for the social sciences. Avagail Sachs (2018) has recently argued that American architects began to advocate for holistic attention to how the built environment affects its inhabitants as early as the 1930s. It was during this period

genericized notion of "design" the philosophical and methodological innovations of figures such as Horst Rittel, Herbert Simon, Henry Sanoff, and Nigel Cross have found far-flung audiences. (This mutual influence is one of many factors reinforcing the notion that there is any such thing as "design" in a general sense.)

that architects began to show interest in developing comprehensive insight into the effects of their design decisions on users. Sachs credits the sociologist Lewis Mumford with first articulating the need for architects to reckon holistically with the effects of the built environment upon its occupants.[22] In his works on the urban environment, Mumford challenged architects to be "democratic" (Mumford sometimes specified "Person-Centered") in their approach to design. This was important precisely because, in Mumford's estimation, the built environment played a vital role in shaping human experience and behavior. In the urbanizing United States, where people no longer self-built their dwellings, it was the architect that shouldered the responsibility for how well the built environment suited and shaped its inhabitants. As Mumford wrote, "The individual no longer builds his house; but the house is still building the individual" (quoted in Sachs 2018:2).

To be certain, modern architects had never lacked ambitions to engineer the social world. Famous examples are readily available. Le Corbusier's unrealized scheme to raze and rebuild Paris on the model of a grid, or his unbuilt Venice hospital each exhibit the provocative architect's ardor for rationalization across different scales. Frank Lloyd Wright's "Usonia" philosophy (and the utopian socialist communities it later supported) portrayed architecture as capable of teaching people how to live. Wright's homes were intended as a moral education. What was distinctive about the "environmental design" movement was its empirical bent: the innovation which began to take root in the 1930s lay in the notion that it was a matter of fact that architecture affected experience and behaviors; and, that in light of this, it was architects' responsibility to reckon with the measurable effects of their design decisions in order to better insure their success.

[22] Mumford, Sachs (2018, *passim*) argues, was specifically inspired by Dewey's typification of experience. Later authors would draw upon the pragmatists as well as upon Alfred Schutz and Karl Popper.

It was during the pre-war years that architecture, and its offspring urban planning, first came to be articulated as potentially scientifically justified forms of social engineering. But was only really beginning in the 1950s that the specific notion that architecture should become a "social art" (Conway 1974) gained notable traction. The "environmental design" philosophy was fostered within and disseminated by a diffuse interpersonal network of academic architects and social scientists, and between the mid-50s and early 1960s became embodied in the reformulation of many schools of architecture, including those as Harvard, MIT, Penn, Princeton, and Berkeley as schools of "Environmental Design" (Sachs 2018; see also Montgomery 1989). As the design historian Avigail Sachs (2018:10) observes, the new moniker "Environmental Design" served a dual purpose. On the one hand, it underscored the holism aspired to by the pioneers of the movement, who hoped for an interdisciplinary cooperation between architecture, planning and research: environments transcend individual structures. On the other hand, the concept of an environment also underscored architecture's functional part in human activity (rather, or in addition to its aesthetic function).

The figures who ultimately did the most to advance the notion that design should pre-figure desirable effects on the user are not household names. Some, including James Marston Fitch[23] and Christopher Alexander (both of whom were fairly peripheral to the aspects of the movement that interest us here) or Henry Sanoff (who is more central) will be known to designers and some others. But even for architects and other designers the emergence of American architecture's empirical interest in "user needs" is not a storied chapter of design

[23] "Man was compelled to invent architecture in order to become man," the architect James Marston Fitch wrote to the New York Academy of Sciences in 1965, "By means of it he surrounded himself with a new environment, tailored to his specifications … interposed between himself and the world. Architecture, is thus an instrument whose central function is to intervene in man's favor."

history. Nonetheless, this history predates and prefigures the broader syndrome of Methodological User-Centricity characterizing today's most influential approaches to design.

To the extent that architects aligned with the increasingly widespread conviction within the social and behavioral sciences that the physical environment significantly informed behavior at individual and group levels, the luminaries of the "Environmental Design" movement had grounds to argue that buildings and the broader built environment should take these effects into account. Yet the cohort of architects who pushed for this conceptualization of the profession also problematized architects' current capacity to carry out this commission.

The Environmental Design movement in architecture was enthusiastically stoked by social scientists who, like Lewis Mumford, had been studying the effects of the environment on behavior and experience (Sachs 2018; Zeisel 1975). Many of these social scientists were convinced that the built environment was too often poorly suited to people's needs and expectations. Sounding very much like Mumford, the social psychologist Robert Sommer (1969:172) wrote that,

> [Man] will adapt to hydrocarbons in the air, detergents in the water, crime in the streets, and crowded recreational areas. Good design becomes a meaningless tautology if we consider that man will be reshaped to fit whatever environment he creates. The long-range question is not so much what sort of environment we want, but what sort of man we want.[24]

[24] Sommer's comment here could be read as paternalistic, indicating an ambivalence that surfaces throughout MUC. While often times focusing on users is cast as a democratic or populist project of giving power back to the people most affected by the designer's decision, there is also a discernibly manipulative dimension to some design discourse that persists to this day. The architect and historian Roger Montgomery (1989), on the many faculty members at Berkeley who would contribute to the development of MUC by way of the Environmental Design movement, has argued that the invention of the "user" ultimately cast architects in the role of behavior modification specialists. This is, however, essentially true to some extent irrespective of the intentions of the designer, so it is an outstanding question for social scientists how and to what effect designers thematize the potential to control, liberate, or comfort in a given case. For his own part, Sommer was deeply impacted by the counterculture in the Bay

For social-scientist critics, these failures of accommodation were symptomatic of architects' detachment from the social and physical impact of their buildings.

In its earliest articulation, beginning around the 1930s and extending, in fits and starts, through the 1950s, the partnership between social science and architecture seems to have been envisaged as rather one-sided. In arguing that architects should operate with an awareness of social scientific findings, American social scientists who specialized in studying environmental influences on behavior and social organization and saw in architecture an opportunity to implement the findings and theories they were developing (Sachs 2018; see Zeisel 1975). Architectural practices where to be broadly informed by the gradually mounting social scientific studies on "Person-Environment Relations"[25] (see Thiel 1977, Rapoport 1971), but beyond implementing the findings of social scientists, architectural practice itself would be little changed. Social scientific concepts trickled into the design world and would become operationalized there.

To some extent, the high-water mark of this model of the partnership can be found in books and studies published in the latter half of the 1960s. An example is Edward T. Hall's (1966) notion of "proxemics," which inspired sometime-architectural-consultant and chair of psychology at UC Davis Robert Sommer (1969) to conduct a study from which he coined the term "personal space" in an eponymous book that both argued for the concept using original data

Area and began to lose faith in the well-intentioned, well-informed expert, later dedicating a book (*Design Awareness*) to arguing in favor of giving users more direct control of the design process (on the model of People's Park in Berkeley).

[25] One of the by-products of the sprawling growth of this ideological complex seems to have been a range of titles for similar lines of inquiry. On the one hand, there was "Person-Environment Relations," "Man-Environment Research," "Environmental Psychology," and "Environment and Behavior Research." Then there were the organizations "Environmental Design Research Association," and the journals, "Environment and Behavior." It is difficult to tell whether the differences in terminology marked personal rivalries or substantive differences in philosophy. I have yet to find a text that acknowledges any differences between them, nor have I encountered critiques. It seems more likely, rather, that titles were matters of personal preference.

and modeled a way to implement the notion in design practice. (Another example, more notorious for its politics though equally titular and arguably still highly influential in architectural education is Oscar Newman's [1972] concept of "Defensible Space".)

Throughout the 1960s, architecture and social science would gradually be drawn even closer together. In addition to the implementation of social scientific concepts and metrics, social scientists were eager to see the effects of architectural design decisions measured in order to establish a feedback loop between theory and practice. Post-occupancy evaluations (POEs) were rhetorically positioned as a bridge back to scientific research (see Sachs 2018:98). Social scientists were to some extent successful in motivating at least academic architects to conduct POEs, and a fair number of these studies were conducted throughout the 60s and 70s (Zimring 1980).[26] A number of organizations, conferences, and journals emerged over roughly 10 years spanning the mid-sixties and seventies. Founded at the initiative of Henry Sanoff, an architecture professor at North Carolina State University (but previously from Berkeley), the Environmental Design Research Association (EDRA) is probably the most important of the professional organizations (Montgomery 1987, Sachs 2018). Schools of architecture, including UC Berkeley, Princeton, Harvard pioneered environmental design programs and were followed, year after year, by others (Geddes and Spring 1967).

At the same time, many social scientists (e.g. Gutman 1968; Perin 1969) acknowledged that there were obvious limits to how well theory and generally observable social patterns could inform design decisions on specific projects. Moreover, they were often critical of the "architectural determinism" that to some extent motivated architects' interest in allying with

[26] It is unclear to what extent post occupancy evaluations forever conducted by persons outside the academy, however. Nonetheless academic architects and social scientists advocated for their widespread implementation (and continue to do so to this day [e.g. Li et al 2018]).

social science and thought it a serious impediment to integrating the fields. However, many figures in the movement were less concerned with developing an integrated theory of what was sometimes called “Person-Environment Relations” or “Environment and Behavior” than with counterbalancing architects’ lack of empirical interest in building occupation.

**Act 2: In which the “gap” between design and end-user becomes focal**

By arguing for the need for architects to consider the impact of their design decisions upon the “user”, proponents of the “environmental design movement”, as Sachs calls it, at once proposed a new telos for design and diagnosed a myopia in architects’ knowledge about the persons for whom they designed. Rhetorically, the early texts of the environmental design movement each rely on the premise that, all else being equal, the value of a design solution was a function of how well-informed architects were of their users. In order to meet their goal of designing environments that responded to “user needs”—which could variously include consciously held attitudes, habitual behaviors and perceptual tendencies, and accustomed living and working arrangements—architects would need to draw upon the work of, and sometimes work alongside with, social scientists. For these social scientists, systematically studying the user’s needs and desires was essential to ensuring that architects’ supposedly new-found desire to improve society was not merely the inefficacious imposition of the designer’s personal vision of utopia. Sommer (1972:4) makes this quite evident in *Design Awareness,* "The danger exists that the social concerns of the new designers will become only another fad – artistic intuition will be replaced by altruistic intuition. In each case the designer believes he knows how other people should live, but the standards of judgment shift from the aesthetic to the sociological.”

Social scientists argued that the complexity of contemporary building projects had become a hazard to the viability of the architectural profession: clients and end-users were often not the same people; social and cultural differences made it hazardous to presume the user's preferences, motives, or habits; urbanization and new forms of business, medical, and pedagogical practice required that architects had some means to keep up to date on clients and users' actual practices. To hear the social scientists tell it, design's assimilation to social science was a necessity given the range and complexity of the organizations and the anonymity of the persons for whom architects worked. In this sense, architecture's need for social science was coeval with the societal conditions of possibility for social science itself. "For the architect who wants to understand the complex needs of strangers for whom he builds," the Harvard sociology professor John Zeisel (1975:17) would write, "social research is bound to become an indispensable tool, just as the social sciences generally developed in response to an increasingly complex society whose structure it is difficult to see through direct observation." The anthropologist Constance Perin (1970:4) would write that "... less and less does the designer know the people to live in the environment he makes. Somehow he must." Similarly, Robert Sommer (1972:3) would argue that architects had become problematically detached from the people who would inhabit their designs,

> Good designers have always been aware of the client's needs. The increasing complexity of society has produced so many non-user clients, such as corporate boards and government agencies, that the humane designer needs to go beyond the client's prescription in order to discover the needs of the actual users. This is concern is not new, but within the last decade is become a self-conscious ideological movement within the design profession.

From very early on, then, the concept of a "user" indexed social distance between the designer and the client, on the one hand, and the more amalgamated and mysterious persons who would become the primary occupants of the built environment.

Beyond furnishing 'objective' data (which not all social scientists thought was always necessary and not all architects believed in wholeheartedly), the social scientist was also to be a facilitator of communication. Particularly in institutional projects, like government housing, education, or healthcare, the paying client and the regular user of the space were not only different persons, but often belonged to significantly different social groups. Social scientists could bridge these worlds, making them mutually intelligible (see Conway 1973). With Roger Montgomery (1989), we might observe that prior to the historical infusion of design with social science it would have been impossible to critique the epistemic status of architect's prior assumptions. The urgency of the "gap" between the architect and the user that the methods of social research were intended to fill was (and continue to be) constituted by designer's reflexive awareness of their own social distance from the "users" they were to design for. This social distance threatened not only architects' technical prowess but also the ethical basis for designers' decisions. The problematization of the social distance between designer and end-user necessitated the creation of new areas of expertise in the architectural field (Montgomery 1989).

If designers were going to affect the social world then, social scientists argued, affecting it for good meant knowing how to direct their efforts. Social scientists were eager to fill the gap between the designers and users of architectural spaces by applying their methods of data collection and analysis. Social scientists (and to some extent their architectural counterparts) pursued two lines of argument in favor of social research: on the one hand researchers could point to an increasing number of studies of the effect of the built environment on behavior, and argue that the specific findings and general theoretical insights afforded by these studies could help inform architectural theory and practice; on the other, social scientists argued that they could help put architects in closer touch with user needs on specific projects.

As we will come to see, the emergent articulation of a social separation between designer and end-user, a gap that designers needed a means of crossing, would be pivotal. As I demonstrate over the next two acts, the environmental design movement undertook a "rhetorical drift," its emphasis shifting in a way that would significantly reconstrue the issue. The social scientifically inspired notion that the gap in question called for methodological innovation would come to take center stage and, gradually, the clamor for positivistic theories, commissioned studies, and social scientists themselves would give way to emphasis on architectural designers' own direct understanding of their users.

**Act 3: In which social science proves difficult to integrate in a rigorous sense**

Gradually, a model began to emerge in which social scientific methods were seen as potentially able to be incorporated into the early stages of the design process itself. An early prototype of this model can be found in the work of the sociologist John Zeisel (1975, 1981), who, like many of his contemporaries, sought a reflexive synthesis of design and social and behavioral science. By effecting an alliance between research and architecture, the environment and behavior paradigm could simultaneously develop a positivist science of the ecological determinants of human behavior, and restructure design practice to develop and test applications of this knowledge. Architectural design was reconfigured, in this sense, as a kind of research in practice.[27] For this to work, however, designers had to undergo methodological re-orientation. To that end, it was necessary (it seems) to articulate the design process as already entailing a discovery process which could be bettered via social scientific research methods (thus always

[27] We can see here an early predecessor to contemporary attitudes toward design as a "way of knowing". Seen in light of its historical constitution, it is remarkable how design, repackaged as a quasi-ethnographic endeavor, has come full circle to represent for some a new archetype of anthropological knowledge.

implying, but often enough outright stating a deficiency in previous architectural forms of knowledge).

It is unclear the extent to which the ideal model proposed by Zeisel and others was realized in practice. Changes in the architectural profession are easiest to track through universities, either through curricula or the intellectual output of the architects (and, later, social scientists) who taught in schools of environmental design. It is often difficult to tell how much the mutual desire of architects and social scientists to reformulate the design process was shared by practicing architects and researchers outside the academy. Nonetheless, there is some evidence to support the inference that full time practicing architects were also motivated to consider what role social science might play in informing design.

The best evidence comes in the form of addresses and conference reports from the American Institute of Architects. In response to developments spanning the 1960s, for instance, the national chapter of the AIA hosted what became known as the Coolfont Conference (after the town where it was located) in 1973. Coolfont brought together a small working group[28] (9 in total) of practicing architects and social scientists with the express purpose of developing a "process model" for how to integrate social scientists into the existing workflow of architects (Conway 1973). In aid of this commission, the architects and social scientists at the conference were asked to talk out the difficulties and motivations for effecting this integration and then to

[28] Social scientists included John Zeisel from Harvard, Robert Sommer from UC Davis, Edward Ostrander from Cornell, and Robert Bechtel, who at that time was president of the Environmental Research and Development Foundation (an organization founded during the 1960s to advance the integration of social scientific research into architectural education and practice). Architects included George Agron (a notable figure in healthcare architecture) representing San Francisco-based Stone, Marracini and Patterson (a firm that would—through mergers—eventually become SmithGroup, one of the largest healthcare architecture firms in the United States); Shelton Peed, representing the renowned I.M. Pei and Partners (the architecture firm that would later design UCLA's Reagan Hospital); Louis Sauer, of Louis Sauer Associates, whose specialty was urban housing; and George Hartman of Hartman-Cox, a Washington D.C.-based firm. Donald Conway, Director of Research Programs for the AIA and author of the official report from the conference made a ninth participant. While the participants are reported, their individual contributions to the conference, including their verbatim statements, are anonymized.

draft and present several models which could be synthesized the disseminated to the broader architectural community. To that end, Donald Conway, Director of Research Programs for the AIA wrote a report on the conference and featured graphical reproductions of the various process models develop through it. Given that the AIA intended from the start that the proceedings of the conference should be widely reported, a stenographer was hired to produce transcripts of entirety of the workshop (except for during breakout sessions). While this record is not given in full, verbatim excerpts suggest that there were points of tension between the academic social scientists—who were positioned in this case as the protagonists for remaking architecture—and the practicing architects who were not all fully convinced of the value social research could bring to their firms. The social scientists, for their part, argued to the architects that they could produce definitive answers, and that better information could only aid more effective design. However, more than once architects suggested that they were primarily concerned with what would sell their work to a client; not all clients would permit architects the autonomy to pursue whatever direction might be suggested by research, and others might balk at the added fee of social scientific studies.

The conflict at Coolfont between the social scientists and practicing architects suggests that although the overarching goal of a "process model" had appeal (at least at the level of the AIA, whose self-imposed mandate includes continuing education for architects), the urgency of implementing a full-fledged integration of social science (in the form of social scientist consultants) within the flow of architectural projects was much more attenuated amongst professional architects than amongst their academic counterparts and students. When the AIA held a second conference (this one entitled "Atwater") a year later to further develop and evaluate the implementation of the ideas developed at Coolfont two major points of discussion

were the competing interests of the fields (in terms of authority over projects, desired level of detail, etc.) and the difficulty of keeping the engagement of architecture and social science rigorous in light of the pace of architectural projects (Conway 1976). Again, it seems the practicing architects were interested in principle, but unsure of the value or the feasibility of paying for social scientist consultants, waiting for their recommendations, operationalizing these in actual designs, and convincing their clients of the benefits of following those recommendations.[29]

Both the reports from Coolfont and Atwater lend the impression that it would be nothing short of a monumental challenge to actually integrate the rigorous methods and theoretical aims of social science with the practical concerns, timelines, and financial schemes or architectural projects. Thus, the creation of process models that relied either on positivistic findings that related only abstractly to particular projects or upon commissioning social scientists to do unique studies for each project seemed bound to fall short of becoming the standard. Both modes have persisted to the present day in various forms, but neither really set the precedent for Methodological User-Centricity. It was ultimately the insinuation of methods for studying use and users into the architect's own design process that would set the stage for our contemporary moment.

Perhaps, for the researchers who hoped architects would see the need for social scientific data and methods the skills and sensibilities of the next generation of architects was always in view. After all, reforming education was always an agenda of the "Environmental Design"

[29] This continues to be an issue. Foresite noted that it was partly because there was so much work to go around that they were able to work with clients who, for the most part, were willing to experiment with a 'strategies-based' approach. Even then every client varied in how much they were willing to facilitate Foresite's process for becoming familiar with users. The fact that the environmental design movement and the model of architecture that Foresite inherited from it is always subject to institutional (and material) constraints that are seldom articulated in the models themselves is a point of great significance for the dissertation (see following chapter).

movement that had precipitated American architecture's interest in the social sciences. In 1967, the AIA sponsored a report by architectural faculty at Princeton that detailed the state of "Environmental Design" programs across the country. It was one of the key recommendations of the report that, in light of what the authors perceived to be an increasingly complex society, schools continue to advance students literacy in the social sciences (Geddes and Spring 1967). In any event, at the dawn of the 1970s it appears architects and social scientists concentrated much of their attention on producing a style of architectural education that embedded social scientific methods into the design process itself. This is to some extent evidenced by the proliferation of process models[30] featured in publications expressly produced as textbooks or other resources for architectural education. Robert Sommer's *Personal Space* (1969), for example, was structured in halves that produced an analysis and then argued for how it could be put to work in architectural planning. Berkeley's Robert Ellis (1971) and Lars Lerup (1973), and the University of Washington's Philip Thiel (1977), among many others, laid out arguments for the necessity of social research in articles published in education journals. Henry Sanoff's (1979) work on "design games" for working with users was published in the form of a 'how to' manual for students and designers. Finally, Zeisel's *Inquiry By Design* (1981) became the first published text to programmatically prescribe a synthesis of the design process and social scientific methods (Sachs 2018).

**Act 4: In which the principle behind social science is distilled to familiarity with users and "empathy" emerges as a methodological premise**

[30] It should be noted that the possible social scientific contribution to design was far from being the only thing about the design process being modeled in this period. Owing to the popularity of systems theory, the 1970s in particular saw an intense effort to formalize models of process and decision making in design.

What these emerging models for a synthesis of social science-inspired methods with the architectural design process often manifest is an interest in simplifying and making readily imitable the social scientist's tools. Whereas alternative modes of understanding users might have had to draw abstractly upon theories and empirical findings from academic post-occupancy and behavioral studies, or else might rely upon commissioning a social scientist to conduct a bespoke study (the model that was explored at the Coolfont and Atwater conferences), more and more the process models that emerged in publications aimed at practicing architects and architectural students seemed to constitute an effort towards consolidating the new task of understanding the "user" to the designer's purview. Occasionally this tack was met with criticism from members of the architectural community who complained that architecture was losing its identity and, perhaps worse, failing to reproduce its core competencies (see Eisenman et al 1971). Some, including the sociologist of architecture Robert Gutman critically suggested that training architecture students to become increasingly fluent in social research was a zero-sum game. The unacceptable tradeoff, for Gutman and others, was a perceived de-emphasis on the technical skill required to successfully plan and manage a project through construction (Sachs 2018). Perhaps Gutman, who was in other respects supportive of collaborations between architecture and social science (see Gutman 1968), was in favor of these remaining distinct specialties. However, amongst many social scientists and architects who were champions of the integration of social science and design there was a discernible tendency to encourage a degree of merger.

The goal in many cases seems to have been to aid the appropriation of social scientific concepts and methods in ways that fit with the existing model of architectural practice (e.g. Ellis 1971). Many such changes to design methodology were proposed during this period, but a

common thread is that these changes privilege efficiency and clarity for the designer. This was one explicit concern of Geddes and Spring's (1967:20) report to the AIA, wherein the authors issued the opinion that,

> The development of reliable, explicit design methods may be the only way we can hope to deal with the increased scope and complexity of our problems without enormously increasing the length of time the student must spend in school or the length of time a practitioner must devote to a problem in his office.

As noted earlier, practicing architects were facing increasingly complex and diversified tasks in design and construction (Gutman 1988). There was some concern that architects were under threat of spreading themselves too thin. However, though they expressed concern for the efficiency of architects' educations and for the design process itself, Geddes and Spring (1967:15) also recommended that architectural schools continue to integrate social science courses into their curriculum and were unequivocal in expressing their support for a methodological reorientation toward users: "The needs expressed by the client and the user are the basis for the solution of the problem." Techniques for discerning what were often referred to as "social factors" in the design process were one of many skills students would need in order to manage these complicated projects; as with the Coolfont conference, where ensuring the efficacy of architectural design was an explicit motivation for collaborating with the social sciences, in assimilating paired down approaches to social research the maintenance of the profession remained in view.

As such, even as social research was becoming an integral part of architectural education, the true and lasting influence of social science began to reveal itself; it would not be a comprehensive or widespread conflation of design and social science (cf. Montgomery 1989), but rather a selective absorption of techniques for gathering and handling information about users and use. Many schools of architecture aimed to teach students to connect with the needs

and tastes of the local community through immersion.[31] "Social research," in this sense did not always entail the specific and systematic use of social scientific methods. Instead, the lesson many architectural students seem to have been impressed with was more broadly methodological: that they needed to develop a more direct, personal familiarity with the needs and preferences of users.

Arguably, the best evidence that advocacy for a user-focused methodological reconfiguration of the architectural process was consciously driven by concerns over the social distance between designer and user was fact that some faculty seem to have felt that the best method for getting students to understand users was simply to encourage students to seek out direct experience of the communities and places they were designing for. Specific method, social scientific or otherwise, was second to a generalized methodological reorientation: the notion that designers needed any process for ensuring users were understood in order for architecture to be relevant. To some extent, social scientists even acknowledged this. "[T]he point," Berkeley psychologist (professor in the Sociology Department and Environmental Design program) Robert Ellis (1971:90) argued, "is that architects can learn how to gain access to the experiences

[31] Some of the most influential architectural theory arose from immersive observation. Though it falls outside of the social science-inspired tradition of architectural research, the populist notion that architects should respond to user's preferences is similarly on display in Robert Venturi, Denise Scott Brown, and Steven Izenour's *Learning From Las Vegas* (1988 [1972]). Denise Scott Brown and Robert Venturi's studies of Las Vegas were premised on the notion that The Strips' popularity with tourists might show its unorthodox style of architecture and urban planning to be highly effective and worth learning from. Brown and Venturi created a studio class around observations of Las Vegas, teaching their architecture students to read the meaning and function of the built environment, and enlisting their help in distilling general principles that might explain how The Strip worked as an urban place. As a piece of theory, Brown and Venturi's research was pitched as an examination of the function of symbolism in architecture, and it holds a controversial place in history of bickerings between modernists and postmodernists. But it is more seldom considered that Denise Scott Brown (who initiated the whole program) hoped that the use of direct observation to develop architectural theory would motivate her fellow architects "to learn a new receptivity to the tastes and values of other people and a new modesty in our designs and in our perception of our role as architects in society" (Venturi, Brown and Izenour 1988:xvii). To be clear, Brown and Venturi's studio was not based around social scientific methods. However, the studio (and scores that followed its example) was premised on the sentiment that what works for users should be understood and, in some dimension, imitated.

of others through research findings or informed direct experience of various classes, regions, ethnicities, and times."

It was through this focus on grasping the user's values and experiences that "empathy" was first articulated as a basis for design. While Robert Ellis was not alone in arguing that grasping the user's perspective was the quintessential aim of social scientific methods—throughout the 1970s there were a rash of monographs advocating for focusing on the experienced meaning of the built environment (e.g. Norberg-Schultz 1971, Rapoport 1977)—he did play (what appears to be) a singular part by distilling the value of social science to "empathy". In an article in which he reflects on a workshop he attended where architects and social scientists had despaired over their lack of a common language, Ellis argues that the point is not the advocate for the wholesale adoption of social science, per se. Instead, the lesson was to compliment the architectural imagination with empirical inquiry that would allow designers to recognize others' ways of experiencing the built environment. "[A] tremendous amount of what we call social scientific investigation can be characterized as more or less *systematic empathy*," he wrote to his architect colleagues, "It is this orientation, if not the method, into which the practitioner must tap. [The architect] must develop empathic modes of study for his own purposes..." (Ellis 1971:90, emphasis in original).

As a remedy, Ellis' way of framing the value of the social science-derived methods was as a way of facilitating—or, in many cases, standing in for—interpersonal understanding. It was the user's subjectivity which had to be grasped *en route* to a valid design intervention. Good design would follow from comprehending the user's way of experiencing the built environment. The very specific coinage "systematic empathy," implied that "empathy" itself was something to be purposefully methodologized; it was the route to understanding the user but required the

adaptation of architecturally suitable techniques for its achievement. This general idea—an idea Ellis would be far from the only one to promote—would go on to become one of the dominant ideologies of the contemporary design world.

In its own time, the goal of promoting a greater understanding of users—whether frame specifically as "empathy" or as familiarity with user's attitudes and experiences more generally—would lead architects and social scientists to draw upon but significantly reframe classic arguments from the preceding decades. For example, hoping to facilitate an easier accommodation of the "miscegenation" of architecture and the social sciences (including psychology), the architect Philip Thiel[32] (1977:194) echoed what by that time was likely a familiar rhetoric of the argument for social science in design, "by closing the comprehension gap between the environmental arts and the behavioral sciences[33] we may reduce the performance gap between our professional intentions and our public results". Likewise, like many later-coming advocates for architects adapting social science, Thiel's prescription was less focused on advocating for separate social scientist collaborators than on suggesting internal changes to design methodology. Finally, Thiel (whose views were inspired by others, including Henry Sanoff [1975], and Lars Lerup [1973]) argued that designers needed to undertake to develop a personal understanding of the specific users of their designed environments. Encapsulating the

[32] Thiel (1977) develops this notion citing Lars Lerup (1973), who had been partially trained at Berkeley (as an undergraduate architecture student) and later was on faculty there (from some time in the 1970s until retiring). Ellis was one of Lerup's colleagues, and the source he cites when he engages in his own discussion of empathy, so there is some evidence that Ellis' formulation was influential. Moreover, all three published their arguments in journals of education, and so participated in the strategy of transforming design pedagogy outline earlier in the chapter.

[33] In order to maintain consistency, I've tended to speak of the "social sciences" here in somewhat loose fashion. Strictly speaking, psychology, sitting at the interstices of behavioral and social science, was sometimes referred to as a "behavioral science" despite the fact that most commonly the aspects of psychology being referenced where social psychology or the new field of "environmental psychology" which was intentionally hybridized with social science more classically conceived. There were some traces of experimental and behavioral psychology, especially in the field of "environmental psychology" but these have been fairly minimal with respect to the particular historical developments I have detailed here.

diagnosis had gradually emerged through the preceding two decades, Thiel (1977:195, emphasis added) wrote,

> ...because of the significant differences in lifestyles, values, and environmental attitudes that may exist between the users of a new environment and the designers of that environment, we recognize *a crucial empathy gap*.

"Empathy", Thiel would go on to argue, "obviously" depended upon developing methods and procedures for getting at the user's perspective. Thus, almost immediately, "empathy" and perspective taking came to be understood as a themselves components of design methodology, facilitative steps in the design process (see Pastalan 1977 for a case in point). Evidencing its perceived methodological significance, references to "empathy" appear *primarily* in publications on architectural education throughout the 1980s (Albrecht 1988, Joiner and Daish 1989, Koberg 1978, Lang 1987, Tzamir and Churchman 1989).

We thus come full circle. If in the incipience of the environmental design movement designers allied with social scientists' methods in an effort to compensate for an absence of interpersonal connection to the user, in its maturity designers became convinced that interpersonal understand itself was methodological. As Thiel's example illustrates, these positions are not mutually exclusive. Architects could (and do) at times seek out social scientifically-derived data and theoretical frameworks – often to produce 'objective' analyses of user behavior and absolute requirements while also (and more commonly) producing their own techniques for producing "empathy" for users' attitudes, motives, and routines.

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Reading the literature that emerged within and alongside the environmental design movement, what emerges as a through line is a progressive emphasis on the methodological benefits of architects cultivating an understanding of the people for whom they were to design. I

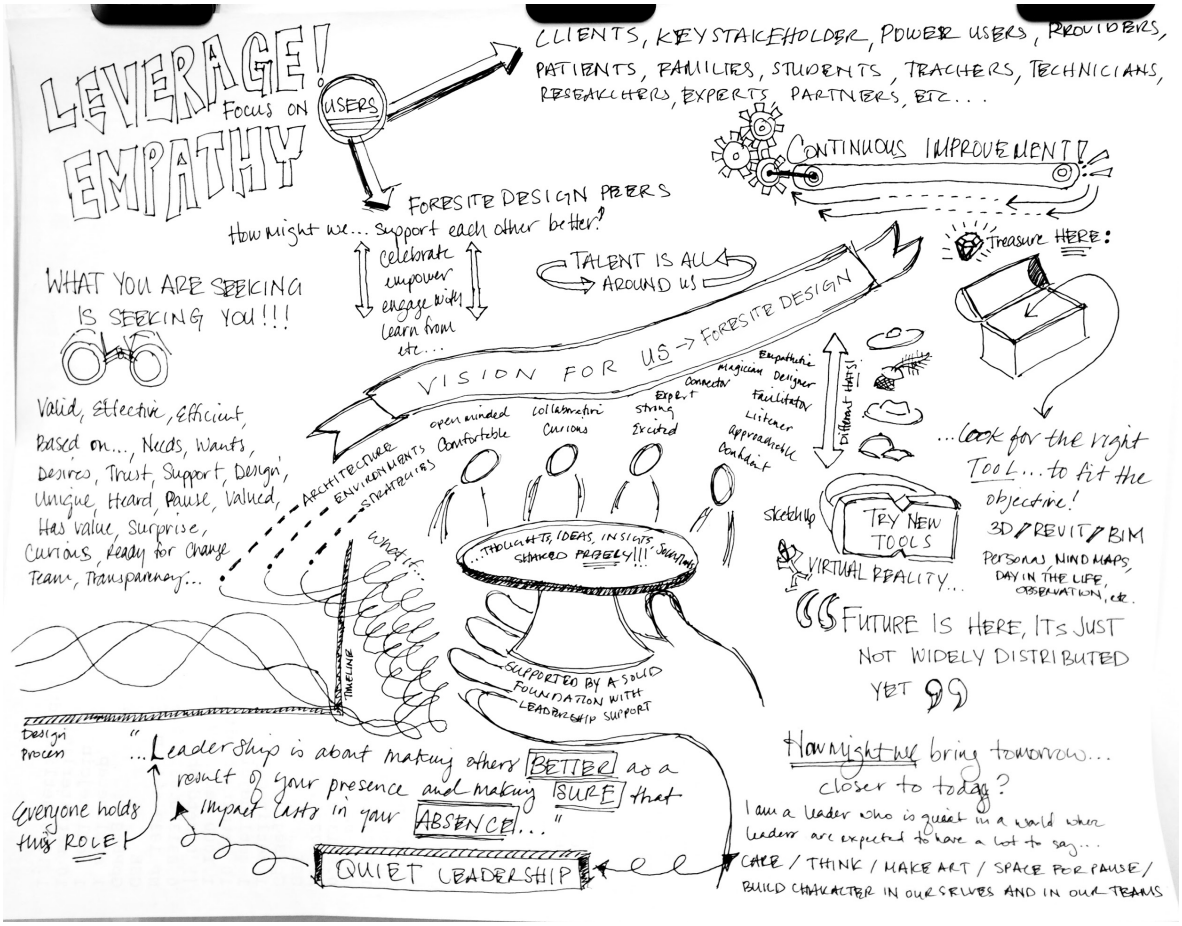
emphasize the *methodological* because it is striking how much greater emphasis was placed on the usefulness of the general premise than was given to any particular mode of study, form of contact, or distinctive analytic object.

The final outcome of the interdisciplinary "Environmental Design" movement was arguably not the successful integration of social science and architecture. To be sure, social science transformed architectural theory and practice to notable extent. Architectural education often includes exposure to at least sociology and environmental psychology. Moreover, since the 1990s there has been renewed interest in interdisciplinary collaboration, both academically and in practice (Allen 2012, Cross 1993). As a case in point, one research participant, the director of healthcare for an international firm told me that she was currently working with a team of anthropologists to help develop a new medical center in Canada. This architect had herself been trained in Environmental Psychology as an undergraduate—a field that came into existence through the work of many of the figures discussed in this chapter. Yet despite her own background and her ongoing collaboration with design consultants trained in social science, she harbored cynical suspicions that some firms used social and behavioral research as marketing, as if it were a simple formula for quality projects. Nonetheless, I would note that actual collaboration between architects and social scientists are notable occurrences, not the status quo. Rather than becoming normative, the architectural recourse to social science became a recognized exception. The most obvious outcome of the mid-century project to integrate social science and architecture was that it created the conditions of possibility for social science to be evoked as an additional source of authority in architects' recommendations, a source of innovation and rigor. This is to a large extent what Foresite Design was tapping into when they revamped the firm's image and workflow.

The primary contribution of the social science-informed retooling of architecture, however, was more diffuse and fundamental. It was Methodological User-Centricity itself: the idea that users are the royal road to good design. From the 1980s to the present day numerous transdisciplinary design movements have co-opted and theorized how to incorporate users and information gleaned from them into the design process. Service Design, User-Centered Design, Human Centered Design, Experience Design, Participatory Design, Empathic Design, Design Thinking: many of these stylized approaches did not originate in the architectural discipline itself, but all of these found their way into the vocabulary and practices at Foresite Design. Arguably, the generality of the premise helped prepare the field for interface with these other movements.

To a notable extent, the very idea of an interdisciplinary field called "design", unified more by a style of problem solving than by craft, is largely a product of the same era and involved some of the same figures. But that is another subject, involving a history of cybernetics, and of the inventions of cognitive and computer science. What matters most is that the impetus to approach design problems through the user lay the groundwork for a convergence between architecture/interior design, product/industrial design, computer systems design, and graphic design. Like the environmental design movement that was largely responsible for the invention of Methodological User-Centricity in architecture, these styles of designing single out the user. In each case, design is given as compatible with social science because it addresses social groups with respect to whom designing is cast as a form of knowing. The quality of this knowledge is tantamount to the efficacy of design, and so the occasional and partial incorporation of social scientific skills (including, in the case of Human-Centered Design the concept of "ethnography") appeals as a means to augment design's potency. In that respect, Foresite's project to reinvent

itself as a user-focused design firm was founded upon a kind of cultural logic that had already been established in recognizable form fifty to sixty years beforehand.




In concluding, I want to return—briefly—to Foresite Design's San Francisco office. A couple months into my fieldwork one of the designers created and posted the image above on the feature wall. It's a remarkable document because of the number of things it is attempting to synthesize, an exceptionally dense text that defies quick summation, and the single most vivid condensation of the ideas and attitudes materially on display at Foresite during my time there. Of all the catch phrases, iconic references and illustrations the one that claims the most real estate is the directive: LEVERAGE! EMPATHY. It remains to be seen how this a methodological proposition, a strategy for how to design well, translates into the actual techniques employed at Foresite. It's to that issue that I now turn.

# Chapter 3
# A Process Model for "Empathy"

About three months into my fieldwork, Foresite experienced a major slowdown.[34] The doldrums would prove to be short-lived, giving way to what would become a good year for the firm overall and one of unprecedented growth for the San Francisco office in particular. But from January until early March many days just crept along as ongoing projects began to wind down to their later stages and clients delayed awarding new contracts. Outstanding projects aside, the 'team' (Foresite's collective pronoun of choice) had a good deal of extra time on their hands. The senior designers (licensed architects with the title "Project Director") at Foresite found ways for everyone to stay busy. It was in times when the pace of work slowed, they reasoned, that the designers could devote themselves to additional training and to examining and refining their process. And so began a season of meetings and workshops in which members of the San Francisco team openly discussed their design methods and methodology. In that way, the slowdown proved a boon to my fieldwork. Though the designers regularly engaged in reflective conversations about design practice there was never such sustained and deliberate attention to the issue of the firm's identity and approach as during the Winter slowdown.

[34] The slowdown began in January and continued until early March. Architects often experience a sluggish pace of business in January, partly, I am told, on account of the holidays. But this episode was more protracted. While not entirely to blame, there was a political dimension to the slowdown. In the months following Donald Trump's election as president some science labs, universities, and public hospitals became skittish about committing capital to building projects that would rely on funding sources that could be impacted by an administration anticipated to be hostile to research and healthcare. A handful of institutions relying on public funding put on hold or cancelled their projects with Foresite.

It was during this period that Foresite got a chance to host a "meet the firm" night for a group called the Bay Area Young Architects (BAYA). Despite the languid pace of work, there were by that time already indications that recent bids for large contracts would be successful, and, anticipating growth, the firm was planning to hire several new designers before the end of the year. Seeing an evening with BAYA as an opportunity to network with newly minted architectural designers, Foresite took the job of hosting very seriously and held several meetings to plan and practice for the event.

Under the direction of Marc, the head of the San Francisco office, Amber (a junior architectural designer) and Raj (a design strategist) took primary responsibility for organizing and hosting the event. Their first planning meeting took place roughly six weeks before the BAYA tour. Amber was handling communications with BAYA, so to open she gave a short summary of the purpose of BAYA's firm tours, explaining to Marc and to Raj that BAYA's tours are meant to introduce recent graduates to a variety of firms, their organization, philosophies and the different industries for which they provide services.[35] Amber, Marc, and

[35] Marc and Raj know a fair amount of this information already—largely because Amber has already conveyed most of this when she first suggested that the office host BAYA. It's a ritual element of meetings at Foresite that discussions always opened with a briefing statement. Though the briefing statement usually contains large amounts of information that has already been conveyed through other means, the act of briefing establishes the speaker in a role of expert. Establishing the persona of an expert is useful in a work environment where relative expertise fluctuates. Within a design team (the set of designers undertaking a particular project) the allocation of expertise often varies by topic/task and over the lifespan of a project. 'Project managers'—the high-ranking licensed architects who pursue new contracts, delegate work, and are primarily responsible for managing relationships with executive-level staff from the client side—are usually at their greatest level to relative expertise at the beginnings of projects. As work progresses, however, the day-to-day work is handled by mid-ranking 'project architects' and (at Foresite and similar firms) the 'design strategists'. At Foresite, the further work progressed toward and through construction, the more likely that the low-ranking 'job captains' hold an outsized grasp on the details. Yet, the reality can be much more complicated than the titles convey. Especially at a small office like Foresite San Francisco, a Principle may also be a project manager and may act as project architect. So, Marc, for instance, would split time between developing new business, delegating specific tasks to junior designers, and facilitating meetings with users. Further, a particular architect might have significant expertise in a unique project area such as 'life safety' [i.e. fire codes] or medical imaging and may therefore manage minor details themselves rather than delegating them. The very existence of these additional sources of variance in expertise underscores the point that the persona of expert often needs to be ritually established as a part of organizing speaker roles in a meeting.

The briefing also serves to highlight relevant information (and, concomitantly, relevant contributions) and to jog participants' memories. Participants are almost always juggling multiple projects and significant time may

Raj were very aware that succeeding in attracting a number of young architectural designers to come visit the San Francisco office might not be easy. They were particularly concerned that a lack of name recognition would hurt the firm's chances of a good turnout. Consequently, much of the early portion of the conversation revolved around how to distinguish themselves. Early on, Marc suggested that people would not want to come see them because they did not have the reputation of a firm like Gensler (a much larger firm whose approach to design bears many similarities to Foresite). As he spoke, Amber overlapped with a similar statement, saying that young designers "won't know us." Lacking the intrinsic appeal of a big-name firm the three designers reasoned that in advertising their event to the group they should present it, as Marc put it, as "a unique experience."

```
Marc:       the message I want to get across
            which is come, come for a unique experience
Amber:      yeah
Marc:       not come to hear about architecture.
Amber:      I definitely [agree].
Raj:                     [Yes], mhmm.
Amber:      I think we'll get a lot of people
            interested that way too
            if we send them something which is more like
            you know, not something that every firm sends.
            [Most] I understand send a couple pictures of pretty
Raj:        [mhmm]
Amber:      detailed (?) space,
            and so
Marc:       Right.
            And I think our write up needs to be like 'hey!'
Amber:      hhhh
```

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have elapsed between the current meeting and the time when they last discussed this particular project. The briefing selectively refreshes interlocutors' memories, and in that way establishes the conditions of possibility for relevant speech turns. Briefings often give way to direct questions (usually directed to the speaker giving the briefing) or speculations on the nature of the solution which (in light of the first speaker's tendency to treat them as requests for information) function somewhat similarly to questions with respect to establishing the parameters of a viable contribution.

Occasionally there will be new participants in the meeting, either because a member of the staff (or someone from another office) has been called in to consult or because a mounting workload has forced a member of the design team to withdraw in order to have sufficient time to complete other projects. In these cases, the briefing does genuinely inform, but usually in those cases the interactional structure is usually altered to allow multiple members of the team take turns giving shorter briefings and to volunteer expansions on one another's contributions.

In all these cases, the briefing ritual (including the period of questioning that usually concludes it) suggests that interactional norms have a significant and, to my knowledge, understudied role in what has been called "problem setting" (Schön 1983)—the work of establishing parameters for an acceptable solution.

```
Raj:        Yeah
Marc:       'wanna head up' like, you know
            it's gotta have a happy smile to it
Amber:      [mhmm]
Raj:        [right]
Marc:       some excitement about what we're doing
            because otherwise people aren't going to pick us.
```

What stood out immediately was how the three designers went about interpolating Foresite Design as an alternative architectural firm. The designers recognized from the start that they could not compete for attention by taking the same line as larger firms with more established identities. But, of course, having little notoriety is hardly the basis for "a unique experience". They thus move very quickly to working out how this lack of recognition might afford projecting an alternative kind of face (Goffman 1978). They agree on wanting to appear exciting and fun (Marc: "Hey! Wanna head up…?" / "It's gotta have a happy smile to it."), and that they do not want to visually present, as Amber says, like "every firm" with images of "pretty detailed … space." However, the most pronounced instance of the designers positioning themselves as alternative comes in the form of Marc saying that the invitation isn't even to "come hear about architecture." Marc's suggestion is provocative, and hints at how far outside the norm Foresite Design would like to market themselves to be. The next phase in the conversation makes clear that Methodological User-Centricity offers that alternative identity.

In a conversation prior to their first official meeting, the three designers had already determined that in addition to needing to attract BAYA members to their firm, they would like to do something more educational and interactive than giving a tour and a presentation. It had, however, been left open how they would go about doing this and what this activity would focus on. Now here, as they searched for a way to present themselves on the basis of something other than "architecture", Raj reopened the issue of the activity. He suggested that a suitable activity

should be oriented around a central message that Foresite wanted to communicate to the young designers. He probed Marc for suggestions.

```
Raj:        [what's that sort of]one or two things
            that they're going to take away with them?
Marc:       Yeah. So I mean, you're um.
            For my, my whole goal in this is to, uh,
            to show something different about the process
Raj:        mhmm.
Amber:      exactly.
Marc:       um. in. um. in design. Whatever it be.
            And I would say centered obviously on, on empathy.
Raj:        Mhmm.
Marc:       experience. um.
            Something that's not architectural in any way,
            that's something about, uh
            really empathy is kinda the,
            was the thing that keeps getting in my mind
Raj:        [Yeah]
Marc:       [that] I don't think we teach students [or young]
Raj:                                               [mhmm]
Marc:       architects.
Raj:        [Yeah]
Amber:      [Yeah]
Raj:        You mean, more of the user-centric approach to, um,
            why we're doing what we're doing?
Marc:       Yes. Yeah.
```

The notion that user-centered design, and "empathy" in particular, are "not architectural in any way" does not necessarily imply that "empathy", as it is understood by these designers, is irrelevant to architectural practice. Rather, in the flow of conversation, "not architectural" directly ties "empathy" back to that earlier moment where Marc had suggested that their advertising for the event should not be to "come to hear about architecture". In that sense, his utterance tacitly proposed that focusing on "empathy" met the criteria the group had set moments before. Moreover, Marc (and the others who eagerly and frequently backchannel their agreement) also explicitly positioned "empathy" as alien to architecture *as it is taught* to students and young architects. The claim that "empathy" is "not architectural" in the sense of belonging to the taken-for-granted conventions of the profession thus positions Foresite on a fringe.

I would also suggest that the statement that "empathy" is something that "we don't teach students" "sideshadows" (Morson 1998) an alternative design curriculum. In positioning "empathy" as a way of designing that could be taught (but is presumed not to be), the designers also caste "empathy" as explicitly methodological. Its exercise requires learned techniques, exposure to which would constitute "a unique experience." Just within the next couple of lines of transcript, Marc went on to suggest that students and young architects might see a vague resemblance between what they do and "empathic design" or "design thinking" (which Marc suggested—again to emphatic backchanneling from Raj and Amber—was "along the same lines"). But they would be mistaken in that assumption, since what's missing is "a formalized… process."

```
Raj:  You mean, more of the user-centric approach to, um,
      why we're doing what we're doing?
Marc: Yes. Yeah.
      uh, and then, centered also, in some way
      I know these are kind of like parallel lines of thinking,
      but, um, design thinking? Um, in some way also? For-formal?
      (inaudible) especially if you're kinda doing it at school
Raj:  Yeah.
Marc: you (might think?)
      "Oh, yeah. That's kind of what I do."
Raj:  Yeah.
Amber:[Mmmm]
Marc: [when] it's not a formalized design thinking
Raj:  yeah.
Marc: process.
```

The goal, they decided, should be an activity that illustrates what that formalized process looks like. A few minutes later, the Amber, Marc, and Raj had decided that the main activity of their BAYA event should be a mock version of one of their methods ("Six P", described later in the chapter) —one that would allow the touring architects to directly experience how "empathy" was generated in Foresite's approach to design problems. It was thus by virtue of their methodological premise that Foresite could project a face for the firm that would be relevant to their audience. Methodological User-Centricity, encapsulated in this reckoning as a formalized

process of generating "empathy," offered the firm a means to present as in a position to broker uncommon techniques to a presumably needful audience. By setting "empathy" as their watchword, Foresite constitute themselves as a unique place that is are not merely at the fringe; they're the vanguard.

***

Well before the first BAYA planning meeting in late January I had an interest in the connection between the kind of understanding of users Foresite idealized and tried to cultivate and empathy (in the sense of *Einfühlung*). In the beginning that interest had been a purely theoretical one. From the BAYA planning onward it was explicitly ethnographic. Having profiled the historical development of Methodological User-Centricity and given an analysis of its evolving discourse, I have already noted the early emergence of "empathy" as a watchword for architects; it was in an effort to articulate a guiding premise for architects' social-science inspired methodological renovation to that Robert Elise (1971:90) first coined the phrase "systematic empathy" to describe the "orientation" that architects would require their own methods to adopt. In the previous chapter, I demonstrated a rhetorical drift toward appealing to methodological precepts over specific social scientific methods and theories. It was a historical development that would ultimately leave open the empirical question of how architectural designers would interpret "empathy" and adapt design methods to carry it out. That task falls to this chapter.

Without altering the traditional format of architectural projects there could be no user participation in Foresite's design for healthcare. As chronicled in the preceding chapter, Methodological User-Centricity arose in response to the epistemic (and often, I should add, moralizing) concerns raised by architects and social scientists who took issue with a disjuncture

between the role of the client and that of the user. As I argued in the historical chapter, that disjuncture could only be problematic insofar as it involved a social distance between the designer and the end-user. The user was outside of the architect's social and professional orbit. The subsequent appeal to "empathy", in that regard, was in itself a marker of social distance. Only, "empathy" carries a special connotation as it is invoked as *a condition of possibility for the efficacious design of user-experience.*

It was evident to the advocates of MUC that it would be necessary to make accommodations for the constraints of architectural practice. It could not be social science, as such, that became part of architecture. There is little evidence of principled objections to arguments in favor of integrating methods for studying users and gathering their input (though some were concerned that the architects' expertise was a zero-sum game, and other areas of practice would suffer if students were trained in social-science inspired methods). Instead, resistance to the assimilation of MUC seems more commonly to have surfaced in concerns about its feasibility. As noted, at the AIA-sponsored summits on "process models" for integrating the social sciences and architecture, practicing architects raised concerns about, first, how they would get the client to pay for studying users and, second, how they could integrate the relatively slow, methodical pace of research with the deadline-driven pace of design (see Conway 1973, 1976). While to a great extent the hybridization was put into effect by assimilating certain aspects of social scientific reflexivity and a methodological emphasis on understanding users (rather than necessarily studying them systematically), it again remains an empirical question how architectural practices would manage to enfold whatever methods emerged into their projects without disrupting work and hurting business. What it could mean to enact "systematic empathy" for users would be conditioned by the resulting process model. Though the exact

details vary from project to project, in this chapter I will present a summary of Foresite Design's process model and the user focused methods the firm works to embed within the flow of their architectural projects.

The main thrust of this chapter is ethnographic; in it I offer a broad overview of the structure of architectural projects and explain how Foresite Design integrates their own, evolving expression of Methodological User Centricity into that generic structure. As a practical arena, the meaning and means of "empathy" articulate within the structural confines of architectural projects. It must be clear that I am not offering an assessment of the private experiences of persons, particularly not during those moments that they are face-to-face with users. The project of this chapter is not to examine the empathic experience as such (in the phenomenological sense). Nor do I want to suggest that the activities associated with "empathy" in this milieu are coterminous with the experiences of individual designers. Instead, I am interested in characterizing "empathy", as the designers would have it, as a gloss for a range of activities. "Empathic design" certainly includes moments of empathic experience, and the significance of those moments will be in closer focus in the following chapters. However, here I am mainly concerned with the structured, practical undertakings of architectural designers, and with relating these to the working knowledge of users that designers at Foresite sometimes glossed as "empathy".

**Locating Users**

If the appeal of methods for understanding users emerged, in part, through the recognition of a social distance between the architect and client, on the one side, and users on the other, it was always implicit that there was something which essentially set users apart. The

methods of coming to an understanding of users can only be clear insofar as we know who this population is. More precisely, in order to recognize what frames the architectural designers' attempts to "empathize" with users, it is necessary to conceptually clarify what distinguishes a "user".

"Client" is a heterogeneous, indexical category. Included as "clients" are owners or chief executives, but also anyone charged with the task of coordinating with designers and representing the interests of these owners, executives, or investors. In shorthand, the entire organization or the specific site of the project may be referred to as the "client". So, for instance, within the same conversation, architectural designers might refer to "our client Colma Medical", then to "the client" on the Colma project when summarizing a stipulation made by one of Colma's project managers responsible for coordinating with the designers and safeguarding the organization's bottom-line, and finally to what the project manager has explained that "the client" wants (citing a higher authority). So the exact referent of the term is "essentially occasional", to use Husserl's expression (see Gurwitsch 1977, Husserl 2001), but also exhibits a constricting field of reference—there are clients and then there are *clients*—with increasingly specific allusions to where the buck stops (for this reason, even "users" can be included as "the client" in references of the greatest generality, but they are readily and commonly separated). All of this indicates that the fundamental quality of a "client" is proprietorship, and institutions and individuals are "clients" to the extent that they are wedded to this role.

"Users", on the other hand, are prototypically types of persons whose interests are likely to be distinct from those who fall under the category of "client". They are, in turn, persons for whom the client is likely to be a poor representative. And yet users are also destined to be the most direct beneficiaries or sufferers of architectural design. As noted in the last chapter, the

language of "users" and "user types" is of fairly recent origin. Its popularization seems to have been tied to architects' recognition of the problems incurred by being at a social remove from the persons who would be the primary occupants of the nascent built environment. Despite the freshness of the category, considering the selective constitution of some groups as "users" seems well outside the purview of the methodological discussions recounted in the previous chapter.

So what is being a user? The status cannot obtain simply or necessarily to all people who are not a client (one is neither a user *because* nor *to the extent that* one is not a client). While on one extreme, we could imagine a client who is also a user (say, in a workplace project), we could also easily imagine the many kinds of persons who are not clients and yet are not conceived of as users; persons who never occupy a place are not users, and neither are persons who are not supposed to occupy a place. Rather, users are those persons whose presence is considered legitimate and desirable by the client. *Being a user is primarily a matter of claim to place*. This means that there is an asymmetry in the client-user divide. While this asymmetry first and foremost means that being a user and being a client are not mutually exclusive categories, it also means that users have an independent and conditional standing.

Design activities unfold within a field of relevance. For architects, that field is determined by ongoing dialogue between the designers and the client (these relevances are thus "imposed" in Schutz' sense [Rogers 1981]). From the perspective of the designer, the "range of the user type" (as it is said) is always there to be discovered. As a general rule, however, we can say that relevance obtains roughly within the pragmatic interests of the client. An individual is a user under the auspices of a client, and at the clients' pleasure. Likewise, the "types" of user that exist will be delimited by the range of legitimated activities and roles that belong to a place.

When designers talk about "empathy" for users we should be prepared to recognize that those efforts after "empathy" will articulate roughly alongside determinations of legitimate claim to place. Those determinations extend over two dimensions: the classes of person counted amongst the "users", and the range of activities and concerns that qualify as "uses" of the nascent built environment. To "empathize" with a class of persons not recognized as "users" would be, by definition, irrelevant. So would be "empathizing" with aspects of persons' experiences that were not related to their capacity as users.

Architectural designers are not merely passive with respect to these selections. Despite their positions as specialists, architects are not entirely free to approach projects in any way they like. From the start of a project, architectural firms are in contact with various people from the "client side". They are not, however, guaranteed any form of contact with users. Instead, they must take an active part in vying for access to users. When it comes to their user research, users' place in the design process itself has to be secured if their claim to place is to be reflected in the final design. The architectural designer's success in making a case for relevance of learning about a particular user type plays a mediating role in that access. Even one successfully granted meetings with user groups, a firm will need to carefully manage their own and the users' time. Thus, methods for learning about user's needs, desires and experiences must be made to fit within the customary organization of an architectural project.

**The Shaping of Architectural Projects**

There are numerous factors involved in determining how much direct interaction with users Foresite will have on a given project, but two of the most common and influential are the client's financial stakes and their flexibility upon hiring the firm. The former points toward

issues of budgetary constraints and business model which are outside of the purview of this dissertation (but see below on the related issue of what considerations a client must make when choosing an architect). The latter is an outright question of whether the client is willing to allow their architects to reexamine the prior assumptions the client established for their capital investments. Some clients have already invested money in master planning and programming[36], and still others have previously hired firms or employed in-house architects to produce schematic designs (see description in "Project Phases"). Either of these (but particularly the latter) go a long way toward predetermining the ends to which Foresite will orient. More constricting still, a small contingent of potential clients enforce standard design elements across projects in an effort to ensure cost efficiency (e.g. via economy of scale, vendor discounts, or pre-approved expenses per item) and a visual brand that may constrict aesthetic options.

As will become apparent, there are also a number of factors constraining how a firm can carry out its user research. Whether it be in part to manage fee, to comply with a client's priorities, to remain unobtrusive on ongoing operations, or to compress user research and feedback into the deadline-driven timetable of an architectural project, the process model through which Foresite Design pursues a user-centered approach reflects those constraints.

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[36] **Master planning** is a process of diagnosing and proposing solutions for the long-term needs of a facility or campus. It often covers periods ranging from just a few years to more than a decade, and will include a proposed schedule for renovations, demolitions, new construction, and other foreseeable changes necessary to accommodate a client's current trajectory over a specified timeframe (25 years, for example). Master plans may be adhered to closely for some time or revised after only a few years, but either way they serve as a guide to capital investment and will thereby spell out the scope of future architectural projects.

**Programming** is an overarching category of processes through which architects or consultants reckon a facility's specific, functional needs regarding the number and capacity of all essential functions. At the level of masterplanning, programmers will determine, for instance, how many operating rooms of what size a new hospital will require. However, at this level of remove the program will usually function more as a wish list than a mandate. More up-to-date programs may be produced and revised later in the design process. Often a healthcare architectural project will begin with a proposed program already in place, and the architect's job will be to accommodate it as best as possible or revise it with the client's agreement. To effect the program is one of healthcare architects' greatest points of impact on healthcare delivery, but it is a level of intervention that is virtually invisible to users and anyone else who observes only the final built environment.

*Winning Work and Setting a Fee*

Architectural firms must win contracts. "You can be the greatest architect in the world," Marc told me, "but if you can't sell your work or build relationships you're out of business." Selling work begins with appealing to the client by appearing knowledgeable and responsive, setting an acceptable fee, and making a credible claim to deliver high-quality service.

Most commonly, when a client desires some work done, the firm will have already done some research on what the client institution prior to vying for the contract. Requests for proposals (RFPs) usually give a project brief that stipulates the kind of work the client needs done and the kinds of expertise they would like their architects to possess. The brief may also give some specifications as to the functional criteria that should be met by the finished facility. Architectural firms respond with a proposal that details their experience and credentials, the kinds of steps they would recommend taking (e.g. how many meetings of what kind), and how much fee they would charge for these services.

Depending on the client and the type of job the client and architectural firm might agree to different ways of paying for the project. In some cases, the client will agree to pay a flat fee, leaving it up to the firm to manage their expenses well enough to turn a profit or break even. All things being equal, making a business work on flat fees depends on the firm being very good at estimating how much work projects of one or another type will take. There is, however, some room to approach the client for an "add service" addendum to the contract if the client makes requests that were not included in the original agreement or if unforeseen circumstances such as delays or complications brought on by persons on the client side or by site conditions make necessary significant additional work. During my fieldwork, fixed fees were the most common

fee structures. Less commonly, clients can agree to a fee-for-service format. This guarantees that the architect will be paid for any work they deliver. For architectural firms, fee-for-service presents less risk, but the contracts are harder to come by.

There is much that could be said about fee structures and the different kinds of behaviors they incentivize on the parts of architects and their clients, but at present what matters most is that proposing firms must set fees that are believed to be competitive with other firms but that nonetheless are likely to suffice for a reasonable profit. There is an industry standard assumption that architectural fees will run around 10% of total construction cost—so a million-dollar project would pack $100,000 in architect's fees. These rates vary, however, and the fact that there can be negotiations even after a firm has been selected goes to show that a final fee is not a foregone conclusion. On the contrary, the key to winning work is not always to be the lowest bidder; often there is some room to command a somewhat higher fee if the client has reason to believe the firm in question can deliver a sufficiently better design.[37]

Proving that a firm can deliver the work can often involve architects submitting predetermined allotments of time to different specialties. As part of the proposal and contract negotiation process, proposing project directors (architects in senior management positions) at Foresite would work up spreadsheets documenting how many personnel of each type they would need to complete the project in question, justifying their suggested fee by calculating a projected number of work hours for each employee at their individual billable rates. I first found this somewhat confusing, wondering how a firm could predict the exact hours their designers would work. I missed, however, the necessarily generic quality to these allotments. In addition to fees

[37] An exception must be made in the case of certain public clients. I was given to believe that the University of California system is legally required to take the lowest bidder on design and construction work—something I was assured by well-informed sources could prove problematic, especially in the case of contractors who bid on jobs outside of their area of proven expertise.

being loosely predicted by the anticipated final cost of a project, architects can roughly gauge required effort by comparison to projects of similar kind and scale. There is also a good deal of fungibility in how firms bill for their awarded fees; if on a small project an architect predicts needing two junior architectural designers for 100 hours each at a billable rate of $100 an hour, a mid-level interior designer for 40 hours at $120 an hour, and their own time for 40 hours at $190 an hour, the resultant fee of $32,400 can be billed differently according to the actual course of the project; what matters is the bottom line for the firm. Forecasting the exact personnel and probable hours, then, is often a matter of making tangible for the client what they will get for their money should they agree to the firm's fees—or, conversely, what the client would have to sacrifice in order to lower the fee.

When Foresite competes for work and negotiates contracts the first factor in how extensive they can be in their use of methods intended to inform the designers and facilitate their "empathizing" with users will be the client's willingness to pay for the time of the architectural designers and design strategists who will carry out these methods. Convincing prospective clients that Foresite Design's "focus on the user" is an advantage is a matter of marketing; but allocating sufficient funding to ensure that the designers can exercise their user-centric methods is a matter of fee negotiation. Accordingly, the firm was incentivized to make their adaptation of MUC as seamless with the rest of their project delivery process as possible.

*Project Phases*

Once an architectural project has been awarded and the contract has been negotiated, a project will go through many phases before a finished facility (whether a renovation or a whole new building) emerges. There are some discrepancies in how those phases will be defined from

project to project. However, typically projects will follow a four-phase pattern beginning with a pre-design phase and continuing to construction administration.

Pre-design is a somewhat nebulous period ranging from when a project is awarded to when architectural designers begin the first rough spatial arrangements that initiate the phase of "schematic design". In a traditional architectural project, pre-design activities would include site surveys[38] and reviews of any as-built drawings[39], as well as some studies that the architects might need to commission from relevant experts (though these do not always need to be completed before the next phase of work). During pre-design, designers and clients negotiate expected delivery dates for the subsequent phases. Architectural firms will often work to manage the client's expectations if they are perceived to be too optimistic; clients may, for instance, overestimate the speed at which subcontractors can deliver studies or specifications, or underestimate the jurisdictional complexities in getting plans approved in code review.

As early as possible, architects must also clearly define any ambiguities in the "scope" of a project, since in many cases there may be ambiguities regarding what exact services the architect is expected to include for the agreed upon fee. At the start of a medical office building revamp, for example, the designers at Foresite needed to clarify whether they would be making any structural interventions (for instance, moving walls) in the existing buildings; if so, they

[38] **Site surveys** are in-person reviews of building site conditions. In a ground-up project a site survey may include sun studies and other environmental considerations, as well as familiarization with nearby landscape and neighborhood features that might be useful to take into account. In cases where a building already exists, site surveys can include comparing current conditions to existing drawings, walk-throughs with clients, examining neighboring floors or wings of the same building, and any number of other observables that the firm determines would be better seen *in situ* by an architectural expert than reported on by whomever the client can spare to gather the relevant information.

[39] **As-builts** are retrospectively justified drawings, consolidating the diagrammatic representation of the building as it was designed with the building as constructed. At times, budgetary, logistical, or code-related constraints will require deviations and amendments of varying scope to the building design during construction. Sometimes those alterations are of little significance to future architects, but occasionally as-builts will need to include vital information such as the dimensions of structural elements, or the location of plumbing lines or other mechanical, electrical or IT components which may not be evident without partial demolition.

would need to conduct additional research on the condition of the buildings. Likewise, it needed to be established whether something like signage would be included in the actual project; if so, the designers would need to employ someone to design it, which would include services that weren't covered by the current contract. This raises the related point that one of the major, unofficial tasks of scope-setting is to establish parameters for what constitutes extra work and what later on can, therefore, either be recognized by all parties as a special favor from a friendly firm to a valued client, or as a "add service" that warrants a separate invoice—with the difference between the two options usually involving a delicate relational calculus on the part of the architect in charge of the project.

Pre-design is also when preliminary design research begins. At Foresite this is known as the "discovery" process. "Discovery" denotes the earliest steps of empirical inquiry; it is during this time that Foresite's user research methods are at their most pronounced. Discovery nominally ends with the creation of schematic designs that can be tested against users' performance criteria and preferences, and so the discovery process tends to be the bridge between pre-design and the schematic design phase described below. The portion of the discovery process which takes place during pre-design typically consists in secondary research on the client and project type (e.g. research on common problems within Intensive Care Units). There will also commonly be some preliminary plans made for how many user meetings will take place with which groups and what methods might be appropriate given the things the architects can foresee needing to know and the kinds of problems they may anticipate (see chapter 4 on anticipation for an example). Pre-design discovery also sometimes includes one to two initial meetings with clients and users. In the early stages of a project, particularly during

pre-design and the "schematic design" phase that follows, these meetings are devoted largely to learning about the client organization and the customary activities and perspectives of users.

Before any of this "discovery" can take place, however, architectural designers must make a place for user-input in their projects. As noted in the preceding section, the first hurdle to clear in making MUC work within the confines of an architectural project is to convince clients to buy in to the approach during the process of competing for work and negotiating a fee. The second comes during predesign, when the designers must secure viable opportunities for primary research with users. As I will elaborate below, the financial constraints on architectural projects are conducive to conducting this research largely within the confines of structured meeting activities; fast, verbal answers are economical for both the client and the architects. The success of user research and participation in the design process during the pre-design and schematic design phases often comes down to the architectural firm's success in recruiting the client's cooperation with facilitating user meetings. As will become evident in chapter 5, clients do not always place equal priority on facilitating user meetings with all user types.

Schematic Design (SD) is intended to take the client's somewhat generic request and develop it into a working concept. As noted, the first of the major tasks here is to learn about the users and the operations of the current facility or the intended purpose and operations of the imagined future facility. Doing so would sometimes involve site observations, and interviews or surveys. In my experience, SD will always entail meeting with representatives of the users (often doctors, charge nurses, heads of department, and various other figures) during which Foresite's design strategists would facilitate exercises with clients and users (see section on "discovery methods" below). In addition to aiding in typifying operations, architects believe that user meetings are vital to determining any aspirations the architects align with and any major flaws

the architects should take care to avoid reproducing. As I will detail in an upcoming section, at Foresite meetings with users were instrumental in the creation of concrete and value-laden criteria by which the success of a design could be warranted.

Findings and consensus items from user research and client meetings inform the second major task of SD, which is to find a spatial arrangement that supports the goals and operations of the facility. Schematic design is an opportunity to intervene in the operations of a department or healthcare organization. Working at the level of spatial arrangements, users and architects co-construct (always asymmetrically) minimalistic but influential criteria for what the designed place should be like. A central feature of that process is to dialogue with medical personnel about how they think they could best deliver care. The meetings that take place during SD are also architects' best opportunity to recruit early commitment to any features or goals they believe are important or trending in the industry.

The defining feature of SD is the progression toward preliminary, undetailed design decisions. Ideally, the phase has as its terminus an agreed-upon set of loose diagrammatic representations of the space under design. A critical step in that direction is testing various configurations against some set of cardinal commitments; for example, placing windows in high traffic areas might contribute to the availability of natural light and views to the outside, both of which may be identified as means to help orient people within the building and to reduce stress experienced by visitors and staff.[40] Finding adequate spatial arrangements can entail narratively going through a task within a given configuration to determine its efficiency using heuristic metrics like walking distances or an orderly flow of steps in a recurrent task (like obtaining patient medications, restocking a room, or charting). If the project will take place within an

[40] It should be noted here that I am writing to a common set of associations, some of which have a basis in research in environmental psychology. I treat these associations as cultural data.

existing building the schematic design must take those "existing conditions" into consideration. Budgetary and code restrictions also already factor in at this stage, though often only to the extent that architectural designers must take care to avoid setting themselves up for errors so gratuitous that their remediation would cost them extensive rework or invalidate the basic organizational concept of the plan.

Once the initial arrangement and desired features of spaces has been established, Design Development (DD) takes the schematic concept to a finer level of detail. DD often involves interior design (though not always furniture) with the selection of color palettes, graphics, and surface materials. It is also during DD that the layouts of exam rooms and other workspaces become more determinate. On the technical side, DD involves working out the details necessary to ensure that the basic agreed-upon features of the space can be put in place: mechanical systems (like HVAC), medical equipment, and IT, among other things. That task will carry on through the following phase of construction documentation.

As with the latter stages of schematic design, DD entails an iterative process of interpreting initial input from clients and users, roughly hashing out variants of design options that the designer's believe will address the priorities and tastes indicated, then taking feedback from clients and users that will inform the way the designs develop through further iterations.[41] Most typically, DD involves some of the users and client representatives from the previous stage; however, the various users and client representatives have differential sway and access in the

[41] One of the tell-tale signs of the legacy of the social scientific origins of Methodological User Centricity is the notion of iterative loops as the very nature of "design thinking". In the present day it's very common for designers of all stripes to describe design in terms that imply a dialectic. But this conception of design was first articulated, as far as I have been able to ascertain, but the environmental psychologist John Zeisel (1981) in his book *Inquiry by Design*. Images of this iterative process that participants drew for me, for their clients, and for one another bore a striking resemblance to the illustrations in Ziesel's book. That book is reputed to be the first full-fledged guide to the new social-science-informed way of doing design. However, to my knowledge, none of my participants were aware of the history I laid out in chapter 1, not to mention Zeisel's text.

decision-making process.[42] Architects must navigate those interrelationships and build consensus in order to have the "go ahead" that allows them to begin drafting plans. Meanwhile, users and other 'stakeholders' may become available for the first time or some key information withheld or forgotten earlier may surface. Consequently, new information often appears at this stage, leading to some reorganization of spaces or the prioritization of some design features over others on the basis of their feasibility, affordability, or organizational politics. Finishes (externally visible materials) and equipment are most accessible to clients/users, so DD is often where the strongest opinions surface. In every case the goal of DD is to make all the decisions necessary to allow the architects to begin drafting construction documents.

Construction Documentation (CD) is primarily about drafting detailed plans and a set of instructions to contractors who will be responsible for building the new space. Ideally this process does not involve making any new decisions about anything but the finest details of materials and dimensions. However, contentions or new information sometimes spill over from the DD phase. Most importantly, as architects develop their plans at the finest level of detail it can sometimes be necessary to make revisions in order to manage the project budget or to be in keeping with code requirements. "Value engineering" —a euphemistic term for substitutions and revisions meant to keep a project on budget—may have begun earlier but is fully in season during the CD phase. Furniture, non-essential technology, and finish materials are prime

[42] There is a winnowing process here in which users tend to become less involved (and fewer in number) as the project heads deeper into its more technical stages. To some extent that winnowing evinces that the appeal to user input is relative to certain assumptions about the lifeworld of the user. Users move through places and interface with their surface features. The matter of what holds a building all together is presumed outside their spheres of relevance. In nearly all cases I would assume the assumption holds true, but the fact that there is a cutoff suggests there is potentially interesting work to be done around the constitution and maintenance of schemas for relevant user-input. That work could extend to the matter of moralizing discourses surrounding user participation, since in my experience those appeals share with their predecessors (e.g., environment and behavior research) a mostly unspoken assumption that at some point the user becomes irrelevant.

candidates for getting “VE’d out”, so interior designers and architects often need to revise their list of specifications on the fly.

In California, the CD phase for healthcare projects entails review processes with the Office of Statewide Health Planning and Development (OSHPD) and various local agencies. Any one of these review processes can trigger revisions if something has been overlooked. However, OSHPD is also an entity with principled reasons for its requirements, and as a result architects who are well versed in the code can obtain unique exemptions if they can show that the purpose of the code has been achieved in another manner.

Despite the frequent need to make some revisions to the plan or to the interior palette, CD ushers in a phase of significantly reduced user participation.

Construction Administration consists of working with the contractor and client to oversee the construction process. One of the most critical duties at this phase is being available for Requests for Information (RFIs). It is possible that construction documents be vague or inaccurate about small details, and as a result the contractor will need to be in contact with the architect to make sure the intention of the plans is carried out. In some cases, conditions in the field do not match what the architect designed for (sometimes this is about historical documentation being inaccurate) and the architect will have to suggest a workaround. It is also important to architects to remain actively involved during the construction phase to help with quality control and with managing the client’s expectations. As a new facility materializes, clients sometimes find changes they would like to make. Owner, architect, and contractor (collectively, “OAC”) must decide whether those changes can and should be accommodated. Architects must often be careful in this phase because they have often run out of billable hours and will have to decide whether to do small changes as a favor to a client they are hoping will

reciprocate in the future or whether to ask for more money as a matter of stewardship of their firm.

Since there is rarely any design activity in CA there is also little to no user involvement. Even more than during Construction Documentation, the channels for feedback have been consolidated to the OAC (owner, architect, contractor) representatives.

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I have offered here prototypical descriptions of these phases. If everything goes according to plan, these descriptions match the activities of architectural designers at each stage of the project fairly well. In practice, however, tasks intended for one design phase can be dragged into another. I found that these displacements were often chalked up to some delay in information relay or indecision on the part of the client. It was not unusual for there to be some difficulty coordinating meetings—particularly with users. As a result, there were times when the designers had to proceed on a few key decisions in a provisional manner, pending the input of some user type or department that was difficult to access or schedule with (see next chapter on anticipation).

**Discovery Methods**

At Foresite, most "discovery" takes place over the pre-design and schematic design phases of a project. Typically, "discovery" takes place within the first handful of meetings on the project. Indeed, the bulk of the discovery process takes place through meetings, with special emphasis placed on structured activities meant to facilitate learning about the organization, operations, and user types and preferences in a (somewhat) orderly and manageable fashion. The number of these meetings varies depending on the size and complexity of a project.

The designers' dependency on working with users in meetings can be seen as an outgrowth of the constraints on budget and time that similarly inform all other parts of the process model. Assembling a group of users and asking them to describe how they work, what problems they typically encounter, and what they can imagine making the space more functional and enjoyable (or simply less frustrating) is much thriftier than conducting naturalistic observation and interviews on site (should there be an extant facility—and there often is). As I've noted, these other techniques were employed from time to time, but meetings were far and away the leading form of user research. As such, they were the primary site of activities meant to inform and engender "empathy" on the part of the designers. It is no surprise that architectural designers made every effort to optimize this time with users.

Throughout my fieldwork, Foresite engaged in ongoing experimentation in their meeting-based methods. They had a number of options. Raj, the main "design strategist" (experts in user research) in the San Francisco office (the other would be hired several months into my fieldwork), usually kept more than one book on design methods on his desk. Titles like *101 Design Methods* (Kumar 2012) indicated a variety of potentially applicable techniques. The problem, however, is that many of those design methods were intended to aid in developing new products or service not for use in architectural projects. Many, for instance, were not well suited to working with looming deadlines or draining fees. They might also aim to produce kinds of knowledge that would be difficult to operationalize in the design of the built environment. That is not to say that those resources were useless, only that many of the techniques suggested would need to be adapted to the context of healthcare architecture. And adapt the designers did, often introducing a new method when they anticipated needing to know something that they could not foresee learning by tried means (see next chapter on anticipation).

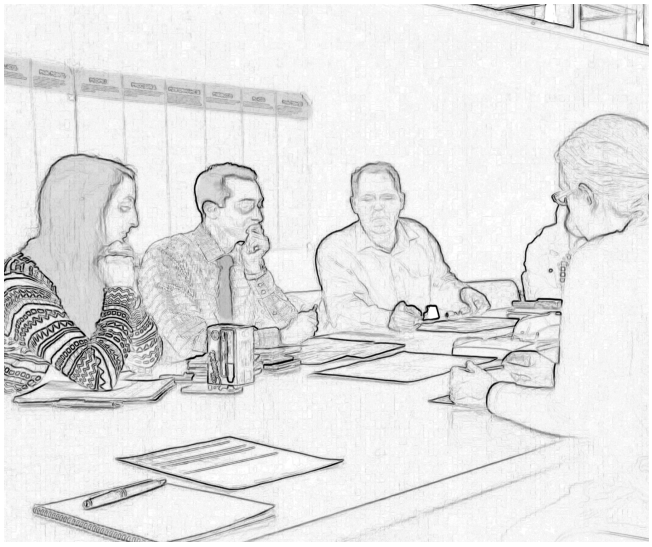
There are numerous ways architects continue to gather information throughout the course of a project that go beyond the methods I will profile here. Perhaps the most important of these is the feedback the architects receive from clients and users as they begin to develop floor plans and furnishings and equipment options (typically in the schematic design and design development phases). However, here I am focusing on these "discovery" methods in particular because they were the most common and targeted means of learning about users, and the firm's most formalized approaches to "empathizing".

Six P: Starting a couple months into my fieldwork, the dominant method for gathering information on an organization and seeking to "empathize" with users was an activity they called "Six P". Six P stands for the six alliterative categories of inquiry: places, people, processes, products, performances, and pain points. The method had its origins in a Lean organizational[43] heuristic for formulating clear business strategies called "Five P". Each of these categories corresponds to a central set of questions. In bringing the heuristic meant to for self-assessing business strategy into an interrogative tool for architectural design research, Foresite amended the category titles (for instance, replacing "platform" with "places") to suit their field. They also added the sixth category "pain points".

In the photo below, three of the designers are preparing to conduct a Six P exercise with user representatives from a public health agency. Taped to the wall behind the designers are large sheets of paper naming and describing the six categories at the head of columns. One of the designers will lead the inquiry (with occasional input from the others) and the other two will work as scribes, taking down onto large sticky-notes abbreviated glosses of what they understand

[43] **Lean** is a system of maxims and tactics for business efficiency. Emerging through a synthesis of American management science and Japanese manufacturing techniques (most notably, the Toyota Product Development System [Morgan and Liker 2006]), Lean proliferates across a variety of industries—including architecture at firms like Foresite Design.

the users to be trying to convey and sticking the notes onto the appropriate columns. In this instance, one of Foresite's design teams is pictured just before Raj (second from left) began explaining the Six P categories to users in meeting with a public health department while on a project to produce a master plan for a county hospital. Process, he told them, stands for "processes or actions related to providing or consuming [a] service." Performances were "tied to process, but more about routines and rituals." Products, Raj explains, should be noted when there is any object specifically "in line with doing that work"—supporting a performance or process. For places, Raj offers example questions: "Where are they housed? Where are they working?"



In principle, the designers intend to design for ideal types rather than actual persons. Raj had briefly described the procedure as loosely based around "a day in the life" of a "user type"—meaning that they would first name each type of user and then proceed to walk through the Six Ps for each of them, taking special note of areas where their needs or activities intersected (see below on journey maps).

Journey Mapping: Before introducing Six P, the go-to method of understanding the operational features of a medical department was to construct a "journey map". The goal of a journey map is to produce a processual account of a user's typical actions over a given period, ranging from a single activity to an entire workday. The designers typically began from the point of arrival—the start of a shift for medical or support staff, or from the point of reception or admission in the case of patients—requesting a procedural breakdown of where the user was,

what they did (in steps if possible), and what they used (if anything) for each reported activity. This procedure would be repeated for each user type in a given medical facility.

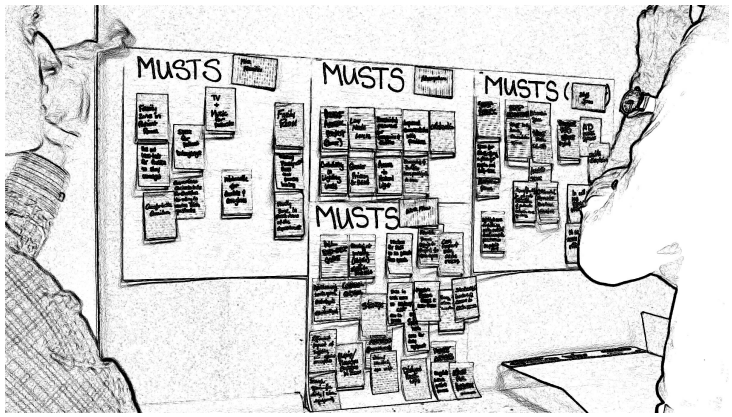
As with six P, during journey mapping one of the members of the design team (usually the design strategist) would write down short phrases on sticky notes, attempting to summarize the participants' responses. Another member of the team would lead the questioning with support from the other designers present. The sticky notes would be placed in sequence upon a whiteboard or along a wall, with a new line being created for each user type. To the extent that they were able (often sticky notes would be so numerous that they would get all bunched up) the designers physically aligned points in each users' routine whenever their actions were supposed to be synchronized.

In Foresite's projects, journey maps were often used in order to understand not only the functional requirements that each user type had, but also the points of contact and interdependencies between user types. It was thought that anything the designers might do to improve what happened at these points of contact would have a relatively high impact. Thus, the journey maps allowed the designers to pay particular attention to the moments when patients were in contact with members of staff (e.g. reception), where there were handoffs of particular materials (stocking supplies, handling medical records or insurance paperwork), and when there were transfers of information.

Musts/Wants/Desires: The first tool I ever saw used in person was an activity entitled "Musts/Wants/Desires" (hereafter M/W/D). The goal of the activity is not only to learn what users want, but to make relative valuations intrinsic to the act of reporting. M/W/D hails from a technique in decision analysis. In decision analysis "musts" articulate the minimal conditions of satisfaction for any acceptable solution. "Wants" further distinguish merely acceptable solutions

from optimal ones. Notably, in this project and elsewhere the designers also add "Desires" as a tertiary designation, setting apart those things which would be merely "nice to have."

The exercise begins with a 3-5 minute "brainstorm" in which users write down on post-it notes any features or criteria they believe belong in the new building or department. Their responses are then collected and read aloud. If clarification is necessary, whichever designer is facilitating the discussion will ask for further details. In most cases little to no elaboration is necessary. Once the request is clear the users are asked to designate the contribution as either a "must" a "want" or a "desire," thus collaborating in the ranking of their suggestions.[44] Under ideal conditions, M/W/D produces a data set which is explicitly framed as everything the participating users could think they might want, grouped according to priority.




Other noteworthy methods: In addition to these three most common methods for gathering information on the needs of different user types, the designers would survey the sites

[44] From the standpoint of interaction, it could be considered that the M/W/D exercise provides a structure which does not transparently relay users' preferences. Rather, the users' contributions are conditioned by several entailments of making their suggestions part of an inherently evaluative process. On the one hand, "Musts, Wants, Desires" imposes an interactional frame which provides an immediate criterion for the relevance of users' contributions. It solves, to some extent, the problem users may face regarding what is "worth" bringing up in conversation with the designers: the first rule is to write down anything you can bring to mind; only afterwards will the inputs be subject to evaluation. On the other hand, the way that the game imposes this criteria of relevance also requires that users explicitly rate the relevance of the contribution by specifying whether their suggestions belong amongst the "musts" the "wants" or the mere "desires." Explicitly qualifying the relevance of contributions thus becomes a critical juncture at which users must also put their stance on record. Importantly, the question of which designation to give each idea is put to the group, not to an individual. Each user is thus not only making their expectations explicit to the designers and to one another, they are also conscripted into aligning or failing to align with one another's evaluations. Finally, to play the game cooperatively requires demonstrating some degree of acquiescence to the basic premise that not every imaginable feature is equally valued. The flaw, however, is that users could (and did) covertly evade the interactional difficulties that might be entailed by lumping every (or nearly every) suggestion into one category. In the included image, users rated nearly everything a "must".

of their projects. Since much of the work that Foresite took on was to repurpose or renovate existing facilities, these sites were commonly already occupied. The strategists and architects would use those site surveys as limited opportunities to observe and interview users in person, taking notes documenting issues those users were presently confronting. It was common that the designers would take photographs of material proof of ergonomic or organizational problems. They would also note any "desire lines"—a term that stems from urban designers recognizing that tracks in the snow and bare patches in the grass could be interpreted as indicators of where people needed sidewalks or other infrastructural accommodations. The term now has an extended sense, encompassing any instance where user's preferences can be discerned by behavior that modifies or works against the affordances of the built environment (see Malone 2019). On site, the designers would sometimes take tours with specific users (usually managers) who might show introduce them to particularly frustrating features of their space. These on-site encounters were usually fairly brief and meant to be supplemental to the methods employed in meetings. In my estimation, an envelope of a half hour to 90 minutes at a time would capture most instances.

**From Discovery to Guidelines**

At Foresite, the architectural design teams develop their guidelines out of the user and client meetings held during the discovery process. Those guidelines serve a variety of purposes, including the rather mundane but essential function of marking the end of the discovery process and the transition to the "more traditional" activities of an architectural project. Most relevant for our purposes here, the guidelines serve dual roles with respect to "empathic" understanding of users experiences: first, that of sparsely but evocatively communicating back to the client what

the design team takes to be the most needed and meaningful goals to pursue in light of what they have learned from the clients and users; and secondly, that of establishing a loose set of criteria to which the architectural designers will refer in order to "validate" their designs going forward. The guidelines, in short, should encapsulate the architectural team's working understanding of the needs of users and respond to these with a set of strategic aims of the final design (hence the title "design strategists" to designate the members of the design team who are specialists at this procedure). The resulting documents are used in presentations to the client, and the established guidelines inform the architectural designers' subsequent efforts (a more detailed look at how user input operationalized is included in chapter 6).

Most user input received during the discovery process comes through the structured activities (methods) outlined above. In almost all cases the facilitated interactions produce a bevy of sticky notes with a particular participating user's responses to the prompt of the activity. Depending on the structure of the activity, users might write on the notes themselves or may respond verbally while one member of the design team listens and constructs a short phrase that attempts to summarize the response. In the latter case, the designer writing on the sticky notes would sometimes provide a verbal synopsis for ratification by those present (an interactional form that was also common outside of these structured activities—between designers as well as between designers and clients). The exact content of the sticky notes varied according to the activity conducted in the meeting and according to who was their author—user or designer. In either instance, these sticky notes are the main repository of information on users. Some supplement to the content of the sticky notes may come from longform notes taken in aid of constructing meeting minutes to be edited and distributed later on. Occasionally, those longform notes could be consulted to flesh out or clarify the information on a sticky note. However,

designers frequently began working on guidelines while the events of the meeting were still fresh in their memories.[45]

The first step toward a set of guidelines involved the design team organizing the materials that had been generated during their meetings. When they had run a 6P exercise, for instance, the designers would return to the office with large sheets of paper with sticky-notes organized in columns (one for each category—e.g. "pain points"). One or more members of the team would photograph these materials (on site or once they had returned to the office) to archive them in their original state. They would then begin to work upon the sticky notes[46], breaking them up and regrouping the sticky notes into clusters according to


[45] Whenever it appeared necessary to look beyond the guidelines back to some specific user input the architectural designers were reliant to a great extent on the individual recall of designers who had participated in the meetings. This obviously came with limitations. (There were a few instances, for example, when the designers struggled to recall some detail that I had recorded in my field notes. In those cases, I offered my assistance.) Nonetheless, reliance on individuals to recall details of meetings or other interactions seemed mainly to disrupt design activities only when they called an individual (a design strategist, for example) away from another task. I was often impressed by how well the relatively junior design staff, like Raj or Amber, who were usually responsible for meeting notes could retain small details they had learned during time with a client or user.

[46] The sticky note has become a common tool across design fields, and a team of intent looking individuals huddled around a wall covered in sticky notes has become an icon of the present epoch in design. Outside of architecture, Fischel and Halskov (2018) report finding that sticky notes are frequently referenced in papers and conference proceedings of the Design Research Society and the Association for Computing Machinery, including usages that are merely metaphorical—that is, where something else is described as a sticky note. I would consider that such metaphorical uses may imply the sticky notes' perceived standing as a relatively basic and ubiquitous medium of design activity. As recently as 2018, Halskov and colleagues (Dove et al 2018:113) published an article in the journal *Design Studies* in which they write that, "Despite being commonplace, the practices surrounding designers' use of Post-It notes have not, to our knowledge, previously been the subject of close analysis and theorizing." I am not in a position to judge the veracity of that claim, but I would note that Dove et al are specifically interested in the distributed cognitive qualities of working with sticky notes. Within design anthropology, sticky notes make a frequent appearance, and are featured in Murphy and Marcus' (2013) *Ethnocharrettes.* Eitan Wilf (2016) has related the sticky note's material properties to its symbolic and ritual use in "innovation" techniques.

perceived thematic commonalities between them.[47] The image above displays Raj and an architectural design named Liz at work shuffling and reshuffling sticky notes according to what they felt made for the strongest and most appropriate patterns (event described in chapter 6).

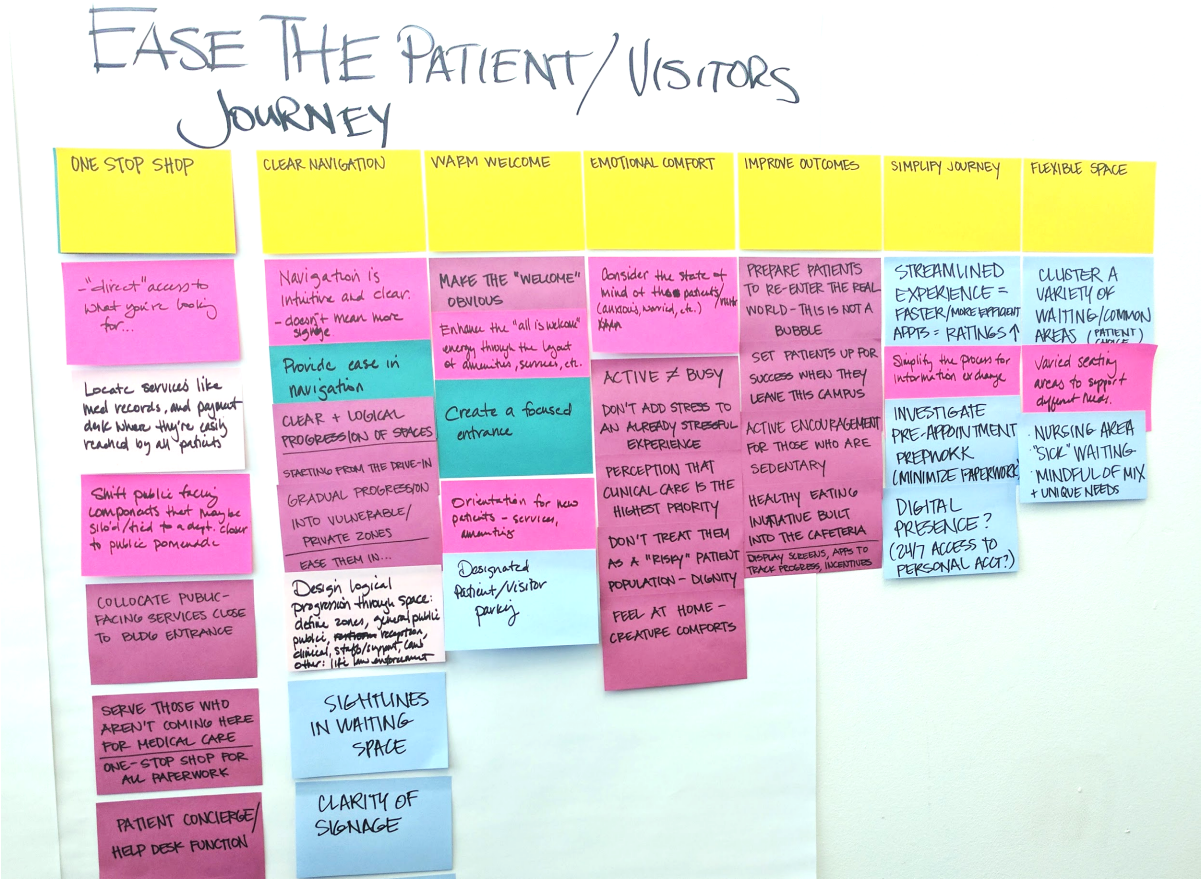
The resulting clusters indicated potential objectives for the designers. The groupings are a diagnostic exercise that sets the stage for a possible fix—an activity known in design studies as "problem setting" (Diefenthaler 2008, Schön 1983). The groupings thus rely very much on the designers formulating a 'take' on what the users have conveyed.[48] In the moments surrounding the authorship of one of the sticky notes it is always some particular individual's viewpoint that is being expressed. (This is so irrespective of whether the user takes themselves to be speaking on their own behalf or on behalf of others of their type.) In the later process of abstraction, however, the designers break out of the framework of an individual's input and work toward a general theme that implies a set of common goods. Thus, in some sense, we can see user types emerging (anew) from the work of turning specific moments of interaction into generalized issues that require the designers' interventions.[49] At this later moment, the thus far generic user types become inflected with a particularized form of relevance: rather than simply being "nurses", "patients", and the like—that is, individuals who are known only and entirely as anonymous kinds fulfilling a particular function ("functional types" [Schutz 1976b]) —groups become user types with such-and-such a difficulty or preference ("characterological types" [Schutz 1976b]). This reconstitution of users instantiates/undergirds a form of attention to

[47] This process is sometimes called "affinity mapping", though I did not hear it given any specific name at Foresite. Affinity mapping "in the wild", Harbo and Huang (2015) note has been the object of very little study.

[48] At another time I plan on analyzing the interactions I filmed between designers as they assemble these clusters.

[49] Producing a detailed account of that transformation process is outside of the scope of the present dissertation project. Nonetheless I would suggest that it might contribute significantly toward accounting for and refining certain distinctions that I must here employ only in a heuristic mode.

persons through attending to issues in the environment. I will be building on this point in some respects in chapters 5 and 6. In chapter 6 I observe how user input and the resulting guidelines directly inform design activity by insinuating modes of experience into features of the built environment.




The resulting guidelines are not all alike in their specificity. While some of these guidelines will take the form of particular, material objectives (e.g. 'patient rooms should include space for visitors'), others will have a much more abstract quality. Consider the tagline above the sticky notes in the photograph included above. In the project during which the image was taken, the designers formulated a generic objective in their analysis of the materials they gathered from meetings with clients and users: to "ease the patient/visitor's journey". In itself, the goal is quite nebulous. A modicum of specificity obtains at the next level, indicated by the first row of sticky-

notes which include subsidiary goals such as “clear navigation”, “emotional comfort”, and “improve outcomes”. As further facets of these strategic aims are tactical suggestions in columns beneath.

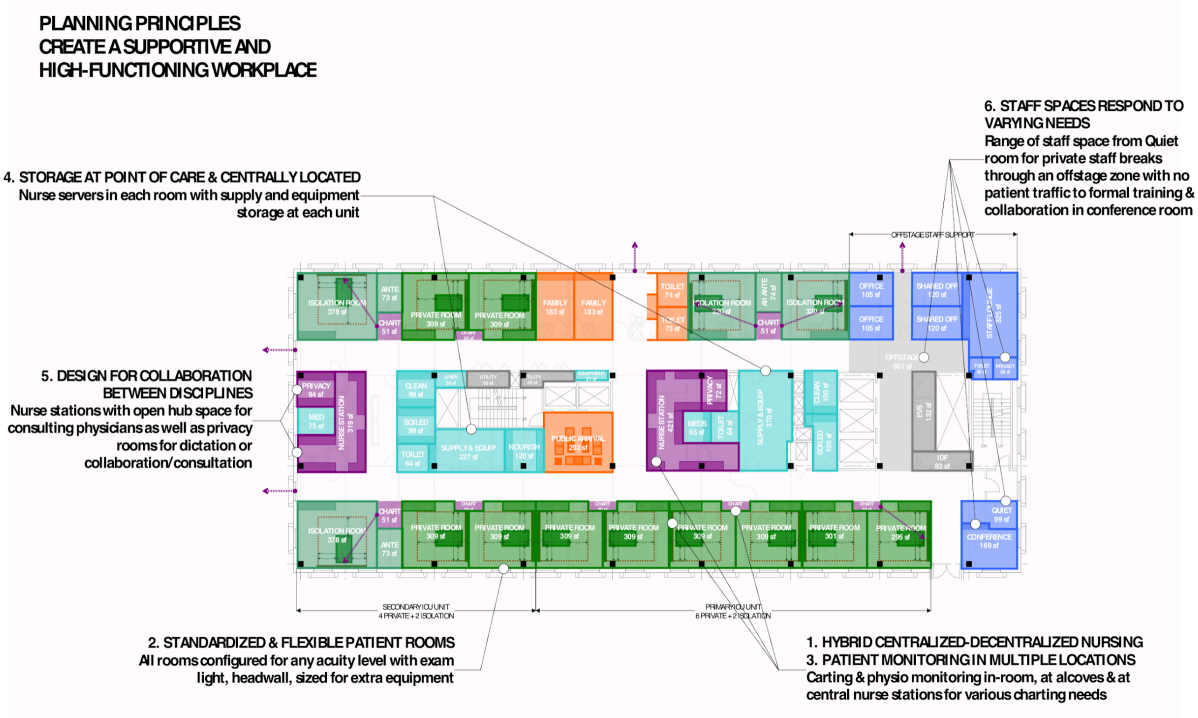
The guidelines as presented in the photo represent the late stages of “design strategy” work at Foresite. To repeat, they are not a direct reflection of user input, but rather a translation of what the architectural designers have learned into a language that presents an anticipatory grasp of the optimal design solution. As I suggested above, this is most evident in the case of those guidelines that clearly correspond to a material criterion. Under “clear navigation”, for instance, one suggestion reads “sightlines in waiting space”. While still leaving many concrete details underdetermined (e.g. Sightlines to where or to whom? How many?) this sort of guideline does articulate a specific feature that is the corollary of a particular form of relevance inflecting a type (in this case, waiting patients[50]). Not all guidelines are necessarily worked out to such detail, nor are they all so thoroughly rationalized as to evidence clearly distinguishable tiers. To offer a brief observation in this vein, the column titled “improve outcomes” include aims that (at this stage) provide no discernible architectural elements—e.g. “prepare patients to re-enter the real world - this is not a bubble”. They appear to serve instead to keep the designers mindful of a particular attitude expressed during user meetings (the insinuation being that the designers felt this was something they would need to respond to, even if it isn’t yet evident that they foresee any way of doing so). Furthermore, the rationalization that is evident in many categories was

[50] I would like to be able to say why the patients were thought to need “sightlines” while waiting, but in this particular case I cannot be so specific. I was not present at the time this particular token was being created. From experience, I would suggest that sightlines for patients tend to be toward two things: views of the outside, which are thought to orient people (temporally and spatially) and reduce stress (see chapter 6) (see Salonen et al 2014); and selective views of backstage areas—which in one school of thought are posited to allow for glimpses of staff hard at work, thereby reassuring people and making them more tolerant of waiting times (see Baker and Cameron 1996). Both of these ideas appeared (at different times) in the discourse at Foresite Design.

partly an attempt to manage the scale of this particular project. Nonetheless, all projects I witnessed or reviewed contained guidelines with differing degrees of specificity as described.

Once the design guidelines have been formulated their first application is as a communicative tool. The architectural team returns to the client (and at times to a core group of users as well, when such a group has been formed) to present the guidelines as a statement of intent. In theory, the guidelines might be subject to critical feedback at that time. However, I do not know of any instances where revisions to the guidelines proved necessary. In my estimation this partly because the design guidelines tend to be framed very agreeably, with some of the broadest goals even mirroring language from the client organization's mission statement or terms and phrases that emerged within meetings with users or clients. Further, design guidelines as delivered are uncontroversial because they are typically delivered alongside other materials to which they have been made to correspond and which have already received a degree of corroboration from the users and assent from the client. For instance, design guidelines are often included as a part of an overall package of documents that may be designated "deliverables" at the end of schematic design; by the time they were reified and presented to clients, the design guidelines could be, and often were, directly connected to particular design decisions that the client and (to varying extent) users had already given approval. Thus, presenting the guidelines often served the overt function of communicating that because the users and client valued X or needed a solution for Y, the designers had devised a Z. The image included below comes directly from a set of documents Foresite Design delivered to a hospital that had hired the firm to create a

masterplan and schematic design for a new, expanded Intensive Care Unit.




In chapter 6, I will look at how user input and the resulting design guidelines directly inform design activities. For the moment, suffice it to say that in many ways the early design process at Foresite revolved around accomplishing pairings between guidelines (which, as we have seen, can include specific functional requirements) and material features. The effect is to have operationalized, sometimes in multiple ways, a given guideline, and thereby to be able to convince a client that a given feature accommodates a specified need, avoids invalidating a goal or recreating an existing problem, or convincingly serves as the embodiment of an expressed value. This is where the skills and imagination of the architect and interior designer really come into their own.

**“Empathy” and beyond**

Over the course of this chapter I have introduced the core features of Foresite Design's process for gathering and integrating user-input into their projects. If the mid-century social scientists and architects whose efforts brought about today's Methodological User-Centricity left the actual integration of empirical research and design practice largely unfinished, I would offer that in the process model exhibited at Foresite Design we can see what amounts to an inheritance of that project. Whereas during the late 1960s and early 1970s, the "process model" was a conceptual object, subject to speculation and concerted modeling, at Foresite and other design firms of their ilk, the rhetoric and ideals of Methodological User-Centricity compel an ongoing effort to make user-centricity a feasible form of practice.[51]

While Foresite has been very successful in establishing a business based around a "focus on the user", it is important to consider the ways that their pursuits are given contour by the structure of the client-architect relationship and the expected phases of project delivery (that are each anchored in customary business practices of which I could here only give a cursory overview). As we have seen, the constraints that come along with the current paradigm in the architectural industry are the ground from within which any efforts to "empathize" with users find their articulation. Accordingly, I have spent much of this chapter setting the architectural designers' goal of a user-focused design in relief against the other goals a design team must meet (often concurrently) and the ends to which "empathic" understandings of users are ultimately put.

[51] That is not to say that in today's design communities, MUC functions only as a practical challenge. A cursory glance at the manifold academic design journals and trade publications will bear testament to just how greatly Methodological User-Centricity "enframes" (see Heidegger 1977) the scholarly questions and notions of innovation in our current design epoch. Though, if we take Heidegger to heart for a moment, it is not the user but *use* which enframes (as the practical sense in which all possible objects are standing-in-reserve). To see possible people as "users", knowledge of whom is germane to fashioning use, would suggest that MUC is—to elaborate the Heideggarian edifice provisionally offered here—a kind of subframe of standing-in-reserve.

Six weeks after Marc, Amber, and Raj held their first BAYA planning meeting, the firm hosted its “Meet the Firm” event. The evening was well attended. Amber and Raj led the office’s presentation and activity for their guests. As planned, the two architectural designers made the firm’s focus on the user experience the motif of the evening. They worked in tandem, taking turns of a few minutes each before handing the speaking role back to the other. After welcoming their guests, Raj gave a short treatment of the firm’s “focus on the users”, one meant only to pique interest for a further discussion later. He then handed the presentation over the Amber. “And so what does that mean for the way we work?”, she asked,

> What it means is that we take this focus on experience, on user experience, and we really try to build it into our design process. Especially up front in the project. [...] So a huge part of our work up front really starts with understanding our client. What is their business model, what are their goals, what are their values? From there we're able to launch into some level of research. And there's a lot of different [...] tools to pull from, depending on what's appropriate for the scope of that project. Then from there we're able to set up and develop these core drivers for the project. And from that point on we're able to refer back to those drivers, those guidelines, and use that to really ensure that our end product is delivering the value that our client is after. So from there we move into a more traditional project delivery. So we go through schematic design, design development, construction documents and then all the way through construction.

Amber continued on, describing the firm’s organizational structure and some finer details of their process model. But I want to pause here because her description makes an excellent summary of much of what I discuss in this chapter—a summary that I think is fairly mindful of the place user research plays in the larger endeavor. As we have seen, while the firm is committed to a user-focused process, it is ultimately the client organization that has the most authority over the

framework of relevant use. Who counts as a user, and what aspects of their experience and activity constitute forms of use have their grounding in that frame of reference. Likewise, the level of research is tethered to client facilitation, fee structures, and project scope.[52]

Those pressures shape the firm's methods; specifically, the need to be swift and unambiguous incentivizes a reliance upon meeting-based, discursive and written forms of research on users. The client's customary way of making decisions and their sensibilities regarding who should be involved in setting the agenda for the design can again work as constraints on the learning and discovery process. Whatever the level of research, insights into user experience are articulated in the form of guidelines. Those guidelines, as I've argued here, are abstractions from the particular. Specifically, the process of deriving general guidelines from what is learned from users depends upon treating each individual as a token of a "user type". Individuals participating as users give their "type" a kind of relevance through the relationship the architectural designers are able to discern between the users' kinds and experiences of use and their built environment—the outcome of which I have referred to here, following Schutz, as a "characterological type".

The practical constraints on architects' process are such that actual contact with users, as realized, tends to be fairly fleeting relative to the overall scope of the project. In turn, "empathy" as the designers talk about it, tends to understate the range and complexity of intersubjective attunements at work throughout an architectural project. As a case in point, a few minutes after

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[52] Note: in the practice version of the talk, given two days before, Amber phrased this point somewhat differently,

> So at the start of every project we really try to understand our clients, their business model, what their values are, and who they are as a company. From there that sets us up to launch into some level of research where we try to learn and discover.
> And that.
> The level of effort there varies depending on the project type and the client.

In its earlier manifestation, this segment of Amber's presentation places somewhat more emphasis on the fact that the intensity and pace of user research is conditioned by project and client.

the segment of Amber's presentation presented above, Raj picks up on the point of user experience: "We talked earlier about experiences. We talked about the user-centered approach. [...] And it really starts with empathy," he insists.

> Empathy is our opportunity to leverage the skills we have when we're trying to put ourselves in the perspective of the other person. And empathy is defined as understanding and feeling, um, another person's experience, through their own perspective. And, uh, I think of this quote when I think of the word empathy. Um. It goes like this. Maybe paraphrase it, cause I can't remember specifically. But, uh. You don't really know a person until you've walked a mile in their shoes. That's all about really understanding what that person's going through in their life. [...] And if we get curious to understand those things we can respond to that in our designs. [...] We might start out with, you know, the basics. The description of the people? What makes them who they are, how they're divided up into different groups, what they do. But what we want to get to is what's inside that individual person's head? What makes them tick? [...] And we're humanizing information. Because we might get information that looks like this [shows a chart full of numbers]. It's spaces, it's people, but we don't know what's behind those people. [...] What motivates these folks to come to work every day and do the work that they're doing and all that joy and excitement that they want feed into, into their work. And so, that's the frame. It's about putting ourselves in the perspective of the people that we're designing for.

As with the historical development of MUC, in which "empathy" became a stand-in, in some accounts, for a sufficient understanding of an otherwise opaque user, at Foresite references to "empathy" function as a marker of social distance. "Empathy" as a methodological tenet reacts against utter anonymity ("we're humanizing information"). It is also an expression of skill, insofar as the designer possess techniques for uncovering the "perspective" of users and responding through design. In that regard, "empathy" functions in design circles as the promise of efficacy.

And yet, even as Raj describes "empathy" there is some slippage. Raj seems to be aware that "empathy" as he has defined it does not really do justice to the full range of ways in which users and use come to be understood in the process of architectural design. And so the category grows. It may be fair to say that the shape of practice is distinct from the ideal informing the

design process. Perhaps we might consider instead that “empathy” is a figuratively extended moment in architectural design. “Empathy” is used most exactly to talk about getting a user's perspective, but it always implies a process that is extended over acts of designing that cohere to that grasp. Next, through the feedback that the designers will often obtain, there actually can be a kind of extended series of moments in which designers may satisfy their efforts at “empathy.”

The diversity of tasks, forms of contact with and knowledge about users, and means of construing what is known indicate a diversity of intersubjective modes of attunement that is belied by the designer's description of "empathy". And so the range of architectural designers’ activities and modes of access to the persons for whom they design would seem to suggest that we need to go “beyond empathy” (Zahavi 2001)—or, at least, situate it within a range of other modes of intersubjectivity. My goal is to draw out some of the complexity of architectural attunements to users across different moments in the design process. In what follows of the dissertation, I present three scenes in which intersubjectivity manifests in distinctive (but imbricated) modes. First, I consider the intersubjectivity of anticipation as architects collaboratively construct possible scenarios for how to direct their attention to users (as well as the attention of the user). Second, in order to clarify the varied forms of understanding that the architectural teams develop through user meetings, I examine empathy (*Einfühlung*) as a socially distributed phenomenon. Third, I analyze how being affected by users manifests in and through the materiality of the architectural design process.

# Chapter 4
# Anticipating Others, Anticipating for Others

> "For them to be things at all… requires that they be brought into a relation with one another that is itself defined by a narrative of anticipated use."
>
> - Tim Ingold, "Introduction: The Perception of the User-Producer" (2012:30)

> "Prehension gives a particular cast to mental understanding. You don't wait to think until all the information is in hand. You anticipate the meaning."
>
> - Richard Sennett, *The Craftsman* (2008:154)

Every Monday morning, the designers at Foresite gathered in the middle of the office, arranging themselves in a loose horseshoe around a large monitor on the wall. Tim, one of the project directors[53], would bring up an Excel spreadsheet listing all the firm's current project and all the personnel assigned to each of those jobs. This is the weekly "Stand Up" meeting. Its manifest and primary function is to provide everyone in the office with a preview of the operations for the forthcoming week. Going through each employee in alphabetical order, Tim would nominate the designers to speak on their upcoming tasks for the week. For junior members of the staff, competent performance at this activity entailed knowing which projects they were assigned to currently had outstanding tasks within their purview, the priority those tasks held relative to others on the same project and relative to competing responsibilities on other jobs, and how many hours it would likely take them to complete the work. Senior designers have to know the

[53] Project Director is managerial role given to licensed and senior staff. Among other things, the title accompanies responsibilities for overseeing business development and project profitability, task management of other designers assigned to the PD's projects, and final approval on all internal design decisions.

status of their projects, including their deadlines and upcoming meetings, how much fee is left on the project and how many hours of whose time that will cover, whether they are ahead or behind schedule on the current phases of all pending projects, and which tasks need completion and have yet to be assigned. For anything a junior designer does not know their senior colleague is expected to help provide an answer. For anything the senior architects do not know they either confer with one another to produce a provisional answer or they will earmark as an issue requiring immediate follow-up. Collectively everyone works to elaborate and anticipate the upcoming week and the overall trajectories of their projects.

Stand Up is not only about debriefing on workloads and cashflow, it is also a venue for coordinating social expectations. It is how you find out if someone will be out of town that week, is becoming overburdened with work, or is having difficulties with a client. It is the premier venue for getting advice (requested or not) on how to get a project that has stalled out due to an unresponsive client back on track. Stand Up is also where the team as a whole learns the most about personas and actions of persons outside the office—commonly project managers and heads of department on the client's side who have been difficult or exceptionally cooperative, or designers or administrators in one of Foresite's other offices that are doing or planning something that might affect the San Francisco team. It is, in short, the most routine and salient opportunity for answering the questions: What are others doing? What does it all seem to be amounting to? How should we respond?

Stand Up is one of myriad of daily and weekly events centered on anticipating. Foresite Design operates primarily in the highly specialized architectural markets of healthcare, and science and technology. These "institutional" project types require a cultivated capacity for managing complex and detail-intensive work — requirements which, as will become evident

below, significantly shape the kinds of anticipatory work in which architects engage. Client's institutions often have convoluted organizational structures that can make it unclear who has authority on a given issue. Institutional facilities (particularly in healthcare) must be designed so as to protect against manifold hazards, requiring extensive consultation with various experts and agencies. Building codes (again, especially in healthcare) are fastidious and enforced by multiple overlapping agencies whose jurisdictions must at times be sussed out *ad hoc*. Technology changes quickly, often rendering technological infrastructures obsolete even before they have been built. Other capital projects across the client institution can skew timelines and budgets. Finally, and often most importantly, these institutions operate only through an intricate coordination of roles and tasks, each intersection of which must be taken into consideration in order to facilitate effective cooperative action.

The particular materiality of buildings also lends contour to architects' anticipatory labor. Unlike forms of design (e.g. web design) where the product is virtual or highly plastic and can therefore be quickly and cheaply modified even once it has been released to the public, buildings are time-consuming, technically challenging, expensive and legally fraught to modify. As such, there is tremendous pressure on architects to get it right the first time. Nevertheless, as a cursory glance through the writings of any architectural critic or a conversation with any trusting architect will bear out, costly, embarrassing, and sometimes damaging mistakes are made.

To some extent, a system of quality control exists which can help to offset these risks. Other architects, agency reviewers (for building permits, facility licensing, etc.), and the differently distributed attentions of contractors and consultants can all help to catch a potential mistake in planning before it has been carried out. At Foresite, designers were encouraged to write up reports on mistakes caught in this way and share them with their colleagues. The

resulting ‘lessons learned’ documents would be posted to the company server where any member of the firm could potentially access and learn from the erstwhile oversight. Likewise, stories of projects gone sideways, often with intricate adjudications of responsibility, pervaded office gossip. The stakes, everyone understood, were high. A substantial lawsuit can quickly put any but a very large and powerful firm out of business. However, harm to a firm’s reputation, broken relationships with clients or contractors, and failure to even cover the firm’s expenses on a project are much more common threats. And yet, amidst all this attention to the ever-present threat of error there was no discernable crisis of confidence. The designers were for the most part self-assured in their competencies. Rather, the ethos was one of caution.

The paradigm is that, if furnished with all the relevant information in a timely manner, architectural designers can—within the limits of reason—find an effective solution. For that reason, the possibility that someone might withhold or miscommunicate relevant information is a major source of anxiety for architects. Stories abound of clients and users who were unresponsive, equivocal, taciturn, forgetful, or misinformed. Architects commit a tremendous amount of time and other resources to meetings and emails. Timelines get pushed and pulled around the availability of information or the persons who can provide it. Designers read books and attend workshops on how to run effective client meetings. Exercises and games intended to jog memories, mitigate conflicting reports, and provide schemas for recognizing important information are invented and shared amongst colleagues. These efforts can, at times, strike the designers as comical in their extent; one architect sardonically remarked that nowadays everyone tries to “game-ify everything.” However, as much as the extents to which architectural designers go in order to obtain information might occasionally leave them self-consciously bordering on

parody, there is a seriousness to the game: architects are keenly aware that their efficacy depends primarily on access to reliable and comprehensive knowledge.

The primacy of information is not simply a mark of its material significance but is also a reflection on the substance of architectural labor and the forms of anticipation that shadow it. When I first began fieldwork, Marc told me in seriousness that maybe only 5% of architects' time was spent "designing". A couple of weeks later he offered me a reduced estimate of 2%. These figures were not meant to be exact so much as to dramatize the point that if I had come to observe people design in the sense of brainstorming and sketching forms the pickings would be spare. Indeed, over the following year of fieldwork, most of the work I would witness consisted of communicative labor—seeking out, gathering, and interpreting information from clients, users, contractors, and other designers. All of these efforts take place in and through various shadings of anticipatory experience.

Anticipation is, in various forms, a central component of architectural labor and expertise. At no time is anticipatory work more focal than at the beginning of a new project, when the designers at Foresite had very little information at hand[54] and would have to begin improvising their way toward an actionable understanding of the requirements of clients and users. Significantly for this discussion of anticipation, in the context of this overarching ethnographic project I came to see that the most salient aspects of anticipatory experience are not so much planning structures or predicting their eventual patterns of use, nor even anxious and imaginative foreshadowing of what might go wrong so much as frequent and recursive acts of

[54] Much architectural work is either inherited through something like an IDIQ (Indefinite Delivery/Indefinite Quantity) contract, in which case a firm is pre-approved by a government agency to be compensated for projects that are often given definite "scope" after the fact, or won through an RFP (Request for Proposals) process, in which case a general brief is circulated and firms offer competing bids. In either case (and in all others, to varying extents), much of the exact "scope" (what the architect is permitted/expected to do) is underspecified. Resultantly, the start of a project often involves some level of discovering and negotiating the scope as one of several processes of "problem setting" (Schön 1983) that take place at the outset of a project.

thinking about, feeling into, and discursively constructing what there may be to take into account.

At Foresite, Methodological User-Centricity loomed large here. As is suggested by designers' intensive focus on games and techniques for structuring meetings, communicative strategies are reflexively organized around understandings about the forms of and possibilities for gaining access to the knowledge of others. What clients and users were able to describe themselves as doing or needing in the future could subsequently be accounted for in the design. Ultimately the final design is in many respects the outcome of these more immediate interpersonal considerations. From moment to moment and phase to phase of a project, architects become concerned with what those persons will care about, how they will feel about a particular issue, and they know and can be consulted about, et cetera. It is necessary to tack back and forth between the final objective and the more immediate interactions that will variously furnish the criteria, essential information, and, ultimately, a plan that meets with approval – to anticipate others in order to anticipate for others. The user's force of habit was, in this respect, a professional hazard. This is one reason for the reliance on games and other techniques for triggering memory. Implicit understandings and routinized behaviors were things the designers had to get out ahead of. In orienting to discursive knowledge, the architects thus aimed to engender, in themselves as much as in their clients and users, forms of anticipation that were maximally available to reflective awareness. Consequently, a large part of the work of designing user meetings was dedicated to anticipating what users might be leaving out of their accounts and how it could be brought to light.

All of Foresite's work was thus situated within a highly distributed social network. By their own standards, the architects could not effectively plan until they knew what users needed

and expected, but ensuring they accomplished this in as thorough and timely a way as possible while also meeting their project deadlines meant anticipating how to organize their interactions with clients and users. In this chapter, I examine anticipatory experience through Foresite's efforts to anticipate upcoming projects in light of how they will engage users. In what follows, I offer an initial theoretical sketch of the range of anticipatory experience. Rather than attempt to delimit and describe the full range of anticipatory modalities, however, I focus on the differential contributions of just a few (most notably mood and imagination). Following upon the work of phenomenological anthropologists and key concepts from phenomenological philosophy, I argue that these modalities of anticipation vary in their focality and availability to conscious reflection. As anticipatory experience emerges in time, the more implicit experiential modes (such as mood and intuition) operate as antecedents to more explicit ones (such as imagination). Turning to apply these ideas to ethnographic materials from my fieldwork amongst architectural design teams in San Francisco, I examine how what architects believe clients and end-users may or may not be able to anticipate shapes the architects' own concerns with anticipatory experience. In detailing the gradual elaboration of initially implicit forms of anticipation over the course of a conversation between architects, I demonstrate that this gradient of anticipatory experience allows us to attend to anticipatory experiences as they unfold through time.

**Anticipation and Design**

Amidst a recent flurry of sociocultural anthropological publications concerning "the future" there has been remarkably little on work on anticipation (Stephan and Flaherty 2019). Where anticipation has been the focus of anthropological work (e.g. Adams et. al 2008; Appadurai 2013) it is often employed as a catch-all for predictive and speculative practices rather

than for its role in first-personal temporal experience (but see Bryant 2013). Nonetheless, anthropologists have been keen to argue that "futures" are cultural objects which are always rendered knowable through present practices (including epistemic techniques) (Bear 2016, Knight and Stewart 2016).

Design figures prominently among futurological practices. "Design is always future-making," design theorist Susan Yelavich (2014:12) states unequivocally. In the introduction to *Design Anthropological Futures* (Kjaersgaard et al, 2016:1) the authors write that the future is present in design as "collaborative explorations of situated possibilities, formations and actions at the intersection of design and everyday life." "[T]he designer uses the present..." writes Jamer Hunt (2011:35), "as a provisional leading off point for reimagining possible futures." Likewise, Tim Ingold (2012) argues designers can only make things by drawing them into "a narrative of anticipated use"[55]. In short, design is cast as an essentially anticipatory practice—in particular, one that actively mediates the coming-into-being of particular futures.

While design theorists (including anthropologists) are eager to class design as a kind of futurism, they are also reluctant to flat out equate design practices with foreknowledge. This is not only for the obvious reason that what is anticipated does not necessarily come to pass, but also because designed objects are iteratively realized (Cross 2011, Rowe 1987, Schön 1983). What they become is rarely about something which could be stipulated in advance. Ethnographers of design have especially emphasized the role of implicit knowledge, particularly in the forms of embodied skill and intuition, in the creative process (Bucciarelli 1994; Ingold 2013). This emphasis is in many ways epitomized by Tim Ingold (2012, 2013), who has explored design as a relatively open-ended anticipatory practice and distinguishes this perspective on

[55] This narrative conception of design bears an obvious family resemblance to the thesis of design as a kind of practical social knowledge that I earlier (chapter two) argued was premised on Methodological User-Centricity.

design from overly rigid and unsubstantiable models of the design process which falsely construe it to be the stepwise implementation of rules conceived in relation to a pre-figured end. Studies in this vein focus upon the processual realization of the designed object. These authors rightly emphasize the open-endedness of (often *individual* acts of) planning and craftwork, emphasizing embodied knowledge and iteration to the exclusion of more explicit and deliberative forms of anticipation which draw upon a range of other cognitive and social skills that function as counterpoints to intuitive creation.

At the same time, the balance of work on design emphasizes reflective moments of narrativizing, comparing, evaluating, and strategizing. The authors of these texts are often cognizant that the clarity and reflection with which we examine objects after the fact (for instance, at a momentary pause in activity) is not the same as the phenomena we experience in the moment of their creation (c.f. Donald Schön's [1983:49-69] distinctions between "knowing-in-practice" and "reflection-in-action"). Nevertheless, they emphasize the necessity of reflection; as in the case of abductive reasoning (Cross 2011, Murphy et al. 2012), Ingold's "narrative of anticipated use", Hunt's "reimagining", collaborative imaginative activities (Murphy 2005), and what Donald Schön (1983) has dubbed "reflection-in-action" designers do rely heavily on explicable forms of anticipation. It is significant that in many cases, the places where reflective activity shows up most strongly is in cooperative design activity or criticism. Indeed, a dialogical quality is often read back into the act of designing even when the qualities of interaction themselves remain at the periphery. For instance, Schön characterizes design itself as a "reflective conversation". As Murphy (2005, 2015) demonstrates, these reflective moments of narrativizing, comparing, and evaluating are often interactionally instigated and distributed between design participants.

What becomes clear in comparing these cases is both that anticipation is experienced differentially, including different degrees of reflective availability, and that anticipatory experiences are situated (dependent on what is subjectively and intersubjectively accessible within the moment) and temporally distributed. Anticipation, then, neither plays a singular function within the design process nor manifests with a unitary phenomenality. Anticipatory experience is rather a gradation of experiential modalities which differentially and processually gear into the potentialities of the situation at hand. Moreover, what becomes apparent when considering the literature on design is that reflective modes of anticipation may be intersubjectively bootstrapped within the reflexive framework of interaction. As I will argue it here, the phenomenal forms of anticipation are genetically and generatively[56] related; they build upon one another, allowing us to attend to anticipation's temporal unfolding. This is demonstrably the case when designers must cooperatively anticipate the designed objects' or spaces' "users".

**Anticipatory Experience**

[56] Since the ethnographic and theoretical content focus on a shifting phenomenality this is obviously not a static phenomenological project. However, there is some question concerning where to locate this argument in the "genetic" and "generative" levels of phenomenological analysis (see Steinbock 1995). In a previously published version of this analysis (Stephan 2019) I referred to the theory as a "generative one" in large part because in the ethnographic portion I was largely concerned with how previously encountered features of the lifeworld that emerged within conversation figured as waypoints along which we could track shifts in the course of the designers' anticipatory experiences. Nevertheless, the theory that corresponds to those observations is more aptly considered "genetic" since its primary aim is to map how anticipation courses through different experiential modalities. Since most references to generativity come from within the theoretical sections, I have opted to replace most instances of "generative" with "genetic" throughout the theoretical portions of the chapter, while maintaining the relevance of generativity to the ethnographic subject matter. This is in part because the chapter version of this argument contains both further ethnographic detail than before and a new section considering the intersubjectivity of anticipation. Moreover, the course of the conversation can only be understood through a lifeworld understanding of the task, the interactional partner as a context for interpretation, and a speculative typification of who the user is.

Experience is inherently temporal, having what William James (1890) and Edmund Husserl (1983) alike found fitting to describe as a stream-like quality. Duration is thus an ever-present quality of experience. Yet, most aspects of the temporal streaming of experience, including what just happened and what may happen next, reside for the most part in the background, outside of our immediate awareness. As phenomenologists (Heidegger 2010; Husserl 1983; Merleau-Ponty 2012; Radman 2012; Sartre 1992; Zahavi 2003, 2008) have effectively demonstrated, the default mode of experience is a flow of intuitive and practical engagement with objects and others in which there can be little to no explicit parsing of self, other, and world. It is only when we shift our attention to specific features of features of our environment or social surround, or to specific qualities of experiences that they become distinct and set-off from one another. For the same reasons our own self-experience is most typically something we live through pre-reflectively. By extension, the moments in which we become reflectively aware of an experience such as anticipating something and are subsequently able to lend conscious effort to directing or elaborating those anticipations are relatively fleeting and partial.

In Husserl's scheme of temporal experience, anticipation was the future-oriented analogue to recollection. Both were forms of 'reflective consciousness', or ways that we could be directed toward our own experiencing. The analogy is illuminating. Being available to reflection, recollection allows one to catch oneself thinking of a memory, to intentionally retrieve one, or to review specific details. Likewise, one can 'tune in' to anticipatory processes, focus anticipation on some potentiality, or place attention on how or just *that* one is anticipating. Yet the analogy to recollection suggests a caveat: there are limits to what can be brought into focus and reflected upon, and limits to our conscious control over what we anticipate or recall. Memories often arise

unbidden, resist clear articulation, and certain details or whole events can have varying degrees of availability depending on the context of their recollection (Bower 1981; Smith and Vela 2001). There is a gap between the recollected and the reflection process. Just as with recollection, anticipatory experience is not in every respect equally available to, or manipulable by, acts of reflection.

I would argue that anticipatory experiences do not always unfold with the same extent of clarity and focality in part because they are a processual achievement. Our anticipatory engagement in the world inevitably outpaces our capacity for reflection and action. Thus, as Ingold (2013: 70-73) describes, even in instances where we intentionally elaborate anticipation we must catch hold of our fleeting thoughts and feelings in the midst of living, pin them down, and work toward progressively bringing their objects into being. Anyone who has raced against the twilight of a receding moment of inspiration knows this all too well. Yet, for the most part, this process of catching hold is so endemic to experiencing that one hardly notices it. More to the point, even the moment of emergence, in which some anticipatory object catches our attention, is embedded within and has contiguity with more implicit antecedents. We generally feel no disruption in shifting from this 'pre-reflective' mode to reflecting upon some portion of our experience because pre-reflective consciousness produces an awareness of objects, others, events and our own experiential relations to them in such a way as to reveal them upon reflection as already present or underway (Husserl 1983; Merleau-Ponty 2012).

However, as suggested previously, not all forms of experience are equally easy to catch, reflect upon, and intentionally elaborate. Some modalities of experience are even characterized by their tendency to remain at the periphery of our awareness and are therefore by nature not as parseable as others (Merleau-Ponty 2012; Schutz 1967; Throop 2003, 2009, 2014). An example

is mood. Jason Throop (2014, 2017) has argued that moods are diffuse and atmospheric, fundamentally resistant to attribution to merely oneself or one's surrounding world. Thinking alongside Martin Heidegger (2010), Throop goes on to examine how moods are disclosive, revealing one's situation within the world (see also Gammeltoft 2018). It is in this 'disclosive' respect that mood can be understood as having anticipatory dimension (see Throop 2017, see also Ratcliffe 2020). These 'intermediary varieties of experience' (Throop 2009) fundamentally color one's perception of the world, and thus lend distinctive tonality to anticipatory experiences. But residing at the horizons of our awareness, the mooded dimensions of anticipatory experience are relatively implicit and resistant to reflection.

On the other hand, there are modalities of experience which are far more salient, distinguishable and malleable. Such is the case with imagination. As Edward Casey (2000) notes, while imagination may occur spontaneously, it is also remarkably easy to access at will and sustain in depth. Imagination is also distinctively more targeted. Whereas mood suffuses one's experience *en toto*, one imagines something or some event phase in particular. Inevitably, imagination plays a more distinguishable part in anticipation. And indeed, anticipation is most often described in terms of an imaginative pre-viewing of an act or event (e.g. Schutz 1967). Yet even anticipatory imagination may have degrees of elaboration. Edward Casey (2000), for instance, considers this mode anticipatory experience in the context of what he dubs "imagining that" and "imagining how". While "imagining that" is a paradigmatic case of positing some state of affairs, "imagining how" is a derivative, more elaborated projection of exactly what it would be like to inhabit that reality as an "active and embodied participant" (Casey 2000:45).

While imagination is often considered paradigmatic of anticipatory experience, those facets of our experiencing which are most readily recoverable and made instrumental in

anticipation are not necessarily more integral to anticipatory experience. Rather, imagination is the most reflectively available form of anticipating, and consequently is most salient and amenable to intentional elaboration. Drawing in part upon Casey's "imagining how" to theorize volitional experience, Throop (2010) has argued that anticipation (which in this context Throop discusses in terms of 'goal directedness' and imaginative 'pre-viewing') is an experiential 'vector' through which willing manifests. Crucially, Throop argues that anticipation may be more or less salient in experience depending on cultural context, activity, or phase of an action. I would suggest that this variable salience is in part constitutive, but not wholly determinative, of the anticipation's varying degrees of elaboration.

As the comparison of mood and imagination demonstrates, however, the range of anticipation is not merely comprised of greater or lesser degrees of salience but also of the differential affordances of experiential modality. The relative experiential intensity of an intuition is not straightforwardly equivalent to the elaboration of its object (see, Gary Klein's [1999] description of expert intuition). Yet a salient feeling might prompt, intentionally or not, imaginative projections of what may come to be. As such, the genetic relationship between modes of experience is responsible for anticipation's variability. Insofar as moods and intuitions are more basic than imagination, for instance, the range of anticipatory experiences also implies a temporal ordering to anticipation. As it has already been suggested is more broadly the case with consciousness, reflectively bringing some aspect of anticipatory experience into focus as such is, if it happens at all in a given instance, a rather 'late moment' (see Csordas 1990:14) in the anticipatory process. Reflection, often predicated on salience, provides an opportunity to direct, to some extent, the course of anticipation, but always relies upon anticipatory experiences which arose prior to reflection and may carry on spontaneously.

Crucially for the analysis at hand, this means that anticipatory experience is not only characterized by a range of experiential modalities with differential affordances for reflective awareness; those more implicit forms are antecedent to relatively explicit registers (e.g. imagination is necessarily embodied and mooded). If some form of anticipation is always at work in the background of our experiencing, much has already taken place by the time one becomes reflectively aware of an anticipated potentiality. As such, the implicit subtends the explicable and allows the work of anticipation to carry on in the background outside of reflective awareness. While anticipation does not follow a linear course and is not guaranteed to manifest as an elaborated and highly reflectively available experience, where reflective acts of anticipation (such as those featured in imaginative pre-viewing) do take place we should find that they are predicated upon more implicit modes.

**Anticipating Others, Anticipating for Others**

Our ability to anticipate others articulates across this phenomenal range. Because anticipating with others and anticipating other's experiences are alike acts that will differentially draw upon and be interposed by various experiential modalities and degrees of self-awareness and attention to the other, both acts open onto a highly complex domain for research. At present, I will pursue just two interrelated premises—both with immediate relevance to the data to follow. The first premise is that when it comes to anticipating others we commonly draw upon a background of knowledge about their typical motives and patterns of activity. The second is that others, particularly in the midst of face-to-face interaction can instigate shifts in our anticipatory experience.

To anticipate means to go beyond what is immediately given, to sense into a recognize tendencies and possibilities not already at hand. It is present in the very recognition of a situation as being of a 'kind'. Alfred Schutz' (1967) phenomenological sociology set this capacity at the center of social understanding (both everyday and social scientific). We act within the social world, at times cooperating across vast and anonymous networks, by virtue of acquired assumptions about other social actors' motives and intuitions of relevance. The same "stock of knowledge" that allows me to formulate my own in-order-to motives provides the context for assessing or anticipating the motives of others (see Overgaard and Zahavi 2009). Moreover, when we anticipate others, we are in many ways counting on the habitual and pre-reflective aspects of their own experience. As the sociologist Mary F. Rogers (1982:187, emphasis in original) has observed concerning the habituality of the lifeworld, "If people could not *depend* on others to maintain routine activities, the prereflective pursuit of their own recurrent courses of action would be impossible."

Phenomenological theories of empathy take this condition of being an intersubjective being with a history of experiences and attendant knowledge of others as one of the hallmarks of empathy as a distinct mode of intentionality (see Stein 1989, Zahavi 2014). Social actors are not given absolutely and transparently but aspectually and with shadings of certainty and precision that correspond most of all to degrees of similarity between the way the relevant situation is given to the empathizer and empathic target, respectively. Even when such similarities are apparent, the resultant empathically-founded attributions may be mistaken or overgeneralized (Throop 2010b). In any case, empathy often requires refinement that can only come about through ongoing attunement; as such empathic understanding *can* become a mutual project for the parties involved (Hollan 2008). All these possibilities of empathy are predicated upon its

temporal unfolding. Elaborations, refinements, and collaborations in our social understanding thus necessarily depend upon an anticipatory sense that we don't *yet* have fully the other's meaning. The sense of anticipation thus significantly contours empathic efforts, returning us again to the topic of the lifeworld and the empathizer's stock of knowledge (thus the genetic level of analysis is folded into the generative one).

In acting together with others, we "gear into" one another's vivid present. Alfred Schutz' most elaborated example comes from his analysis of playing music in a small ensemble. He (Schutz 1951:94-95) writes,

> He has not only to interpret his own part… but he has also to anticipate the other player's interpretation of his—the other's—part and, even more, the other's anticipations of his own execution... Either has to foresee by listening to the other, by protentions and anticipations, any turn the other's interpretation may take and has to be prepared at any time to be a leader or follower. Both share not only the inner *durée* … [but] each, simultaneously, shares in vivid present the other's stream of consciousness in immediacy.

One mechanism for these interactionally emergent shifts in anticipatory experience are empathically-afforded reorientations ("attentional modifications" [Schutz 1967:171]) as well as what Schutz (2011, see Rogers 1982) referred to as "imposed topical relevances". Schutz conceptualized interaction as a situation of mutual orientation and affection ("affecting-the-other", see Schutz 1967, §31-34). In interaction each participant (to greater or lesser extent) affects the others attention to aspects or entailments of the situation. While Schutz tends to emphasize the intended consequences of our actions towards others, Maurice Merleau-Ponty (2012) points out that novelty can spring out here in a pre-reflective mode that may even eschew authorship. As such, anticipatory experience within the face-to-face relationship can consist largely in embodied, pre-reflective manifestations.

> …my words and those of my interlocutor are called for by the state of the discussion and are inserted into a shared operation of which neither of us is the creator. […] We are, for each other, collaborators in perfect reciprocity: our perspectives slip into each other, we coexist through a single world. I am freed from myself in the present dialogue, even

> though the other's thoughts are certainly his own, since I do not form them, I nonetheless grasp them as soon as they are born *or* I even anticipate them. And even the objection raised by my interlocutor draws from me *thoughts I did not know I possessed* such that if I lend him thoughts, he makes me think in return.
> [Merleau-Ponty 2012:370-1, emphasis added]

Our engagements with and anticipations of others arise within the context of pre-reflective, pre-reflexive modes of subjectivity and intersubjectivity that are always enveloped within a shifting protentional and anticipatory horizon. As such, even in the moment of collaboration our own acts may occupy an "intermediary" space of experience (see Throop 2009).

As Schutz noted, our attention to others can also alter our attention to our own experiences. Ongoing attention to our partner in an interaction or to someone whom we are observing can alter the course, mode, and object of our anticipation. In my own thinking this situation obtains whether the person to whom we are immediately oriented is the one whose experiences and acts we are anticipating or whether (in addition) we are collaborators in anticipating yet another actor. Finally, irrespective of whether and to what extent the interactants may be reflectively aware of their own or one another's anticipatory experience, the pre-reflective modes of anticipation carry on; our capacity to reflect on or intentionally elaborate our anticipations of others depends upon anticipatory experiences already underway.

**Anticipating Together**

When it comes to anticipating on behalf of others, architects rely first and foremost upon clients and users making explicit their requirements, typical activities, and expectations. Implicit forms of knowledge and anticipatory experiences that do not lend themselves well to reflection and precise articulation are consequently rendered as liabilities for architectural practice. Working around clients' and users' more inchoate forms of experience, however, requires that architects themselves work to progressively anticipate users' and clients' potential contributions

or blind spots. At minimum, this entails the designers' arriving at some specifiable sense of what of importance might not yet be known. Architects' attention to these matters are at their peak in the early stages of projects when they are at the greatest deficit for information. All identifiable sources of information may be attended to carefully as early clues about how the project will go: Are there other requirements of this space that no one has mentioned yet? Are there people who will use this area whose activities have not yet been considered? Will the organization be undergoing any significant and foreseeable changes that might alter how a space is used in the near future? Who might be able to tell us, and what would it take to get them to answer these questions? Even formulating such questions is an anticipatory activity. It takes considerable work for architects to anticipate others in such a way that they can later anticipate on behalf of those others. I now turn to examining how those reflective forms of anticipation are built up within the course of architectural practice. The data presented here come from an approximately twenty -minute meeting I observed while doing fieldwork at Foresite Design. I will be describing this interaction in a play-by-play style in order to show how what the architects anticipate develops over the course of their interaction.

Marc, who acting as lead architect, and Raj, one of his frequent collaborators at the firm, were meeting to discuss how Marc wanted to approach a new project. The firm had recently been hired to outfit a laboratory at a preeminent research institution in the region. The scientist who would be the primary user of the lab was new to the institution and to the country. Since the architectural project in question would entail one of a number of changes for the scientist, including the possibility of all new research projects and collaborative partnerships, they could not assume that her previous workplace would serve as an adequate template for the new lab. As such, they maintained that they would need to consider her needs starting from scratch.

From the outset of the conversation Marc is concerned with limiting the scope of the upcoming meeting. He initially claims that he does not want to venture into making decisions on laboratory equipment or layout. At this point, all the architects need is information that will help them prioritize their focus. However, through a series of shifts in the conversation, what begins as a simple debrief in which Marc explains to Raj his limited objectives for their first meeting with the scientist gradually evolves into increasingly specific anticipations of how future project meetings might unfold and what might go awry.

The first shift in the conversation occurs when Marc pivots toward describing a scheduling tactic that might well suit a user meeting as a conceptualization tool in this project. In the method, one articulates the desired end state then works backward, iteratively specifying what that end depends upon. Necessary conditions become steps back toward the present, things that need to be set in motion before a goal can be achieved. Marc elaborates, offering a prototypical question they might ask in this case: 'What do you need… in order for the, for the chip to be still frozen when, when you walk across the room?' Raj picks up on this, noting that approaching the issue in this way will keep the scientist—and, subsequently, the architects—from overlooking crucial details, such as how to arrange equipment to facilitate crucial sequences of action. Raj evokes an imagined confrontation that might occur if something is overlooked: 'Oh,' he says, voicing a dismayed scientist, 'this needs to be *here* because… I don't want to keep running across the room for that.' If they cannot avoid such oversights, Raj observes, then they are effectively 'not changing anything.'

What accounts for Marc's shift away giving a general overview of the meeting and toward detailed discussion of tactics for uncovering the scientist's work process? Over this segment of their meeting, an image emerges of the scientist as a creature of habit. Prior to any

assumptions about the scientist, *per se*, the architects already imply that the user's requirements will come to light in a gradual and iterative fashion. The implication first appears in Marc's mention of needing occasion to ask 'follow-up questions' once they had already gone through the process a first time. Raj picks up on this by narrating a dialectic (in his words, a 'toggle') movement between interrogatives regarding the scientist's workflow and those addressing the physical requirements of the workspace. Marc specifies that each of these phases 'do these little steps.' It is subsequent to invoking an incremental learning process in the form of 'steps' that he appears to be reminded of the scheduling tactic and subsequently suggests adopting the exercise as an approach for organizing their inquiries.

The implicit anticipatory background here operates to construe the scientist as someone who will likely need several successive rounds of questioning in order to make explicit her customary workflow. For Marc this brings to mind a method for thoroughly vetting the scientist's habits. And it is at this point that in Raj's response a second shift occurs—one that foreshadows potential trouble arising from the scientists' presumed tacit familiarity with her workflows and environment. It is only once the scientist's activities are brought into the discussion as something that might take very rigorous questioning to disclose that Raj performs the imagined problematic interaction with the scientist: 'Part of [these questions] will inform us on how we're going to help layout the room. Because the goal — we don't want them to, like, worry about and then we find, "Oh, this needs to be here because this is how, you know, I've used this…"' In performing a possible conflict with the scientist, who is depicted as late in realizing a customary step in her workflow, Raj for the first time in the conversation makes explicit—even without labeling it as such—the anticipation that if they are not sufficiently rigorous in their questioning then, ultimately, they are 'not changing anything.'

Marc affirms Raj's assessment of the stakes of the conversation and seems about to elaborate what he believes they will be able to do once they have their questions fully answered when a particular piece of laboratory equipment Marc mentions as an example reminds Raj of a science fiction television show he has been watching. What follows seems like an aside but nonetheless comes to bear on the main topic of conversation, ultimately changing the overall tone of the meeting and introducing hints of the hazards of failing to foresee the consequences of one's decisions.

The show is about time travel, and Raj takes a moment to describe its specific premise, which includes pivotal moments in United States history including aspects of the Cold War nuclear arms race. Marc responds that he thinks it would be fascinating to relive the fast-paced scientific and technological developments of the period. 'What happens when we do this?' he asks in a mockingly naive tone, voicing an unknown experimenter. Raj immediately picks up on the implied freewheeling attitude. 'There were a lot of explosions, I'm sure,' he replies. Marc agrees, claiming that at the time people were 'blowing shit up recreationally' and poisoning the environment. The two briefly marvel at the myopia on display here. 'We just didn't know!' Raj exclaims in mock innocence. Raj launches into describing a scene in one episode of the show in which people are gathered by a pool in order to watch the atom bomb explode in the distance, blithely unaware of the harmful effects of radiation even at a remove. 'Nobody realized,' Raj insists. Marc just mutters, 'Oh, wow' and shakes his head.

At this point a third shift has occurred, as the conversation henceforth takes on a more concerned tone. Gradually it becomes clear that while there may be no explicit linkage between nuclear scientists' failures to anticipate hazards and this particular scientist's potential oversights, the talk of unforeseen consequences has shifted an undercurrent in the conversation. Raj begins

to recount a project working on a testing facility for a gas utility company. The job was plagued by the client's persistent failures to articulate their needs in full. The architectural team would meet with them to gather information and begin developing the designs only to have someone from the client side remember something else important: 'And then they would kind of, like, say some things, and then a couple weeks later: "Oh! And then I need this." We would, "ok… what else do you need?" and then... The entire project.' Raj's narrative emphasizes the recurring frustrations (and then… and then… and then… the entire project) that may accompany this problem. Marc nods along. Raj goes on to elaborate the difficulties his previous firm faced. In particular, there was a deafeningly loud piece of machinery that had to be accommodated in the new facility, but its integration was something of an afterthought and it had caused problems. This sort of thing typified the whole project, and the lack for forethought eventually necessitated changes that cost the client roughly one million dollars.

It is important to note here that even though the topic ostensibly shifted, both Marc and Raj seem to be gradually elaborating their anticipation of the upcoming project. What Marc and Raj seem to be problematizing is not simply the generic possibility that something might get left out. Rather, it seems to be the case that a large part of the specific issue is that there are levels of detail that evade the casual and habitual glance. For instance, it was in their habitual dealings with the cacophonous machine that the gas utility workers overlooked its volume—a feature that posed an unanticipated problem for the design team. As Raj notes, 'So they just let it go… into that room. And it's really loud. We, you know, I didn't know how loud the machine was… you know, this is gonna be an issue.' In this way, Raj's tale indirectly contributes to and elaborates the architects' portrayal of the scientist (and 'users' more generally) as someone whose

habituated behaviors needed to be rooted out in their upcoming meetings. Confirmation of this interpretation comes in what Marc says next.

Explicitly tying Raj's story about the disastrous gas utility job to the method of questioning he would like to use on their upcoming lab design, Marc responds, 'so again, the value of uncovering all this stuff at once. It's absolutely that.' In so doing, Marc ratifies Raj's recollected experience as something which may typify this project as well. Marc says that he thinks they will have time on this lab project to reckon with those kinds of issues, 'but', he adds, and here the two say the same thing at once: 'you never know…' There is a pause, after which Marc speaks up again. 'I think that's the problem with scientists,' Marc concludes, 'cause they're just like, "oh yeah, I just do this thing." But once you get four or five layers into it they're, "oh yeah, I use solvents that are explosive"!'

Throughout the conversation, lack of forethought, the inadequate access to crucial information due in part to others' unexamined or implicit assumptions, disaster (given paradigmatic form as explosion), and the designers' desire for comprehensive methods of questioning all hang together as an imbricated and mutually implicating whole. Further, the designers can be seen as gradually elaborating their anticipations of how best to approach the upcoming meeting and what the stakes might be should they get it wrong. Crucially, it is apparent that some facets of their conversation which were not at first obviously relevant to the case at hand nonetheless contribute to the overall arc of the meeting. There is no reason to assume from the outset, for instance, that Raj's account of the television show that he had been watching would lead to speculation on the dangers of myopia or to a general turn in the conversation toward musing directly on how what users and clients take for granted can pose a threat to the success of a design project. In other words, there was no reason to see the overall

direction that the architects' collaborative anticipatory task took as itself being intentionally guided in a reflective mode. The architects seem, rather, guided by their own background assumptions and recollections, shifts of mood, and flights of reverie. And yet they collectively attend to these as portending exigencies and general lessons. They 'catch' these vicissitudes to varying extent and gradually elaborate a sense of the relevant contingencies, the stakes of failing to account for these, and what tactics they can employ to encourage adequately explicit awareness and anticipation in the scientist. These moments where something becomes reflectively available are often embedded within the reflexivity of interaction itself. In ways that seem to outstrip the topical relevancies of the conversation, the designers prompt reflection in one another.

Thus, we have a recurring pattern in which some things that are implicit early in the conversation gradually become more explicitly treated as matters that prefigure the challenges of the project. These include, most notably, the emergent construction of the scientist as a creature of habit. However, in keeping with what I have argued is the relative resistance of certain experiential modalities to reflection, there are also aspects which never come into the foreground of the conversation. Perhaps the most influential of these on the overall arc of the architects' interactionally coordinated anticipations is the turn in mood introduced in Raj and Marc's discussion of myopia on the part of nuclear scientists. Once the unintended consequences of scientists' failures of anticipation are introduced into the conversation, the architects' focus is increasingly devoted to the possibility of problems — epitomized, finally, in the image of a scientist negligent of explosives.

In anticipatorily engaging with the scientist's own capacities for reflection and anticipation, the architects ostensibly undergo a range of anticipatory experiences themselves,

though notably their talk is in large part limited in its reference to those aspects of experience which are most readily available to reflection (e.g. imaginings of future conversations). It is important to note that I do not claim certain knowledge of Marc and Raj's subjective experience. However, what I am able to show is that their conversation adheres to a pattern which strongly indicates that certain felt possibilities are progressively actualized within the conversation as explicitly recognized contingencies. This is consistent with my other observations in the field. As Marc and Raj themselves make clear in the quoted portions of their conversation, the issues and tactics that gradually emerge are things that, in the least, are indicative of the 'kind of thing that could happen'. It thus becomes evident that the architects' own explicit formulations of what may happen often lag significantly behind and may leave entirely unreflected-upon more tacit forms of anticipation which nonetheless operate to configure the horizons from within which those more explicit forms obtain their relevance and articulability.

**Conclusion**

Anticipatory experiences range in their mode of appearance, and degrees of vividness and focality. Because memories, sensations, moods and emotions, intuitions, and imagination, among others, can all appear as disclosing something about the future, anticipation is heterogenous and continually evolving within the stream of lived experience. I have argued that these various modalities of experiencing are differentially available to reflection. Resultantly, some forms of anticipation are relatively more implicit while others may prove more salient and offer more explicable anticipations. While something of this spectrum can be read into the existing literature on design practice, the full range of anticipatory experiences is visible (to the extent that

experiences are ostensible) in the moment to moment flow of design interactions like those between Raj and Marc.

These modalities of anticipatory experience are not independent from one another. Rather, as demonstrated in the case of Marc and Raj's meeting, the relatively implicit forms of anticipatory experience formulate a crucial background against which more explicit modes of anticipation take shape. Tim Ingold (2013:73) has characterized designers as "dream catchers," referring to the way fleeting moments of insight or tendencies exhibited within ongoing activities (such as drawing) are drawn into awareness and integrated into the execution of a creative task. This reflexive recognition is similar to what Donald Schön (1983) has spoken of as "reflection-in-action" in which the expert turns attention on the action even while still carrying it out. The same pattern manifests intersubjectively. To engender reflection in the user, the designers must reflect themselves. While the architects at Foresite Design aimed in certain contexts (such as in their dealings with 'users' like the scientist) for maximally explicit forms of anticipation the foregoing analysis strongly suggests that they nonetheless must live through the more implicit antecedents. By examining those more implicit anticipatory experiences, then, we gain insight on much more than simply what people hope for, plan on, aspire to, or dread. We catch a glimpse of how a given articulable experience of the future comes into being.

My theoretical aim in this chapter has been to suggest the continuity between marginally reflective and focalizable forms, to consider how those forms can relate to one another through time, and to show that vivid anticipatory experiences—such as those that may be of use in planning—are dependent on subtler experiential modalities. However, to be clear, I do not mean to propose a teleological model of anticipation: it is by no means inevitable that anticipatory experience gives rise to articulable visions of what the future holds in store. Indeed, such vivid

anticipations may be unnecessary or even unobtainable in many domains of life. Moreover, a non-teleological perspective on anticipatory experience also implies that anticipating some potentiality in explicable form does not mean finalizing once and for all what one anticipates. Experience streams on and when the anticipatory aspects of experience permit reflection and elaboration there is nothing but sustained attention to keep those anticipations in such a form. Thus, those relatively implicit forms of experience carry on after reflection ceases, lending continuity and meaning to salient and reflective anticipations whenever they arise.

# Chapter 5
# **Missing Persons**

It's 5:30, the end of a long day. The office is already half empty when David gets off the phone with a client. He signals to get Raj's attention. "So we tried, got denied," he remarks—obviously disappointed. Listening in, I piece together that David, the lead architect on a new radiology project, has been trying to convince his client to give the firm access to the client hospital's "patient advisory board", a volunteer committee who David hopes might represent the perspective of patients on his latest project. The client turned him down. "They didn't think this was the appropriate time to go through all that," David explains. Raj laughs, "This is the perfect time to go through it!" David doesn't reply. This is the latest in a series of frustrations with a client who hired Foresite Design for their expertise and approach but has not facilitated the meetings necessary for the designers to enact their pre-design "discovery" process. After a long pause, Raj adds something about the "project kinda crumbling." That remark gets a response from David: "Well it's, it's clients who want new work but can't meet to tell us what they want." The two speculate, somewhat sardonically, that they bet that when they send the client some generic plans there will be a lot of dismay and plenty of feedback. Though at that point, they muse, the problem will be that it is very different to request alterations to something that has essentially already been set out than it is to actually participate in framing the agenda from the start.

In chapter three I noted that Foresite's efforts to generate "empathy" through their methodological "focus on the user" were necessarily contingent on client buy-in and facilitation.

Above all, this meant needing clients to invest in and host meetings with various user types. From time to time throughout my fieldwork, the architectural designers would face the frustration of clients placing relatively low priority on the discovery process. As a rule, clients tended to be cooperative. Yet, when it came specifically to patients, Foresite had one persistent problem. Whether it was to avoid possible HIPAA violations or for the sake of rationing access to the limited resource of Patient Advisory groups, health providers rarely consented to allow patients to be interviewed, observed, or invited to planning meetings. This meant that over and over again, on every project undertaken by the firm that year spanning 2016-2017, and on nearly every project in the years prior, Foresite's architectural teams would design with the explicit goal of improving the patient experience without any more direct experience of patients than could occasionally be furnished by a chance encounter or personal acquaintance.

Despite the contemporary methodological emphasis on users, the architectural design process is full of missing persons. But their absence does not go unnoticed. Instead, they are represented by other users who have firsthand acquaintance with their type. The situation is so common that it justifies consideration in its own right. Though there have been decades of discourse across the design fields that champions user involvement in design (see chapter 1), the resulting literature taken as a whole does not consider who these users are. Much of the talk about "empathy" in interdisciplinary design scholarship (e.g. McDonagh and Thomas 2010, Postma et al 2012) takes for granted access to users—something that in practice is hardly a guarantee. As a consequence, one would be hard put to find much consideration, in design studies, much less in practical manuals and popular discourse, of the ways that design methods articulate with the organization of institutions or communities of practice. This chapter

represents an initial step to grapple with that issue in one of its most elemental forms: the necessity of relying on secondhand information.

These missing persons, and what follows from their absence, will be the dominant theme throughout the remainder of the dissertation. The patient serves a dual role in that project. First, patients are a population of people whose experiences must be, in some form, understood by the designers without the benefit of direct interaction. Consequently, the designers at Foresite would often rely on secondhand information in their effort to use the aesthetics and material affordances of the built environment to craft experiences of care. It was with patients, then, that the dynamics at issue in this chapter were on most consistent display. Secondly, while patients are the limit case of a recognized user type with no direct representation in the design process, they are not alone in being marginal to the process. Depending on the client and the project, there are shadings of similar absences; for instance, at times an entire group of relatively low-power users are represented by a single managerial figure (such as a head of department). In every project I witnessed or otherwise researched at Foresite and elsewhere, architectural designers invariably relied on proxies: users whose experiences would stand for all those of their "user type". In that respect, much of what goes for the architectural designers' style of response to patients' absence from the design process goes too for the case of all missing persons.

My goal here is to consider the architectural design of user experience from its logical limit: instances when the user is only indirectly accessible and can only come to be known through others who are more proximate. In this case, architectural designers are reliant on other users, primarily medical staff, in their efforts to understand—and, ultimately, affect— "the patient experience". While I will only be able to suggest the consequences of the absence of any particular user or user type in meetings, the total absence of patients makes for a much starker

pattern; for instance, I can directly demonstrate that the presence of medical staff lends relative priority to their concerns over those that may be held by patients (to the occasional consternation of the designers, as we will see). More specifically, I will argue in this chapter that even when medical professionals provide information about patients as users, their perspectives and modes of attention make these secondhand accounts starkly different from the kind of account of patient needs and experiences that might be given from the patient's perspective. Architects, I argue, to some extent empathically inherit this viewpoint. In the closing section of the chapter, I will show how an analogous situation resulted in some grossly unsatisfactory conditions for a population of users who were not involved in the design of a medical facility.

**Empathy and Reiteration**

By suggesting that architectural designers are the inheritors of medical personnel's views I am drawing on Edith Stein's notion of "reiterative empathy". Stein wrote her doctoral dissertation *On the Problem of Empathy* (1989) under Edmund Husserl's supervision. In it, she argued persuasively against a number of contemporary theses on empathy, putting forward a perspective on empathy and intersubjectivity inspired by Husserl while innovating and expanding upon that Husserlian frame in her own right. A chief concern in Stein's thesis was to establish through phenomenologically-grounded premises how we can intuit the other's experience without improperly implying that we do so by subsuming or being subsumed by that other. Empathy, she insisted, is not an imaginative projection onto the other person, nor is it a perspectival merger. For Stein, empathy just is the special form of intentionality entailed in

other-directed consciousness.[57] To empathize was to be directed toward another's intentional act[58], she argued. Thus, empathy in Stein's conception is also to be distinguished from non-phenomenological uses that portray it as a particular orientation taken up by the empathizer (e.g. receptiveness to other points of view or a compassionate attitude) or that relegate empathy to a particular domain of the empathized subject's experience (e.g. their emotions, or to what goes unsaid).[59]

Empathy, Stein would argue, is a mode of intentionality, *sui generis*. To empathize is distinct from imagining another person, and it is also distinct from the perceptual acts by which we intend the other's physical features. In empathy, I am *at* the other person's experiencing, but it is whatever is evident of that person's experience that is intended and not the experience itself as given originally (primordially) and uniquely to the other (Stein 1989, see also discussion in Zahavi 2014). My perceptual experience of the other is primordial, whereas the other's experience as empathized is not. In Stein's account, as well as in the theories of numerous other phenomenologists—including Stein's teacher Husserl and later Maurice Merleau-Ponty (2014) —empathy is closely linked to the phenomenology of the body, and specifically the alterity in the lived body that makes the intuition of the other's body as lived body (*Lieb*) possible. It is the other's living body, given in this way as an expressive unity, that subtends empathic experience.

[57] In interpretations that have stressed Stein's continuity with Husserl (e.g. Zahavi 2014), empathy entails a "thematic" consciousness of the other. My understanding is that this interpretation insinuates Stein (however safely) into a schematization of affection and attention that is not articulated (as such) in Stein's own writings on empathy.
[58] For utter clarity, let me state that "intentionality" and the concept of an "intentional act" have a special meaning in phenomenology. "Intending," as I use it here, is to be distinguished from common associations like "meaning to do". Rather, intentionality is the mode and quality of consciousness directed toward an object (see Duranti 2015).

[59] All such things may be instances of empathy, but for that reason are not to be identified with it. We have in cases where empathy is especially marked certain types of activities, privations of personhood, and epistemic frames that are alloyed in the experience of empathy. Thus the recognizability of empathy in a given case suggests both the cultural salience of certain social scenarios (see Hollan and Throop 2008, 2011) and the fact that empathy can (and, in those salient instances, must) be staged—i.e. given intuitive performative criteria that allows us to answer the question "how do we know the thing has happened"? —in part through what Throop (2008) refers to as dimensions of "discernibility".

The other's intentionality is co-given with their perceptible body. Consequently, empathy, unlike other forms of social cognition such as imaginative perspective taking, is linked to bodily co-presence[60] (see Throop and Zahavi, in press).

Empathic acts, Stein observed, could be reiterative. That is, one empathic act could be founded upon and have as its reference in another, preceding empathic act. The concept of "reiterative empathy" was in part a reappropriation—and, rightfully, an amendment—of Theodor Lipp's notion of "reflexive sympathy". Drawing upon a phenomenological distinction, she points out that all forms of representation have as "an ideal possibility *ad infinitum*" the capacity for reiteration. Thus, one can reflect upon an act of reflection, imagine an act of imagining, *et cetera*. Stein asserts that this reiterative quality also obtains in the case of empathy. "And so," writes Stein (1989:18),

> I can also empathize the empathized, i.e., among the acts of another that I comprehend empathically there can be empathic acts in which the other comprehends another's acts. This "other" can be a third person or me myself. In the second case we have "reflexive sympathy" where my original experience returns to me as an empathized one.

With this observation, Stein makes evident that the phenomenology of empathy is not merely a unidirectional phenomenon, but one that has extended and looping iterations. The observation was simple and brilliant. It was simple because it is a logical extension of Stein's premises—widely shared among phenomenologists; it follows that whatever can be argued of reflective consciousness generally (e.g. the ability to remember an act of remembering) can be applied to

[60] Co-presence is classically the way that we can be certain that all the conditions of possibility for empathy are in order. In that sense, it is something of an ideal limit since there is no more 'with' someone I can be then alongside them, paying attention to the same things and to one another. While I do not pursue the implicated lines of questioning here, it is worth noting that co-presence can be subject to a variety of intentional and material modifications. Two horizons of inquiry subsequently open up: one concerning the most modest possible criteria of co-presence necessary to sustain an empathic intentionality, the other concerning possible augmentations of the senses or another form a mediation that lends relative salience to some aspect of the other that would be difficult to attend to in the 'bare bones' face-to-face situation. Either direction has bearing on the issue of technological or otherwise-material affordances (for some related considerations see Throop and Duranti 2015).

acts of empathy specifically. It was brilliant because, by introducing reiteration, Stein's conceptualization potentially opened a form of empathy to persons beyond the sphere of direct interaction.

My interest in Stein's comments about the reiterative potential of empathy is to draw out from her theory some useful premises for thinking about the entailments of architectural designers trying to understand and design for the experiences of users they are only acquainted with secondhand. That effort will require some elaborations since in her thesis Stein (pg.18) goes on to say that, "The significance of this phenomenon in the give and take between individuals does not need to concern us here because we are dealing with the general essence of empathy and not with its effect." In keeping with Husserl's eidetic aims, Stein left mostly unelaborated the sociological implications of reiterative empathy. What might be clarified by appeal to multiple empirical instances is instead left mostly as a gesture toward the realm of social phenomena; extended analysis of the manifestations and effects of reiterative empathy within the social world was out of bounds. What mattered most, in that respect, was merely to observe the "ideal possibility" of potentially infinite recursions of empathy.

Yet Stein appears to have had a good eye for the more mundane empirical patterns of social life and could perhaps hardly help but make the offhand observation in the guise of illustrations. And so there are exceptions. The most evident exceptions pertain to her theorizing of how the "psychic individual" is constituted in "reflexive sympathy"—how my self-experience comes into being in light of how another constitutes me. In reflexive sympathy I am given to myself doubly: as I experience myself primordially and as I take the other to be experiencing me. It is possible that the other can know me in some ways better than I know myself, and I can come to know myself more completely (if extrinsically) as a result. I can also be deceived, in some

sense, by how the other takes me (more properly: how the other is taken to take me). And the only check against this deception is my own self-experience.

The possibility of deception was a recurring theme in Stein's thesis, but with respect to reiterative empathy deception served to problematize the disparity between the first- and second-person's viewpoints. Crucially, as a non-primordial experience, reiterative empathy is essentially aspectual. Analogically, we can say that unlike a perceptual encounter in which apperceived sides of an object can be fulfilled in movement, the non-primordially given cannot be glanced around. While the other is primordially given in my own experience, what appears to them as primordially given cannot appear so to me. When I empathize with others it is always with what is to me a non-primordially given experience; thus, at least within the moment of empathizing it is a face-value affair. What you see of me is something of the manor of my experiencing rather than the object of that experience; and what you empathize can itself only be ascertained in the aspect presented in your regard. In the case of "reflexive sympathy", what I see of what you experience of me is narrower than what is given of me to be experienced. Thus, in reiterative empathy we have a look at a look (with each look in itself being only a partial view).

It makes some sense, then, to talk about reiterations as each entailing a narrowing of aspect. This narrowing will be constituted differently and to different effect if it pertains to a third who is present rather than absent, or if it refers back to the first person; I will delve into the aspect in which it makes sense to talk about reiterative empathy for persons who are not currently co-present later on.[61] However, for the time being we should observe that even in the case of "reflexive sympathy", where one has immediate and reflexively organized access to the

[61] This is especially pertinent in the case of an absent third, because there the second's reflective (now, non-primordial) access to the third is constituted all the more determinately by some mode of interest which will draw most readily on what was empathically available in a past face-to-face encounter.

other (say, an interlocutor), Stein notes that those reiterations are sufficiently narrow in their aspectual presentation that we will find ourselves uniquely, and always partially, apprehended in each encounter. So, Stein (1989:88) writes, "...I can have just as many 'interpretations' of my psychic individual as I can have interpreting subjects." In an endnote she approvingly adds that William James was therefore "not so incorrect" when he wrote in the *Principles of Psychology* that a man can have "as many 'social selves' as there are individuals who know him" (though she fastidiously notes that she objects to the term "social self") (cited in Stein 1989:128).

From here on we begin to proceed with much less direct instruction from Stein. The constitution of the psychic individual is a much-celebrated theme that comes to dominate the latter half of her thesis (Baseheart 1997), but it does come at the cost of belying the full conceptual grasp of her observations on the reiterative potential of empathy. Thus, in her relatively sparse examples, Stein seems to limit herself to cases akin to those Lipps described as "reflexive sympathy"—she even reverts to this language at times (e.g. pg. 88). The more fundamental and unifying insight behind the notion of reiterative empathy slips, for the most part, out of the frame. Consequently, despite my efforts to find some mention of reiterative (or 'iterative' as it is sometimes called) empathy that was not devoted to a looping effect within a dyad, it so far appears that subsequent scholarship on reiterative empathy has been entirely devoted to this privation (e.g. Cummings 2016, Fuchs 2017, Garner 2018).

As noted, Stein does not make any express analyses of cases where reiterative empathy extends out to a third party. However, in a second passage dealing with the possibility of being deceived there is some glimpse of how Stein may have anticipated the role of reiterative empathy in inflecting an individual's experience of and attitudes toward a third. In the passage in

question, Stein introduces the notion of "empathic valuing."[62] In her example, Stein offers, among other possibilities, the possibility of being raised by "conservative parents" and thus being an anti-Semite. She offers that in such a case the "hatred would be entirely genuine and sincere" despite the fact that "it is based on an empathic valuing rather than on a primordial one" (Stein 1989:31).[63] By positing acts of valuing as empathically communicable, Stein offers a means by which one can inherit, so to speak, another's way of seeing.

It is evident that "empathic valuing" is not in itself equivalent to reiterative empathy. To begin with, I might handle a book gingerly because something in the comportment of the person lent it to me indicates that it is precious; the empathic valuing need not address a person.[64] Moreover, while empathy may make it possible that my feelings and values may be responsive to another's, I may empathize with another person without having an equivalent experience (ibid, 15); I may, for instance, be confused by your confusion, but I need not be. But for all that, the

[62] The idea of empathic valuing is one that Stein leaves mostly unprefaced and unelaborated. I have so far been unable to find published works making concerning "empathic valuing" that are more than passing references to the passage in question. Perhaps, to Stein and to Husserl, the idea so consonant with the general premises she was putting forward (or those she had taken on from Husserl) that nothing special needed to be said regarding it. For instance, Stein also talks about being joyful at our friend's joy, discriminating this from the phenomenon of being joyful for the same reasons our friend is joyful and relates this difference to the events "value for others" versus its "value for ourselves" (pp.14-15). Nevertheless, while the prior example is clearer and more evocative, it hardly resolves many questions concerning the nature of valuing-because-another-values-as-such. One possible implication, which I explore to a limited extent here, is that empathic valuing is one means by which our experience of a third (plural or singular) is inflected by the experience of a second.

[63] By focusing in on social attitudes, Stein offers empathy as a mechanism for socialization. To head off one possible objection, it should be noted that Stein—who is credulous to the notion of "emotional contagion" —does not think that is what is going on when a child adopts antisemitic views. Immediately following her remarks on "empathic valuing" she notes that such a valuing may be *enhanced* by contagion, in which case the experience would be accordingly modified. The valuing, however, is particular to empathy as it is not original to a first person but to a second.

[64] Further, while it is tempting to imagine that the empathic valuing in Stein's examples might be conveyed in direct interaction with members of the target social group, we cannot assume that to be the case. One could, for instance, very effectively learn hate from someone who had no direct experience with members of the hated group. If we want to read reiterative empathy into that situation we can, in principle. We would only need to take it on faith that somewhere in the daisy chain of interpersonal relations the valuing was based on a real, empathic experience. While I would maintain that possibility as an "ideal limit", it is also true that at the vanishing point of actual description we lose just about all explanatory power.

example Stein offers is particularly illuminating of one of the distinctive qualities that inheres in reiterative empathy: the other's empathized experience (or some aspect thereof) can become a guide by which we are intentionally channeled toward some object, toward yet another person, or back toward ourselves. There would be two variations on this quality, corresponding to the extended and reflexive modes of reiterative empathy. In the reflexive mode we could value ourselves (in some aspect) empathically in light of another's regard.[65] In the extended mode we could value a third person or that third person's experience in light of how a second is empathically given as valuing the third's experience.

Thus, although Stein's notion of "reiterative empathy" has typically been invoked only to describe the same dyadic interactions as Lipps' "reflexive sympathy", it is readily observable that "reiterative" acts of empathy need not take place within a closed loop. In particular, we can to some extent take on another's empathic understanding. In reiterative empathy we can become acquainted with the second's way of seeing us, and/or with third parties through the second's way of seeing them. This permits that empathy is not simply our means of being presented with the experience of the other immediately before us, but that the empathic target is also an opening onto the world beyond our direct experience. "Here," she concludes, "emerges the possibility of enriching our own world image through another's, the significance of empathy for experiencing the real outer world" (1989:62-3).[66] Of our knowledge of the world more generally, Stein (pg. 19) writes,

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[65] In a paper given at the AAAs several years ago ("Myself in Light of What You See"), I examined this phenomenon (and the modifications it made possible) as a medium of socialization into Charismatic Christian communities. Neophytes would discover that others saw in them some quality or spiritual power and subsequently come to experience that quality or power for themselves.

[66] Stein, like Schutz in works like "On Multiple Realities" (1962), observes that she is working at an intersection of phenomenology and pragmatist philosophy.

> "Knowledge reaches its object but does not 'have' it. It stands before its object but does not see it. Knowledge is blind, empty, and restless, always pointing back to some kind of experienced, seen act. And the experience back to which knowledge of foreign experience points is called empathy." [67]

Here Stein is very much in line with Husserl's observation that intersubjectivity—though here considered mainly in its empathic mode—as the condition of possibility for objectivity (see discussion in Duranti 2010). More specifically, she seems to have sketched out a specific intersubjective precondition for what Alfred Schutz (1967, Schutz and Luckmann 1973) would systematically theorize as the stock of knowledge (including ideal types) and the social distribution of knowledge. I will return to this point in the coming section.

Laid out here, briefly and sparsely, are the phenomenological grounds for a trajectory of thinking that I will now begin to bring into focus. First, let me restate those premises and their implications for my next direction. As I view it, the most fundamental premises to carry forward are as follows:

1. Empathy is that particular intentionality which is directed toward the intentionality of another.
2. Empathy, as such, is made possible by the perceptible presence of the other's body. The perception of the other's body is primordial to the empathizing subject, but the empathized experience is not.

[67] With these admittedly sparse though evocative comments on reiterative empathy, Stein—in my reading—prefigures some of Husserl's later emphasis on generativity. Donn Welton (1991:592) writes that when Husserl began to think about the individual as a being with a personal and cultural history, he began to articulate a sense of intersubjectivity that was distinct from the 'Cartesian' approach through empathy. Reading Stein prompts me to differ with Welton's characterization of empathy, and thus to take a more generous position on the concept's continuity with the generative phenomenology of the lifeworld. I think that Stein's recognition of the implications of personhood, empathic valuing, and reiterative empathy for the continuity ranging episodic interactions to ongoing socialization throughout the lifetime suggests an intrinsic compatibility between the early Husserl/Stein view of empathy and Husserl's later generative phenomenology.

3. Because the empathizing subject does not have the other's experience originally, it appears precisely as another's experience rather than the empathizer's own. This, however, also means that the empathized experience appears in a particular aspect.
4. Empathy can reiterate, and when it does empathy does not shed its aspectual nature. So, in the reflexive mode the empathizer has a view of a view of himself. In the extended mode, the empathizer has a view of a view of another (the first empathizes with second's empathizing with a third). Thus, in reiterative empathy, we can partially inherit another's way of empathizing.
5. Empathy, including reiterative empathy, is the primary means by which we form our understanding not only of those persons in our presence, but of their view toward the world (including others); it is the basis upon which our knowledge 'reaches' the world beyond our direct experience.

**Reiterative Empathy in the Phenomenology of the Social World**

In preparation to consider the situation created when architectural designers attempt to design for absent users by way of secondhand accounts, I will proceed to articulate some of the epistemic prospects in different possible configurations of the intersubjective field. Throughout this portion of the chapter I will keep as my reference one intersubjective array: an ego figure ("the first"); the other whose empathizing is empathically given ("the second"); and another who is empathically given to the second ("the third") and may also be perceptible to the first. I consider the potentialities of this array in two configurations. In the first instance, I consider a situation in which the first, second and third are all co-present. In the second instance, I compare these findings to the possibilities inhering in a situation in which all three interactants are only

co-present in pairs at two different points in time—a situation that matches the conditions under which architectural designers attempt to design for absent users utilizing secondhand accounts. My aim here is to consider how the presence or absence of the third affects the potential modifications of attention that can be undertaken by the first. Obviously here I cannot game out all the possibilities and consequences that may suggest themselves. There are manifold cultural and contextual factors influencing how and toward whom our empathic attention may be drawn (see Throop and Duranti 2015). In this context I will primarily consider the presence or absence of the third with respect to the verifiability and richness of what can be empathized reiteratively by the first.

In co-presence every participant in the interaction is potentially mutually perceptible. When all parties are co-present, I can shift my attention from one to another interactional partner. I can seek in one person's countenance, for instance, a cue for how to take what another has said or done, or to find confirmation that we have judged it similarly.[68] I can respond to one interactional partner in a way that elaborates my understanding of what she has said, because some way our co-interlocutor has looked or something he has remarked has led me to believe that he does not fully grasp what she meant to convey. The latter example involves a fairly complex allocation of reiterative empathic attention of a kind that is beyond what I can delve into here. In the situation I am considering, the third is the empathic target of the second, and the second is the (direct) empathic target of the first. It may be most common that this configuration occurs only within a fleeting interval of a more extended interaction. In order to understand my friend as annoyed by our mutual acquaintance, for instance, I must intend the connection between their states.

[68] See, for example, Harvey Sacks' (1989) lecture "One Exchanging Glances".

Goffman (1959:7) offers an example of exactly this form of thematization. He recounts of "a crofter's wife" in the Shetland Isles who,

> ...in order to discover what some acquaintance (A) 'actually' thought of acquaintance (B), would wait until B was in the presence of A but engaged in conversation with still another person (C). She would then covertly observe the facial expressions of A as he regarded B in conversation with C. Not being in conversation with B, and not being directly observed by him, A would sometimes relax usual constraints and tactful deceptions, and freely express what he was "actually" feeling about B.

Goffman's example makes clear that even when my interest is in the second, insofar as I am concerned with how that second experiences a third, my empathy is still reiterative in nature. At root, I must understand the third's behavior in its significance for the second. My attention can be directed toward the second as recipient of an impression or toward the third as the giver of that impression. Theme, in other words, varies within the intersubjective field. But in the second case it should be noted that the third can only appear as the "giver" of a received impression through a sense that has been *inherited* from the second. (In this sort of situation, we can have an instance of empathic valuing.)

The ability to vary my theme within the intersubjective field potentiates reflection upon the second's act of empathizing with the third. In turn, this thematization enables me to make judgements regarding its conformity with my own empathic experience of the third. Like the Crofter's wife, I can do so as an empty anticipation that there is something-of-x-nature to learn from taking the second's empathizing the third as my theme. However, generally it may be easiest to distance myself from and reflectively evaluate the second's view when there is an asymmetry between what I observe the second to empathize and the impression I have received of the third for myself. In the situation of inclusive co-presence, the thematization of the second's mode of attention is thus made readily accessible in light of my own occurrent

intuitions of the third. This thematization can be a precursor to bracketing the second's empathizing.

It could be mistaken, however, that distancing myself from (bracketing) the second's way of seeing somehow voids the reiterative nature of my empathy (and thus the aspectual inheritance of the other's empathic experience). Instead, what is in question is the meaning the reiterative empathic experience holds for me. For instance, empathic valuing may still obtain by virtue of the second's impression showing me "a new side" of the third.[69] Or elsewise, I can have my understanding of the third enlarged/augmented through a modification of my attention to the third made possible by my empathic intuition of the second's own empathic experience. In other words, not only my total impression, but also my finite acts of attention are affected, so that I do not, for example, merely receive the impression that A's expressive act meant X to B, but I can potentially see for myself (if bracketing, 'try on') that A's expression holds X meaning. Here we see an isomorphic pattern to the modifications that inhere in socialization of all types (see Duranti 2009).

So, in co-presence I can not only learn about the second's view of the third, but I can learn from it in a way that I can subsequently embody. I can also compare it to my own occurrent empathic view of the third and judge it in the following ways: it can appear to me that the second's empathic intuition of the third is a mere consequence of the second's particular orientation or mistaken assumptions; it can appear that I have underappreciated some aspect of the third's experiencing or character which now becomes apparent in light of the second's empathic regard; it can appear that the second's empathizing has selected a different aspect of the third's experiencing or character than I have previously known or was currently attending to

[69] The phenomenon of seeing a new side of the third is basic to the formation of social attitudes and personal ideal types.

and which I might subsequently intend 'for myself' depending on this aspect's relevance for my purposes and my relationship to the third. In all instances, however, insofar as I can make reflective judgements regarding the second's empathic regard of the third I must have reiteratively 'gone through' the second's empathy to grasp its sense.

I want now to turn to the situation in which only the second and I are co-present, but a third is given in the form of some representation. For the time being, I am leaving to one side the question of what difference it might make if the second is engaged in an act of memory. Doubtless this modification comes with consequences. However, I am taking as the basis for considering extended, temporally distributed acts of reiterative empathy Stein's observation that there is an essential capacity for reiteration in all reflective acts: as one can empathize the empathized and remember remembering, so too one can empathize the remembered empathizing. In view here are the reiterative empathic possibilities available to the first person, not an analysis of the second's remembered empathic experience as such (which—to note one significant difference—is no longer primordial, being that it is now only remembered). That being said, I will not claim that all else I have established in the foregoing passage about reiterative empathy in its extended mode remains unchanged. Instead I will attempt to plot out the differences that obtain through discontinuous co-presence (temporally distributed pairings). These include, most generally, a diminution in my capacity to empathize richly with both the third and the second.

Before venturing into the possibilities inhering in these temporally distributed pairings, however, I want to bridge the two configurations under consideration by first offering an example in which there is temporal immediacy but not all three parties are mutually perceptible. Consider this scenario,

> *I am sitting in my office. Seated at my desk, I cannot see down the hall. A colleague stops by for a moment's conversation and remains standing in the doorway. From her position*

> *she can easily see out from my office. As we chat she occasionally glances down the hall. She is doing just that when suddenly I see a pained expression come across her face. I immediately ask what is wrong and she reports that she has just seen a friend of ours limping as though he has been badly hurt. I become concerned and get up to see for myself whether our friend needs assistance.*

There obtains an inherent limitation in how evident it is what the second is empathizing at all (as opposed to feigning), which is only partially ameliorated when the second puts her empathic experience into words. There is in principle, however, some unverifiability to the second's account. Given that the third is only indirectly given (as the object of the worried look) and fleshed out through a verbal account, the link between primordial (in perception) and non-primordial (in empathy) experience is only intact in the case of the second. Only a non-primordial experience—which is both primordial and non-primordial to the second—connects me to the third. To change that situation, I must get up and seek out our friend for myself (at which point we would enter into the situation of total co-presence analyzed previously). For my purposes here, a temporally discontinuous reiterative empathic experience comes along with the same limitations. I observed that in co-presence I can more or less freely modify my attention to my consociates such that the second's empathy for the third can to some extent be compared to my own (becoming thematic in reflection). However, when not all are co-present the situation changes. There is no opportunity to peer around—so to speak—the second and see the third on the hither side of her experience. What becomes most relevant, then, is to consider how and to what extent the aspectual nature of the second's empathic experience can become thematic for me, and to what extent I can make judgements concerning its veracity.

Stein shares with Alfred Schutz (1967) a belief that much of our understanding of the social world is expressed in typifications.[70] Stein offers that (1) there are degrees of generalized

[70] See, for example, where Stein describes the errors in empathy made possible by overgeneralizing (pg. 87); likewise, inspired by Dilthey's observation that "personalities have an experiential structure of a typical character" ,

typicality that correspond to degrees of empathic understanding, and (2) that greater degrees of commonality between my own experience and that of the other with whom I empathize are conducive to greater degrees of empathy (see pg. 115).[71] These typifications are not exclusive of empathy but instead occur along with it. For example, in empathizing with a person we 'see' the emotions and values they are expressing as a manifestation of attributes of their character (a situation Stein compares to perceiving a particular quality of an object that is nonetheless given as a whole—see pg. 86). In circumstances where the experience another is undergoing is foreign to me, I am still able to empathically identify and appreciate the nature of that experience (see pg. 115, see also Zahavi 2014:119), though in doing so the foreignness of that experience is marked. It is this markedness that manifests in my assignment (or creation) of a type (e.g. people who expect to be reincarnated). Thus, to put the matter in Schutz' language, the "stock of knowledge" stemming from my past experience in the social world permits me to understand my fellows with differing degrees of depth. At one extreme are persons for whom I possess an individual type (see Schutz 1976a,b; Stein 1989:86, 114-116), while on the other are those

she concludes that "every empathic comprehension of a personality means the acquisition of such a type" (pg.114). Where there appears to be a difference is in accentuation. While Stein mainly keeps her focus on the empathized individual's style of experiencing and the problem of the extent to which that style overlaps with that of the empathizer, Schutz elaborates the face-to-face situation in the direction of publicly available meanings. I do not differentiate them from one another on this point, however, because it seems that typification plays essentially the same role for both of them: in either case it is a contextualizing sense of the other that bridges our past experience with our ongoing and anticipated future experience.

[71] There is a two-fold problematic implied by these observations, and Stein is keenly aware of it. On the one hand, we most richly understand what falls within our own experience and style of experiencing. On the other hand, the "objective" world is precisely that ideal limit which could be described as all possible objects of experience revealed in all manner of experiencing. Thus, we are bound to be limited in our experiencing of the world and our understanding of one another by virtue of the same finitude that makes any intersubjectivity whatsoever possible. Given this condition, there is a danger in retreating into our individual viewpoints, falsely presuming sameness on the part of others or the superiority of our own knowledge, and thus attitudinally constricting our channel to the intersubjective world. This is why Stein (1989:116) would write that "If we take the self as the standard, we lock ourselves into the prison of our individuality. Others become riddles for us, or still worse, we remodel them into our image and so falsify historical truth."

people and activities that I know about only in gradations of generality (what Schutz calls the "they orientation").

With Stein and Schutz, we can say that typifications are always at work to some extent, even in our empathizing with an individual *qua* individual. As I will illustrate going forward, however, in moments of extended reiterative empathy with a second in the case of an absent third, typifications play a more prominent role in empathic experience. Most importantly, while it remains possible to some extent for me to bring the second's empathic experience into focus without a contrasting intuition, the manner of bracketing is fundamentally changed. I can only relativize the second's way of seeing within a context of ideal typifications. I must impose some impression of what the second or the third are like in order to relativize (make allowances for) the behavior witnessed or under description.

These allowances are a reflective act of judgement that can subsequently play a part in further acts of empathy, as they can in more elaborated inferences. If, for instance, I have a personal type for the second—which is to say that I have something I know about the perspective they take on certain issues, their degree and form of familiarity with certain practices and institutions, and their typical attitudes and ways of conducting themselves with certain types of people—I can provisionally apply these operating assumptions.[72] With respect to my view of the second, I can thus see my acquaintance as acting in or out of character. Likewise, I can make a kind of provisional allowance for these qualities on the working assumption that this person will be more or less the same character in their own account as in all my previous experience. The same holds for second persons known more anonymously, though in a somewhat different

[72] I can do this correctly or incorrectly; my colleague in the doorway might be fond of practical jokes and knowing this I might doubt that the third (our friend in the hall) is in any way genuinely given by my colleagues pained expression. Nonetheless my friend might be out there and hurting. Whether I give credence to what is empathically given of an absent third is in this respect indifferent to the veracity of the second's empathic experience.

manner. In the case of a more general ideal type it is only what I know of anyone of this type that can aid my interpretation of a given individual; so, by extension I might only be able to make very broad and uncertain allowances.

I am in either case limited in the extent to which I can reflectively verify the second's observations. For instance, I can ask myself whether they are consistent, weigh the preponderance of evidence and provisionally discount the inconsistencies. However, doing so involves a process of inference which is predicated on my empathic attention to the second and does not contribute positively to what I have empathically gleaned of the third (though I may find my own interpretation more convincing).

I am likewise limited in how well I can thematize the second's style of experiencing the third. Just as it becomes difficult to say what I empathize of the third was directly evident to the second versus what was assumed in a process of inference, it becomes hard to know how the second's original empathic impression was related to his occasional attention. I am all the more inclined to see the third's style of attention as typical, if I thematize it at all. In ordinary situations I am relatively unlikely to thematize it unless it contradicts some typifying judgement I have made myself regarding the third (or persons of the third's type). Thus Stein (1989:86) notes that, "If someone tells me about a dishonest act by a person I have recognized as honest, I will not believe him."

If I am only co-present with the second, my prior knowledge, however limited, does play a part in my empathy. But when empathizing with the second's empathically founded view of the third I am limited to provisional allowances in which the third—should I enter into such reflections—can only be imagined or posited to be any way other than how the second experienced him. (This is equally true whether or not I know the third. The only things that

change are my degree of pre-established knowledge of the other and, with that, the particularity of my acts of imaginative perspective taking.) Outside of total co-presence, to bring into view the second's way of seeing does not—and as a rule cannot—produce any new knowledge of the third. To take the second's empathizing (or any aspect of their lived experience) as theme only produces a modification in my understanding of the second. I can accept or reject the second's empathic view of the third in whole or in part, but insofar as I am able to empathize with the third I am essentially and unqualifiedly tethered to empathic acts as lived from the second's point of view.

Taken together, the various ways reiterative empathy is conditioned by the presence or absence of all parties do suggest that there are significant limitations to the richness and veracity of empathic experience (toward both the second and the third) when the third is not co-present. For my present purposes, the most significant to the consequences for the first is that the second's empathic experience cannot be "peered around". Once the third has appeared through it, I must either take it on in some respect as a compliment to my own or suspend my belief—in whole or in part—with the aid of some pre-established typification of the second or third.[73]

I noted in the previous section that Stein shares with Husserl the premise that intersubjectivity is the basis of objectivity. Specifically for Stein, this objectivity arises through empathy. "Here," she writes, "emerges the possibility of enriching our own world image through

[73] "My friend A tells me about X whom he recently met and whom I do not know. He proceeds to characterize X, that is, he constructs an ideal type of X by keeping invariant his direct experiences of X, thereby transforming them into typifications. A's typifications depend, of course, upon his stock of knowledge, his biographical situation, his interests when meeting X, his interests when telling me about X, etc. I refer the ideal type, as constructed and communicated to me by A, to my own stock of knowledge according to my own biographical situation, my interests, etc. The ideal type of X is therefore not identical for A and for me. I may even question the validity of A's characterization of X on the basis of my own characterization of A: 'A is an excitable type ... he is likely to see people in his own peculiar way'" (Schutz 1976b:50).

another's, the significance of empathy for experiencing the real outer world" (1989:62-3).

Shortly afterward, Stein (ibid:64), acknowledging Husserl, writes,

> Were I imprisoned within the boundaries of my individuality, I could not go beyond "the world as it appears to me." [...] But this possibility [of a shared world] is demonstrated as soon as *I cross these boundaries by the help of empathy and obtain the same world's second and third appearance which are independent of my perception*. Thus, empathy as the basis of intersubjective experience becomes the condition of possible knowledge of the existing outer world, as Husserl and [Josiah] Royce[74] present it. (Emphasis added)

The notion of a second or third appearance independent of my perception (a phrase that I emphasize because I believe its language to be suggestive of extended reiterative empathy) draws attention to the essentially face-value nature of much of my empathic exposure to the world beyond my immediate experience. "Truth lives", as William James (1995:80) remarked, "...for the most part, on a credit system. [...] But all this points to direct face-to-face verifications somewhere. [...] We trade on each other's truth." Stein is quite explicit that there is always a risk of deception in empathy, even when we are in the face-to-face situation with a single empathic target. She is equally clear that the only remedy is more empathy. "In order to prevent such errors and deceptions," the philosopher offers, "we need to be constantly guided by empathy through outer perception" (1989:87). It follows that the same applies to reiterative empathy. In its reflexive mode, that means successive empathic views of myself. For the extended mode, in the respect that I have considered it here, that means ongoing acts of empathy with the second (or with successive persons in the place of a second).

**Patients in perspective**

[74] "The world of my fellows' experiences may not be real just as I, in my narrowness, interpret it. But this world is still, from the philosophical as from the common-sense point of view, a real world, a complex of experiences other than mine, and more or less imperfectly communicated to me. And thus it is that one in general defines the metaphysics of the social consciousness. You observe once more the essential relativity of the individual Ego and the social Alter. Neither conception has any clearness apart from the other" (Royce 1895:578).

Reiterative empathy with a third to some extent inherits the seconds view—a view with intentionalities grounded in an attitude and relevancies. We can adopt the premise that all intentionalities are grounded, at least in part, on our skills and stock of knowledge. In the long view, this means that the natural attitude and its counterparts have historical sedimentation and some specificity to cultures and communities of practice (Steinbock 1995). For individuals, this history manifests through socialization into patterns of attention (Csordas 1993, Throop 2008). In a more immediate realm, members of a given community of practice fluctuate between different "cognitive styles" that organize experience within a given practical domain (Garfinkle 2006, Schutz 1962). Within those practical domains, social actors may have acquired varying degrees of skill at discerning relevant objects and events (see Goodwin 1994). Taken together, these historical sedimentations, styles and degrees of aptitude include ways of attending to and classifying people and activities.

While empathic attention may convey something of a third party without any insight into a third being sought out, we should expect that reiterative empathy often courses along well defined social epistemic channels. Knowledge of the social world gives us others as persons with particular fields of more-or-less established interests, relations, and domains of experience (Schutz 1976a). Past empathic moments, including reiterative permutations, furnish a sketch-form familiarity with others. What Schutz would call "ideal types" (including "personal ideal types", "course-of-action types", etc.) work in this case as anticipatory structures (cf. ibid:187). When opportunities for reiterative empathy are purposefully sought out they may be prefaced by equally complex acts of iterative and distributed imaginative perspective taking. Crucially, these

anticipatory acts articulate within a social-epistemic framework in which varieties of knowledge and experience are inferred based on a range of ideal typifications.[75]

Learning about others secondhand was an everyday occurrence at Foresite Design. The designers swapped stories and gossiped and sought out other's opinions regarding potential clients or colleagues' dispositions. To stick just with an example from within the Foresite Design office for the moment, my field notes include an account of a daisy-chain of secondhand information. One architect, Tim, was beginning work on a new project. He had worked for this client before but had no experience with the liaising 'project manager' assigned to oversee the client's side of the design process. He asked a colleague, whom he knew to have also worked on a project for this same client, whether he knew and had any impressions of the project manager. His colleague did not know the project manager but offered that he was friendly with another project manager for the same client who might be willing to offer some impressions. The colleague then phoned his friend, asking for a candid assessment, which he received. The colleague then summarily relayed his impressions of his friend's impressions of the original target—the unfamiliar project manager—to Tim, who subsequently (and, we might assume, provisionally) used his impression-of-an-impression-of-an-impression to inform his initial conduct toward the project manager.

[75] Amongst architectural designers I observed that it was quite common to use one another as proxies for gathering information. Since the stock of knowledge includes such things as typical greeting patterns, other's behaviors in such scenarios can often be anticipated in a purely taken-for-granted way. I more than once witnessed instances in which, to avoid the embarrassment of admitting to having forgotten the name of a particular client or prospective business partner, it would be arranged among the design team that someone who had yet to be introduced would go into the meeting first and introduce themselves. Stranger to stranger, the badly needed exchange of names and titles would appear natural and the confederate could then relay the information back before the others joined the group or use it in a marked way in the presence of the others once they had arrived. While I am often bringing into focus the empathic and (elsewhere) imaginative acts of perspective taking at work in the social exchanges of architectural designers and in their subsequent design activities, it should be taken into consideration that the salient moments in those processes are all subtended by and stand out from within a lifeworld in which there are always ever-so-many things which 'one' simply does or knows about 'everyone'.

Considering the prevalence of absent user types in healthcare architecture projects, most readily demonstrable in the near total absence of patients, a large proportion of the designer's efforts to empathize with users are similarly reiterative in nature.[76] More specifically, in seeking to understand missing users like patients through the accounts offered by medical staff, the architectural designers at Foresite sought to cultivate interactions that would facilitate reiterative empathy. This is at its most obvious during architectural designers attempts to learn about patient needs through seeking secondhand information from clinical staff. This effort, however, was sometimes frustrated by the limited perspective medical teams could offer on their patients.

My first opportunity to observe the architects working with users came when a local hospital hired Foresite to develop a masterplan for a new, expanded ICU. (I will introduce much more detail on this project in the next chapter.) Almost the entire project would consist of meetings with hospital administrators and various users. I had voiced my interest in studying the process of working with users, so David, who was lead architect on the project, invited me to the kickoff meeting and the work to follow. Meetings took place on a weekly basis over two months. Between meetings the architectural team, which was made up of David, Raj, and Armando—an architect on loan from one of the other offices—would work on and update the schematic design and masterplan based on what they had learned that week. Each meeting included doctors, a nurse manager, and one of the hospital's logistics and operations experts and (with a couple

[76] To be certain, it is entirely possible to understand what is said on a number of bases that outstrip empathy, including, as Stein (1989:82) would note, on the basis of the literal meaning: "Only if I want to have the intuition on which the speaker basis his statement and his full experience of expression, do I need empathy." Empathy, in itself, was not the only form of intersubjectivity undergirding the designers' efforts. Stein's point here is very useful for a heuristic distinction about the relative roles of empathy versus other sources of meaning. However, obviously a world in which we had either only empathy or the literal meaning of statements would be one in which language use and social action looked quite different than they actually do. Garfinkle's (1964; see also Cicourel 1974) "et cetera principle" is a case in point: incomplete and partially sensible utterances do quite well in customary activities provided the interlocutors have some shared understanding of how to carry on the action. In that case it is neither completely the semantic content of what is said nor the speaker's empathized lived experience alone that suffices, but instead a relevant supplemental knowledge base and procedural understanding of the activity.

exceptions) a project manager representing the client. Depending on the issues up for discussion, additional users were invited. These included infection control experts, chaplains, medical supply, and nurses. As with other projects, however, no patients or patients' family members participated and no one in particular was designated to represent their interests. Instead, as I would come to learn was a common and necessary practice, the designers would ask members of the medical staff to account for the needs and experiences of users on the patient side.

Patients were explicitly brought into these conversations more than once, but most focally during the meeting to which the whole nursing staff had been invited. On that occasion, the designers invited the nursing staff to give their comments on favorable and adverse features of their current ICU. They specifically asked if the nurses could provide pros and cons from their own experience and, additionally, pros and cons from the patients' standpoint. The exercise did not go as planned. The responses were entirely negative; the staff could think of nothing they liked about their current space. In itself that was no problem. The architects were happy to change things, and already had devised some concepts that they could see being validated by the feedback from the nursing staff. The resulting list of things to be improved, however, was also nearly exclusively focused on staff-related issues. My notes from the meeting show that the staff initially offered only two items for the patients: a window for each patient room (which is a code requirement) and more privacy. David, who was leading the meeting, was obviously off put by the omission and toward the end of the meeting he gently plied the group to come up with more ideas for patients. There was little headway. This situation was not unusual. In previous meetings, the more senior staff members and administrative higher-ups had not much to say on behalf of patients, either.

When we left the meeting, unlike other occasions, there was little immediate conversation about what had been learned. I had the impression that all of the designers were mulling over what they had heard. In the car, all were silent until David remarked that this meeting really "showed the value of primary research with patients"; this group didn't seem to know anything about them, he said. It had been his hope, I gathered, that the nurses would prove better acquainted with the patient's point of view than previous groups of users had. He said, indignant, "they work with them every day. How do they not know anything?" It is possible that Raj had already been sensing the same thing, because he immediately volunteered that he had been doing his own side research with an ICU nurse he knew. He had learned a little more that way. For instance, he recounted that when he asked about families and the first thing the nurse friend said was "ugh, freakin families." David asked Raj what he thought provoked that reaction. Raj says that the nurse said that families interrupt work with their questions. "So, it's about craving communication," David inferred. "That would certainly vibe well with the hospital performance reports," he mused further. "It would be nice," David concluded, "if there were a way they could actually be useful, part of the care." Raj, it seemed, had already felt the need to seek out an outside perspective, to glean additional insight to what had been offered in the user meetings thus far. David, too, was seeking much more psychological depth—trying to peer around the oblique views of patients and their families afforded by the medical team.

It was to some extent obvious to the designers that clinical staff were not always fully reliable sources concerning patients. By the point in my fieldwork when I began participating in user meetings (around two months), both Raj and David had independently reported to me that they believed staff could not always be counted on to think about or prioritize patient experience. David had added that he had observed that a user's aptitude for reporting on patient experience

was correlated with that user's degree of contact with patients. In his example, doctors and nurses were paradigm cases of two user types with appreciably different awareness of patients; doctors were relatively out of touch, so what they said had to be corroborated by the comparatively richer information available from nurses. Raj, for his part, had in conversations indicated that staff frequently struggle with as simple a task as describing "patient journeys" outside of their immediate practical domain; as soon as the patient moves on to the next phase of activity (for instance, out from radiology and back to an exam room) the narrative account is likely to break down. Without direct interaction with patients, the typical knowledge and patterns of attention exhibited by various user types could work to some extent as an interpretive aid, but they could also simply be a point of recurring frustration.

Healthcare professionals' struggle to give account of patients in a way that would fully suit the designers' purposes is not on account of pure ignorance. To the contrary, nearly all the users who participate in Foresite's design research have daily contact with patients. Some, like nurses, spend extensive time face-to-face with patients, and in some departments knew many of them by name. What was frustrating for the architectural teams was that even when these medical workers are inclined to talk about patients (and families) their accounts were so narrow in their scope.

In the case of the ICU project detailed above, my notes show that despite David's impression that the staff there knew little about patients, patients came up quite frequently throughout the meeting. While the nursing staff and others present were stumped when asked to make observations about current features of their ICU that could be improved from patients' perspectives, they did not struggle at all when asked what would improve their dealings with patients. For example, everyone in attendance was greatly concerned with patient monitoring in

the ICU, and there was much discussion of the various and sundry ways nurses currently do (or think they would like to) keep an eye on their patients. This included windows that would allow line-of-sight bed monitoring while charting at workstations (in addition to physiological measures), visual and auditory cues for when patients were requesting a nurse, video monitoring, guaranteeing sightlines between workstations and patient rooms, and doors that could be left open to enhance patient visibility (in addition to easing patient transport). The issue of patient monitoring was but one to which the clinical staff easily devoted ample and fastidious attention.

Staff could also give an account of a range of kinds of interactions they might have with patients, procedures they might need to conduct, conditions patients may be in, and even heartbreaking cases they had recently encountered. To build on that latter point, it was not as if the medical staff were disinterested in patients. In fact, one of the goals that the design team quickly identified along with the staff was to find space in the new ICU for a meditation room—a place where the doctors, nurses, and others could take a private moment to relax or to regain their composure—precisely because they were affected by their patients' precarious health. The staff witnessed intense suffering and battles with death on every shift.

The issue, rather, was that here, as the staff exhibited an almost exclusively clinical attention to their patients (and in some respect, I would add, to patients' families). The net effect was that insofar as patient experience became at all focal, it was mostly likely to surface in an exclusively medicalized framework. In the clinical modes of attention evidenced in the accounts of nurses and other members of the ICU staff, the patient is largely only visible insofar as she is the recipient of treatments and medical advice, and exhibitor of various states could be reduced glossed as symptomatic, benign, stable, in acute crisis, improving, or declining. A patient's

presence and, consequently, her way of inhabiting place, is conveyed as if it tracks with only the course of treatment.

Stein (who had worked as a nurse) offers the example of a physician who, trained to see diseases in symptoms, may initially assess a patient empathically only to drop this empathic orientation in turning toward those symptoms as a mere effect of a cause to be discerned. The physician's empathy, Stein (1989: 70-71) claims,

> mostly ceases at the first introductory level… And the physician's relationship to his patients… is no different from the gardener's relationship to his plants… He sees them full of fresh strength or ailing, recovering or dying. He elucidates their condition for himself empathically… [then] he looks for the cause of the condition and finds ways to cure it.

Stein is insistent that empathy is responsible for the "causal reflection" underlying the doctor's ability to diagnose and treat. Nonetheless, sustained empathic attention is, she claims, in short supply. The medical expert instead turns a "schooled view", as she says, toward the relevant symptoms and possible diagnoses. In her writings on empathy in clinical settings, Jodi Halpern (2001) has described one aspect of this style of attention as "detached concern." Halpern argues that detachment, comprising both an inattention to/suppression of one's own emotions and a concomitant avoidance of fostering familiar relationships with patients, arises in part out of a professional mistrust of emotions. In this instance we might wonder whether dealing with a high number of traumatic cases motivated (in a broad sense) paying as little sustained empathic attention to patients as possible. In an Intensive Care Unit, strictly maintaining a clinical interest is likely very adaptive in this context—though Halpern's writings suggest that the phenomenon is much more widespread (see also Kirmayer 2015). But I am not concerned here with clinical staff's ability to empathize or incentives not to do so in depth. Moreover, empathy differs beyond matters of degree. Any particular act of empathizing is a culturally shaped activity (Hollan and Throop 2008, 2011; Throop and Duranti 2015). The cultural configuration of empathy includes

acquired and situationally relevant styles of attention (Stein's "schooled view") that will configure any person's empathizing with another (see Throop 2012). I am therefore only interested in and able to speak to how their mode of attending to patients became the condition under which the designers could gain reiterative empathic access to those missing users.

What manifested in the designers' conversations with medical personnel was a particular perspective on life in a hospital department, one that foregrounded elements of persons and environments that were relevant to the execution of staff's duties as care providers and administrators. This could be seen in the examples medical personnel employed to make their points. For instance, one nurse told us she was skeptical about the proposed increase in the size of the redesigned department. Just that morning they had needed to chase a patient who had become desperate to escape the ICU while suffering from alcohol withdrawal. She said the patient had been running around the department, bleeding and trying every door, whether it was an exit or not. (Irrespective of the patient's behavior, from the standpoint of infection control the possibility of stray blood in a hospital, let alone in the department with the highest acuity patients, is a nightmare.) This was one reason she personally had misgivings; the episode would have caused even more mayhem and potential danger in a larger space with a higher patient census. At another meeting on the same project, one doctor offered that she had very recently had an experience with a particularly tragic case. A young man, hardly older than her own son, the doctor noted, had been pronounced brain dead. The doctor reported to us the difficulty of informing his parents, and the awkwardness of needing also to ask if they would agree to donate his organs. This episode was embedded within a broader discussion about the need for private spaces where physicians could brief loved ones about a patient's condition.[77] While medical

[77] Healthcare worker's tendency to provide examples of particular encounters with patients even when they hadn't been asked to do so is one reason why I have emphasized empathy here rather than falling back solely on the

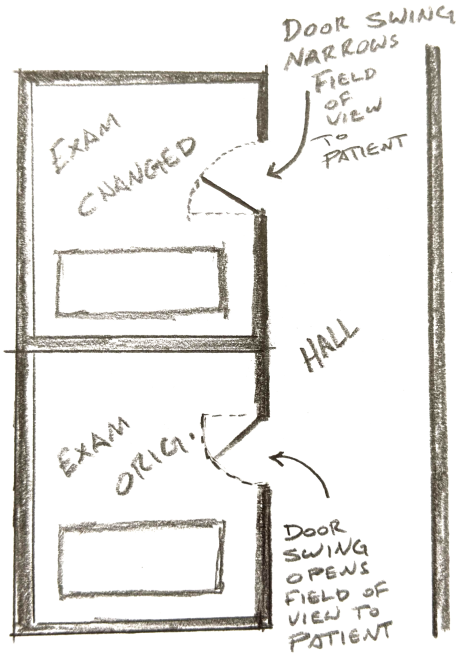
personnel could be variously attuned to different aspects of a given situation, in my experience medical staff struggled whenever asked to consider the patient's own viewpoint in any case outside of, or more expansive than the understanding necessary to carry out their own caregiving duties.

This is not, however, to say that patients and other missing users were ignored or completely unconsidered. In addition to the above-mentioned example of the physician's argument for why patient families needed access to a private space, there were times when medical personnel made very useful and considerate contributions to "the patient experience". One afternoon I sat down with Amber to observe her as she was working on architectural drawings for patient examination rooms in the Medical Office Building remodel. She moved from room to room across the plan, implementing changes that had been suggested by the medical staff after a recent meeting. As she went, she explained what was being changed and why. In particular, she noted the orientation of the doors. At the request of some physicians, Amber was changing their "handedness". The architects had initially set them to swing from the right, an orientation that would bring medical staff face-to-face with their patient on the exam table. The doctors observed, however, that the patient on the exam table would briefly become visible to anyone down the hall. Instead, the physicians suggested, the architects should plan to have the door hung the other direction so that the patient could only possibly be seen from a very

Schutzian notion of ideal types. There is something that can meaningfully be called reiterative empathy here, rather than simply an ideal type copied and pasted into discourse. The episode as exemplar is gratuitous, except in two, linked respects: that the experience stands out for the teller, and that the other interlocutors are expected to empathize with the narrative. The pattern here is that generalizations are often founded in some concrete episode that has been judged to be the kind of thing that can happen or that happens all the time. And when asked to make such generalizations, members of medical teams would often make recourse to one or more memorable episode.

narrow angle of view. This gap the doctors would fill with their own bodies as they entered the exam room.

Of course, even here the designers have no way of verifying the value of this gesture for the patient. It can only be imagined on account of the doctors' own intuitions that patients feel exposed by a potential view down the corridor. If we cannot meet the third, we cannot distinguish between what is empathically known about them and what might be presumed (in this case, perhaps, based on the institutional interpretation of HIPPA). That is a basic consequence of not being able to "peer around" the second's experience. We can only question it in principle, and our ability to do so will be entirely dependent on our present attitudes and stock of knowledge.




So, we are left with an arrangement in which attempting to empathize with a patient through the accounts of care providers is rife with liabilities that are often surreptitious. The limits of the second's empathic understanding of a third—and, indeed, of the extent to which that understanding is genuinely founded in empathy—can themselves often only be inferred. What we seem to find again and again is that—to pick out one accessible example—medical staff's presentation of patients-in-general tends to be restricted to the patient's role as the subject of observation, treatment, and logistical management. That frame provides the designers with a very narrow reiterative empathic window onto the patients' lifeworld.

**Another View**

To revisit a point made in the previous chapter, architectural designers are highly dependent on clients and users for the information upon which they will premise their designs. In light of our current discussion, it is important to point out that user meetings are perhaps the most vital sources of information; the architectural designers relied on the accounts of those users to whom they did have access. On balance, that meant that insights into the experience of patients were relayed through the accounts of healthcare professionals. As we have seen (chapters 3 & 4), at Foresite the designers would privilege direct verbal accounts in their methods and (as a consequence) subsequently in their design guidelines. That dependence made for trouble whenever clients and users could not give an exact or reasonably approximate answer to the designers' inquiries. As noted in the theory section, qualifying the second's empathic view of a non-present third requires some application of typified knowledge (about the second, the third, or both). In the case of the ICU, both David and Raj made efforts to do just that. Here, with my focus on the means by which designers formulate their impressions of users' needs and experiences I will restrict myself to outlining a few forms of recourse the designers pursued in order to cultivate typifying knowledge of patients and other users.

The first recourse in these instances was always to ask a user (say, a department head or their deputy) to look into an unresolved matter and report back. The mediator might solicit opinions, gather accounts, *et cetera*. What a user representative was asked to report was rarely complex. Reported information was assimilated into Foresite's user research. It was, however, not unusual that architectural designers would look for other sources of information and inspiration.

I knew designers to conduct their own, informal inquiries on the side of projects by asking friends and family members to share their own experiences of a particular kind of facility or type of care. I most often saw this happening in advance of a new project (in anticipation), when the architectural designers might be taking on a new kind of facility or medical department and had a personal acquaintance who might be able to offer some insight. A family member who had recently undergone a medical procedure or course of treatment, or a friend who worked at an outpatient clinic could become valuable informants, and a number of the designers at the San Francisco office would regularly report things they had learned from these exchanges.

The same process at times took place within the office. For example, at the outset of a new project to design a blood donation center, the design team circulated a questionnaire to all employees of the firm, asking them to share whether they were blood donors, why or why not, and any anecdotes or reflections they might have regarding blood donation. The designers were especially keen to design an experience that would boost donor retention, frequency, and referrals to friends, so the questions and subsequent analysis focused largely on co-workers' motivations and sentiments. In the end, portions of a few accounts solicited through the questionnaire played the part of data on donors and, with the client's reportedly enthusiastic support, informed the subsequent design.

In the absence of significant contact with patients, offhand observations could take on outsized significance. While on a site visit to a campus of medical office buildings (MOBs) Foresite had been hired to "refresh" with new casework (e.g. cabinets), furniture, and interior finish materials, Marc observed a mother and child rushing from one building to another. Marc later told the team the mom had been visibly frustrated, rushing the kid and exclaiming that they were now late for their appointment because they had first gone to the wrong building. Marc

reported this observation to his colleagues, and subsequently concerns with wayfinding and the "arrival experience" played a central part in the project.

Architectural designers' own experiences of healthcare were equally in play. Liz, one of the several young architectural designers at the firm in the process of becoming a licensed architect, had needed hospitalization not long before I began my fieldwork. When she recounted her convalescence at one of the firm's weekly happy hours, a more senior architect jokingly suggested that her ordeal was excellent user research. She agreed, riffing on a number of complaints she had about the facility. She recounted rearranging her patient room, much to the chagrin of her nurses. "I want my husband here, not over there!" she explained when describing how one of her changes had been to move the visitor's seating closer to her bedside. Hospital stays, checkups, and patient visits were an opportunity to tinker—usually only imaginatively—with the built environment and its respective impact on users.

All of these personal and communal resources for learning about a particular kind of care bolstered the architectural designer's efforts to understand experiences of healthcare, particularly from the perspectives of patients. In my estimation, it would be too reductive to contend that architectural designers are always *intentionally* subsidizing their limited contact with patients (and, to a lesser extent, other users). We can distinguish between an intentional compensation and a perennial curiosity that intimates a sense of unfamiliarity without insisting on their absolute separation. The latter was more-or-less constant, while the former only became apparent from time to time. It was quite rare that any of the architectural designers would be so vocally frustrated by their lack of direct access to patients (or other users) as David, and to a lesser extent Raj, were in the moments that I feature here. Yet the situation they spoke to was persistent. However we might characterize their supplemental (and, often, substitutional) pursuits, designers

did, regularly, make use of what they learned from friends, family, and their own experiences, and I would observe those alternative channels at their most active when Foresite's design teams were looking for answers that would be difficult to answer with the available users.

**Coda: The Impact of Missing Persons Recognized**

I have argued here that, in lieu of equal access to all user types, in order to implement their style of Methodological User Centricity in their projects, Foresite Design often relied on secondhand accounts from the users with whom they did work. Most universally, the architectural designers struggled to gain direct access to patients. Consequently, their understanding of patients was often drawn indirectly from healthcare professionals.

Articulating this arrangement within a framework of Edith Stein's "reiterative empathy" and Alfred Schutz' observations regarding our typified (and typifying) knowledge of others, I have put forward the following thesis: reiterative empathy always entails some inheritance of an aspectual view that has no primordial check outside of the face-to-face situation—we cannot "peer around" the second's own view when the third is absent; consequently, while empathy may still reiterate (as in, the second's empathic experience of the third may still be conveyed in the direct interaction of the second and the first) we are limited to modifying our attitude toward the second's empathic experience with the stock of knowledge already at hand.

Based on my observations, while medical staff are often able to convey quite important information about patient care, it was evident that their experiences of patients were largely limited to their professional duties and conforming to the pragmatic motives and modes of attention that distinguished their region of expertise. The ICU master planning project made the frustrations of this arrangement particularly salient, for it was evident to the designers on the

project that these forms of attention to the patient and the typifying understanding they made possible were far from equivalent to the more holistic view of patient experience to which the architectural team aspired. It is in light of those disappointments that the architectural designers bring to bear their own experiences and those of their colleagues, family members, and other acquaintances in part as a provisional supplement to the understanding they are able to obtain directly from users. Taken that way, I have offered those recurring acts as evidence of a pervasive, if largely unspoken, awareness of the limited purview of the accounts the designers could solicit in their user meetings. Yet, beyond this, the possible implications of missing users' perspectives were occasionally the subject of direct, methodologically oriented, conversation.

There was a tradition as Foresite Design of holding firm-wide meetings on a weekly basis for in-service presentations. Each office would gather its employees in one or more meeting places and then phone in to participate in the event and the discussion that followed. The topics and presentation materials varied widely, ranging from short documentaries and TED Talks to crash courses on contract law for architects. One of the most common formats, however, was to have a member of the offices give a short lecture on a topic in their area of expertise. One of these, led by Raj and featuring a recent project from the San Francisco office, was a case study on the value of observational methods for architectural design. After the presentation the members of the San Francisco office lingered a while to give Raj feedback and to discuss their own perspectives on the value of observation. I was asked whether I had any comments for the group. (Aside from the obvious reason, I had also participated in the study that had been the main example in the presentation.) I offered that observation was "one of the more democratic methods". I had observed that there were "often sometimes whole classes of people you don't get a chance to talk to". If the firm could not always get access to all users in meetings, they might, I

suggested, find that observational methods could fill in some of the missing pieces. David spoke up, remarking that I had raised an interesting point.[78]

David: Chris, Chris brought up an interesting point. Like there's a lot of times when we have access to the administration for a department but not necessarily the clinicians

Raj: Yep

David: Or to the patients? Usually patients are the ones who are left out. So we can, if they're not going to let us interview the patients, if we can do an observation we can spend our observational time sort of focusing on that

?Raj: yup

David: missing piece. Raj and I yesterday went back to **a former client** to talk about doing a post

Tim: o::h

Caitlyn: oh!

David: occupancy. Post occupancy study? And they're into it. [...]But one of the things we noticed was when we were doing the design we had access to the main doctors? And the doctors were friggin stoked. They were like man this place is perfect. I wouldn't change anything. This is awesome right? Uhm. But then when talking to the nurse manager who didn't exist during the design phase, she's like yeah it's ok but here's all these, like, nursing problems right? And it was like really obvious that because we didn't have access to the clini- the nursing staff there was an incomplete picture of the design.

Raj: Mhmm

Liz: Interesting!

Marc: Which is unique because there's, there was two doctors, three doctors creating the practice and you didn't have staff yet. You had patients who were in an old space that even the doctors agreed wasn't relevant. And then you had doctors.

David: Yeah, healthcare's really hierarchical, too, like, uh, nurses will always defer to doctors. And the doctors, because their time, they're trying to maximize their time, they have a very narrow slice of what actually happens in it. So they'll optimize their space at the expense of everybody else. And they'll just have like completely no idea. Like they were

[78] It might have been particularly on David's mind lately that patients were consistently marginalized in the design process. His ICU project was ongoing when the observational methods presentation was given. It had also only been about six weeks since the episode I recounted at the opening of this chapter, when David and Raj had been denied their request to work directly with patients on a different project—in that case, for a radiological department.

short like two or three offices 'cause they didn't even think about an office manager and an=a nurse manager.

((Several people laugh, Marc, Liz distinguishable))

David: Yeah, we've got three offices

Liz: we're done!

David: and there's three of us doctors! So::

((General laughter within group))

Marc: And they all have (?) windows

David: Yeah, hhh

((More laughter))

Liz: That'll be mine!

As the transcript given above makes clear, designers knew this project had shortcomings and they were explicit about those shortcomings being largely attributable to the selective attention of the doctors they relied on as their user-group. That selective attention is not solely a shortcoming of empathy as the doctors enacted it. A large part of what was omitted likely related to a failure to grasp the operational details of their own practices—particularly the knowledge that is most socially distributed amongst staff at the clinic. Nevertheless, the oversights refer back to interactional moments where the doings and meanings of members of their own staff were only visible and understandable with respect to the daily purview of the doctors themselves.

About one month after that interaction, Raj invited me to come see the clinic in question and to participate in the Post-Occupancy Evaluation (the firm's first POE). I will just briefly give a few examples. One medical assistant had a small, flat-pack desk set up in an alcove that had been designed for patient intake procedures, like taking height and weight. Another desk was stuck at the end of a hallway. One exam room had been converted into a shared office. This is where the office manager worked. But because the room was not large enough for two desks, someone had removed the cabinet doors from underneath a countertop and she used the space

like a desk, with her legs tucked into the casework. All that is to say that by relying solely on the doctors' view of their practice, the architects had in some cases quite literally not designed a place for certain staff members.

The POE offered me and the team at Foresite a rare opportunity to study the effects of users being represented only from another user type's perspective. The story would be retold several times during the remainder of my fieldwork. It made a useful cautionary tale without being too embarrassing for the designers involved—in large part, I believe, because, as Marc notes, the doctors' accounts were all they had to go on.[79] My understanding is that Marc was highlighting how "unique" the situation was to more-or-less cordon off that instance from the general state of affairs. As I have noted in an earlier chapter (Ch. 2), Foresite Design often worked with departments or clinics that were already staffed and operating at some location. Marc highlights two sources of information that were missing: not only were there no current staff other than the doctors, there was no current facility on which the base the building program. That is not to say that there were no comparative cases or other sources of inspiration, but Marc's comment does effectively request that his fellow designers and I take into consideration that this project may not have been a paradigm case. Rather than suggest that oversights of this kind are common, I want instead, like David did, to highlight the kinship this case of missing users has with the general issue of missing patients. My point in doing so is that patients systematically share the vulnerabilities inherent in being reviewed only, or mainly, in another user type's necessarily aspectual regard.

[79] Marc: Which is unique because [...] you didn't have staff yet. You had patients who were in an old space that even the doctors agreed wasn't relevant. And then you had doctors.

I want to close with one final thought. Recognizing the provincial nature of medical staff's empathic attention should lead us to consider that while care practices can be improved in some respects—for instance, becoming more efficient—even while some users are only represented by others, the overall framing of care practices is unlikely to be expanded by a largely one-sided investigation into "the patient experience". While the designers at Foresite often made a conscious effort to bring absent users into focus, we ought to consider not only what the second-hand nature of information contributes to the design process, but what limiting the frame of patient experience to what appears clinically relevant in the expert view of medical staff may leave out when designers work to create spaces that serve patients overall wellbeing.

# Chapter 6
# **Architect-User-World**

Kim Dovey isn't wrong, exactly. Inspired by phenomenologically-informed studies of architecture, Dovey (1993) proposes to extend a phenomenological approach to the study of the design process. More specifically, the author wants to apply "phenomenological precepts" to the problem of why architectural design sometimes goes awry. In order to produce this explanation, Dovey begins by offering a distinction (drawn, he reports, from the geographer Edward Relph and architect Christian Norberg-Schultz) between "lived space" and "geometric space". Whereas lived space is the rich, experiential world of everyday happenings (and is thus in Dovey's description social, cultural, and political), geometric space is merely an abstract representation, neutral with respect to any human experiencing. Geometric space is universal, and thereby useful for its predictive value: hence the necessity of geometric space to architectural design. With these spatial modalities set up as opposing poles, Dovey presents the design process as a cycle through which lived experiences of space are abstracted and stripped of their experiential sense, then manipulated before being returned to lived space in the form of the new built environment. This, for Dovey, points to the inherent difficulty in architecture: spaces must necessarily be designed in one mode (geometric) and experienced concretely in the other (lived) (see pg. 259). Thus, a disjuncture between two modes in which space can be given instigates a mismatch between perceivers and in so doing becomes the grounds for miscommunication and potentially poor collaboration between architects and their clients/users. For Dovey, this disjuncture is the linchpin of failures to design suitably for place.

Dovey's observation about client's difficulty evaluating drawings, similarly noted by others who have studied architectural practice (see Cuff 1995, Schön 1983), holds across my own data. It was often revealed in interviews that architectural designers were keenly aware of the difficulty their media pose for communicating *what it will be like* to be in a new space. What is more, the prescriptions Dovey provides, which include providing more perspective sketches to solicit feedback, focusing more intently on user experience, and selling clients on the process of working with users to better define the problems they are facing in their current environment, are largely workable, closely in line with the core tenets of Methodological User-Centricity (Dovey was a late-80s Ph.D. from Berkeley's School of Environmental Design, and so would have been a student of a number of MUC's founding figures), and describe quite exactly the path that Foresite Design would take 20 years later. And yet we might ask how well Dovey's distinctions actually encapsulate the architect's "mode of experiencing space".[80] And we should do so, because what is at stake is a proper understanding of how it is that design interventions can be devised on *behalf of* rather than *derived from* the client.

In Dovey's account, it remains unclear *for whom* the architect's drawings appear as simply geometric figures, devoid of accordance with lived space. A reader could gather that it is clients and users for whom there are confusions and perceived disjunctures between the drawing and the final form it apprehends. (I certainly do.) But, more fundamentally, from a conceptual standpoint there is a presumptive symmetry of perspectives that is betrayed in the examples

[80] Dovey himself struggles somewhat with the conflation that is built-in to the conceptual distinction he borrows from Relph and Norberg-Schultz between "geometric" and "lived space". As a result, while Dovey claims he wants to deduce the source of mismatch between architectural plans and their final results from phenomenological postulates, he at times abandons any mention of the distinction between geometric and lived space in order to observe common problems in architect-client-user relations (including the issue of users or user-types missing from the planning process). Apart from the mere fact that the distinction doesn't seem to buy as much analytic leverage as Dovey's actual analysis requires, one reason I have for claiming that the conflation itself is problematic even for Dovey is that his analytic objects tend to be precisely the kind that could benefit from an analysis of how the environment is given partially and differently to all the parties involved.

Dovey employs of what are often essentially communicative dilemmas. Space, however titled, is given equivalently to architect and client/user—as is their givenness to one another. Hence, the problem can reside in a cycling between modes of presentation which are in themselves incongruous.

On the contrary, there is neither equivalence in the modes in which architectural designers and their clients or users inhabit and experience space, nor in the way that they experience or understand one another. Dovey has polarized the world into geometric and lived domains rather than recognizing that the disjuncture he wants to explain arises from the intersubjective asymmetries between actors—in this case between the architect and the client or user. Architects don't struggle to create suitable places only because they don't know what the client or user wants (and therefore need their drawings checked); they struggle because the client/user's needs are never singular, given in totality, or necessarily self-evidently paired to a particular configuration of the material world. At the same time, it's only by virtue of a panoply of differences in skill and perspective that architects are able to manipulate the built environment in ways that clients cannot. A world in which a client/user's needs were transparent and in which the client/user could judge their fit with the built environment as well as an architect would be one in which design wasn't necessary. The architect and ethnographer Dana Cuff offers an alternative possibility. Clients, Cuff (1995:96) notes, seek architects when they desire "...environmental changes to reflect and catalyze less-tangible changes in their lives and organizations, so that *design becomes not just the expression of their new attitude, but the formation of it*" (emphasis added). "In this sense," she adds, "architecture is very much like psychotherapy."

Dovey is right to point out the communicative hazard, but given that the client's view will never be equivalent to the architect's (nor will that view, we should bear in mind, be unitary), we might turn the question around and ask how the architect is able to function—successfully in many instances and respects—in place of the client/user. If what is missing on the side of the client/user is an appreciation for the indeterminacy of the fit between the client/user's manifold expressible needs and the possible environment, what is absent in Dovey's typification of "geometric space" is a consideration of the architect's drawings not as a mode of representation but as an environment for work. The consequences are two-fold. To start, we miss something about architect's "professional vision" (Goodwin 1994). Architects do not perceive space differently from their clients merely by virtue of being inculcated into a relatively abstract mode of representing it; this conflates the representational media the architect traffics in with the skill the architect enacts. But the form of representation and the skill that produces these forms are nowhere near synonymous; the swiftest counter argument to that conflation is that a geometric space devoid of values could only render arbitrary interventions. Rather, the abstractions are useful only insofar as they can be *seen as* the mundane world. "Homogenous space [read: geometric]," Merleau-Ponty (2014:104) writes, "can only express the sense of oriented space because it received its sense from oriented space." Architects are more practiced than their clients/users at constituting this contiguity. Further, a conflation between the architect's representational media and lived experience makes the processual aspects of architectural problem solving insensible. Thinking about drawings as purely abstract representations not only misses the artifactual nature of the media—which consequently sidelines the cultural nature of representations more generally (even ones that purport to

universality) —it glosses over the intersubjectivity embedded even in the lived experience of abstraction.

Considering the intelligibility of "cultural artifacts", Merleau-Ponty (2014:369) describes another person as "the place of a certain elaboration" of the world. It is only as a consequence of already being embedded in an always social/cultural world that artifacts and built environments give us others "under a veil of anonymity" (ibid:363) —an implicit plurality that furnishes this sense that 'one' uses the pipe for smoking, the desk for writing, and so on. In abstraction we have this experience to some extent in reverse. As Merleau-Ponty (ibid:114) notes "...abstract movement hollows out a zone of reflection and subjectivity, it superimposes a virtual or human space over physical space… a function of projection by which the subject of movement organizes before himself a free space by which things that do not exist naturally can take on a semblance of existence."[81] It is the designer's task to project an intersubjective world—to muster abstract representations in order to furnish objects and environments for concrete and particular forms of use. A world cannot be projected generically in a way that is devoid of cultural meaning, values, and some particular perspective; to the contrary, even in the midst of abstract modes of representation, the architect must have this world in the way that world could appear to some-one. Different ways of being attuned to the material world produce different ways of being attuned to others and vice versa.

One of the most ubiquitous phenomena in the field of architecture is users' surprise by what the architects could foresee for how they (the users) could work in and inhabit a new space. Users' reactions of surprise draw attention to a fundamental intersubjective phenomenon at work in architecture. If users and clients are surprised it is because the architects' labors produce a

[81] For the record, Dovey relies on Merleau-Ponty's analysis of the spatiality of the body to describe lived space, only he does not extend it as Merleau-Ponty himself does to the converse case of abstractions and imagination.

different way of imagining their clients' possibilities than the clients/users themselves can produce. This differential understanding points back to a mode of intersubjectivity realized within the embodiment processes of design.

This is precisely where the expected nature of architects' practice threatens to derail our inquiry. It is tempting, for instance, to black box architects' ways of knowing as 'expertise.' Yet, expertise is an embodiment relation. They come into being as way of being attuned to and capable of manipulating certain materials in order to constitute the relevant cultural objects (see Csordas 1990, 1993; Goodwin 1994). Surprise, in this respect, points back to a set of knowable possibilities made discernible to the architects by their ways of working with the materials of their trade. It's here that the phenomenological account is resonant with studies of distributed and embodied cognition that show how people offload and share cognitive function with non-cognitive entities (Gallagher and Bower 2014, Hutchins 2010, Hutto and Myin 2018, Rowlands 2015). Likewise, studies of multimodal interaction have demonstrated how meaning is emergent within an ecology of materials and embodiment processes like gesture (Goodwin 2010, Streeck 2015). In this vein, the anthropologist of design, Keith Murphy (2004), has demonstrated how multimodal interaction incorporates this material ecology to support collaborative imagination in architectural design; and these interactions correspond to an appresentation of the representational media, what Murphy calls a "perceiving in the hypothetical mode". In the case of architects, the materials that variously support this form of appresenting the nascent space commonly include modeling software, reference books for building code, and—most importantly for this chapter—sticky notes, building plans, and tracing paper. Each of these plays a part in helping architects to solve the unique geometric puzzles posed by every project. For architects, there's no way to the possibilities for people except through the possibilities of the material.

It follows that differential ways of constituting cultural objects are concomitantly different ways of construing others. In this coeval foundry of experience it is possible to foreground one or another of self, other, or world in the flux of activity, but doing so, turning our direct attention from others to the tools and other materials with which we can affect or understand them, always affects the way those others appear and matter; ways of attuning to others can thus be emergent in an interplay with materials.

Enacting an adequate understanding of others within—in fact, through—the built environment is not an automatic result. As Sarah Ahmed (2006:31) reminds us, "...some things are relegated to the background in order *to sustain* a certain direction; in other words, to keep attention on what is faced".[82] Acts of perceiving, imagining, and designing objects require a kind of orientation, entail being led by those objects in a certain direction to the exclusion of other objects and directions. If we take another's perspective on an object, take up their orientation—however provisionally and incompletely—as our own, the same dynamic of orientation is in play.

It is with similar concerns in mind that Jos Boys (2017) questions that implicit universality of architectural sensibilities regarding "placemaking". In her critique, Boys (2017:165) argues that an essentializing tradition that construes particular forms of use and experience of the built environment as pointing back to "elemental" qualities of form and material has contributed to an erasure of "disadvantage, marginalization, and disablement". Boys reminds us that for designers the matter is never as simple as turning toward or away from a particular feature or quality of the projected environment. In turning toward the nascent built

[82] As Louis Bucciarelli (1994) points out in the case of engineers, formulating and resolving a problem in design depends upon a learned capacity to unsee certain features of the physical object in order to allow the 'real issue' to emerge.

environment—through the materials that mediate the designer's relation to that environment—from a particular standpoint not only permits some features to stand out as indications of possible forms of dwelling and use, but also necessarily enacts those possibilities *as for* particular types of person. Citing Ahmed, Boys concludes that "designed spaces are orientated", warning is that it is no accident whose perspective is embodied in the subsequent design.

The issues Ahmed and Boys raise are vicinal to the problem on the horizon of Dovey's essay: how it is that architects bring their highly specialized skills to bear in action on behalf of others. This concerns, in part, who is included and what forms of experience are recognized and given place in the design process—problems I have dealt with to some extent in chapters 3 and 5. Here I want to turn to considering another component. In order for their understanding to be possible, designers must be able to go beyond knowing what users need or experience in their current environments. They must be able to grasp those as a style to be espoused and played out on the materials at hand. And moreover they must grapple with the plurality of those needs and experiences. Extending this line of thought, in this chapter I examine how recognition of others' possibilities emerges and is mediated within architects' materially embedded activities. If objects in the world reveal others, then examining architects the objects that architects hash out and manipulate when at work designing can shed light on how they arrive at specific ways of imaginatively and perceptibly constituting others, reading them into and through the incipient environment. How architects go about doing this is in large part a question of the aspects of others' experiencing to which they are oriented. The design environment is not as a representational byproduct of pre-established understandings, per se, but is a context of understanding in itself. These understandings are of necessity always representative of some way

of being toward an object, the affordances[83] are particular to orientations within the environment, and thus an espousal of some such orientation.

**Part 1: Being Affected by Users**

Liz is a "job captain," a junior standing a step up in rank and autonomy from the starting position of "technical designer." These titles vary from firm to firm, but the prerogatives associated with different career stages are often similar. As unlicensed architectural designers, job captains like Liz are primarily responsible for the small details of projects. These junior designers are often occupied with drafting technical features and preparing project documentation. Liz, like many in her position, spends much of her work hours verifying dimensions, detailing, and annotating drawings. She also coordinates with contractors and clients during the construction phase. Unlike many in similar positions elsewhere, she also gets to participate in user meetings at the beginning of projects, putting her "a little more on the ground."

I learned from my interviews with her that Liz finds this direct contact with users inspiring. It keeps her interested in the job and also gives her the sense that she's helping someone. Positive feedback is important to her in general, but she finds herself much more motivated by connecting with users than by pleasing project managers and other client representatives:

[83] I cite here and intend the concept as articulated and revised by Don Norman (2002:9): "the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used". Considering the differences between James Gibson's (2015) initial coinage and the revised sense Norman provides (see McGrenere and Ho 2000), in this case I consider Norman's usage more apt for the particular point I am making herein.

> … I get to go talk to the lead nurse of the ICU and I'm like oh I love you! I do wanna solve your problems, you know? And like those people-like this woman has been a nurse for like 50-something years. She works like a dog. I'm excited about getting them a good nurse station, and like a solid break room, and like a good conference room. It'll-like that will feel very rewarding, you know?

But beyond merely being a source of motivation, interaction with users also changes the way she regards the objects and environments she manipulates in the design process. Objects that would ordinarily appear only anonymous and mundane are transformed into eventful sites or promising technologies. Liz recounts, for instance, "drinking the kool-aid" for a laboratory project when she met the scientist and experienced how exuberant he became about a particular piece of equipment they were designing his lab to house. "This man is very very intelligent," she recounted,

> And he was literally talking about this microscope like we were giving him like a new toy. [...] He was like oh my god. I can't believe I get two! And I was just like ok. This is what we're doin'! This is excellent. [...] It was just really exciting to be part of this man's, you know what I mean? I'm not part of this man's research in any capacity, you know? [...] But then it's just like, you know the Nobel Laureate comes in and he's just so excited. And I'm like that's it. Alright. I've drank the kool-aid now. Let's get more people like you super fun toys so you can keep crankin'.

Liz tells me that even small details like the shape of pipe suitable for transporting gases of a particular atomic weight becomes fascinating in the face of a scientist users' passion for his work. With this shift in perspective the very activity of design takes on new meaning ("ok. This is what we're doin'!"). Even the little things over which Liz has direct influence hold a greater,

more concrete significance for her in light of these interactions. Small, technical interventions become opportunities to solve specific people's daily frustrations or to help them pursue their passions.

The same goes for healthcare projects more generally. Unlike some of the architectural designers I talked to, Liz fell into healthcare, only becoming invested in it after the fact. It is an enthusiasm she finds develops through meeting the specific people she will be working on behalf of and experiencing how excited or desperate they are for the new space. "I had no intention of working on healthcare, like, whatsoever. But you know you get to sit in those meetings and hear the values of these users and then you get to make a decision, you know?" Given the broader context of our conversation, I take Liz's comment about getting to "make a decision," to be a reference to acting on behalf of the users with whose "values" she has come to sympathize.[84] In other words, Liz suggests that these interactions materially affect her design decisions not only in the sense that they supply her with information, but also in that "hearing the values of these users" precipitates a particularized understanding of the user that carries over into how she approaches those decisions. To this point, she adds, "blood center was an excellent example."

When Foresite was contracted to renovate an existing building into a blood donation center Liz was recruited to be part of the design team. The new blood center was operated by a regional health provider who had already chosen a former retail location with large, street-facing windows that had presumably been used to display merchandise. The health provider had used an in-house architect to produce an initial masterplan for transforming the retail space into a donation clinic; however, David, Foresite's lead architect on the project, successfully angled to get a chance to meet with users so that his team could evaluate the suitability of the initial

[84] There is a clear connection here to Stein's (1989) description of "empathic valuing."

design. As David's deputy on the project, Liz was invited to participate in the client and user meetings.

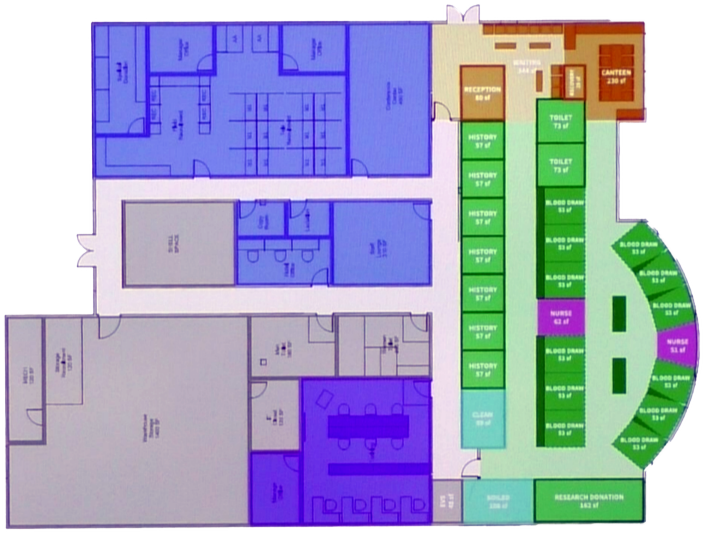
The user meetings had a profound effect on Liz, as she recalled later in our second interview. During their discovery process, the team had learned that the blood center would be staffed by three different groups[85]: there were the phlebotomists and other staff for taking donations; a field team responsible for carrying out blood drives in the community; and the staff of a small call center that recruited donors over the phone. In addition to these groups, there were the donors—whose visits could last between 15 and 90 minutes. It was the call center staff who especially grabbed Liz's attention.

> Liz: You know, we heard about, we heard- it's like a call center, like basically. They have a really high turnover rate for a lot of the... folks who are on the phone like calling. A high turnover rate. [...] I mean, you just handle these, you have a lot of rejection in that job you know? And I've never even met these call center people. I've never met the people who are picking up the phones. This was all just information from their leadership, right? [...] Like, these, this woman who is the manager of this call center is this wonderful woman named Karen. And you can just tell her absolute heart is in, is in like making [...] this job great for these people. Because these people want to help their community. They wanna... get like... they want to increase the donations so that both the research and the medical facilities have the blood that they need in order to keep these people going, you know?
>
> CS: Yeah.
>
> Liz: And so this wonderful woman Karen is advocating for her staff, right? She's like, this is a high turnover job, there's a lot of rejection, you know what I mean? You know it's a call center.

After sitting in on those user meetings, Liz felt concerned for the call center workers—particularly because she knew that the current plan was to give them a work environment that was entirely walled up and artificially lit. In standard fashion, the initial master plan for the building had been organized around related functions. In the preliminary schematic design that

[85] I have simplified things here somewhat. There are other actors, but I've restricted my description to the users who pertain most directly to Liz's intervention.

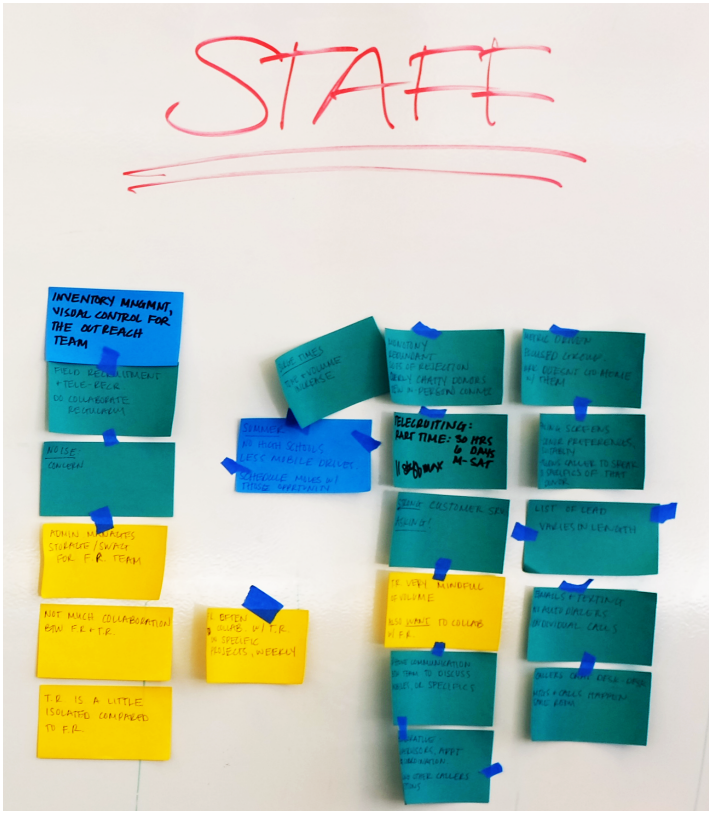
had been given to the architects by the client's in-house designers, the front portion of the building with the windows had been allocated to blood draw, while the back would be office space to be divided amongst the other user groups. A version of this early plan can be seen in the image on the left: the clinical space for blood draw is in green whereas the office functions for the other staff members are in blue. (The spaces in orange represent arrival and departure zones, including reception and waiting areas.)




At first blush, it had seemed obvious to the client and to Foresite that giving the natural light to donors might have made the blood center more appealing. After all, donor retention is a perennial problem for blood centers and giving the rarest resource in the building (natural light) to donors could presumably only help in ensuring those donors had a positive experience. Accordingly, a preliminary option had been to arrange donors in a "fan" across the window-lit space, with staff at various degrees of remove from this space and, by extension, from the natural light. After meeting with the users, however, Liz saw it differently.

I didn't attend meetings on this project, but I caught up with Raj (who also participated in the meetings) and Liz after the first user meeting and filmed their exchange of initial impressions and the analysis they performed of the feedback they had gathered from the users during their "6P" and "journey mapping" activities. Raj and Liz took all the sticky notes and began regrouping them into clusters they perceived to have a thematic link. The themes were emergent, so titles and set-membership changed somewhat over the course of the activity, but within an

hour or so they had arrived at fairly stable and mutually agreed-upon objectifications of "user needs".




As she discussed what she'd learned with Raj, Liz expressed that she felt bad for the people in the call center who would be on the phone all day, inevitably mostly dealing with rejection, and sitting "in the dark" since the only source of natural light would be at least partially cut off by walls separating the clinical space from the phone banks and other office functions of the center. The sticky notes she and Raj placed on the board gave glimpses of the situation: "T.R. (telephone room) is a little isolated compared to F.R. (field recruitment)"; "T.R. wants to collab[orate]"; "strong customer srv (service) asking!"; and "Monotony, redundant, lots of rejection, no in-person connex (connection)".

As she recounted to me afterward, through speaking with the call center manager and hearing her describe the nature of the job and the morale problems her staff faced Liz became fixated (in her words "so stuck") on giving the callers a nicer workspace:

> CH: A:nd we're moving the whole both blood donation center and call center into this building that has this big arc up front? [...] So they have this arched-arc'd glass, a:nd initially [...] they- their in-house architects and interiors put a plan together and they were like ((smacks table)) here you go [Foresite]. Build this for us. And we were like, well not really. We can probably do better than that. You know? So, as we did we came up with some space planning options. And I got SO STUCK on this idea of NOT

> putting... So [medical center] had their blood donation chairs in this arc, which is the only windows in the entire place. The rest of it is like a mausoleum. It's like... just DARK, right? And it's like, you need sunlight. Humans need sunlight. That's not new information.

The perception that the space was "like a mausoleum" already carries a particular evaluative connotation. Yet, beyond this, the negative connotations she associates with the more dimly lit parts of the building disclose a particular intersubjective orientation: as I had learned, it was not an absolute evaluation but instead was relative to Liz's evaluation of how that quality of the environment would play out from the standpoint of the callers; in the case of donors, the "dark" would present itself very differently.

Liz' impression of the experience of being one of the workers in this call center led her to question the assumption that it was the blood donors who most badly needed the most luminous space. That impression was in some respects bolstered by what Liz understood about how donors behave while at the blood center. While the team had initially sided with the client's in-house architect's decision to give the donors a view outward, it turned out that donors would need to face inward toward a monitoring station so that staff could react if they were growing faint or dizzy. What's more, when the designers asked what donors usually did to pass the time while they were having their blood or plasma drawn or during the recovery period that followed, they were told that donors were mainly preoccupied with their smartphones. For longer visits, the blood center also offered electronic tablets to watch movies on. The team was not able to observe donors at the blood center's current location; nor where donors included in meetings; so, these descriptions were the most comprehensive information about donors available.

The large window, in this context, took on an entirely different meaning. Rather than offering a view, it now appeared for Liz as a source of screen glare. The illuminating function was no longer an unambiguously good thing. Liz reasoned that donors were likely to use their

time in roughly the same way with or without a view of the street, and that they would be able to see their screens better without the glare of a window behind them. In contrast to the telephone workers and other staff, donors were only at the blood center for short periods, and only a part of that time would be spent actually having their blood drawn where they would be near the bank of windows. So, the modest view and the best natural light should go to the staff with essential but thankless jobs. As Liz would tell her colleagues later on when the team were presenting their work to the whole office, "You might as well give that access to the people who use this building every single day." Crucially, what subsequently appeared as a rational statement of prioritizing certain relationships between patterns of use and the built form emerged out of Liz seeing counterbalancing affective values in the qualities of the call center job and the properties of the space—a balance that in this case was complemented by giving donors a space without backlighting in order to support their screen time.

Liz approached David with her idea and together they worked out a way to give the whole staff offices, including the call center, access to the light. As seen in the image on the right, the green-colored spaces dedicated to blood draw and related processes would now be relocated to the top of the plan, near the front entrance, where the offices had initially been located. The staff office spaces would move down to the bottom right of the plan, further from the front entrance and nearest the large bay window array on the far right. Ultimately, the call center wouldn't go right against

the window. Instead, they would place a conference room and a staff lounge "outboard." But they planned to use mostly transparent elements to divide the conference room and staff lounge from the rest of the office. "If we're smart about that wall," Liz explained to her colleagues, "we basically flood that entire workplace with nice natural light."

We should think about Liz's sympathy for the call center workers as a product of reiterative empathy and empathic valuing as described in the last chapter. Prior to meeting with the manager, who clearly portrayed the callers as in difficult circumstances, Liz and the other architects were amenable to the idea of placing the blood draw stations near the window. Ultimately, the account the designers received of both the call center staff and the donors motivated an almost exact reversal of that plan. I want to draw attention back to two key points. First, Liz's enthusiasm for projects stems largely from these moments where the affective value of an object (or task that relies on objects) suffuses the objects of design. She doesn't enjoy designing for the pure geometric precision of it. Instead she relates to her (often more modest) design activities precisely as acting on behalf of others.[86] Second, meeting with users produced a modification in how Liz perceived the qualities and affordances of the space. A source of light became a source of screen glare for one set of users while it became a mood-enhancer for another group. We should consider these qualities, then, not as universally-given properties of the material world in-itself, which can be taken for granted as there independent of anyone, but as affordances of the lived environment that manifest as such in concrete interactions with

[86] In case there should be any confusion on this point: my argument is not that Liz's acting on behalf of others obtains through being favorably disposed toward clients or users. It obtains by virtue of seeing the otherwise abstract problems of design as material, human problems. It is incidental, though not irrelevant, that Liz draws on examples of users she sympathizes with: incidental because the examples arise within a stretch of interview in which we were discussing her feelings about her job; and relevant, however, because the manner in which she is affected by another's mode of experiencing must (according to the thesis put forward here) affect the way designers turn toward the task of designing.

particular others. The same goes for all user "needs"; meeting with users can change what appears suitable. The implication running through both of these points is that the objects of design take on a particularized meaning insofar as another's experience offers a view toward it.[87]

**Part 2: Enacting Understanding**

Liz's blood center intervention offers a synoptic view of how encounters with users (firsthand and, in a qualified sense, secondhand) can produce a qualitatively different view of the selfsame material. We have not yet seen how these views are actually embodied in the manipulation of spatial representations. It likewise remains to be seen how the emergent possibilities are judged fitting or not—and, thus, we don't yet have a view toward how enacting understanding concomitantly consists in moments of espousing and arbitrating between possibilities that would differentially benefit user types.

Discerning and espousing a user's style of use in order to craft an appropriate space isn't a solo endeavor, nor is it fully accomplished in the moment an architectural designer empathizes with a user. Every architectural designer works within a team within which the various possibilities for users are evaluated, elaborated, and granted priority. Moreover, the co-construction of user's possibilities includes, at points, client representatives and users (if only to the extent that they are included in subsequent meetings—and often only managerial figures will be) who had approval power. (Hence, what gets built is what seems like a good-enough idea to more than the architects.) In addition to input from one another and from their clients and users, architectural designers must also take into consideration the constraints of the building site. From

[87] Tying back to the last chapter: the overarching issue is how the designer's mode of access to the user's view onto the world makes that world appear in ways consequential to the final design.

the start, designers operate within a field of constraints. In design studies and their neighboring cognitive sciences, these constraints are often (rightfully) lauded not only as hurdles which make successful design impressive, but as conditions of possibility for creativity (e.g. Bonnardel 2000). At Foresite Design—as some of the other firms I became acquainted with—many healthcare projects involved remodeling and repurposing existing facilities. Constraints thus commonly came from an existing "shell and core" (the exterior envelope and windows, structural columns, interior circulation features like stairwells, and mechanical systems). For these and more reasons, the kind of understanding architectural designers can enact through the built environment will always bear a complex and partial resemblance to the empathically-achieved interpersonal understandings were its precursor. Nevertheless, the expectation of all involved—from client, to architectural team, to users, and anthropologist—is that some materially enacted understanding will show through the final result.

In this section, I'm going to consider what happens after some good ideas have been had, and the design team then needs to determine the extent to which those ideas are compatible and prioritize some features over others wherever they are not. Throughout the design process moments of orienting to the needs of different users alternate—particularly early on when the ultimate organization and selection of features are still at their most open. Often options are developed separately and in a serial manner with inexact foreknowledge of their eventual ramifications. Certain features might dominate discussion and be committed to early, with others emerging over an extended period with little need of explicit discourse regarding relative priority.[88] Given the plurality of user types in healthcare environments, however, when it comes

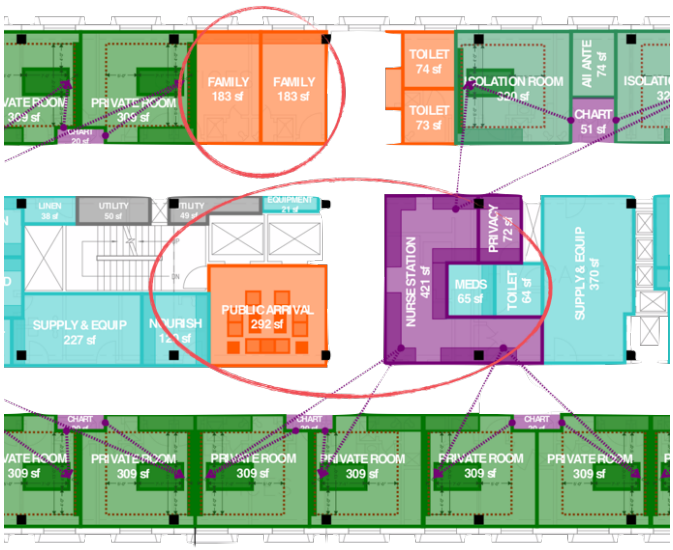
[88] The temporal organization of planning is, to be sure, a matter and means of prioritizing particular features or functions. In that regard, it is a valuable variable for an analysis of the cultural ideologies embedded in design. However, enacting an order of operations does not, in my experience, commonly commit designers to explicit ranking of forms of use. In that respect, it constitutes a phenomenon just to one side of the project of this chapter.

to prioritizing what uses are most critical within a given space, mediating between possible features often comes down to selectively orienting to particular user types over others.

Shortly into my fieldwork, Foresite Design was hired by one of the city's hospitals to help revamp and expand an Intensive Care Unit. The ICU would be much larger than any the hospital had created before, spanning an entire floor of the main hospital building. With so much space, there would be new opportunities to create departmental functions (e.g. spaces such as visitor waiting, staff meeting areas, etc.) that hadn't existed before. But the increased size and complexity of the ICU would also bring new challenges. Foresite Design's role was to take multiple meetings with all the hospital administrators, to consolidate that information into a program detailing the necessary functions of the new unit, and to develop a preliminary design and a report that would provide a workable layout for the ICU. Two of the team from Foresite Design assigned to the project, David and Raj, invited me to shadow them from their initial meetings with the users through to their submission of the preliminary design of the new ICU. A partial description of these meetings and their participants can be found in chapter 5.

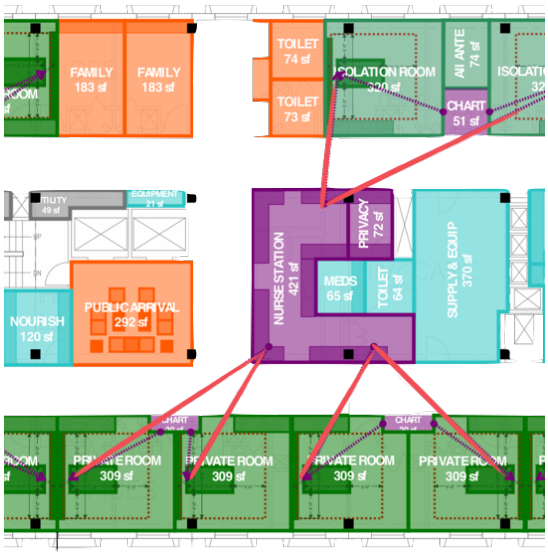
Unable to meet with former patients or family members, in those meetings the architectural team had difficulty learning much about the perspectives of ICU patients or the specific needs of family members that was not immediately pertinent to the operations of clinical staff. However, what the team was able to glean over the course of several meetings led them to infer a few generally desirable features. Of these, the accommodations for visitors were most significant for the data I will present here. For one, the nurse manager and physician representing the clinical staff indicated a need for private family rooms. In addition to giving visitors somewhere to go during times they could not be with patients in their rooms, the family rooms would also provide physicians with a private place to disclose information about their loved

one's condition or to ask them to deliberate a crucial medical decision (e.g. whether to approve a procedure, maintain life support, donate organs). The family rooms were also where visitors could gather to wait out a procedure, comfort one another, and house overflow if more gathered than could all safely fit into the patient's room. Another feature that would aid family members and other visitors would be to have the nursing station near the elevators where the public arrival area will be located. For the sake of making the ICU hospitable and easy to navigate, the architects would like to find some way to have these family rooms clustered together with the public arrival area and the public restrooms. In conversations and email exchanges, the architects emphasized that grouping these areas together would give worried or grieving visitors a kind of home base on the floor.



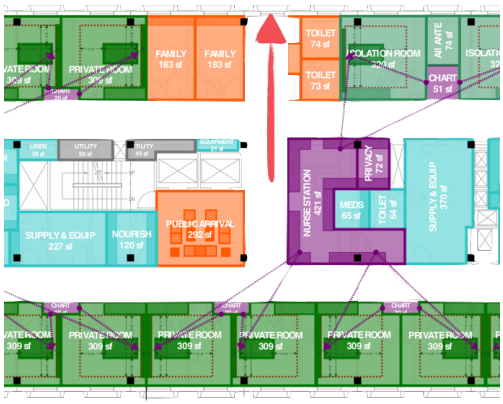

On the side of clinical operations, from the very first meeting the nurse manager made it clear to David and Raj that the ideal scenario for the nurses would be to locate the nursing station where its occupants can maintain consistent visual access to the most patients possible. Typically, the designers learned, each nurse is assigned two patients. Because each patient's health is highly volatile nurses are required to maintain visual access to their patients. This visual monitoring could either be accomplished by assigning nurses to patients with adjacent rooms (regardless of those patients' condition), or by assigning nurses to patients based on the nurses' availability and the patient's triage level. When the designers inquire into the department's "staffing model", the nurse manager explained that they base their patient assignments on triage

level rather than section of the floor. A nurse might therefore need to keep an eye on two patients who were on opposite sides of the floor. This information helped David determine that a central nursing station, rather than charting alcoves distributed across the floor is likely to be the most viable solution. The necessity of patient monitoring taking place from a central location, however, places constraints on the locations of patient rooms. If nurses were assigned to patients with contiguous rooms, then sets of rooms could be attached to a small charting alcove. Those sets could then be placed on any available space on the floor. If instead the rooms need to be visible from a central location then the spaces for patients will need to be as near to the nursing station as possible. It was also evident to the designers that, as with many hospital departments, the nursing station would be the only plausible place to receive visitors. It was therefore decided in meetings with the users that the main nursing station would need to be near the elevators.




The clinical staff were also keen to have a so-called “offstage” area, where staff-only functions would create some remove from the activity of patient care. In addition to offices and a lounge where staff could take lunch, the staff-only functions would include a conference room and a quiet, meditative space to recover during breaks.

Finally, the architects introduced the idea of having a corridor near the nurses' station that would dead-end in a large window. The view corridor, as this feature came to be called, would provide the nurses and visitors a view of the San Francisco Bay and provide natural light, both of which will lend users a sense of spatial and temporal orientation. Once suggested, it was evident that this feature was highly popular with the users, so the architects would make extra efforts to ensure that it makes its way into the final plan.



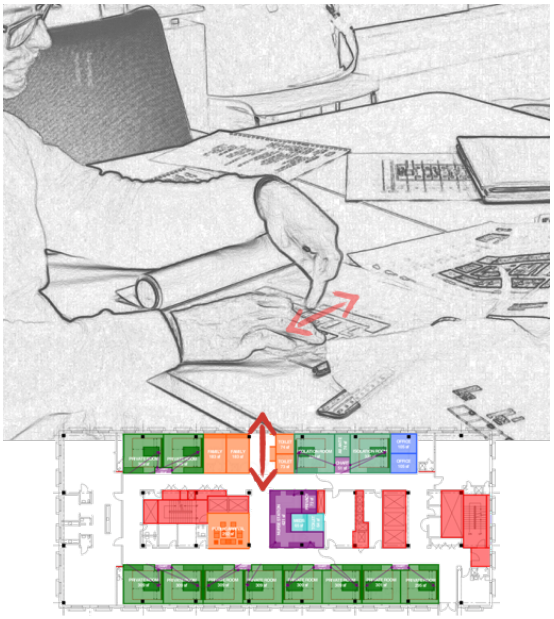

Each of these clusters of features represented considerations for different use cases—and in many cases, different users. Perhaps providing all of these functions would be relatively easy if Foresite Design had been hired to create an entirely new building. However, since this project was a renovation and expansion of an existing ICU, the designers had to contend with many existing features of the hospital building. Most significantly, these included structural features like columns as well as elevator shafts and stairways. None of these features could be moved. These are highlighted in red on the image (right). These immovable elements all pose their own challenges to creating a functional floorplan. The placement of the elevators, for instance, meant that there was a set point of entry into the department which was right in the middle of the floor. Consequently, visitors would need to find their orientation from this point. The elevators and stairwells also restricted views in several directions, meaning the best possible location for the

main nursing station would be in the middle of the floor rather than “outboard” (on an outer edge).

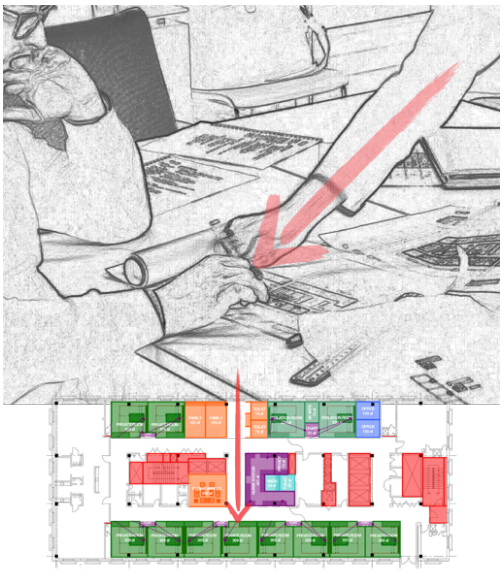
Fresh on the heels of a meeting with users in which the architectural designers presented the building constraints and announced their plans to include all of the aforementioned features, David and Raj undertake to sketch develop a floor plan that accommodates the features well as possible. They have already developed a few options, but today, after receiving feedback in their meeting with the users, the designers are especially focused on the four most desirable features: (1) having the family room contiguous with the other visitor spaces; (2) placing the nurses station where they will be able to surveil the greatest number of patients while still being accessible to visitors, (3) giving the staff and visitors a view corridor with a window overlooking the Bay, (4) and providing the staff with an offstage area. Each of the four features or clusters of features were concepts developed separately in different rough drafts of the plan. Each of these drafts took slightly different priorities and explored their potential implementation. They had yet to be integrated with one another. As such, despite the fact that they were features which essentially manifested in alternative proposals, they were not yet contesting with one another.

David grabs a roll of tracing paper, a felt tipped pen, and printed copies of their existing rough drafts for the floorplan. The two designers set up around a conference table and David lays a sheet of tracing paper over their best prototype and begins tracing some possible revisions.

As he finishes drawing David announces to Raj that the family room will likely end up having to be disconnected and out of sight of the other visitor functions. He concludes that this is the only solution if they still "want to keep this little view corridor through here…" Using his hands to illustrate over top of the plan, he wags one of his fingers over the length of the corridor running from the nursing station to the window overlooking the Bay. The direct consequence of keeping the view corridor, at least in the plan as currently sketched on David's tracing paper, would be that the family rooms would be located in a separate corridor, out of sight from the main point of entry (the elevators).



This is less than the architects had hoped for, since in emails and conversations with one another they had determined that if possible it would be best for all the visitor spaces to be collocated in order to create a hub where it would be easy for visitors to get their bearings and to group with one another. With this in mind, Raj reaches across the table, using a dry erase marker in hand to point and mimic the wagging gesture David has just performed. His gesture takes up the same motion to illustrate a corridor, but this time, Raj is indicating a spot on the opposite side of the floor. "What if we put the view corridor here?" he asks. He's effectively suggested that they flip the plan along the long axis of

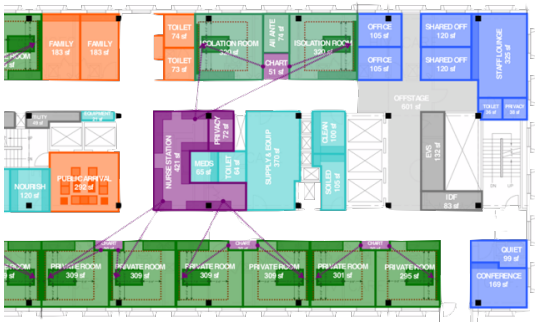


the building, placing the family room, bathrooms, and window where David currently has drawn the main block of patient rooms. “Yeah,” David says. “That’s what I was just thinking.” His own hand now hovers over the spot Raj had indicated. His fingers then make a tight loop around the space above the tracing paper as he says, “just flip flop this whole thing?” Raj confirms.

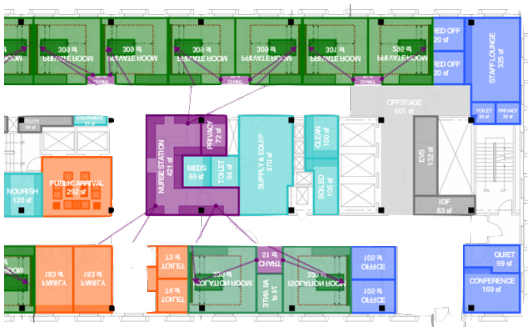
There’s a long pause of seven seconds while David stares hard at the tracing paper. Then he stops, grabs the tracing paper and flips it over. In a split second David accomplishes the move Raj suggested by inverting the translucent surface of the tracing paper. The nursing station appears in the same place at the center of the floor, but the block of patient rooms and the family rooms and restrooms have been flipped. Now David and Raj can immediately see the alternative materialized.

I want to pause the action here to comment on the significance of flipping the tracing paper. When David pauses (7 seconds) we might take him to be working out the possibilities in his head before reaching too great a level of difficulty and instead solving an intermediary problem: how to most easily represent this change physically. When he flips the tracing paper he drastically reduces the cognitive load of this problem. But more importantly, he and Raj are able subsequently to simulate the perspectives of occupants. By flipping the paper,

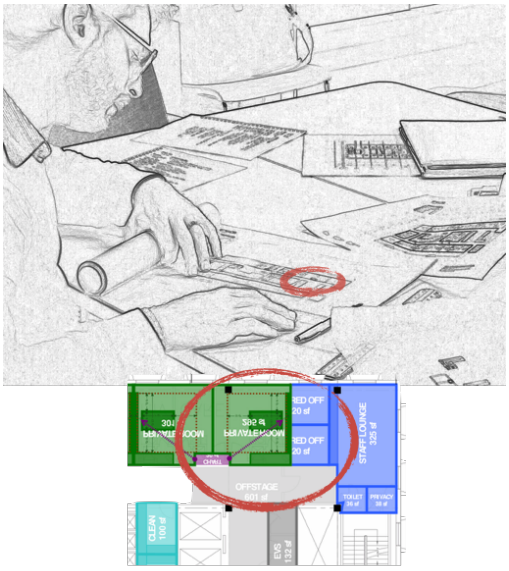
Before the flip



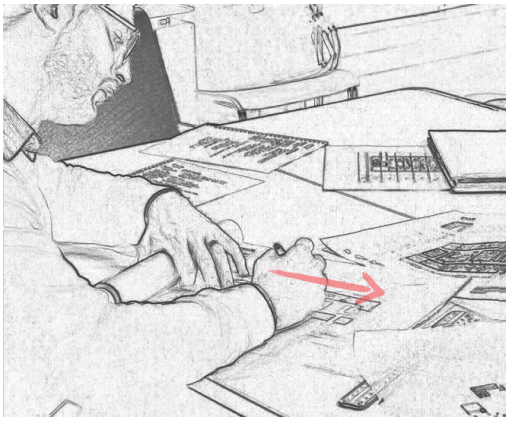
After the flip



David has constructed a stable representation that can scaffold the architects' visualizations of how making this ostensibly minor alteration to the arrangement of spaces on the middle of the floor would affect staff and patients across the entire ICU.

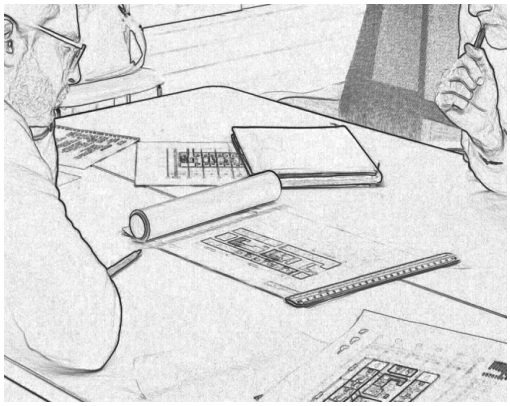


Comparing the block of patient rooms drawn onto the tracing paper with the length of the available space on the plan beneath the paper, David spots a problem. It isn't immediately clear to me what he sees, but he begins a quick sequence of physical manipulations of the tracing paper, scooting it back and forth over the substrate plan. Finally, David pulls his hand back from the sketch, remarking that it "seems kind of weird to pair the offices right there next to the patient zone."[89] There's a momentary pause, then Raj asks for clarification. "Next to the patient zone?" he asks. "I mean," says David, "these are patient rooms all the way up to here." As he speaks he uses the pen to gesture, pointing to the first of the patient rooms then sweeping rightward across the sketch before touching down on the tracing paper to mark the point where it seems he sees the patient rooms impinging on the offstage area.



[89] Compare to Murphy (2015) on comparative and evaluative statements within Swedish design teams. There, allusions and direct comparisons as well as a "matrix" of evaluative terms functioned within design interactions to nudge designers toward particular formal features. Here we might consider that Liz's "like a mausoleum" and David's "seems kinda weird" similarly functioned not toward the reproduction of a precise geometry, but toward a certain affect-laden and user-specific territorialization of space.

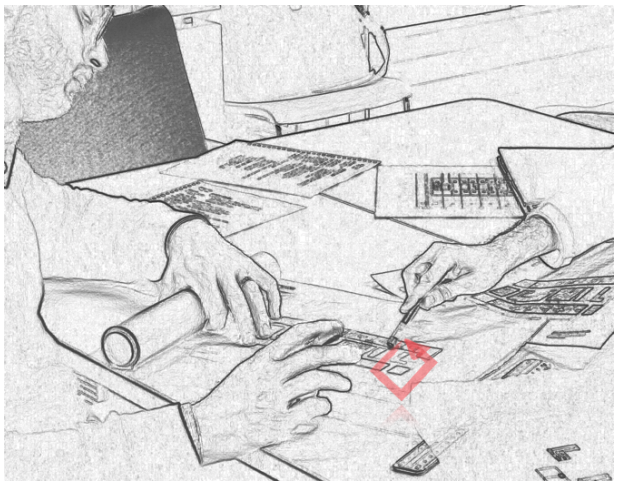
Raj quickly sees what David is talking about, but it takes me significantly more time to figure it out. The patient rooms, I gather, would extend over an area at the far right hand side of the plan that the designers had previously designated as part of a staff-only zone that included doctor's offices, a break room, staff toilets, and a quiet privacy room where staff could decompress on breaks from working the most stressful or heartbreaking cases. The patient rooms wouldn't take up all that much of this offstage area, but enough to displace a couple offices and compromise the staff members' insulation from clinical activity. It becomes apparent that David's manipulation of the tracing paper was an effort to simulate whether starting the patient rooms further down the hall would allow the architects to keep the offices and other staff areas where they'd previously been located together in the upper right corner of the plan. After some time, he concluded that it wasn't possible. If they flip the plan, then, they would have to move the staff offices and the offstage area will be compromised.



At this point, David and Raj have co-constructed a trade-off which didn't exist before. Either they can locate the family rooms directly across from the public arrival area, adding some ease for visitors, or they can produce a consolidated offstage area where clinical staff can have somewhat greater privacy when not actively caring for patients. The materialized juxtaposition thus precedes the architects' evaluation. Prior to this sequence of material representations there was no question of a direct trade-off between the location of private spaces for the staff and private spaces for visiting family. Indeed, being non-contiguous the relationship between these two spaces could only be thought together by tracing the interstitial patient rooms and corridors. Now, just as the architects

have been guided by the affordances of their tools to realize a certain range of viable possibilities for the future users of the ICU, they're prompted by those same tools to now determine which of those possibilities to prioritize. Within seconds they've abandoned the flipped plan, and David turns the tracing paper back over to its original orientation.

If I explicated David and Raj's interaction at greater length we'd see that the architects never explicitly set the value of a consolidated space for visitors against the value of a cohesive offstage zone, or discursively construct any imagined scenarios. Instead, there's a much more furtive object animating the perception of patient rooms as impinging, and thus "weird." As they subtly deliberate, David and Raj each gesture to and touch the offstage zone, indicating not any object represented on the tracing paper, but their earlier design sitting underneath it. The translucence of the tracing paper shows two possibilities at once, from beneath and over top. The tracing paper, placed over top of a plan that already depicts the preferred configuration of the offstage area, manifests these two possibilities through a translucent medium that is already implicitly comparative. Consequently, the architects are able to perceive the patient room as jutting into another part of the plan where it is unwanted. It seems then, largely by virtue of this material representation that in the broader, materially scaffolded project of gaming out what might be possible and suitable for different



users, the patient rooms jutting into the offstage zone simply strike David and Raj as something one might find "kinda weird." It's kind of weird, that is, to have a patient room disrupting the offstage zone when it didn't have to.

We can say that there's simply an elegance to one solution and not to the other, but while that explanation may well capture something about the feeling of a particular configuration being right, it does next to nothing to relate this feeling to the criteria the architectural designers were trying to satisfy. In that regard, it tells us nothing about the social sensibilities on display. Rather, by highlighting (see Goodwin 1994) certain features of the emergent plan, the designers draw one another's attention to qualities that, as I've shown, are already imbued with social significance. In many cases, these qualities are derived through exchanges with users (though they are nonetheless the architectural designers' own perceptions). In part because these views are never unitary, spaces present multiple possibilities which may not initially appear as mutually exclusive. What materializing these possibilities in the form of drawings does is allow multiple perspectives to appear at once. It is through the process of producing these views that their implicit possibilities can be compared and weighed against one another.

**A final note**

When we view the sketch/plan as a context—an environment in its own right—rather than as merely a representation we see that architects must enact to some extent the possibilities presented in that environment, recognizing affordances that always espouse some particular form of experience and pattern of use. It becomes relevant to ask how the varying perspectives taken on this material at different moments harken back to the designer's interactions with users themselves. In kind, we can ask in what regards and to what extent architectural designers are

equipped to project an incipient built environment that suits the various capacities, purposes, and needs of different user types.

# Conclusion

In the course of examining how healthcare professionals and patients come to be understood by architectural designers, I have observed that the intersubjectivity of architecture is layered, articulating through different acts and across a variety of interactional moments throughout projects. Accordingly, there is no single answer to the question of how users figure in the design process. This could by no means be an exhaustive account. Instead, in large part what the dissertation accomplishes in its analysis of intersubjectivity is merely pathbreaking in the direction of a few understudied problems. Even the terms on which these problems can be stated most clearly are still very much in development. In conclusion, I offer final reflections on three themes of the dissertation: the complex of Methodological User-Centricity; the layered intersubjectivity at work in understanding users; and the transmutation of medical cultures into architectural design.

## Reflections on Methodological User-Centricity

In giving an account of MUC's development and uptake within mid-century American architecture, I have emphasized features that generalize well to a large swath of today's stylized approaches to design (including, among others, Human-Centered Design, User-Centered Design, Participatory Design, and many techniques of UX). MUC is by no means limited to those aspects which were selectively taken up by Foresite Design. The firm's milieu offers a panoply of conceptual frameworks and practices, and this is in no small part because Methodological

User-Centricity has numerous interpretations and styles of implementation in contemporary design cultures. Moreover, Foresite's own practices were evolving during my fieldwork. They continued to experiment with specific methods of user research, as well as with processes for incorporating this research into their projects. In no small part, it is the complexity of practices within and between design disciplines that motivates my appeal to a larger ideological assemblage.

There are three particularly important benefits of this appeal. First, taking the long view on how the design and social scientific fields are already historically imbricated should enable us to think more precisely about how their apparent differences are produced and sustained. In this dissertation, I've thought through these differentiations specifically with respect to the difficulty of producing a new "process model" for architectural design. Second, and relatedly, it is important to step back and consider the ideological frame lines of these efforts, to bring their historical, cultural, and economical margins into our accounts. This is of benefit not only to anthropologists, but to designers themselves. Very few of the architects I worked with recognized that they were working on problems that others had encountered decades before. I would be surprised if this were not the case with nearly all practicing architects. Yet it is evident that many issues that surfaced during the historical development MUC remain relevant to architectural designers today. They may rediscover ways of articulating the importance of user research to clients, rethinking the purpose of what they are doing for themselves, and recognize in those past debates the persistence of certain issues in a way that may spark greater critical awareness of persistent structural obstacles to fully realizing the intent behind their practices.

Third, it is necessary for the anthropology of design to take into direct consideration how, as with the case of MUC, recognizable, ideologically charged, patternings are developed and

reproduced within the overall assemblage of design practices. Such efforts can and should enable the anthropology of design to interface with, but constitute distinct analytic objects from, the design fields and professions themselves. In part this is because the disciplinary distinctions endemic to design, including the domains of the professions and the features of stylized approaches like "Human-Centered Design" are products of a different mode of attention than that which ethnography often demands. Moreover, those distinctions are often disrupted by practice—which is, in my experience, more heterodoxic than emic discursive objects give voice to. Designers may be, as those at Foresite Design were, in a continuous search for concepts and techniques that help them realize their goals; and, as with Foresite, they may venture outside of their disciplinary boxes in order to do so. Consequently, heterodoxy and transformation both suggest transcendent issues that may require a different order of concept formation to interrogate and articulate. What sorts of demands do such fundamental premises make on designers? How are those demands felt? And how might the very appeal of certain practices be a response to these felt demands? To answer these questions, it would be helpful to delimit deeper cultural distinctions within design than are presently our object of study. To put this point in a way that gestures toward future work: it is only by passing through a level of conceptualization on par with this dissertation's analysis of MUC that Foresite Design's own ongoing evolution might become at once a rendering of a particular place and time and an analysis of a larger complex. In this particular project there is more work to be done, including developing a more personal look at the designers themselves, which for the time being I have had to put off.

MUC evolved in architecture in response to critiques that the field required an empirically-grounded basis for design. This is the legacy of design's (particularly architecture's) dialogue with the social sciences. What MUC is not, however, is the mere premise that the worth

of a design element ought to be its anticipated effect on some user. After all, all contemporary architecture assumes some specific patterns of perception and association. Moreover, on some level, all design (like all interaction whatsoever) involves a basic intersubjective premise of the natural attitude: the reciprocity of perspectives (Schutz 1969). The primary purpose of characterizing MUC for this dissertation has been to lay out how general features of intersubjectivity articulate through specific styles of design practice, rendering characteristic patterns of attunement to others within this community of practice. This is an effort which, as I noted in the introduction, fundamentally carries forward a central aim of psychological anthropology. I anticipate future work in which I relate my findings more systematically to this tradition. Such an undertaking will have to include some consideration for the heterogeneity of resources at designers' disposal for conceiving of architecture's effect on users. MUC is not the only paradigm of architectural thought, even at Foresite. Even as MUC maintains a certain dominance, I have observed architectural designers slip into other ways of architectural thinking (e.g. essentializing formal qualities or making cultural references). As we start to become clearer about how to typify these it will become more apparent that there is good ethnographic work to do in understanding how designers alternately call upon these respective resources.

**Reflections on the layered and processual nature of intersubjectivity in architecture**

What is distinctive about MUC is the infusion of primary research as an ideal for what constitutes good design. If this is so, it is because advocates of MUC believe design ought to coincide with people's extant motives, practices, and interpretive schemes. As I have shown in this dissertation, however, the correspondence of design features with what designers learn about their users is not an automatic result. The practical work of seeking out such a concordance is, I

believe, the fundamental ground for understanding users in architectural design. As I have worked out here, architectural designers' understandings of users continually evolve through the course of various design practices. Ultimately, the final design expresses—if, owing to the plurality of ends to be met, always only partially—an understanding which could not be said to antedate its materialization.

Foresite Design embraced the design buzzword "empathy" as an encapsulation of the premise in their own approach, tending to give their practice of "empathy" the gloss of a static insight into what it is like to be another person. "Empathy", so defined, highlights a fairly restricted aspect of how understanding users works within the design process. However one might conceive of "empathy" in design, it is not equivalent to the range of intersubjective acts constituting design. When Raj glosses "empathy" as being 'walking a mile in another's shoes' and when Don Norman (2019) writes a blog post arguing for why he believes "empathy" is not the trick to good design, both of these equally hone-in on a specific aspect of the concept's popular construals. These relatively emic-conceptual articulations, in which "empathy" is embedded within and makes reference back to a history of popular discourse, take on more-or-less specific meaning depending on the purposes at hand and do convey something important about what is explicitly taken into consideration about others. Yet, as I have shown, there is a great deal more complexity and variety to the intersubjectivity of architectural design. It should thus come as no surprise that the diversity of intersubjectivity in design practice is also unexhausted by the architectural designers' own formulations. I have thus taken Foresite Design's evocation of "empathy", and their purposeful use of it precisely as a condensation, as an invitation to look instead for an extended moment.

In response, I have worked across different moments in the design process, highlighting a range of experiential modalities in order to show the diverse forms of intersubjective attunement at play in Foresite's implementation of MUC. I have argued that what architectural designers make of others is emergent from within their techniques and modes of encounter, including amongst these the material representations they construct.

Among the most significant features on display herein is a vital but underrecognized interplay between explicit (i.e. reflectively available and articulable) and implicit (i.e. pre-reflective and potentially resistant to articulation) forms of subjective and intersubjective experience in architectural practice. To recall a case in point, in their user research methods architectural designers focus largely on what can be conveyed verbally. The value of a method is, in turn, a matter of how many observations it can help to elicit from users. Naturally, this serves to selectively highlight aspects of people's relationship with the built environment that can be articulated. The material products of these meetings, handwritten minutes and sticky notes, produce dense generic representations of idealized workflows and priorities. Often, these are further abstracted into principles to be paired with design features. Consequently, it is first a foremost the architectural designers' own embodied feel for the built environment that gives material interpretation to these accounts. Yet, we should not think that the emphasis on reflectively-available in any way implies that architectural designers are merely and wholly oriented to their users through these channels and then only subsequently take on an embodied and pre-reflective understanding that outstrips what can be brought into thematic focus. On the contrary, it is also evident that architectural designers' actions are also affected by the feelings and values implicitly conveyed through face-to-face communication. As Liz's example demonstrates, in the face-to-face encounter, users' own feelings can stir parallel motives and

interests on the part of the designers. Espousing those feelings, the value of designing itself, and of particular design options, can be transformed. Both examples serve to underscore the importance of attending not only to the conceptual articulation and marked processual features of design, but also to the experiential qualities which may be relatively tacit.

**Reflections on the insinuation of biomedical cultures into design**

The contribution this dissertation makes to medical anthropology is to demonstrate how the methods of architectural user research can inadvertently reproduce technocratic regimes of care through the dual reliance on rationalized, declarative models of practice and the relegation of patients' perspectives to the reports of healthcare professionals. I will briefly expand on these two observations. In the first instance, I've observed that Foresite's most frequent form of "user research" involved face-to-face meetings with representatives of the departments, including management-level staff and individuals from the medical specialties, affected by their healthcare design projects. Thus, user research largely took the form of conversations structured by special activities that dictated the topic and form of these users' contributions. The primary objective in all of this research was to produce collaborative accounts of the ideal-typical patterns of activity within the particular healthcare setting in question. At the same time, representation amongst user types was seldom equitable. The most glaring disparity was between clinical staff and patients. Whereas healthcare workers were systematically included in user research, patients were never in my experience involved in projects. To a certain extent, as I make clear in "Missing Persons", this was despite the efforts of the architects. Nevertheless, it is clear that the conundrum of persons missing from the project meetings was often regarded as an issue of

missing information about persons. I have found that designers' remedy is typically to solicit accounts of these missing users from those who are represented in the meetings.

When everything can be distilled to abstracted, ideal typical representations, inequivalent forms of understanding can be unproblematically assimilated into the same process. Sticky notes and other shorthand representational media at the designers' disposal can make it appear that all knowledge is roughly equivalent. However inadvertent, treating familiarity with users' needs and priorities as if it were equivalent to what can be copied down can serve to introduce asymmetries in how well different user types are cared for when architects' methods meet the uneven social terrain of medical institutions. For instance, interactional features that go unmarked, such as comparatively elaborate attention to self-care relative to patient care on the part of clinical staff, can introduce subtle hierarchies of value that ultimately affect architectural designers' orientations in the negotiation of emergent trade-offs in the design process. While the attempted recourse on the part of architectural teams is often to draw the missing information out from those users who *are* present, and the designers are sensitive to the perceived quality of these accounts, I have suggested that this can only ever be a partial resolution. To some extent these disparities can even become compounded by the limiting aspect of reiterated empathy enacted in user meetings. It is not only the case that the architectural team ends up relying on what can be reported, but that they cannot 'peer around' these views of the non-co-present users.

In short, focusing and relying upon what is verbally reported in a social milieu in which not all user types will participate in user research means that what is most salient to the architects is what is most salient to the involved users. This point requires some qualification. In the first place, architectural teams encounter differences between the different healthcare professions and between individuals. Consequently, the construction of something like the typical flow of work,

for instance, is something architectural teams collaborate in. Further, architects have their own professional modes of attention, which can include notions of good design features imported from past projects in which they were involved or that they learned about in some other way. Finally, as I have pointed out, architects may have heuristics for whom to take as greatest authority on which matters (see, for example, the chapter on reiterative empathy). Nevertheless, every project involves quite substantial margins wherein the remit professional expertise is negotiable, or where more than one viable alternative is available. At those margins, especially, the reliance on verbalized knowledge can have an outsized impact. Here we find a significant premise for further study, especially where, as I have disclosed, medicalized modes of attention can become unproblematically adopted into the design. Here again we see the interplay of implicit and explicit. Design research's reliance on reflexive statements may help to obscure the difference between what architectural designers know through direct interaction with the users in question and what has been passed on through secondhand accounts.

**Going forward**

Despite the critique offered here, I want to be clear that criticism is not dismissal. It is one thing to recognize the shortcomings and liabilities of a set of practices, or the blind spots of ideas, and quite another to reject these on the whole. Personally, as a social scientist, it is hard to imagine a better premise for intervening in the lives of some community than to make an earnest study of their practices and attempt to align with their priorities. Yet it is vital not to oversimplify the complexity of this undertaking. Fundamentally, the issue will always be the plurality of needs and ways of being. As I have ventured in my discussion of the orientations architectural designers must take up as they manipulate representations of lived space, every

design feature must sympathize with some perspective and form of use. The challenge, and this is a formulation I think my participants could align with, is to allow the built environment on the whole to be open to the greatest range of possibilities. Ultimately, what is concerning is the way the institutional politics of healthcare providers threaten to subvert the intentions behind user research. I am convinced that without some means of keeping in play what may be under-represented viewpoints, MUC is vulnerable to being co-opted by, and reproducing, whatever forms of power and privilege prevail in the client organization. This much is clearly suggested, for instance, by the case of the doctors who overlooked the needs of their future nurses and other staff. The simplest fix is to implement measures to ensure commensurate representation between all user types. The most robust solution will probably take the form of collaboration across disciplines (medical anthropology, architecture, patient advocacy groups, and medical institutions themselves) to enact a "politics of world building" (Zigon 2014) that ensures the transformations of architectural design will be more than just better versions of the status quo.

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One of the outstanding projects of my ethnographic research is to think through the relationship between Foresite's efforts at methodological innovation and the pervasive drive to be better. Talk about improvement was an ever-present feature of the firm's internal discourse. Much of this ethos was expressed in strivings toward ever greater levels of personal and collective reflexivity. Indeed, my own presence as an ethnographer was to some extent enrolled in this practice. Marc told me during our first meeting, as did other figures at the firm, that the possibility that I might help them better observe their own practices was one of the attractions of supporting my research. Team meetings were replete with personal and collective assessments. My interviews with individual designers showed that often the very practices they had learned to

apply to designing for others were adopted and adapted as techniques of self-explication and transformation. Thus, I have gradually come to think of these efforts as closely knit with the designers' approach to architectural projects. As much as this suggests a way into the personal, and a closer ethnographic attention to the interior life of the office, it is also an excellent reminder that how we relate to and make sense of others is intimately bound up with how we find our own selves in the world. It is a further twist that only serves to underscore the inexhaustible range of intersubjectivity.

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