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Fantasy Sports: Community through Technology and Ritual

Jaroszewski, Samantha Nicole

Princeton, NJ : Princeton University

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Fantasy Sports: Community through Ritual and Technology

Samantha Nicole Jaroszewski

A DISSERTATION

PRESENTED TO THE FACULTY

OF PRINCETON UNIVERSITY

IN CANDIDACY FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

RECOMMENDED FOR ACCEPTANCE BY

THE DEPARTMENT OF SOCIOLOGY

Adviser: Janet Vertesi

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Abstract

I explore the digital artifact of Fantasy Sports using the analytical framework of *rituals* as used in the Sociology of Religion to understand a digital, networked, and multi-sited field site. I explore the two related communities involved in perpetuating Fantasy Sports game play: a) the users who play and help evolve the game and b) the developers who build and maintain the game. In each chapter, I focus on these two "sides of the screen" to put together a fuller picture of the people who shape this tool– to bear, understanding the technological and social dimensions of workplaces and online communities. While many subfields, including organizational sociology or science and technology studies consider ritual or routine, their intellectual legacy emphasizes a micro-interactional focus that misses the group-level causes and effects of rituals on a group or community. Using ritual as the analytical lens, this dissertation explores how temporality (chapter 3), rules and roles (chapter 4), and boundaries (chapter 5) relate to the community of Fantasy Sports players and developers, which are both particularly amenable to the camaraderie and team-based sociality despite being an otherwise competitive context. Taken together, by looking at rituals in a Durkheimian sense that is both about the social group and the affective, meaning-laden dimensions of participation we uncover broader insights about Fantasy Sports specifically. Thinking beyond Fantasy Sports, these insights increase understanding of hybrid in-person and digitally mediated communities, contemporary social interactions in leisure and work, and primarily –what I term *ambiently* masculine groups. I suggest that Fantasy Sports is particularly well suited for community building because of its dual temporalities, which include small mundane activities that keep users engaged combined with larger, emotionally valent rituals over a longer time horizon (such as every summer). Organizationally, I propose that both informal and formal interactional structures are necessary for encouraging durable communities. Finally, I explore how the concept of a "core" group helps sustain the cultural and affective dimensions of a group, even in the face of attrition or turnover. I suggest that these elements warrant implementation and exploration in other digitally mediated social groups.

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Finally, I extend a note of thanks to the men and women who play Fantasy Sports. Not only those who generously shared their thoughts, feelings, and yes - even rulebooks - with me, but all of those whose *love* of the game make it such an interesting, meaningful and important space.

Producing a dissertation is hard, and each stretch had its own challenges. As I close this chapter of my life and enter the new one, I move forward with the memories, friendships, lessons, and investments from all of these people and many more. I hope to repay a fraction of the generosity in mentorship, opportunities, advice, and companionship that I have received.

Chapter 1: An Introduction to Fantasy Sports

Draft Day

It is a sweltering Sunday evening in August of 2017 and I am sitting in an air-conditioned office in Los Angeles surrounded by computer monitors. On one, I see two men sitting next to each other on a couch in a sun-drenched living room on a Naval base along the Pacific Coast; on another, a woman sits in a dimly lit kitchen yawning; on yet another, a baby-faced young man in camouflage sits in a trailer in a desert in the Middle East, the sun gradually rising behind him. This group of men — and one of their wives sent as a proxy during his deployment — gets together each August for a digital "hangout" during their Fantasy Football draft.

This year, they let me – a PhD candidate and academic collaborator at Yahoo doing research around Fantasy Sports – observe digitally, using the same video conference they were using. As they prepared for the draft, they sat together in their remote locations, ribbing each other, poking fun and catching up: who has gained weight since last year, gotten a new haircut, had a baby or moved into a new house. They reminisced and ridiculed decisions made in previous years' drafts. In short, they seemed to be proceeding as they would without me there, which was my goal. That snapped suddenly as the evening went on and some expletives were expressed, spurring one of the Fantasy Football managers to scold his friends, league mates and fellow Navy servicemen: "Hey! The researcher lady is listening!" Over the course of two years of fieldwork, I observed or was told about many evenings like this one: friends carving time out of their schedules to get together, reconnect,

and kick off a four month stretch of Fantasy Football game play. After the draft, each league mate will manage his team weekly, making roster adjustments and conducting research to help defeat his opponent with the goal of winning the league. Every year, the same group returns and rituals repeat: the annual draft and the daily lineup tweaks that follow, the smack talk, the elaborate rules and expectations laid out in careful detail in a series of word documents and spreadsheets.

In another California-based Fantasy Sports League, Eric plays with the same group of men throughout the whole calendar year – covering all four of the major sports: Fantasy Football, Hockey, Basketball, and Baseball. As the organizer, or *commissioner*, of all four leagues Eric has the bulk of the responsibility for organizing and managing the built-in tools as well as creating the supplementary rules and roles that make this ultra-engaged league unique. Over time, Eric's leagues have built out a fuller organizational structure than the basic, built-in roles of one commissioner and 9 managers. In their league, there is the commissioner and a vice commissioner, a competition committee to rule on disputes brought to the league for adjudication, and more. They took what is an informal leisure activity and created a whole system of rules and roles around it in order to formalize and extend the opportunities for play. Eric reflects proudly on the community he's helped build, "They all know each other because of me, and now those relationships go way beyond Fantasy."

What makes Fantasy Sports, a game for competition about sports, so amenable to being repurposed into an emotional touchpoint in the lives of men like Eric and the millions like him who play Fantasy Sports? How do the rituals that are built into the game as well as those added onto it create durable communities that are grounded in relationships but

are mediated and maintained online? And what about these rituals and experiences make them so set apart and durable in people's lives, such that as they become busier with families of their own, they remain in these communities and commit to celebrating the events like the draft as they would important holidays or a family reunion (two life events often used by my respondents as analogous to their Fantasy drafts)? This dissertation – beginning with this chapter, introducing the field sites and key questions – aims to address these questions while simultaneously offering an overview of the people involved in the Fantasy Sports communities to help us learn more about contemporary workplaces and relationships that span both in-real-life and digitally mediated spaces.

Over my two years of fieldwork, I spoke with dozens of Fantasy Sports users and surveyed tens of thousands of users. I heard countless stories of users who put relationships - and not competition - at the center of their experience playing this game. I heard from international users desperate for a way to connect with other fans of the same sports they followed but were not popular in their home countries, combat veterans who were eager to stay in touch with those with whom they served but were reluctant to engage in any support groups that required them to focus on their feelings or experiences (but they loved to be able to connect with fellow sports fans about this mutual interest as a low-emotional-maintenance to keep in touch), new neighbors who break the ice through sports talk only to find they share Fantasy Sports as a hobby, pastors who describe the game as fostering fellowship (while the vast majority of my respondents call it "camaraderie") and a small town full of fathers who joined a league to play Fantasy Football against their ten year old sons.

In each of these cases, the men and women who are playing the game of Fantasy Sports put the *community* at the center of their experience. Though the game is designed and intended as a tool for competition, and can be played anonymously or with instrumental motivations in mind, Fantasy Sports are at their most meaningful and fulfilling when they draw on and contribute to the relationships in people's lives. As such, the mundane and routine practices of game play – the daily setting of the roster, the cursory research into the sports data and news, the compulsory checking of scores before bed – take on a sacralized (or value-laden and set apart) meaning of ritual; through this, digitally coordinated groups of individuals become durable communities. The processes that link individuals and help shape their shared sense of meaning emerge both in the communities of (1) users as well as (2) the communities of developers and designers, product managers and editorial teams that invest their own time and expertise in the product that is so meaningful to its users. This dissertation explores both sides of the screen to better understand the dynamics of users and producers of the same artifact: Fantasy Sports. Both sides of the screen are relevant for a few reasons. First, the developers are a subset of users – unique and important, but users nonetheless and thus are participants of both sides of the screen. In that way, I argue that they are indeed one connected community. Second, with respect to the social shaping of technology, I suggest that understanding the ways that habits and routines from both sides of the screen mirror one another is a novel consideration. Finally, from my position as an embedded researcher occupying a User Experience (UX) role, I suggest that this liminal position in interaction with both users and developers is methodologically well situated for understanding both groups.

Throughout, I consider the following questions: What makes this game so persistent for the millions of people who play in Fantasy leagues? How is a prediction-based game of numbers the basis for deep and enduring affective ties that bind men in friendship? And what can we learn when we take this pastime seriously, thinking about friendship as an area of interest for sociologists of technology and communities? To answer these questions, I consider two groups – (1) Fantasy Sports *players* and (2) Fantasy Sports *developers* – and how the rituals involved in Fantasy Sports help us understand the communities in a new way. By starting with a technosocial artifact and looking at the two primary social groups that relate to it, I present a broader understanding of the ways that these groups make sense of and meaning from the game than if we looked at either individually. This is because these groups regularly interface; they are tied to the same product and its unique temporality as a result; they both make use of formal rules and roles as well an informal rituals and routinized fun to maintain their community and make it through the "grind" of the long sports' seasons together. I consider the rituals around a shared sense of time (chapter 3), ritual rules and roles involved in game play and development (chapter 4), and finally how rituals help us understand the boundaries and belonging in the community (chapter 5). Looking at rituals in a Durkheimian sense highlights what is interesting both about the social group and the affective, meaning-laden dimensions of participation as we uncover broader insights about Fantasy Sports specifically. However, thinking beyond Fantasy Sports, we can consider how these insights increase understanding of hybrid in-person and digitally mediated communities, contemporary social interactions in leisure and work, and what I term *ambiently* masculine groups.

What are Fantasy Sports?

Fantasy Sports are a genre of game that relies on the outcomes of real-life athletes to provide the data for Fantasy leagues. That is to say, it is a type of meta-game, or a game about and dependent on another set of games. For example, Fantasy Football leagues use the data from live games being played by professional athletes in the National Football League in order to generate the points that accumulate to their fantasy teams. The same is true for Fantasy Baseball with Major League Baseball (MLB) and Fantasy Basketball and the National Basketball Association. Today, Fantasy Sports are most frequently played by groups of men on digitally mediated platforms provided by a handful of companies with Fantasy Sports offerings. These Fantasy Sports products, offered by large technology and media companies such as Yahoo and ESPN, facilitate gameplay by managing much of the logistics and infrastructure for Fantasy Sports leagues. This project is an in-depth exploration of those Fantasy Leagues on the one hand, as well as the men and women who build the platforms on the other hand. Taken together, this look at the communities on both sides of the screen aims to set the foundation for a better understanding of an emerging realty of social life and interaction: communities that are a hybrid of in-person and digitally mediated ties.

Each Fantasy Sport season roughly maps to the professional sports season for the corresponding sport (the Fantasy Sport season is typically a few weeks shorter than the professional season. Fantasy Baseball usually runs from late March through September, Fantasy Football, September through December; and Hockey and Basketball run October through April. The Fantasy Season kicks off with a Fantasy Draft, some variations of which were described above. The draft is the time that Fantasy *managers* — the men and women

who play Fantasy Sports and run a *Fantasy Team* — select the real-life athletes who will populate their roster; that is to say, each Fantasy manager selects the real-life professional athletes who will comprise their Fantasy team. The group of (typically) 8-12 individual managers is called a *Fantasy League* and each league is typically organized and run by a *Fantasy Commissioner*.

Much of this structure to the game was baked into Fantasy Sports from its infancy. The origin story of Fantasy Sports is now fairly canonical: the year is 1980, the location is a New York City restaurant called *La Rotisserie François,* and the sport was baseball. A group of men gathered for the inaugural draft of a fantasy game that would be named after the location: the Rotisserie League. Rotisserie, or Roto, remains the name of leagues drafted in the same scoring style of that first Fantasy Baseball league, most of the founding members had ties to the media, and the statistics for the first years of this new game-within-a-game were calculated by hand from newspaper box scores. The math and time-intensive process of calculating statistics for teams of Major League Baseball players that only existed in this league of friends made the game a labor of love. But it carried on for over a decade with this same original group and spreading slowly among only the most data-loving, fanatical niche of baseball fans. Two phenomena converged to make this hobby, originated by a dozen players and experiencing growth at a glacial pace for a decade, explode into the multi-billion-dollar industry it is today: 1) the proliferation of easy access to sports specific data via the internet and 2) the spreading popularity of advanced statistics as a way to understand and consume professional sports.

The origin story of many an individual long-running Fantasy Sports league intersects with the Yahoo platform. Often, these stories are recounted to me in interviews with men

in their forties or fifties, most frequently Fantasy Baseball players. A composite version of these stories I heard over and over follow a familiar arc; users say "I've been playing Fantasy Baseball for at least fifteen years. I got started when I heard of the game and curiosity and my love of baseball got me interested. I joined a league and we paid a fee to get paper baseball box scores from newspapers across the country sent to us weekly. We would manually compile the statistics at regular intervals, and would call each other on the phone to make trades. As the internet at home got more popular, we began playing Fantasy baseball online on Yahoo and have been doing so ever since." These advances have made the pastime more accessible to a broader population by reducing friction and barriers to entry, including organizational requirements on individual players and the commissioner especially, as well as the scale of the requisite time investment. It also introduces the ability to get data, statistics, and advanced metrics in near real-time rather than requiring lengthy delays as scores were formerly gathered via newspapers across the country, delivered by postal mail or synthesized and made available by phone. Now, users can sign up and log in to a free website – one that is monetized by their presence and exposure to ads, the business model for much of the internet – and have that website deliver instantly updating scores, see how those scores have affected a given players' standings in the league, and send a message deriding their opponent all within thirty seconds from their phone.

How do you play Fantasy Sports?

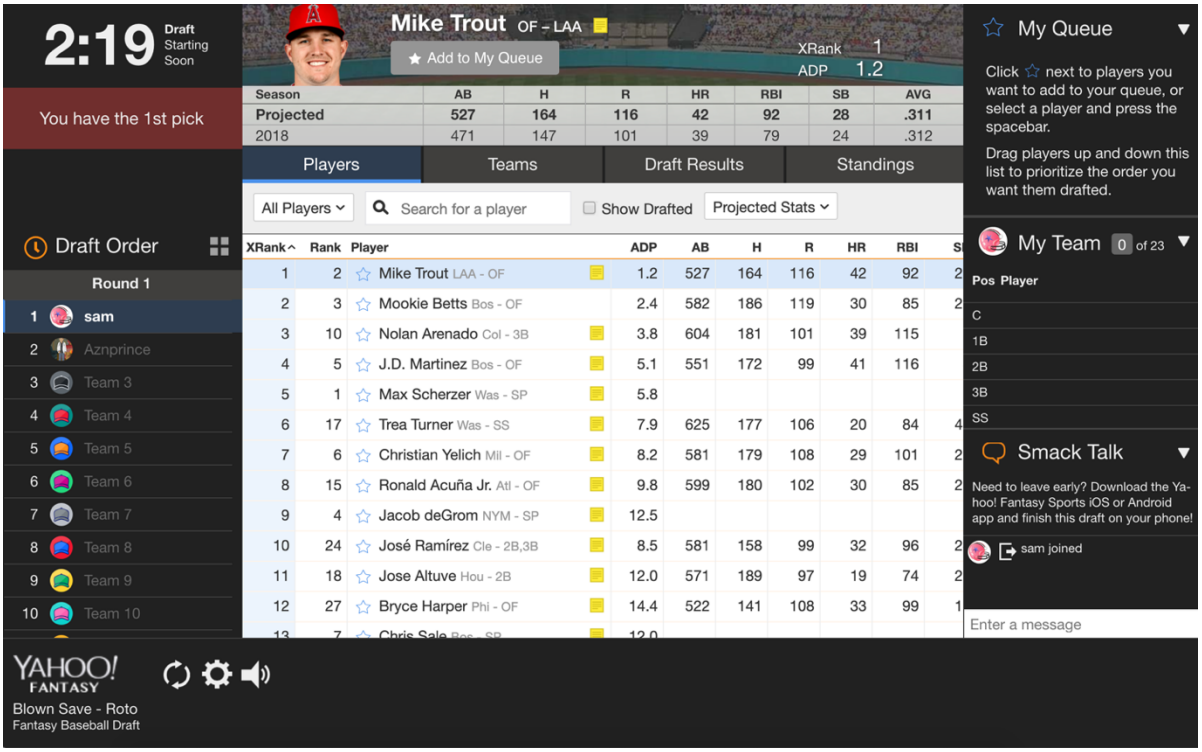
Let's say that you wanted to play Fantasy Baseball. Imagine that I, your friend, had heard that you are new to Fantasy Sports and wanted you to join my league. First, I would create a Fantasy League – perhaps I would call it the "Sociologists' Fantasy Baseball League" – on Yahoo. I might name my own team "The Chicago Pink Sox" and as the

commissioner, I would select the settings from a range of available options. Once I created the league, I would have the option to invite others using a customized invitation link or by entering their email addresses. Once I have gathered 10 people to comprise the Sociologists Fantasy Baseball League, I set a date and time for the league to draft. I might reach out via the built-in message board to try to find a time that works well for everyone to draft "live" – or contemporaneously – using the online "Draft Client" or web-based tool that facilitates and organizes drafts. Let's say that the draft is scheduled for this upcoming Sunday evening.

Before Sunday's draft, you might do some research; you could do an internet search for recommended Fantasy Baseball draft picks, "sleepers" (or picks that experts recommend might have a lot of value and might be less likely to be ranked highly by other people in your league) and advice for who to pass on, or "do not draft" lists. Yahoo, like many other Fantasy Sports sites, has a built-in cadre of research tools including a huge amount of data about the individual MLB players you can draft: how they performed last season, how they are projected to do this season, and dozens of ways to slice the data for Fantasy Sports players to make informed decisions. If you are feeling anxious about your draft, you can test out your strategy by joining a "Mock Draft" – which are public, free trial runs of the draft process with real users around the world and that fill and run on a rolling basis. At the time of this writing, I opted to join the next available Mock Draft and was placed in a draft within three minutes. Everything about a Mock Draft proceeds exactly as a real draft would except that the team you select does not persist after the draft; it is merely a practice run.

The image below [Figure 1] shows the Mock Draft client, which looks like the real draft with the exception that in the Sociologists Fantasy Baseball League, the far-left column of "Draft Order" would be full of people we know and are playing in our league. The middle section, with the white background, is where we can find the exhaustive list of players available in Major League Baseball. The filters and search options allow the users to do research within the client and the different tabs show views of the Players, the Teams in the League, the current Draft Results, and projected Standings, or performance, by team. In the right-hand sidebar I can "queue" players that I want to draft with future picks; below that I can see which of my set roster slots are already filled (we each need to have a player fill each of the available roster positions – seen under the header of "My Team – Pos Player"). In addition to drafting players to fill each required position to field a full team, you draft a number of "bench" players as well, so that you can field a full team even when your starts are not playing that day (since MLB players do not play every day). Below the roster, we see the section designated for Smack Talk. While it works as a regular chat feature that drops in information about which player was taken by which League member in real time, it is conceptualized as (and named for) a place to banter. This co-presence with built in tools and the encouragement to chat offers the opportunity not just to make your picks but to talk about them, evaluate them, and compare them within the context of the league.

Figure 1: Mock Draft Client for Fantasy Baseball



Once my team is drafted, I can access it on the mobile application or on the website. It is common practice for users to draft their teams on a computer because of the extensive research tools, but then transition to using the mobile application, or app, for day-to-day use. Accordingly, though I demonstrated the draft client above on desktop, I will show next steps using visuals from the iOS app. Here in the screen images below (Figure 2), I am looking at my roster for my team, the Chicago Pink Sox. I see an overview of the statistics from today, I see the players I have occupying each position eligible spot (in the first player row, the position is the catcher, indicated by the "C" on the far left, and is occupied by M. Zunino, the catcher for the Tampa Bay Rays. The information in this player row shows that the game is over (score is "Final"), his team won ("W 4-2 v HOU") and he recorded one run ("R") for my team, the Pink Sox.

To make sure that I have MLB players starting in my roster each throughout the week (since not every player I drafted will play every day of the week), I can use the built-in functionality to "start active players." The screen shown in (Figure 3) shows how the Fantasy app automates a lineup for each day through the week. This time-saving feature is relatively new and is a user favorite for taking some of the guesswork and time requirement out of keeping your roster filled. The user still needs to manually replace players who are injured or sitting out games, to make trades or pick up free agents, but pressing the Start Active Players button really takes just a moment and comprises the basic requirements of game play. The buttons that sit along the bottom of the app's navigation – 1) My team, 2) Matchup, 3) Players, and 4) League facilitate research and additional data views, as well as ways to see your own performance. The chat bubble icon on the upper right-hand corner of the screen is where you can access the in-app chat product, which allows you to group chat with everyone in your league or send 1-to-1 messages to any individual.

Over the course of the season, each manager in our league will manage his or her team in this way. They will accumulate points based on the performance of the players we each drafted. We can remove (or "Drop") players who are not performing well, can "pick up" or add players who play in Major League Baseball but are not currently "owned" or "rostered" by any of the members of our league. Those players are "Free Agents" and can be added (depending on league settings) on a first-come first-serve basis or acquired through a complex bidding system called "Waivers". Each week in this league, you will go "head to head" with another team in the league, and the winner in the "matchup" is the one whose team performed the best in the most categories that are scored[1]. The view below

[1] This scoring type is called "Head to Head Categories" or H2H 9 Cat (9 cat means there are nine scoring categories; the number of categories is customizable).

(Figure 4) shows my – The Chicago Pink Sox – matchup versus my colleague, "Nightmare Scenario." I am beating Nightmare Scenario 4-3 and the categories I am winning are shown below, with the winning number shaded lightly in gray. If this were the end of the week, it would count as a win for me. Over the course of twenty-six weeks, I will play each other member of the league 2 – 3 times in a head to head matchup like this. At the end of the season, the teams who have performed the best in terms of record will go head-to-head in the Fantasy Baseball playoffs until only one team, the champion remains.

Figure 2: Mobile App Screen, Fantasy Baseball Roster

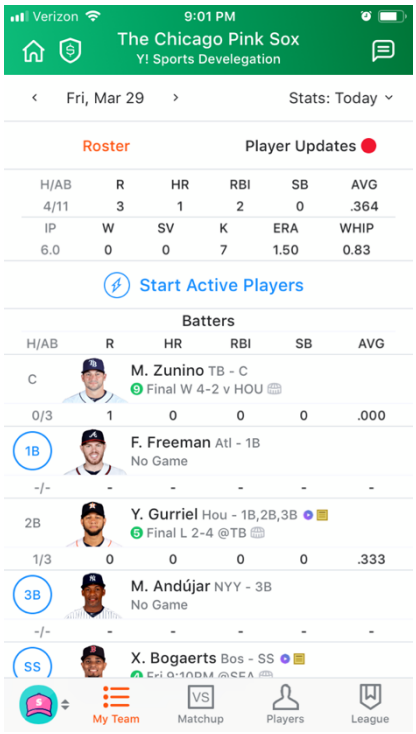


Figure 3 Mobile App Screen, Set Active Lineup

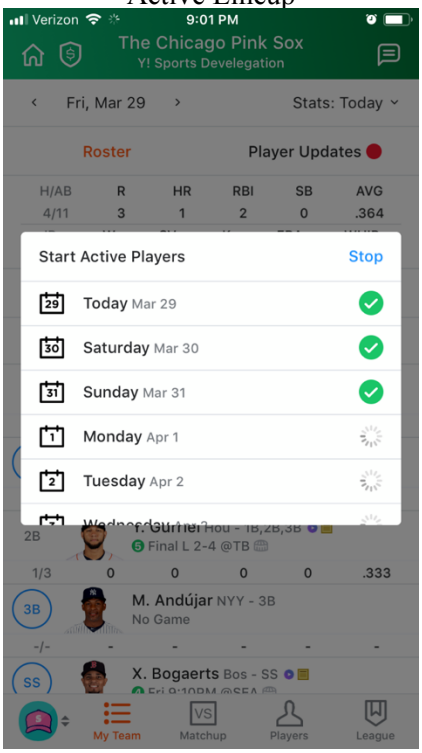
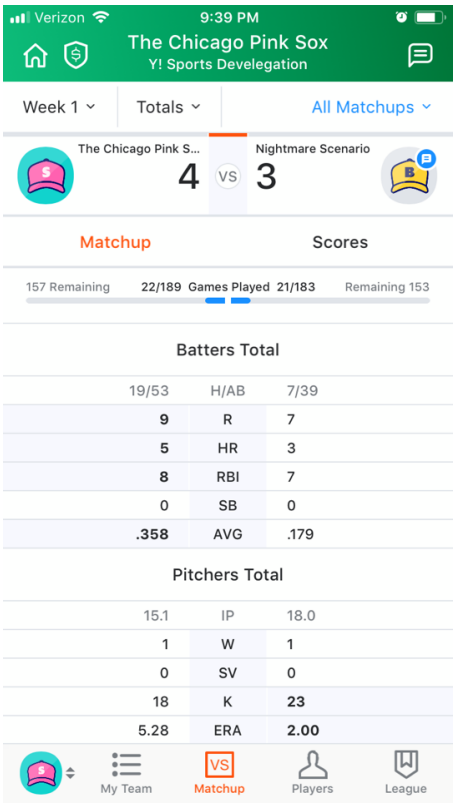


Figure 4: Mobile App Screen, Fantasy Baseball Matchup



The game today

In 2019, Fantasy Sports is a leisure activity that has gained immense popularity, though some misconceptions persist among the general population. Commonly, I hear from the uninitiated that they perceive Fantasy Sports as a gambling activity or, on the other hand, that it is a sort of nerdy activity "played by men in basements." Neither perception is well founded. While a variation of the season-long Fantasy games I discuss in this project called Daily Fantasy Sports (or DFS) exists in which players can enter for free or a small fee and compete to win large sums of money, season-long Fantasy Sports is much more a game of skill than a game of luck. Additionally, users are by and large not playing to win large sums of money. Regarding the idea that Fantasy is an underground hobby played by the socially isolated, that is also unrepresentative. According to the Fantasy Sports Trade

Association, about 1 in 6 Americans played Fantasy Sports in 2017. Fantasy Sports players are our colleagues, relatives, teachers, bankers, pastors, mechanics, servicemen, and more. As a "gamification" of real-world sporting events, Fantasy Sports play has a low barrier to entry in that Fantasy Sports can realistically be played from anywhere by anyone, though most forms of Fantasy play in the contemporary moment requires regular access to internet. The low barrier to entry, ubiquity of sports fandom, and proliferation of digital platforms supporting Fantasy Sports has yielded a huge increase the numbers of participants in recent decades, with sharp rises in recent years.

Whatever the motivation of individual users, Fantasy Sports as a game genre is in a period of explosive popularity. The Fantasy Sports Trade Association (FSTA) estimates that in North America, 59.3 million people participate in Fantasy Sports. Fantasy Sports currently has more participants than the popular online game Second Life at its peak, or other popular, immersive and massively multiplayer online games such as World of Warcraft or Halo (Shipman 2009). This growth has led to an emerging body of literature about this relatively recent social phenomenon, though it has ties to the multiplayer online games that preceded it. Despite the name "Fantasy", which may harken for readers to other online or analog games of the Fantasy genre such as Dungeons and Dragons, Fantasy Sports does not have any magical or mystical elements. Fantasy Sports is distinct in this way and others - including its lack of an immersive experience - from the preceding wave of online social and/or competitive games. Rather, Fantasy Sports represent a "gamification" of real-life sport play and bridges events happening in the world (the live sports played by professional athletes) for social groups (Fantasy leagues) that are tied together through this form of play (the Fantasy season). The game play itself is mundane

and routine after the initial draft, with the main activity of play (setting the lineup) occupying mere seconds of a day, though managers may elect to put hours of weekly research into their decisions.

Despite being a *Fantasy* game, then, it is also a game grounded firmly in reality. It is a game that relies on real life data and statistics from real-life athletes playing actual games that exist independently from the game of Fantasy Sports; similarly, it is often played with people – at least some of whom – participants know from their offline life. While it is an engaging and pervasive form of digital recreation, this basis in offline reality distinguishes this pastime from other forms of online activities. Those games of the *fantasy genre* that contain fantastical elements (such as World of Warcraft or Second Life, or even their analog (offline) counterparts such as Dungeons and Dragons, are *immersive* experiences that require the dedication of significant amounts of time to participating in those game communities, which precludes the ability to drop in and play briefly without disengaging from their day to day lives. I argue here that what is unique about Fantasy Sports is that it is a digital game that is adept at fostering durable, *meaningful* communities because of (and not in spite of) the limited time requirement that makes it hard for men and women to remain engaged in time-expensive games such as Second Life or Dungeons and Dragons throughout the life course.

Scholars of the world of online games and technology have indeed been attuned to how these games of the Fantasy genre have developed rituals and roles (such as World of Warcraft's "Guilds") or placefulness (such as the meaning created around online neighborhoods in Second Life) or entire real life *leagues* around playing video games (such as is now common practice among elite video game players, or eSports athletes) in a range

of game types (Boellstorff 2008; Taylor 2012; Turkle 2011, 1995). In these cases, what is different from the case of Fantasy Sports – beyond the connection and grounding in real-world experiences and relationships – is the brevity of the rituals engaged in. In those games, players spend huge chunks of time co-present and engaging in these immersive practices. Rather than requiring continuous co-presence to play, Fantasy Sports requires co-presence episodically at the draft, and then allows for asynchronous play tied to the sporting events that occur at fixed times but do not require active presence by Fantasy Managers. In this dissertation, I will argue that the brief daily activities *combined with* the episodic co-presence creates the right context for durable communities (chapter 3) and that as those communities become formalized through the addition of organizational rules and roles which yields deeper investment by participants (chapter 4).

If not an immersive game, video game, or game of the Fantasy genre, what are Fantasy Sports? Broadly, Fantasy Sports fit into the larger category of "data-driven prediction games" and have important implications for understanding data-seeking and data analysis among users and game players (Dzodom 2016; Dzodom and Shipman 2014; Sharma and Reimer-Kirkham 2015) However, as games they are also part of a set of leisure activities that are digitally mediated, collaborative, and social. Ahn calls this emerging form of engagement "pervasive play," which references a set of "technology-mediated, playful experiences that are tethered to our everyday lives through the physical and virtual spaces we inhabit" (Ahn 2016). Collaborative, digitally mediated, and distributed leisure, whether through physical sport (Mueller, Agamanolis, and Picard 2003), interest-driven internet communities (Kow and Young 2013), or sites that bridge online- and offline-communities (boyd 2014) are key sites of interest to the scholarly community as more and

more leisure, social engagement and play takes place in networked spaces. I became interested not just in the networked community of Fantasy Sports players, the initial proposed focus of my dissertation project, but also the men and women who build and support the game as I became embedded with their team to study the users.

The experience of professional sport fandom in the United States is nearly ubiquitous as well as historically rooted. Sport has been linked, analytically and symbolically, to Civil Religion (Belllah 2009; Kornblum 2013; Williams and Fuist 2014) with special attention paid to the rituals and meaning making of religion (Spickard 2005; Tavory 2013; Whitehouse and Lanman 2014). In the most recent two decades, the game of Fantasy Sports emerged to supplement fandom by creating ways for fans to put themselves in the shoes of those who manage professional sport franchises. These men and women Fantasy Managers are not just engaging in the collective effervescence of attending live sporting events, they are orienting their free time and relationships around the rituals, traditions and communities of Fantasy Sports. In this dissertation project, I borrow from the theoretical toolkit of the Sociology of Religion to understand the sociotechnical product of Fantasy Sports and the two communities — those of the men and women who play it and the developers who build it— as an interesting site of social action.

To do so, I take an ethnographic look at the experience of the Fantasy Sports players and the software engineers who build an industry-leading sports app at a large corporation in the heart of Silicon Valley, I Follow the contours of their work, which results in an ethnography that is multi-sited. Over eighteen months, I conducted participant observation as a researcher embedded in the "Sports Org" in the company, both in their Silicon Valley headquarters, a satellite office in Los Angeles (known as "Silicon Beach" for the

preponderance of technology companies with remote locations there), and the digital spaces that link them: their enterprise chat and video call systems. These ethnographic observations are supplemented by ten semi-structured interviews conducted with members of the engineering team from both locations. Additionally, it offers a descriptive as well as analytical view of engineering culture with special consideration given to the intersection of engineering norms and mores with the cultural norms of sports fans, given their shared goal of building a product that is for sports fans.

This ethnographic work draws on the tradition of workplace ethnographers (Kunda 1995; Kunda and Van Maanen 1999; Vaughan 1996; Vertesi 2015, 2014). Like Vaughan and other "trace ethnographers", I use written artifacts to reflect on the culture and processes of the workplace (Geiger and Ribes 2011; Vaughan 1996). It also draws on and is in conversation with cultural analyses of Silicon Valley, notably (Barley and Kunda 2001; Ensmenger 2015; Turner 2009; Wajcman 2018). Taken together, it offers an update to the literature on "geek culture" with sensitivity to dimensions of gender. In particular, it takes a look at the ways that the sports and technology/engineering masculinities (known as "geek culture") intersect but also makes space for progressive views about gender. In part, this is evidenced through the performance and surveillance of interactions on digitally mediated platforms. Through this close look at the culture and interactions of the workplace and its broader context, I shed light on interesting nuances in their distributed labor practices as well as their performance of gender and agency.

Reflexivity and positionality

My interest in studying the complex and enduring bonds of sports fandom emerged in my undergraduate years from observations in my own personal life. I was interested in

the ways that sports often served as a gateway into conversation, for men especially. During my early graduate education, I became interested in the world of adult recreational sport leagues for reasons similar to the ones outlined here: people (though mostly men) were forming meaningful, durable relationships and communities through routinized play. Like many dissertation projects, this one is the result of intellectual curiosity at the intersection of seemingly unrelated subfields (religion, sports, and STS), luck, and well-timed encouragement from conscientious advisors who saw promise in applying the established ways of studying something old (religion) to something new (online communities).

Data & Methods:

I operated as a fully embedded team member in the corporate structure of the field site throughout the duration of my fieldwork. I began as a paid intern in the Summer of 2016, the only way to initiate full access to the physical and networked spaces of the field site. This arrangement also facilitated my data access and collection. Because, at the end of my internship, both the product (Fantasy Sports) and UX teams found the research valuable and the relationships I built with the teams were strong and productive, I was able to transition into an unpaid role as an Academic Collaborator. The Academic Collaborator role within the company was a formal affiliation without pay that involved the sharing of resources (data, network access, and the ability to use the office once a week). From the conclusion of my internship through the Spring (August 2016 through April 2017) I was in this role. I was still writing surveys, deploying them, and analyzing the data. This data was designed and proposed to serve as the basis of this dissertation, but I also submitted regular reports on the data to the teams. As the teams were extensively using the data I collected, I was transitioned into a part time project-based research role at the company.

This role facilitated my ability to work from a second office, thereby making a comparative ethnography possible. It also enabled me to continue working as an embedded member of these distributed but related teams. I wrapped up my fieldwork, gradually, through the winter of 2017 though I remained on-site for several more months and transitioned to a permanent role on the team.

To be clear, without the generous and complete support of the company and, specifically, the UX Research managers, I would not have been able to conduct this dissertation research. This reflects a commitment to not just industry research but, likewise, a commitment to academic research from within the UX research team. In fact, it is one of an elite few industry UX research departments that has such a history of facilitating and sponsoring academic research. The tradeoff I made in exchange for this access and permission is the careful stewardship of both a) user data (bound by both IRB and company data agreements), and b) proprietary data. Because my research questions were around community and meaning-making, I had scant few challenges emerge around proprietary data. I am not interested in exploring minute details of the engineers' work processes or specific elements of their code; the precise numbers of unique users playing or their specific demographic makeup are not the data of interest to me. Instead, I am focused on how these groups of people behavior, how they talk about their behavior, and how they make sense of it. Additionally, I am interested in how it reflects back on the men and women who build the system and how that gets inscribed back into the product itself.

Though my data are limited and constrained as outlined above, this dataset is, to my knowledge, the largest study of Fantasy Sports users ever compiled. These data represent a cross-section of users from only one (although one of the two largest) online

providers of Fantasy Sports; additionally, some numbers cannot be presented because of their sensitivity as relevant to business interests. Taken together, the data presented here reflects 18 months of partnership between myself and the teams that create the best Fantasy Sports product on the internet (as rated by the Fantasy Sports Trade Association) and a generous volunteering of time by the men and women who play Fantasy Sports.

Regarding my own experience of the Yahoo Fantasy Sports platform: I played my first Fantasy Sports game ever my first year of college. From then on, it was the only Fantasy Sports platform I used until I tried competing products during the course of my fieldwork. Not only have I immensely enjoyed the process of researching this product for my dissertation, I have gained a sense of satisfaction contributing to a product that I personally use and, through my research and experience, know is a meaningful part of people's lives. My own experience mirrors many of the cases outlined in this project: I play with a few close friends and family, but mostly with an extended network of friends of friends, year over year. I am in a keeper league for baseball, in which I have risen in the standings, finishing in last place in 2016, eleventh in 2017, and seventh in 2018. My league is currently (in the off-season) in the midst of discussing rule changes and adjustments for next season, and I am looking forward to playing again come spring. Meanwhile, I am in a Fantasy Football draft with many of these same people, a subset of whom drafted from my home when, by coincidence, a third of the league was in the same city at the same time. We have a shared chat platform and, because of the season length of football and baseball, we are in leagues together for the full calendar year.

Finally, as is often the case with an ethnographic experience, the relationships established during one's field work are multifaceted. Over the years I spent working

alongside them, the engineers became my colleagues, and those colleagues became my friends. The culture of the teams involved tight knit interacting, socializing, and friendship. It was a privilege to work alongside these teams that, by all accounts, excelled at their jobs and worked together to produce and maintain an award-winning product. Though the work was often challenging, it was more often fun. Equally so, their friendship, conscientiousness, inclusion, professional courtesy and respect was a hallmark of my fieldwork. I remain grateful and humbled by my time working with them as a PhD candidate in the social sciences on their corporate-engineers turf.

Throughout this dissertation, I present observations and interviews from men and women who play in leagues with a seemingly endless list of meaningful ties to the game: strangers who became friends over the course of a decade of online play, veterans who value the opportunity to remain in competitive but low-stakes contact with the people they served with abroad, a boss who got to know his employees through Fantasy Leagues with an annual party hosted at his house, a group of women whose long autumns drinking beer at Football games have transitioned to spa days as they began having kids and could no longer drink at their drafts, and more. I will also look to the men and women who build the game. For them, the meaning of the game is beyond the experience they have playing. It is their daily labor. I take each "side of the screen" in turn over the following chapters, looking at the ways that a shared sense of time, community and identity are built and sustained through rituals.

It also takes seriously Anne Beaulieu's call to ethnographers to refocus studies of science, technology, and laboratories from co-location (or being physically in the same space) to co-presence (or a way of broadening the notion of *being there)* as a researcher

(Beaulieu 2010). As an embedded participant observer of a dispersed and digitally mediated team, I experienced co-presence online in ways both obvious and unexpected. Among the most straightforward, co-presence was achieved via routine participation in video calls which mirrored the experience of being co-located around a single conference room, table. Co-presence was also accomplished in less visible ways, through shared calendar invitations, rapid email communications, casual and problem-solving conversations on a chat platform, real-time collaboration in synced documents, and asynchronous use of other tools of the trade.

This dissertation also draws on a dataset collected for this purpose: nearly 100,000 users were surveyed over the course of a year, across the four major fantasy sport games (in order, Baseball, Football, Basketball, and Hockey). Each survey was designed to include comparable questions across sports, with the addition of sport-specific questions in each survey and additional questions as the year went on and areas to follow up on were identified. As the first survey, the Baseball survey functioned as a pilot. This data is the most limited, and the results presented throughout include baseball to the extent that the data is available for that question. Each survey included a mix of open-ended questions alongside fixed-response questions. This facilitates both quantitative and qualitative data analysis and enabled the collection of detailed information from respondents at a scale that would have been cost and time prohibitive if it had been conducted through alternative qualitative approaches.

On the user's side of the screen, I interviewed 40 users — ten per each of the four major American sports — for about one hour each. All of the users interviewed were recruited from a sample of the nearly 100,000 Fantasy Sports users who had voluntarily

filled out the large-scale surveys I deployed for the purpose of this dissertation project. The large-scale surveys featured open-ended experiential questions are also used to shed light on beliefs, behaviors and practices among Fantasy Sports users. Additionally, I observed 7 separate Fantasy Drafts, covering both football (n=5) and baseball (n=2). One of the Fantasy Football drafts observed (in person, August 2016) was a high-stakes Fantasy Football draft that took place annually in Las Vegas as part of the National Fantasy Football Championship organization. The remaining drafts were observed and recorded digitally (methods explained below). Beyond observing, I participated in several drafts and seasons of my own, for Fantasy Football (n=7), baseball (n=5) and Fantasy Basketball (n=2). The observed drafts were attended remotely with the help of a key informant. They were recorded at two points: 1) there was a camera capturing the audio and video display of the room and 2) a key informant shared his screen with me, the researcher, to facilitate the observation of inaudible or invisible behaviors and interactions happening on their monitors and within the draft platform.

The surveys were deployed in partnership with Yahoo's User Experience Research, Sports product, and marketing teams. The collaboration across teams with study design and questions added to the survey to address the current research needs of all the teams. This was especially necessary because the survey was delivered, via email, to a huge population of potential respondents. My data agreement with Yahoo prohibits the sharing of proprietary or business-related numbers, with the result that not all numbers about the number of surveys sent can be reported. However, I can report that the surveys were sent to a sample that met the following criteria: 1) the person was currently registered for a

league in the Fantasy Sport being studied, and 2) the person did not opt out of promotional or other emails (i.e., have selected to be "unsubscribed" in the past).

A core of the survey included a matrix question around motivations for play, which I assembled from a review of the relevant literature around motivations and Fantasy Sports (Billings and Ruihley 2013; Brown, Billings, and Ruihley 2012). The items were displayed in a randomized order to respondents to help neutralize the effects of response fatigue with the number of rows in the question matrix. This question always includes "Other (please specify)" as the final row and users are able to enter their own response. Combined with the open-ended question on the preceding survey page and the fixed-item matrix, there are three ways to explore motivations for participation in Fantasy Sports. The survey questions ask questions about the social context of league play: with whom do you play? Have you played with this group before? Do you live nearby your league mates, or are you geographically dispersed? What do you talk to your league-mates about? And what is the medium of your communication? How often does this communication happen?

On the development side of the screen, I spent over 18 months working as a participant observer in the day to day operations as a member of the Sports Org. I entered my field site as an intern, not atypical of full-time employees. I worked on the User Experience (UX) Research team, learning how to be a UX researcher on the job, under careful guidance from a mentor-manager with a PhD and an academic background in Human Computer Factors and Information Science. In this role, I supported the Fantasy Mobile engineering team. During the twelve weeks of my internship, I lived in the heart of Silicon Valley in nearby Mountain View, took a daily shuttle at 7:15 am into the office, and took the 7:30 pm shuttle back to the room I was renting. I ate fourteen meals a week at

the office, most shared with other employees; I used the on-site gym and spent hours of time reading on the large grassy quad between buildings on campus. I participated in meetings, calls, talks, informal conversations, and social events relevant to the teams with which I was interfacing. In other words, I was a fully embedded researcher fulfilling a professional function for the team (supporting their mobile product through UX research and sharing the findings with the team) while also retaining my role as an ethnographer.

Following this internship period of intensive activity, I relocated to Los Angeles where I joined the Silicon Beach team, which works on the desktop Fantasy and Sport product. I participated in the same role among a different team for another fifteen months. At this point, I was also able to continue my co-presence on the digital tools that link the two sites. I participated in routine events that called for co-location (such as quarterly planning meetings) and chat-based communications with the same engineers I regularly spoke with during the internship. After the internship, my hours shifted from spending 12 hours a day on-site to a more sustainable 10-15 hours a week of on-location participant observation. I began building rapport with the front end (desktop) team. I shared space, meals, and conversations with the front-end team while continuing to support the mobile team. Despite my support of both teams, I was more integrated with the mobile team and thus have more access and insight around their work. During the final phase of my fieldwork, I conducted in-person interviews with engineers from both teams.

Figure 5: Summary of Surveys by Sport

Baseball Football Basketball Hockey

Study timing	Summer ‘16	Fall ‘16	Winter ‘17	Spring ‘17
Survey N	8,309	56,982	5,060	6,481
Interview N	11	8	10	10

Conclusion

This first chapter introduced the field sites as well as the key research questions, data, and methods. Setting aside the substantive content of Fantasy Sports, as a whole the dissertation is about ritual and why it matters. The aim is to help us make sense of what sociologists can do when they look at the places, spaces and platforms – digital, analog or both in sequence – as locations where meaning and communities are made. While scholars now know that technology is involved in relationships but they rarely posit an explanation of the way that works.

The second chapter offers an introduction to the field sites, the literatures utilized to analyze the data, and some key concepts. Here, I use ritual as a starting point and apply that lens to think about ritual and time, rules and roles, and boundaries for two distinct but interrelated groups: Fantasy Sports users and developers. After this second in the pair of introductory chapters, I pivot to three substantive empirical chapters.

Each of these three chapters will take a look at what I call “both sides of the screen”; the users and the producers of the Fantasy product, which I suggest are linked in several analytically and methodologically relevant ways. This chapter is intended to make real through vivid description the cases studied thereafter, and emphasizes the importance of co-presence. Chapters 3, 4 and 5 look at the way that rituals help produce shared understandings among the groups on each side of the screen. Chapter 3 moves to understand how both of these groups introduced create a shared sense of time, which is

especially important because they are often dispersed geographically; shared time creates a visceral orientation towards a shared focus. Through an annual rhythm of daily mundane rituals interspersed with infrequent but emotionally charged large events, they create a shared understanding of and orientation to temporality that shapes their days and years and makes the communities more enduring. Chapter 4 builds on the understanding of a shared sense of time and looks to the ways that community is built through shared meanings and practices. Chapter 5 concludes the substantive chapters by looking at the ways that practices and people are made sacred and set apart through ritual and boundaries. Chapter 6 offers a brief concluding discussion of the preceding arguments and considers how they may be applied and extended in future research.

Chapter 2: Theoretical frames and key concepts

Chapter overview

The previous chapter introduced the two components of this dissertation: Fantasy Sports users as well as Fantasy Sports developers. This fieldwork and qualitative data are the foundation of the analysis throughout the dissertation project. Here, in chapter 2, I discuss the field sites and key concepts and themes discussed in depth in the substantive chapters that follow. Before diving into the substantive chapters that follow, this chapter sets the stage for readers to understand the remaining chapters by introducing key theoretical frames, concepts and contributions, the distinct contours of the field sites, and individual figures that comprise the analysis that follows. I first introduce the theories, highlight some key contributions and use the large-scale survey data to provide the context to establish the trends considered qualitatively later in the manuscript as typical experiences among users.

Some core approaches from the sociology of religion

My training in the Sociology of Religion made sports an interesting adjacent case since my earliest entree into the world of sociology, as an undergraduate. The world of sport, to an academic mind, might seem far removed from the high-level theorizing and spiritual encounters of religion. Anecdotally, when I explained this approach to sociologists, they often responded with skepticism or amusement, sometimes both. When I explained this approach to sports fans and Fantasy Sports players, they often reacted enthusiastically, expressing some combination of gratitude and affirmation. To them, they heard in my project an affirmation and understanding of an important part of their social

worlds. They often would say, "you *get* it." My work here is to foreground those connections to make them visible to any audience.

It has been argued that the Sociology of Religion has an *export* problem (Guhin 2014). What Guhin means by this is that, despite a useful theoretical tradition, the subfield of sociology of religion does not get turned to and mined for theoretical contributions, as is common of other subfields such as the sociology of culture or organizational sociology. He posits three hunches: 1) sociologists are not particularly interested in religion anymore, 2) a lack of coherence, by which he means internal focus on a narrow set of questions, and 3) (the primary focus of the article) that the focus on *religion* as a category limits the generalizability of the work done in the subfield. In short, he argues, "If the purpose of the sociology of religion is to understand *religion,* or, even more broadly, if it is to understand *God and God's actions in the world,* then it makes sense that sociologists interested in social life but not religion per se would have nothing to gain from our subdiscipline. To the extent that we are studying religion as an example of broader processes of social life, then our work is exportable" (Guhin, 582). This dissertation project is, taken together, an attempt to take a deep look into a site of social life — Fantasy Sports — and consider it from a variety of angles with attention to the concept of ritual that the sociology of religion has used historically to shed light on sites of social life. That is to say, exports the way that *ritual* is leveraged, analytically, a) as a social process that facilitates the conversion of individuals into a community but also b) the characteristics of ritual that are specifically attuned to in the Sociology of Religion, including the affective dimensions and feelings of emotional energy.

By using this concept of ritual in the Durkheimian sense, I aim to contribute to the sociology of religion by extending its boundaries through application to an innovative set of cases. I also intend to offer a new perspective on ritual for scholars of organizations, digital or online communities, and workplaces. Extending this thread of analysis and drawing on more contemporary studies from the sociology of religion, especially the lens of Lived Religion, helps us remain attuned not just to the large and episodic rituals, defined by co-location and emotional energy, but also the day to day rituals and roles that help make up the cultural infrastructure of a community (Bender 2003; Edgell 2012; Orsi 2003). Though many of these subfields pay attention to the concept of ritual in the sense of routine or repeated tasks, they have omitted the role of meaning and meaning-making that is tied to ritual in the classical sense of the Sociology of Religion.

Organizational sociology and communication studies have focused on the people and practices that comprise communities or groups on the one hand, or studied the ways that meaning is made in the workplace but with an emphasis on the importance of that ritual and meaning to organizations and not to the individual communities' members who enact them. The Sociology of Religion retains an emphasis on meaning and community as part of its toolkit that is distinct from the ways that other fields conceptualize and operationalize meaning and ritual. I argue throughout this project that exporting that attention to meaning, symbolic commitment to groups, and community-based practices can help us better understand the processes and group dynamics that underlie communities such as those who participate in Fantasy Sports together.

Rarely do we talk about the symbolic investment of people into these groups and institutions and how it reflects back on the material and infrastructural output of their labor.

As scholars who focus on social shaping or construction argue, "all artefacts…reflect the culture of their makers" (Wajcman 2018). The culture of the makers of Fantasy Sports is interwoven with the culture of the users; they are in conversation in many ways through built-in mechanisms for feedback and reporting bugs as well as through dedicated nodes in the network such as user experience and customer care, who work alongside the engineers to funnel, prioritize and "scope" users' information and requests. Both are team oriented, benefit from pacing themselves through the long "grind" of the season and the inevitability of the return of high volumes of work and intensity at predictable increments. They both routinize play and fun as a way to reinforce affective ties between team members and make drum up the emotional touchpoint of joy, playfulness, or togetherness that they can revisit or call on to sustain them through the quotidian tasks between these temporal landmarks.

Using the concept of ritual in the sense typically used by scholars of the Sociology of Religion helps us make sense of the ways that contemporary communities, many of which bridge networked and analog interactions, are not only built but also sustained and extended through actions that are not just repeated but become *meaningful* and *set apart*. Here, I "export" the way that the Sociology of Religion operationalizes and leverages the concept of ritual to the substantive topic of Fantasy Sports. The Sociology of Religion, I argue, can help us understand non "Religious" sites, digital and otherwise. One of the most famous applications of the Sociology of Religion to a not traditionally Religious context is the concept of Civil Religion, which was originally an idea in the realm of philosophers, but later adopted by and used analytically by sociologists Durkheim, and later Robert Bellah (Bellah et al. 1987; Belllah 1970).

In this extension, the frameworks used to understand the cultural and meaning-laden dimensions of political and public life receive the same analytical treatment as the social force that is Religion. Wuthnow, in *Producing the Sacred: An Essay on Public Religion* reviews the state of the sociology of religion with special attention paid to the ways that religion is constructed and enacted through organizational forms (Wuthnow 1994). This framework is especially relevant to my fourth chapter, which focuses on the internal logics of the ways that people and organizations use ritual rules and roles to maintain and extend their community's norms and values. While he mostly is focusing on explicitly religious sites, I suggest this approach can be extended to understand the ways that other meaning-laden groups and communities, in the vein of public religions, can really *produce* feelings of the sacred, set apart, and friendship-imbued communities.

As a subfield in a broad discipline, the Sociology of Religion has an interesting and important theoretical lineage. All of the founding theorists of Sociology wrote on religion: Marx's famous remark that religion functions as a numbing opiate, Weber's exploration of the link between religious ideology and economic orientations, and Durkheim's investigation of the community-sustaining rituals of the Australian aborigines are all cornerstones of the academic understanding of the social world. Each thought critically and analytically about how the organizational and ideological frames of religions shaped social action. Here I suggest that the analytical tool kit provided by the Sociology of Religion is a useful lens for looking at sites that are not *Religious* in the traditional sense. Religions themselves take a wide variety of forms, which has made the term tricky to define. Durkheim's definition of religion does not contain a reference to a God. As such, religion itself is a broad field, and many sites and communities share traits with locations and groups

that are more obviously religious. For example, people may think of habits as things they do *religiously*, they adhere rigidly to cultural or social orthodoxies, they have totems and superstitions, and make mundane objects sacred. Returning to Guhin's assessment, however, we are reminded that these three theorists are "Less interested in understanding the nature of religion than they were understanding how human life works, with religious experience one of its most meaningful and important components" (583).

Durkheim's intellectual mission was to establish Sociology as an independent social science which deals in the currency of social facts. Among those earliest social facts, he established were the roles of religion in shaping group-level behaviors and phenomena (Durkheim 1912). In secondary analysis of descriptions of the rituals of Australian aborigines, he was interested in identifying the social causes and effects of religion, as well as understanding which characteristics of religion were generalizable across groups (Durkheim 1912). Through this research he defined religion as follows: "A religion is a unified system of beliefs and practices relative to sacred things, i.e., things set apart and forbidden—beliefs and practices which unite in one single moral community called a Church, all those who adhere to them" (Durkheim 1912). He identified the outcome of religiosity as shared sense of meaning and togetherness — camaraderie and social solidarity. This theoretical approach focused on how individual interactions are meaningful at scale, and foregrounds rituals and collective behavior as key loci of analysis. Durkheim's intellectual legacy inspires later thinkers' emphasis on interaction, rituals, emotion, and group behavior. The methodological approach of microsociology traces its history back to the interactional emphasis of Durkheim.

The Durkheimian lens of these collective behaviors and group ritual is not the only approach, of course, from which to study Religion or any other "social fact." Thomas Luckmann and Peter Berger's *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* that outlines some core principles of social constructionism (Berger and Luckmann 1966). That framework influences Berger's next book, "The Sacred Canopy" in which he applies the Social Construction framework to understand the world-ordering logics of religion builds on the tripartite dialectic of the Social Construction of Reality (Berger 1967). First, the world one enters is externalized. That is experienced as an objective reality or fact. When one internalizes the social world, he or she interprets and finds meaning in the world. From there, the person acts — or externalizes — that interpretation into the world. This ideal type explains the social and normative ordering of moral universes, according to social constructivists. While a strong social constructivist teleology takes all things as de facto social constructions, a weak teleology (which is the approach I find more useful) considers the ways that meanings are agreed upon and imposed on objects and ideas in the world such that through shared understanding, that thing is made real. Rituals are a useful moment in the process of internalizing and externalizing social and moral meanings and practices. For example, in the ritual of a Fantasy Sports draft, there is a baseline of sports knowledge and investment that is required for active participation but the actual practices associated with drafting – with its co-location or co-presence, routines around including certain foods and drinks, behaviors such as teasing and awarding or recognizing success and defeat from previous seasons – cements and elevates the additional layer of camaraderie, togetherness, and developing a shared

history as a group. That history and memories can then be drawn on throughout a Fantasy season and over the course of the years that follow.

A canonical example of the social construction of reality is money; a dollar exists as a physical artifact in the world. It is real. However, it's purchasing power and the consequences of that is made real through the shared understanding that a dollar is worth a fixed amount, and there is an entire industrial system with real and important consequences built on that shared construction of value. In the social construction of technology, reviewed in the following section, we would look to how that physical artifact, the dollar, is made: what meanings are imbued in that process, what tools are used and how were they created, and where do these things fit in the social order and the broader contextual ecosystem? This processual construction of norms and shared understanding is especially brought to bear on chapter 5, which focuses on the construction of community with an eye towards socialization, or people *becoming* league (for the users) or team (for the developers) members.

When considering sociological approaches from the study of religion which apply to the project at hand, the area of Lived Religion also warrants discussion due to its relevance to the study of everyday or mundane activities within Fantasy Sports communities at hand in this project. Lived Religion is another approach from the Sociology of Religion and the adjacent field of Religious Studies that focuses on the everyday, mundane practices that make certain objects, ideas, and rituals sacred to the men and women who participate in the experiences. This orientation shines the analytical spotlight away from the formal spokespersons — the clergy, orthodoxy and written record— of the religion and onto the laity with their everyday experience and meaning making. This on-the-ground approach

highlights areas of syncretism, where people take the official accounts and practices and combine them with local knowledge to create *hybrid* practices and belief systems that fit with and (are thus suited to) guide everyday life (Ammerman 2014; see for example Bender 2003; Griffith 1997; see, for example, Tavory 2013). By definition, studies of Lived Religion broaden the range of behaviors and activities that "count" or are seen as religious behaviors. This may, on the one hand, include making sacred through layers of meaning and belief kitschy trinkets (Orsi 1997) or, on the other hand, treating topics such as "spirituality, magic, and other alternative religious practices" such as paganism, mystics, and transcendentalists with the same attention and tools as the traditional religions that have historically made up the bread and butter of the scholars of religion (Edgell 2012). Recent work in Lived Religion extends and updates the Durkheimian study of the sacred; Edgell's review of a Cultural Sociology of Religion writes:

> A small but important body of recent work develops a neo-Durkheimian approach to the study of lived religion by turning studies of the sacred toward everyday religions practices. For example, Taves (2009) argues that sacralization processes do not spring organically from experiences of awe, and that which is sacralized is not an idealized collective representation of society. Rather, the designation of things as sacred is part of a larger set of social practices – practices of setting things apart and deeming them special, which allow the cognitive ordering and coherence making that individuals engage in on a daily basis (cf. Marshall 2010) (Edgell 2012).

The relevance for the study of Fantasy Sports undertaken here is the analytical focus on the day-to-day or mundane practices that comprise a social and moral community. In a way, the practices that users develop and build onto the existing infrastructure of Fantasy games is syncretic – they take the structure and meaning but merge it with their additional knowledge and experience as sports fans to make the game more realistic and meaningful to their group.

The approaches outlined above are situated at the level of individual interaction. They are microsociological at their core; that is to say, meaning (and social reality) is made real through encounters with others. Of course, these are not the only approaches to the social study of groups in the sociology of religion, though they are the ones that I draw most heavily from in this project. Some alternative approaches are more structurally oriented, to recall the point of Marx's remark that religion functions as an opiate of the people as a typical example. This axiom relies on a structural understanding of the social world in which the institutional and economic conditions that exist create a set of conditions that yields an entire class of people with a false consciousness susceptible to - and desirous of, to their own disadvantage - the tamping effect of religion. Weber's emphasis on organizations highlight another set of structural orientations. In the Protestant Ethic and the Spirit of Capitalism, he too takes an analytical look at the link between the social forces of the economy and the group-level behaviors of those participating in it, with a focus on Protestants and their orthodox orientation towards work and occupational success as a symbol of sacred blessing.

What these approaches have in common is an orientation to the way that beliefs and practices are manifest in community. Without focusing on evaluating the veracity of the

content of those core beliefs, the sociology of religion is well equipped to explore the consequences of shared understandings within community. The sociology of religion has applicability to a range of social sites and loci of social action, both in person and digitally co-present. However, the intersection of the digital or networked with Sociology of Religion has focused on a narrow set of questions, such as how churches explicitly make use of the internet for evangelical purposes.

Fantasy Sports and Sociology of Religion: a brief discussion

I am not the first scholar to posit that the sociology of religion is an applicable analytical lens for the dynamics and features of sports and sport-adjacent communities. In fact, in many ways the conversation around religion focuses on the ways that sports reflect our Civil Religion specifically. As opposed to general studies of sports and the related religiously-analogous phenomena, these analyses tend to focus on the distinctly American sports: baseball and American football. Sporting events often draft on metaphors of war ("going into battle," "in the trenches together," "he's a floor general," and an infamous incident in which a college football player taunted an injured player and then proclaimed, "I'm a fucking soldier" as an explanation). Extensive controversy erupted during the 2016 and 2017 National Football League seasons because of a peaceful protest in which player-activist Colin Kaepernick knelt during the national anthem, with critics saying that a protest during the anthem (intended to protest injustice within America) was a disrespect to the totem of the flag and, thereby, America herself.

Symbols of Americana — the national anthem sung with hands over hearts, field-sized American flags — gesture towards the might and morality of America. Other sporting traditions are more overtly militaristic; for example, "flyovers" conducted by military jets

at low altitude, fireworks or rocket displays, the presence of veterans on the field, and more all symbolize the civil religion of America (Roos 1972; Wertz 2005). Beyond the analyses of sports as an element of Civil Religion, much research on sports and religion emphasizes the dimensions of ritual and tradition (Fernández and Cachán-Cruz 2013; Serazio 2012). Relatedly, much of this work focuses on a Durkheimian interpretation of some elements of sport that most naturally lend themselves to a religious analogy. Collective effervescence is the most overt example of this (which is, notably, considered in a similar way via the case of large concerts as well).

Theoretical approaches from STS

The fields of informatics and the social studies of technology have rich histories with their own theoretical and conceptual toolkits well equipped for considering sociotechnical tools such as Fantasy Sports, the teams of people who build them, and the communities who use them. By setting these aside for this project, I do not suggest that they are not useful and illuminating. Rather, I am grateful for the analytical leverage they provide and the ways that these subfields have made field sites such as my own demonstrably rich areas for study. I aim to contribute to the conversations of STS and beyond by introducing the tools of the sociological Study of Religion as helpful for expanding and advancing the conversations. This work benefitted in particular from considerations from the Social Construction of Technology (SCOT), which posits the way that designers conceptualize gets built into the object and become parts of the object over time.

The core tenet of the Social Construction of Technology (SCOT) is simply that humans make technological systems, and thus technology does not *do* things by itself. It bears obvious similarities to its intellectual forebear, social constructionism, articulated in

sociologists of religion Peter Berger and Thomas Luckmann's canonical *The Social Construction of Reality*, discussed above. SCOT is, I suggest, a more agreeable form of social constructionism because, like the dollar mentioned above, it is physically constructed by humans. This approach aims to explore and understand the social context of technology. It argues against a technological determinism. In my case study, the developers create and maintain a product that is used by the Fantasy players, but those players' behaviors and preferences also shape the decisions and practices implemented by the developers. SCOT posits the way that designers conceptualize gets built into the object and become parts of the time. This is perhaps best embodied in the work trajectory of Social Construction of Technology scholars Pinch, Bjiker and Kline whose oeuvre of work initially focused on artifacts, tools and their designers (such as the automobile or bicycle), before transitioning to later analysis focused on how users matter for understanding pieces of technology (Bijker 1997; Bijker, Hughes, and Pinch 1989; Kline and Pinch 1996).

The Social Construction of Technology, or SCOT, is a theoretical framework that holds as its main object to understand a technological artifact as materially meaningful but also as inextricably social. To be social through and through means that the artifact has been formed or shaped by a human or social group, that its use is in the context of a social group, and that that use is interpreted by a social group. This perspective runs counter to a narrative of technological determinism or material determinism (Marx 1978) which holds that technologies themselves *do* things (commonly articulated in refrains such as "*internet is changing the world!"* or *"Twitter makes democracy happen!")*. Rather, using SCOT as our theoretical lens, we could deconstruct the technologically deterministic language and reframe the statement as "To understand the relationship between Twitter and the social

movements for democracy in specific cases, we must consider the artifact of Twitter as a technological system created by one relevant social group, used by another relevant social group, and interpreted by relevant social groups." SCOT emphasizes symmetry in its analysis, rather than the privileging of any particular story of the artifact, including the one that comes to be the dominant historical narrative. SCOT as a program does more than point us to interesting case studies of technologies of years past; it frames technology in precisely the terms of sociology's interest, which is one of the goals of this dissertation project.

SCOT surfaces the volatility in technological products. Though they may be encountered as a stable object in the world by many, but by broadening the lens from the object to the people behind it (its designers, inventors, engineers, coders, advertisers, testers, and even the administrative assistants of the offices that do this work) and in front of it (metaphorically, those looking at its screens) to understand how it came to be *in this particular way*. This is an important sociological lesson, one that I can imagine would transport readily to the way that laws and social systems that prop up inequality, for example, are socially constructed technologies with relevant social groups behind and in front of them as well. Understanding technologies as socially constructed (which they are, regardless of how obdurate they may now seem because they have become internalized as the way things are done) sheds light on the way things can be socially de- and re-constructed, opening infinite possibilities for social change.

While social construction and social shaping imply a focus on both the actors who develop the product and also the feedback given by the users of a product, looking at these two groups in conversation with one another is not yet common practice in sociology. I

argue that that is an oversight because, indeed, both the creators and users of a product shape its use and, often, unintentional innovation by users feeds back into the product and becomes part and parcel of the built artifact. Early SCOT literature focused on how the designers of technologies or products shaped not only the built features but also the values reflected in and amplified by the product.

The Cultural Context for Workplace Ethnography Silicon Valley Engineering Culture & Gender in technology cultures

The engineers with whom I was embedded were the contemporary counterparts to a larger culture of West Coast tech engineers being studied by the ethnographers in their midst. Engineers in Silicon Valley, and the technology world more broadly, have a bifurcated public image. On the one hand, they are trained, specialized and skilled professionals engaging in high status work. On the other hand, they are perceived as eccentric and culturally unique from other high-status professionals, such as doctors or lawyers. Software engineers are typified by a general quirkiness as well as informality of dress and mannerism (Ensmenger 2015, 2010). Software engineers and computer programmers emerged from the cultural intersection of both art and science.

While the earliest computer programmers were low-status workers (often women) who calculated equations manually, the next generation were government and military professionals who fit in culturally with their job site: senior professionals who wore suits and participated in the status quo of corporate culture. In the 1960s, the American counterculture intersected with emerging technology to form a new "Cyberculture" (Turner 2005). This historical example has much in common with Fantasy Sports, the case

presented here. The cyberculture Turner describes around the Whole Earth Catalog, much like Fantasy Sports, brought together a community of people with the same hobbies and interests from different corners of the country to share in and contribute to a community. In both cases, what began as an analog endeavor (I.e., a pen and paper game and a printed catalog) transitioned to a networked, online experience, all the while maintaining its cultural orientation (in the case of Whole Earth, the orientation was to its key goals of communalism which proved unsustainable in the end).

Early computer programming and coding – in the postwar period following the second world war – was rapidly accelerating, but remained as much art as science, the "idiosyncratic" emerging technologies required creative and innovative solutions to evolving problems (Ensmenger 16). The rapid and widespread adoption of digital technologies for workplaces created a "labor crisis" and threatened the office hierarchy at a massive scale. Once computer technologists and related fields were established as stable career paths, there came the workplace cultures of implementing technologies. The Military, one large but culturally rigid employer of these new specialists, was not always accommodating to change, especially when that change was being implemented by young college graduates with no military training (Edwards). The newly identified path of computer programmers, the predecessor to software engineers, comprised a small population of specialists but in an economic context that favored hiring these programmers (as opposed to the traditional business-trained corporate managers) to operate their new (hugely expensive) computers. The programmers were hired at high risk to companies, with nearly 100% employee turnover (Ensmenger 2010).

The disproportionately low supply and high demand of their labor offered programmers an extended degree of autonomy. Their limited supply and specialization facilitated the engineers' cultural quirks, which would have previously been unacceptable within corporate culture, to become entrenched and accepted. These cultural repertoires behind the narrative of an egalitarian internet stems from San Francisco's counter-culture scene (Turner 2005), and some elements of that cultural infrastructure remain visible in the tech world today (Turner 2009) such as the broad range of perks made available, flexible schedules, and high degree of autonomy as are discussed in more detail below. Engsmenger describes the stereotype of the computer programmer as: scruffy, bearded, inappropriately casual (wearing sandals and a T-shirt), curt, antisocial and eccentric (2). Though the developers interviewed herein are not antisocial, the other descriptions hold. Early advertisements for programmers targeted prodigy-type applicants: expert chess players and musicians, again mixing the frames of art and science. They were expected to be mathematically inclined but also creative (traits associated with chess and music) but additionally they were expected to be "detached"; these criteria created a selection effect, a:

> "gender-biased feedback cycle that ultimately selected for programmers with stereotypically masculine characteristics. The primary selection mechanism used by the industry selected for antisocial, mathematically inclined males, and therefore antisocial, mathematically inclined males were overrepresented in the programmer population; this in turn reinforced the perception that programmers *ought* to be antisocial and mathematically inclined (and therefore male)" (Ensmenger 78-79).

The quirkiness and instant high-status work programmers performed at a high replacement value combined to insulate them from the status quo corporate hierarchy. Through the professionalization and expansion of the computer programming and software engineering pathways, the eccentric lone genius became an institutionalized role, with room made in the corporate infrastructure to accommodate his productivity and scope the role.

The first dot-com bubble of the 1990s was replete with examples of the eccentric lone genius, college dropouts who founded companies and earned millions of dollars and instant celebrity. These figures extended the mythology of the quirky (male) computer programmer prodigy in popular culture. With the economic boom associated with the expansion of computer-based companies, working in Silicon Valley became Wall Street 2.0: massive money was pouring into the hands of risk-taking power brokers with money to burn. The influx of money also resulted in the sort of free spending culture and perks that became synonymous with Silicon Valley: free food, game rooms, nap pods, in-office kegs, and more (see, for example, Lyons 2017). Additional research is carefully attuned to the ways that technology companies and Silicon Valley in particular are oriented towards privileging a set of tech or geek masculinities that can be exclusive and limiting in their enactment. These tech cultures tend to focus on the elusive and exclusive membership of tech elites (see, for example, discussions of, Burning Man (Turner 2009) or engineering cultural practices (Kunda 1995) that rely heavily on competition, schedules and behaviors that are anti-social or incompatible with family life (Cooper 2000; Poster 2002) or overly juvenile and mobbish (Bridges and Pascoe 2014; Connell and Messerschmidt 2005; Pascoe 2005). To understand these sorts of on the ground cultural practices and meaning-making

processes, qualitative research involving in-depth observation is the most thorough methodological approach. However, given methodological trends over the past several decades, embedded qualitative research in technology firms were frequently replaced by large scale surveys (in the 1970s and 80s) and then other forms of qualitative research, such as interviews (Barley and Kunda 2001). The current study, then, has the advantage of "bringing the work back in" by focusing on the rituals and routines of the work but adds in the layer of group-level dynamics that sociologists are well equipped to leverage in their scholarship (Barley and Kunda 2001; Kunda 2010).

While noting that these cultural repertoires exist, I build on and expand the discussion of tech masculinities by introducing the concept of *ambient masculinity*, discussed below, in which externalized masculine styles are neither toxic nor hegemonic; rather it provides the backdrop or context for understanding the behaviors and interactions occurring therein. Using this lens, we can look at and evaluate the ways that all people interact in this masculine-feeling space. This also helps understand why users might not list "friendship" as their primary motivation for gameplay and instead default to the shoulder-to-shoulder interaction style of shared focus rather than the face-to-face (traditionally more feminine) despite the community motivations getting quickly unearthed through conversation (interviews) about their experience and motivations for play (Wood 1994).

The Development teams

While conducting those large-scale survey and interviews, I was working among the men and women in software development, product management, design, marketing and more who all work hard to build, maintain and innovate the Fantasy Sports product.

In this dissertation, I focus on the two teams with whom I spent the most time embedded as a researcher and participant observer: The Fantasy Mobile team and the Fantasy Desktop team. Though linked, each has their own set of engineers, local leadership, culture and rituals that I observed over several years of fieldwork. In the descriptions below, I introduce each in turn. I focus on some key figures and distinctions between the two teams. As is the case with the users as well, all names are pseudonymized[2].

Fantasy Mobile

The Mobile team of software engineers comprised the main focus of my observations and interactions during my research period as they were the primary point of my entry into the field site. They were a surprisingly small group -- typically fewer than 10 engineers -- with that number split between Android and iOS developers. This team sits in Sunnyvale on D5 – building D of the multi-building campus and on the fifth floor -- in a prime location: they have beautiful corner-office views of the mountains. The defining feature of their space is the lunch table wedged in the corner, around which rows of white desks create a 90-degree angle. The table is round with 8 to 10 chairs surround it. While two rows of desks form one half of the square around the table, the other sides are created by a black leather couch and a large TV monitor hooked up to the hangouts.

The engineers sit or stand at their white, minimalist desks adorned with multiple monitors. They are older models of the now-ubiquitous standing desks and as such they do not move up and down between standing and seated heights at the push of a button, but

[2] Liz Loza is the only person whom I do not assign a pseudonym because the story is public record (was published and shared as a news story) and she is a public figure.

rather require manual adjustment, so their position is fairly fixed[3]. They have personalized desktop set-ups that facilitate their role, reflect their personality, and support them ergonomically. They all have at least one large monitor and a stand from which to raise their work-issued MacBooks. When the laptop and monitors are linked using the work-issued dongle, each engineer works from a minimum of two screens. Their screen brightness settings are carefully calibrated to minimize eye strain, and many of the engineers keep glasses and/or eye drops at their desk.

Their monitors usually have their coding workspace open, where the matte black screens have Android Studio or XCode open, with the corporate chat window open as well, docked to a side. Their role is to build, working from existing code bases and design plans laid out by the design team, the mobile apps on Android and iOS. These engineers build and maintain what the users see when they click the Yahoo Fantasy Sports icon on their mobile device. This team is run by the engineering lead, Nima, a tall Persian man in his late thirties with a goofy demeanor and bald head always covered with his signature red hat -- except when he holds his hat in his hands, which he does when he's thinking hard or feeling stressed. His personality sets the tone for his team, which is loyal and respectful of his leadership but enjoys teasing him -- and each other -- in return. While Nima was known for being upbeat, friendly and exceptionally passionate, he was also equally passionate and protective of his team. Nima is charismatic, with his orientation to product excellence and supporting his own team, which sometimes put him in tension with other teams. While

[3] I attempted to adjust my desk one morning before the office filled up -- I had to clear the desktop and lay the whole desk on its side to adjust the screws that hold its position; because they move one side at a time, it was a struggle to get the desktop completely level and when the team of engineers arrived in a while later they were dismayed that I had not waited for their help to put it together as a team.

dedicating his time to the honing of his managerial skills, he has had less daily practice doing the actual work of engineering. He is always able to jokingly threaten his direct reports with the offer to write some code himself in order to meet deadlines.

As an engineering lead, Nima is a crucial node in the network of the product. He is the gatekeeper to what gets built or not. Designers, researchers, or product managers can all request or demand features be built out. However, it is Nima's team who builds those features and is responsible for the heavy organizational work of distributing the finite engineering resources to list of tasks to be completed. Nima is known for his attention to detail and being passionate, with a strategic role in the product atypical for an engineering lead; Levon is known for his big vision and being focused on the best possible solution rather than the status quo of maintaining the product. They sit beside one another, and together drive the direction and execution of the mobile app. As a whole, the mobile engineering team is mostly Asian and mostly male. Their topics of conversation often involve math, either directly or tangentially. When I pointed this out to them they denied it vehemently. Later that day, while the summer Olympics were on the television, I returned to my desk in the midst of a conversation about the velocity of swimmers through water and the viscosity of water itself. I asked them if they were still willing to deny the centrality of math to their conversations. Relenting, an engineer said *"well, it's good to know about this tendency I guess. You know, for social situations."* They also often discuss current events in sports and their dating lives. As a group, they are very close. This means much of their small talk also surrounds the minutiae of their lives: they know each other's families and extended family, they often hang out outside of work hours, and have a number of traditions and outings they enjoy.

The Fantasy Front End team

The front-end team sits in Los Angeles' Playa Vista office. They are responsible for developing and maintaining the desktop Fantasy Sports website. In other words, they are the computer counterparts to the mobile app team. They occupy a corner of the first floor of building 4, with four full rows of the upgraded, motorized versions of the sleek white desks the mobile team has. Their team lead, Kevin, sticks out as being passionate about watching sports in a crowd known specifically for that, he has games on the monitors and overhead televisions constantly. His casual style -- cargo shorts revealing ankle tattoos and sports-team t-shirts -- is mirrored throughout the team. Hardly anyone ever wears shorts in Sunnyvale, but the Playa team is often in shorts (this cannot be attributed to weather, given that Sunnyvale's temperatures routinely exceed the moderate temperatures of coastal Southern California). They are more reserved -- quiet but not unfriendly; they rarely initiated conversation with me but were happy to chat when I began a conversation -- and were more interested in sports betting, finance, politics, and video games. Like their team lead, they were prone to bursts of frenetic energy and chatter (typically around conversations in Kevin's wheelhouse: sports and sports betting) alternating with long periods of quiet. While both Nima and Kevin worked to protect and promote their respective team, their distinct styles — more internally focused versus more broadly oriented to other teams — are both effective for their teams, but have differing processes and outcomes.

This team is, as a whole, significantly quieter that their Northern California counterparts, with one major exception: they love to play video games together. For long stretches of my fieldwork, they would play video games every day after lunch. Usually a

soccer game (FIFA) or football game (Madden) and occasionally basketball (NBA2k), I never observed them playing a non-sports video game. This ritual was paused twice -- once, due to layoffs in the office; they told me it would be inconsiderate and "not a good look" to be playing games at work while layoffs were happening and in the days immediately following. I thought this was a smart and conscientious observation on their part, and frankly an act of consideration that would not have occurred to me. Also, when executives were visiting who might have specific expectations about work culture that are not as aligned to the West Coast developers' culture – taking game breaks or arriving late -- they also tended to stay at their desks.

Though to visitors the inclusion of gaming during the workday appears off-task, the ritual of play occurring regularly helped tie the teammates together as not just colleagues but friends, fostering camaraderie on the one hand and job satisfaction on the other. Both of these things facilitate cooperative work and collaboration with "cross functional partners" or people who work on different things than you do. Later, when I interviewed members of the two teams the Silicon Beach team's engineers emphasized that they appreciated the flexibility to spend time in leisure with one another as long as they got their work done. They viewed this autonomy as a perk that enhanced their happiness with the workplace, actually (and perhaps counterintuitively) extended the amount of time they spent in the office, and appreciated that it gave them something else to talk about or participate in together, as a *team*. A moment recorded in my fieldnotes demonstrates the importance of game play in their work culture: on D5, I called ahead for whoever was getting into the elevator to hold it for me. It was a backend engineer, who was a bit shy but with whom I became friendly. When I entered the elevator, he was standing behind Levon

and another person I did not recognize. The backend engineer was holding a rather small hammer. A bit befuddled, I asked, "is that a …*hammer*?" He blushed but proudly said "I'm going to fix the foosball table. They [the other engineers] are always breaking it and so I keep the tools to fix it upstairs. " He held out his hand, showing me a small plastic baggy with spare parts in his other hand.[4] The culture of play was so regular that the team even had a contingency plan and roles for equipment maintenance so that something as silly as a broken foosball table would not sideline their game.

Digital Sites

The Networked Field site: seamless communication via CorpChat

Distributed workspaces are increasingly common practice for companies, whether the organizations are multi-sited or entirely remote. Though many networked tools make the work between sites easier by facilitating asynchronous collaboration and operate as spaces that co-work occurs, CorpChat, the enterprise chat platform functions as more than a work tool – it is a space to hang out, digitally, on the job. Like chat rooms outside of the workplace, where dispersed individuals could gather to kill time, get to know others, and engage in activity with a shared focus, CorpChat has a similar function. It facilitates and extends the social ties of the office beyond the confines of any individual location as well as beyond the workday. CorpChat functions in several ways. First and foremost, it facilitates their individual and shared work by making other team members accessible, enabling the crowdsourcing solutions to pressing questions, and streamlining interactions with other employees who may be crucial to getting a task accomplished. Second, it facilitates corporate culture by creating digital spaces to "hang out," during and beyond

[4] From fieldnotes, November 6 2017.

work hours. Third, it facilitates oversight and surveillance by managers and team leads by creating a durable record of employees' work (and to some extent, leisure) interactions and processes[5].

In the mundane case, the digital tools people use as part of day to day life can and do become *places* for people to get together. In the case studies of both users and developers that unfolds in the chapters that follow, their community ties are most frequently initially established in "real life"— in person — but are extended, managed, and reinforced using digital tools. However, those tools are not neutral. Different tools can facilitate and shape different forms of community. For example, a senior designer on the Fantasy team explained to me, "We used to have to use IRC. It was *way* different then. It was either [you had to use] IRC for major 'oh shit something broke' or Yahoo messenger for 1:1 chat only. The free-flowing group chat vibe wasn't there." By free-flowing group chat, he is referring to the idea that CorpChat has enabled, for the first time, easy maintenance of conversations for many people and subgroups rather than just to report issues (1:1). That group chat functionality created a "vibe" and led to the ability to converse

[5] In digital ethnographer Biella Coleman, in *Hacker, Hoaxer, Whistleblower, Spy*, the author spent years embedded in the online world of the (in)famous and hard-to-define internet force by observing, participating in, and interpreting the online spaces that the many Anons — those individuals behind the virtual mask of Anonymous — were *doing* the activities of being or becoming Anonymous (Coleman 2014; Coleman and Williams 2010). The forums and their component messages and messengers were not merely a communication platform, they served as the basis of the interactions and "hanging out" that fomented a specific culture. That culture, in turn, inspired and evolved into political activists. In that case, a leisure activity — visiting internet forums — gave rise to a subculture with a dramatic outcome. In Jeffrey Lane's *The Digital Street,* he exposes how teens use their cellphones and digital tools such as social networking sites (SNS) to develop, reflect, and protect their self-identify (Lane 2014). Through the connections on the internet in real life, the digital spaces take on a *placefulness* that mirrors physical communities, with their own landmarks, public characters, and ultimately hidden dangers and personal risks. Indeed, that is why it is called the digital *street,* it mirrors the characteristics, opportunities and limits of the physical street with sometimes catastrophic consequences.

in a constant backchannel of free flowing or unrestricted communication. He added, "so in our case, I'd definitely say the specific software enabled culture" which is more talkative, more connected, more active. While it is a "game changer" in a positive way, he noted that the ongoing conversation could be distracting, and he appreciates being able to jump in but also to mute it at times to just focus on his work. In my own experience, the ability to follow different subgroups' free flowing conversation helped me keep up with different teams and in different locations without having to leave my seat. It is a foundational piece of the interactive culture that extends a physical location — the street, the workplace, the watercooler, the friend's living room couch — into an overlaid digital location, and warrants similar ethnographic and qualitative attention when studying any field site.

When I reflect on my time with each team, I contrast the two "personalities" each has. Nima's team is perceived as internally orientated and thus less accessible to people outside of the team, replete with a deep commitment to daily rituals to begin and close the day which facilitated a culture of deep dedication to the work and a high standard of excellence. This team chatted much more "in real life," or aloud and in person, than other teams with whom I interfaced. In effect, they sat together, set apart physically in the office space for much of my fieldwork, where they were able to chat freely and loudly throughout the day without interrupting the quieter other teams. Their ties were very durable, with many of the engineers remaining dear friends with former teammates who had since moved on. Though deeply passionate about the product, a trait of Nima's that garnered criticism because of his propensity to argue over the merits of a solution even after one had been agreed upon. I always appreciated at the speed at which his team implemented solutions, the quality of those solutions, and the ways that they relied on data and research (a role I

was personally able to help fill) to select the *right* software solution for any given problem. That is to say, when I think of who I would go to if I wanted research supported and solutions implemented right and fast, Nima was a responsive and proactive teammate with whom to work.

Kevin's team was as a whole quieter; less prone to an on-going in-person back channel throughout the day, they had more daily leisure rituals including playing ping-pong or video games together. They were more likely to have at least one person on the team working from home on any given day and had more distinction between work and informal friendly behavior throughout the day (whereas the mobile team felt like they were blending the two all day). Kevin was seen by leadership as more diplomatic, which was an asset in securing projects for his team to work on as digital trends as a whole moved from desktop-based internet use to more mobile usage. Both teams were both collegial and productive, but had differing orientations. Nima's team was more internally oriented, focused sharply on delivering mobile engineering excellence on time and without compromise on a friendly and focused small team. Kevin's team was more externally oriented; doing their own work with care but also engaged in shared leisure and interested in extending or expanding the work that they do. Additionally, they were more likely to include a wider range of people outside of their immediate team in their social activities.

Users

The field site where I engaged and observe users is the digitally mediated space of their Fantasy Leagues. In-depth interviews focus on the leagues, and draft observations are at or about the main event of the season. When observing and analyzing Fantasy leagues, I also gained access to supplementary artifacts such as their rule books, league notes or

correspondences, and other voluntarily shared documents that my interviewees offered to help me understand the norms, cultures and quirks of their leagues. While I spent years talking to and learning about Fantasy Sports managers, and additionally observed a number of league-centric events, the user-based data is largely based on surveys and in-depth interviews. Like the developers, described above, the group of users tended to be largely male, and though I do not have access on this data to scale, my observations suggest that internal to each league communities follow the pattern of homophily; people often play in leagues of people similar to (and often related to) one another.

A note about gender: Studying the ambiently masculine community

As a researcher embedding in and studying two communities simultaneously, I quickly recognized a shared feature of both: what I describe as *ambient masculinity.* In many ways, this dissertation is simultaneously a case study of masculinity. Ambient masculinity describes the ways in which the dominant form of interaction, communication, behavior and norms in these communities reflect a particular masculine norm, or default. In the field sites I study herein, I am embedded in, observing and researching environments that embody the term *ambient masculinity*. In the case of this intersecting sports masculinity and engineering/analytical masculinity, the ambient masculinity on the team and in the Fantasy, leagues often present as competitive, joking/teasing, casual, and at times confrontational. High social status is related to specific forms of, and ways of sharing, knowledge. The men on the team by and large valued both sports knowledge and engineering expertise.

Note that being masculine or male-identified is not in-and-of-itself the valuable trait here. For example, they were often inclusive of people outside the narrow parameters of a

particular "sports" masculinity, which might be described as heterosexual and aggressively competitive. Here, women and gay men were included on the same terms as those more fully presenting the dominate masculinity when they qualified for membership in the group via some form of identity (as discussed at length in chapter 5; this might look like being a female sports fan or a gay male engineer). As such, ambient masculinity describes the *feel* of the space and interactions and not an evaluative judgement of it (as is, for example, the term toxic masculinity). On these teams, masculinity is not typically a behavioral prescription nor requirement for membership, it is the set of norms that shape interactions and behaviors. There are exceptions, and a particularly contentious space for the dominant masculinity of Fantasy Users in particular involved the way that the question around indicating one's own gender was asked on surveys. A summary of the vitriolic homophobic and misogynistic comments users shared in response to a gender-inclusive survey question suggests that, though a minority, ambient masculinity can encompass key elements of toxic masculinity as well (Jaroszewski et al. 2018).

Other, similar, considerations of gendered culture especially in relation to sports and masculinity include theorizing about laddish behavior or jock culture. Some elements of lad culture — such as the dominant use of banter (or "a type of humour and interaction practice…seen to specific of jocular interaction, with associated styles and strategies" (74). (Nichols 2018) looks into the ways that lad culture is subsumed under the category of hegemonic masculinity, but identifies the nuance of how laddish can also support the nuance of progressive behaviors. Such studies of sports cultures' hegemonic masculinity are interesting and helps highlight the negatives of these sports-based masculinities. Nichols' analytical focus is on how laddishness contributes to everyday sexism; still, the

author acknowledges the ways that "men are challenging sexism themselves, on the grounds that this will provide a stronger foundation from which to develop further discussions and to enable strategies to deal with sexist behaviors" (74). Cooper (Cooper 2000) considers the case of Silicon Valley specifically, in which the way that work is organized and evaluated, traditionally masculine virtues such as competition and physical strength are replaced with an emphasis on teamwork. One of Cooper's respondents explains, "The key element of this whole environment is the team mentality. It's an idea derived from male tradition probably. Even as a contractor you have to live with it too. You have to be part of the team, you can't fall out. If you get injured, you come back as fast as you can or you play with your injury whether it's emotional or physical" (384). What is distinct about the masculinity in the workplace context here is that, in addition to the shared basis of sports the workplace culture offers additional touchpoints and shared understandings over which their culture is built.

The engineers are indeed mostly men, but they are college educated, and living in a politically and socially progressive region of the United States. Though they are working in a mostly male occupation (software engineering) which intersects with another mostly male occupation (sports media), this demographic background moderates some of the more negative impulses associated with laddish. Indeed, the ambiently masculine environment of the engineers' area — D5 — did not subscribe to the "boys will be boys" mentality and instead emphasized teamwork, accountability and respect. While the culture remained masculine, the feminine was not something to rebel against or shun. Unlike youth cultures of adolescent boys (Pascoe 2005) or laddish men (Nichols 2018), ambient masculinity is not unfolding in conscious opposition to or dominance over femininity. Rather, it is more

closely aligned with what Cooper (Cooper 2000) identified as a new masculinity, one that is based on knowledge-acquisition and oriented towards both their high-status jobs and simultaneously their families. This sort of hybrid masculinity (Bridges and Pascoe 2014) is known to extend or blur the constraints of the typical heteronormative masculinity.

Two examples stick out in my mind. In the first, Nima was taking off from work early to take care of his kids while his wife had something scheduled. When he announced he was leaving early and for what purpose, a woman asked, "ah you're on babysitting duty tonight?" Nima, usually jocular and lighthearted, looked at her with a serious expression: "Dads can't babysit their own kids. It's just called parenting." The woman, acknowledging that she had said something she had not quite intended, replied, "I cringed as soon as I heard myself say that" and they smiled at one another and moved on. It was an exchange that always stuck with me, in part because it was early in my fieldwork and this was a very socially progressive confrontation by a male leader that was at odds with my initial expectations about the masculine culture at hand.

Second, in a meeting with Product Managers, I mentioned that as a principle of inclusivity, I make it a personal point to never call a group of people "guys" when there are people who don't identify as men in the group. I was quite surprised at how much this point resonated with the group, and immediately noticed that the entire team of leaders took care to implement this same personal philosophy. Meetings were thereafter initiated with "good morning team" and "hi everyone." Unintentional slips using the word "guys" led to a verbal self-correction, modeling the care and self-awareness that such a transition takes. An engineering VP used reply-all to an email to tell a colleague who used "Guys" in his greeting that he personally no longer uses introduction that and urges his colleague to

refrain as well as a principle of inclusivity. While this did not result in the elimination of the expression "guys" to address groups (you will note that it is used in many quotes throughout this dissertation, though many times it is indeed referring to only men), I took away from the interaction a feeling of respect and sincere and open engagement with the *premise* of my concern, without judgement or pushback.

In the example of Nima, if this culture was based in the traditional male-dominated masculinity that eschews household responsibility and distances itself from caregiving, this interaction would not make sense. Indeed, it would cause Nima to lose face. Instead what he did is demonstrate a respectful, normalized doubling down on this caregiving orientation by challenging the stereotype of a distant father focused on paid employment. Both cases challenged directly and interpersonally — thereby demonstrating and committing to sharing their commitment to their values, whether or not that was established in the case of Nima or being challenged, expanded and then spread by the VP. This sort of openness to reflect on and take seriously the principles of inclusion and respect — in particular of women and other non-heterosexual men — more closely aligns with the new tech masculinity that Cooper describes than the laddish or adolescent masculinities discussed (Bridges and Pascoe 2014; Cooper 2000; Nichols 2018).

Having differentiated ambient masculinity from other studies of masculine communities, I return briefly to the concept of ambient masculinity. I selected the term ambient to describe this because it focuses on the *feeling* of the male environment without assigning an evaluation of it either way. Ambient masculinity describes a culture or place in which the dominant interaction style is more masculine in some sense, whether it is speaking style (for example being more jocular and task-specific), topics of conversation

(for example, sports trivia, technology, and finance trends), or hobbies (video games, attending sporting events, cars). In an ambiently masculine context, different styles of interaction are not shunned or put down, they merely take an additional level of effort to shift the interaction style from masculine. Each of the men at this field site, for example, are able to code switch to contexts — their families, their kids' schools, their friendship groups, general interaction with people outside the workplace — that are more gender-balanced. It is the developers' community, which overlaps with the community with sports' fans, that provides the context for ambient masculinity.

Taken together, it offers an update to the literature on "geek culture" with sensitivity to dimensions of gender (Dunbar-Hester 2008b). This discussion has helped us see how this study connects to other histories of and practices of meaning making through every day, mundane, behaviors. Understanding the culture of Silicon Valley also frames the discussions of the engineering teams that follow this introduction, offering context for the ethnographic components of the dissertation that follow. It ties the existing case to the body of literature that looks at the relationship between developers and the artifacts they create and the communities that emerge and develop around those artifacts. Further, it takes a look at the ways that the sports and technology/engineering masculinities (known as "geek culture") intersect but also makes space for progressive views about gender. In part, this is evidenced through the performance and surveillance of interactions on digitally mediated platforms. Through this close look at the culture and interactions of the workplace and its broader context, I shed light on interesting nuances in their distributed labor practices as well as their performance of gender.

Descriptive statistics

In short, the above sections have framed Fantasy Sports as a specific subculture of a broader subculture: it is a mostly masculine pastime that involves sports data and information, which interests with communities in some way. Why, then, should sociologists care? Understandably, one question that I frequently get asked is, "why should I care about Fantasy Sports if I don't play?" and, relatedly, "what does Fantasy Sports have to do with the social world more broadly?" To answer the first question, I will introduce some descriptive statistics about the game's players and offer some analyses about their motivations for play. I draw on data from the Fantasy Sports Trade Association (FSTA) and my own large-scale study to frame the scale and scope of Fantasy Sports gameplay. To address the second question, I turn to a discussion of digitally mediated communities being a ubiquitous feature of contemporary social life. Addressing these two questions offers the motivation for why sociologists and other scholars should take seriously this field site and helps frame the implications for a deep understanding of online games, the workers who shape a techno social artifact, and the ways that many forms of social life, from play to work, are currently bridged by technologies.

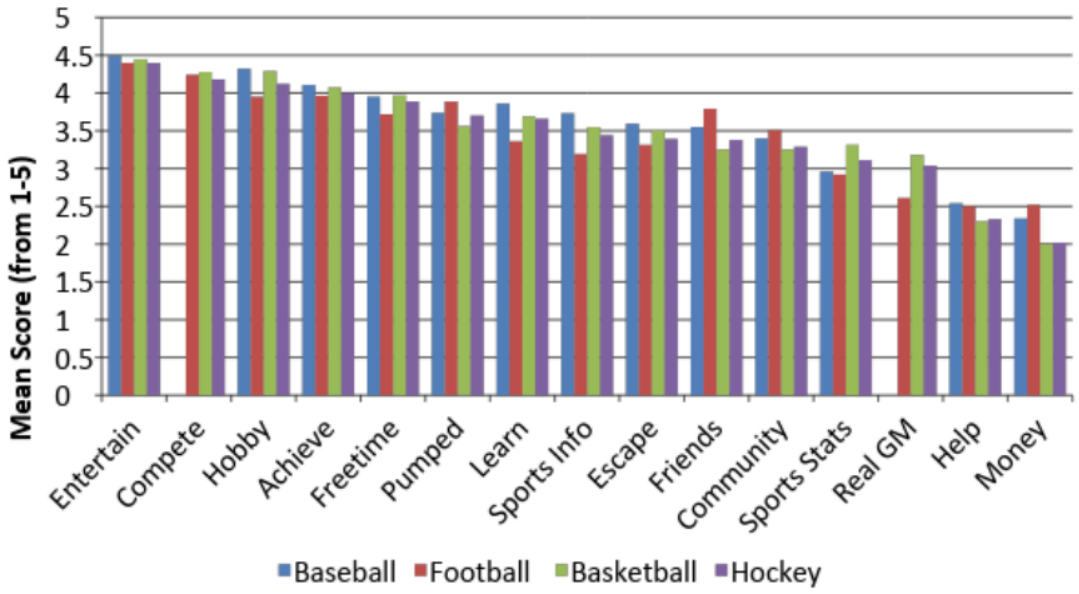
While the perception of Fantasy Sports tends to be that it is a niche hobby, Fantasy Sports play is a very popular hobby in the United States. According to the Fantasy Sports Trade Association, in 2017 over 53 million people in the U.S. and Canada played Fantasy Sports, amounting to 21% of the U.S. general population over the age of 12 and 19% of Canadians over 12. FSTA data suggests that the Fantasy Sport player is higher educated and higher income than his or her peers. My own survey data lends support to their finding. Very few users in any sport report having less than a high school education, and around

40% of users in each sport are self-reported college graduates, with hockey having the highest proportion of college graduates. According to the census, the college graduation rate in the U.S is 33%. Football has the highest proportion of users self-reporting a graduate degree at over 20%, about double the occurrence of Masters, doctorates and professional degrees in the United States.[6]

My data corresponds with these reports, though suggests that the population of Fantasy Sports is more overwhelmingly male than FSTA reports. More than half of all respondents per sport self-identify as white. Hockey is the whitest, while basketball is the least white. In both cases, the country-level distribution of the players may contribute to the racial distribution. Hockey is more popular in North America and the American northeast and Midwest. Fantasy Basketball has globalized more than any other sport studied here, following the popularity of the NBA with pockets of fandom in Asia (especially the Philippines and China), Europe (especially Spain and Italy), and Australia. Basketball, a game popularly played in urban centers, has a more diverse fan base.

[6].http://thehill.com/homenews/state-watch/326995-census-more-americans-have-college-degrees-than-ever-before

Figure 6: Average Self-reported Motivation for play, by Sport



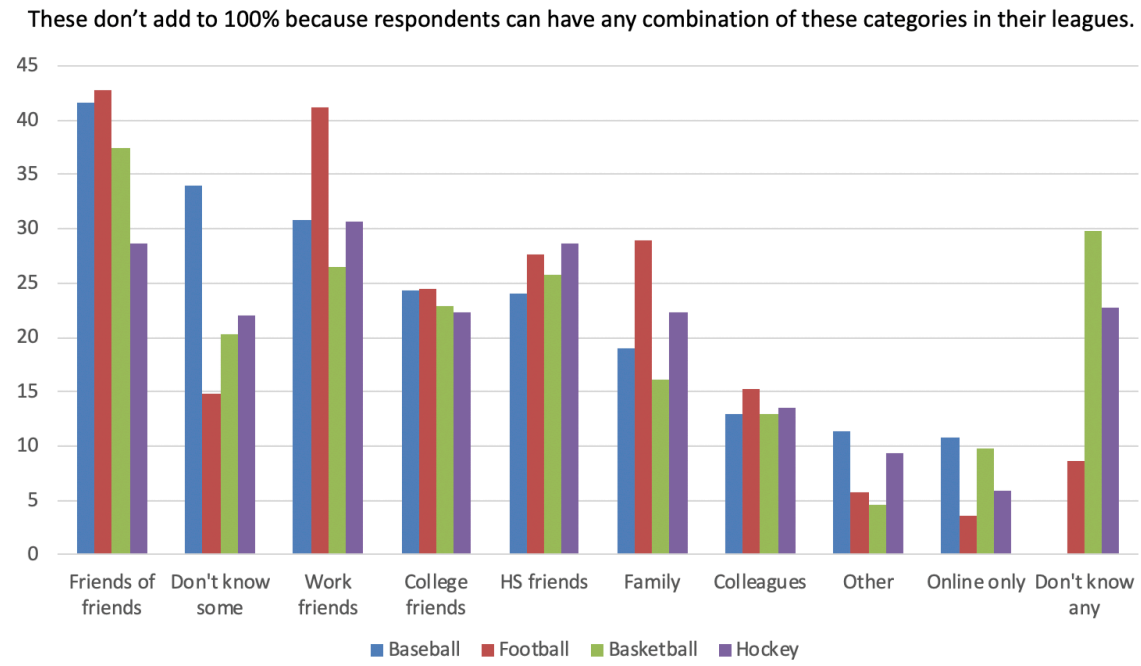
This chart (Figure 6) represents users' self-reported motivations for playing Fantasy Sports, broken out by sport. The list of items included in the questionnaire was drawn from existing research on Fantasy Sports and gaming motivations (Billings and Ruihley 2013; Brown et al. 2012; Farquhar and Meeds 2007). However, when I talked with users the interviews typically uncovered that their explanations for *why* game play was entertaining or why competition was fun involved the social and community-based motivations. As such, I suggest that while being a hobby, pastime, and form of entertainment are indeed strong motivators for initiating gameplay, it is not the reason that users return year over year.

With whom do they play? Friends of friends and beyond

The question asking users to indicate with whom they play Fantasy Sports offered a list of social tie types generated from pilot research, and selections were made in the

format of "select all that apply." This approach facilitates flexibility to accommodate the varying numbers and types of social ties that appear in Fantasy leagues.

Figure 7: Type of Social Ties in Respondents' Primary Fantasy League, by Sport



Across sports, users are likely to play in Fantasy Sports leagues with other people they do not know outside of the context of Fantasy Sports. Around 30-40% of respondents from each sport are playing with at least some friends of friends,[7] which is the highest proportion of social tie type for all sports except hockey. Hockey has a higher proportion of users responding that they play with work friends than any other category. Football is most distinct from the other sports along three dimensions of social ties: playing with work

[7] The qualitative data presented in the following chapter finds that this is common when leagues are trying to fill up their group of Fantasy players, the commissioner will ask managers to recruit additional participants from their own social circles.

friends, family, and others they know exclusively from online contexts. Basketball users stand out as having a higher proportion of online-only ties for their Fantasy participation. Taken together, this shows a varied collection of social ties in any given league. This variation is higher than I expected given the way leagues are often discussed: as a group of high school or college friends, or on the other hand work and family leagues. Most leagues, in reality, span social ties and thereby we expect that they expand the social network of those who participate in these leagues. This hub-and-spoke style social network means that nearly everyone in a private league has a pre-existing tie to at least one person in the league and that person is most frequently the commissioner. The commissioner, like the engineering leads discussed above, has the ability to set the tone or personality of their small community; much of that is set by the rituals and practices established within the league and will be discussed throughout the dissertation.

Table 1: Regression results for Overall Satisfaction by motivation (by sport)

Overall Satisfaction by motivation for play			
	NFL	NBA	NHL
Hobby	***	***	***
Entertain	***	***	***
Escape			
Free time	**		
Learn	***		***
Sport info	***		
Schwabism	***		
Community	***	***	
Friends			
Help others			
Win money	-***	-***	-***
Compete	**		
Achievement	***		**
Real GM	***		
Spread out			
Commissioner	-***		
Standings	-***	-***	-***
Age	***		**
Race	**	-**	
Income	-***		
Gender			
Constant	***	***	***

My regression analyses lend support to this hypothesis, but the findings are not as straightforward as one might expect. The linear regression model above [Table 2] was written to address the question, "what motivations are associated with higher satisfaction?" and holds constant the respondents' current performance (I.e., controlling for whether or not they are winning or playing poorly), gender, income, race and education. Here, I find that higher agreement with the following motivations are significantly and positively associated with higher satisfaction for the three sports tested[8]. In Fantasy Football, "Is a

[8] I omit including Fantasy Baseball in these analyses because, as the pilot study, Baseball featured some variation in the wordings and orders of questions that might render the data not quite comparable.

hobby of mine and Is entertaining., Is something to do in my free time, I like the community aspects, A sense of achievement, I enjoy competition, Learn about the sports world, Access to sports information, and Feeling like a real GM" are all also positively associated with satisfaction. The sense of community is also significant for Fantasy Basketball users while Fantasy Hockey users join their Fantasy Basketball counterparts in being more satisfied if motivated by learning about the sport.

On the other hand, the following motivations are significantly and negatively associated with satisfaction: To win money and I like being someone who knows more about statistics than most others. Notably, the community motivated dimensions do not correspond to higher satisfaction. Does that refute my whole premise that this is a socially oriented game? Not quite, because as we see through the following analysis, that lack of satisfaction, or positive affect about the game, does not necessarily relate to their intent to continue playing, or remaining committed year over year to that same community that might leave them feeling less-than-thrilled with their Fantasy team.

Table 2: Regression results for Overall self-reported likelihood to Play Again by motivation (by

sport)

Self Reported Likelihood to Play Again by motivation for play

	NFL	NBA	NHL
Hobby	***	***	***
Entertain	***	***	***
Escape			
Free time	**		
Learn	***		
Sport info	*		
Schwabism			
Community	***		
Friends	**		
Help others			
Win money	-***	-***	-***
Compete	***		
Achievement	***		***
Real GM	***		**
Spread out	***	***	
Commissioner	-***		-***
Standings	-***	-***	-***
Age	***		
Race			
Income	-***		-**
Gender			
Constant	***	***	-***

My next regression model [Table 3] holds the same constants and considers the same motivations, this time with the outcome variable of likelihood to play the same Fantasy Sport the following year. Here, we find that both I enjoy the community aspects and to keep up with friends are significantly and positively associated with intent to play again. Taken together, we find that being more motivated by keeping up with friends does not predict satisfaction but it is strongly associated with intention to play again. While it may

not always feel the best (I.e., leave the user feeling satisfied) or be the top of mind reason for why a person plays, the elements of friendship and keeping in touch do relate strongly to the durability of leagues, underscoring their fundamentally social function. This is what my years of fieldwork and qualitative data demonstrate. Seeing that these hypotheses hold at scale validates the analyses that I undertake in the following chapters, where the large-scale quantitative data is drawn on sparingly to frame the trends I explore in detail.

This chapter has covered much ground, each section with the goal of providing the background information and context that offers readers the necessary information for making sense of the substantive chapters that follow. First, I discussed the ways that I would approach my analyses and data. I then discussed some of the theories from the subfields I engage – including sociology of religion and Science and Technology studies. Then, I introduced the teams with whom I was embedded and the concept of ambient masculinity, which will be woven throughout the chapters that follow. I begin to highlight the ways that the developers mirror the users the product of their labor serves. In doing so, I take a moment to reflect on my own experience being socialized into these communities. Finally, the quantitative data and analyses provided here also serve to establish the phenomena that I describe in greater qualitative detail throughout the dissertation as reflecting not just a niche group of Fantasy fanatics' experience but the typical experience of play in the small communities that develop around Fantasy Sports leagues. The next chapter begins that core analytical work, looking at how Fantasy leagues and the developers behind the screen develop a shared sense of time through daily and season rituals. With this stage set, we now turn to the first of three substantive empirical chapters.

Chapter 3: The ritual production of time. How Daily, Seasonal, and Annual rituals mark time and contribute to the durability of communities.

"[A religious group] is not a simple group of ritual precautions which a man is held to take in certain circumstances; it is a system of diverse rites, festivals, and ceremonies which all have the characteristic that they reappear periodically. They fulfill the need which the believer feels of strengthening and affirming, at regular intervals of time, the bond which unites him to the sacred beings upon which he depends." Emile Durkheim

"My thesis is that time practices are always sociomaterial, that the contours and rhythms of our lives are calibrated by and with machines. In other words, we cannot comprehend the social organization of time separately from technology." Pressed for Time, Judy Wacjman.

"In my baseball league versus my football league, there's some people who are in both so if I'm with my friend John in a baseball league and John's sometimes not doing football, me and John might lose touch, but during baseball season, I talk to John maybe 3 times a week. It gives you more reasons to keep in contact with somebody like that and if you don't, baseball season will be back around the corner and my friendship level with John should go up because now baseball is happening." DJ, Fantasy Baseball Interviewee.

Introduction

Pastor Nathaniel, in his first ever Fantasy Baseball league, is afraid of making a "rookie mistake" and forgetting to set his lineup — the negligence of a previous Fantasy Manager to set his lineup in Nathaniel league of pastors resulted in that manager getting kicked out, opening the spot for Nathaniel. To make sure he did not lose his own much anticipated spot, Nathaniel set a daily phone alarm to go off three times each afternoon, in advance of each regular start time for MLB games — for the full six months of the baseball season. Nathaniel eagerly awaited a spot in a Fantasy league opening up to him; his own baseball fandom is tied to a meaningful relationship from his past and he craved the "fellowship" of this group activity to supplement his existing ties with his fellow pastors by being part of this group.

For the Fantasy mobile app developers, a recurring calendar reminder alerts every team member at 11 am PST each workday, that is time for their daily "stand up" (a brief meeting with their manager), establishing a routinized rhythm of their day that, over time becomes a ritual. This ritual has the capacity for galvanizing ties and strengthening the team's inward orientation, marking their organizational approach as meaningful and set apart from their fellow engineering teams. When those teams all get together each quarter for a highly ritualized day-long meeting[9] leadership expresses (or externalizes) their ideal typical vision of the time-bound quarterly plans; the teams then absorb and internalize these as their own shared temporal plan and orientation, thereby developing a socialization into shared rituals and visceral sense of time that demarcates their team membership. By coupling these planning meetings with a fun social event, it also helps reify the inter-team

[9] Over time, as with the functional to fun purpose of the drafts, this quarterly meeting has evolved from specific engineering planning towards an informational event with an emphasis on routinized fun and relationship building. Both maintain their functional purposes; the affective rituals are built on top of them. These processes are expanded upon in chapter 4.

(but intra-organizational) ties to help facilitate relationships, that members of the community can later draw on as meaningful in and of themselves or as means towards organizationally beneficial ends, such as reduced friction to collaboration.

For both Fantasy Leagues and the development teams, the work they share is distributed, with moments of intense excitement punctuating weeks and months that feel like "a grind," with mundane daily tasks that can feel Sisyphean. Both cases develop a shared understanding of time across their respective communities, in part through ritual practices and routinized behaviors that shape shared meanings. When users across Fantasy Sports talk about their experience in their Fantasy Sports Leagues, they often draw on the same language of *time passed* and *seasonality*. While not all Fantasy leagues require the user – the Fantasy Manager – to set his or her lineups every day of the season, and no sport lasts a full year, most competitive leagues will require at least a few moments a day during the season to set an active or optimized lineup.

The rhythm of the Fantasy season, layered onto the same schedule as the associated professional sports season, lends itself to a predictable and ritualized cadence. The number of times the lineup needs to be set each week is determined on a league basis, with the commissioner having the capacity to determine the settings when he or she sets up the league. For those who have built traditions around Fantasy Sports participation, the daily, seasonal, and year-over-year cadence of the games is not just a pull factor for their continued participation but has simultaneously reshaped the temporality of their relationships accordingly.

For those who have built the tool around which the users build their communities, the grind of work and play follows much of the same rhythm. The predictability helps

facilitate a persistence of Fantasy Sports by establishing external indicators to return to the Fantasy league as the season enters the temporal timeline. That is to say, while you may not have the Fantasy Football Season at top of mind as summer comes to an end, the ambient interest in the impending NFL season — covered on the news, shown in sponsored advertisements, and discussed in the office — is likely to serve as a reminder. However, ritualized behavior is not merely recurring behavior. In this chapter, I discuss ritual in the Durkheimian sense: an activity that is routinely prescribed, is set apart from the mundane actions of day to day existence, and has an emotional valence that lends the ritual a meaningful or symbolic weight. Thus, ritual activities, such as the Fantasy Draft, are not just ritualized in that they recur in similar format annually but also that they serve as the emotional touchpoint that sustains the leagues year over year.

While other fields and subfields, such as organizational sociology and STS, are also attuned to ritual in the routine or bureaucratic sense, what we gain from looking at these rituals through the lens of sociology of religion is the additional layer - or taking seriously - of *meaning making* that happens during and after the rituals. For example, Judy Wajcman asks, "What kinds of conceptualization about time, of *what time is*, are being framed by and inscribed in these digital platforms?" (5) considering how social mores associate value with efficiency, with wasting time "the deadliest of sins." But Rather than focusing on the temporal logic (defined as the "socially legitimated, shared assumptions about time that are embedded in institutional and societal norms, discourses, material and technological processes and shared ideologies'") we think about the ways that the shared sense of time is not merely socially "legitimated" but socially constitutive. That is to say how both the users and the developers' "inefficient" use of time is an investment in these affectively

meaningful, valuable relationships and communities based around game play (Wajcman 2018). The season's kick-off draft event for fantasy users and the quarterly planning social event are not just temporal markers that indicate a specific temporal logic; they are meaningful life events that people *love.*

As such, those events and rituals are set aside and protected as meaningful and non-negotiable features of their social lives. That is to say, the Fantasy Draft is made sacred (in the Durkheimian sense of being set apart from the *mundane*) as distinct from other social get togethers that may involve the exact same participants and many of the same activities (food, drink, and bantering, for example). They may love that it brings their old friends together, indicates that an unlikely and long-running group of virtual friends but IRL strangers will carry on yet another season; it is the reason that developers love their jobs, the special common ground shared between engineering team members with the freedom in their work life to play a game of ping pong together and get to know the goings-on of one another's' lives outside of their code-reviews and standups.

This chapter introduces users and the development teams who shared with me the way that various parts of their lives and relationships are shaped by and oriented to the temporality of Fantasy Sports. It shows how both the users and developers of the Yahoo Fantasy Sports product engage in emotionally laden, episodic co-presence at regular but infrequent intervals; these events – the draft (users) or quarterly planning (developers) are important for creating a shared memory and interpersonal ties. The predictable rhythm means that the individuals are able to orient to a *shared* temporality; they can look forward to the next event which is tied to a specific time of the year and draw on that shared experience until the next event. In the meantime, though, the brief and mundane activities

that are engaged in asynchronously at much more frequent intervals (for example, daily or every weekday), help sustain the connection to the group that is both low cost in terms of time investment, but sets the community members up for maximum emotional return on that small investment at the time of the larger episodic events.

First, I will briefly review literature on time, and in particular time in communal activities, with a focus on regularly occurring rituals and traditions, beginning with Durkheim's analysis of early religious and tribal behaviors and following the research on the intersection of time and interactions. Then, I turn the current projects' two cases, beginning with users. In that first half of the chapter, I will introduce a series of ethnographic vignettes typifying the cases from which I develop my analyses. When considering the daily level of rituals, I begin with Dane, a military veteran in a Rocky Mountain state and Nathaniel, a pastor in the southeast, both of whom have integrated the daily cadence of Fantasy gameplay into the rhythm of their day to day life. Zooming out to the unit of the Fantasy Season, I will explore how the timeframe of a season, with its accompanying end points and rituals, frames and fosters the interactions of users in the Fantasy league community. The cases of Carrie, a manager in an all-women league, and Liam, a multi-sport power user, will illuminate the seasonality of the game.

Finally, on the user side of the screen, I will turn to longer range timelines that emerge in users' narratives about their play: seasonal and multi-year leagues and consider the puzzle of how mere moments of attention a day have added up to decades-long communities that are incredibly meaningful to the users. Throughout each, attention will be paid to the ways that the elements of time, repetition and ritual reflect back on the game's capacity for facilitating and galvanizing relationships.

Notably, the importance users assigned to time in their discourse was an unexpected, inductive finding from the interviews and initially stood in contrast to the survey data. A total of 11 distinct time-related codes were set in NVivo, despite temporality not featuring in my original research questions. In particular, what emerged was a dual sense of temporality: 1) the small, daily actions that underlie game plan and are logistically the basis of Fantasy Sports participation and 2) the year over year time horizon that spans from two to dozens of seasons with the same "core" of Fantasy Managers.

I then transition to the other side of the screen: how the developers also co-create a shared experience of time through their daily, and seasonal rituals. Every day, the Fantasy Mobile team has a brief daily "standup." These daily standups for the whole Mobile team are meetings that last about 15 minutes but both reflect and facilitate a particularly tight-knit group orientation among this team. Though the Standup is a standardized routine of software engineering firms as part of the ideal-typical feature of engineering work management, it is hard to maintain in practice. This daily commitment to ritual, I suggest, is part of the constitution of this group which has a particularly close relationship and is set apart in its relationship orientation and friendships.

Studying Time: Rituals and marking time

Emile Durkheim argued that "ritual practices" (along with "intellectual conceptions") is a fundamental aspect of all religions (Durkheim 1912). Rituals are social practices that represent the community in which or for which they are enacted, and offer a standardized way for the community to reconvene, either as co-located or co-present symbolically (Beaulieu 2010) to reinforce the social commitment and experience of the religious

community. Specifically, Durkheim offers the following definition of rituals: “Rites are the rules of conduct which prescribe how a man should comport himself in the presence of these sacred objects”(Collins 2014, 2010). Mary Douglas argues that "social rituals create a reality which would be nothing without them"(Douglas 1966). Douglas, and Durkheim converge on the idea that social order is co-constructed by its members, and that ritual as part of social life is a powerful mechanism for that co-construction.

Rituals, per Durkheim, are the basis for the experience of collective effervescence, periods of intense, socially experienced moments of fervor that revolve around their co-presence and shared orientation towards the symbols or ritual that reflects both God and Society. Collins analysis and interpretation of Durkheim’s ritual theory proposes that successful rituals result in: 1) group solidarity, 2) symbols representing membership, 3) emotional energy, and 4) moral standards of right and wrong (Collins 2007). I will argue that the transmission of religious orientations from parents to children can operate through these four mechanisms of ritual in the Durkheimian sense.

Collective effervescence

Emotional energy is a hallmark of Durkheimian ritual theory. In the combination of emotional energy, ritual focus, and relationships that undergirds the experience of collective effervescence, the very visceral experience of the energy is often a prime motivator for return. Collective effervescence’s emotional fervor offers an intense bonding experience that can help create intimacy and understanding between participants. The experience of emotional energy associated with large gatherings of people with shared focus on an event and its outcome was originally discussed as an element of early religion,

but the phenomenon has been applied to the world of leisure activities as well, most relevant here is the experience of collective effervescence at sporting events. For example, the shared affective experience of the emotional energy rooting for a baseball team is classic Americana, and it is tradition for a parent to transmit his team allegiance to his child this way.

Collective effervescence does not create a moral community in and of itself. By definition it is an intensive yet fleeting phenomenon. Rather, it is a sustaining phenomenon that be recalled and drawn from *between* rituals. Members of a community can continue to participate in small everyday actions that serve to preserve and reify their ties to the community through those ritual experiences (Durkheim 1912; Serazio 2012; Wuthnow 1994). Through ritual activity, even everyday actions can be maintained as separate and distinct from the mundane because of their association with the sacred rituals and events that undergird the community – in the case of churches, affective revivals; in sporting events, competitions in arenas; in Fantasy Sports, the draft experience. To use an analogy from Christian religion, small routine activities (setting ones lineup or attending a standup) mirror the small moments of daily prayer; slightly heavier weight activities (such as knowing you are all watching the same NFL games and chatting with league mates) mirrors weekly church attendance, and the emotional and community-focused peak activities (the draft) is like celebrating Christmas and Easter.

As attuned to Sociology has been to ritual, it has a more mixed relationship to the attention to time as a key piece of the social world, worthy of analysis. Ethnographers are perhaps the best equipped to seriously consider a sense of time as an actor and not merely a variable in their analyses because they are observing the processes and temporality that

shape people's day to day lives. The field of STS has, on the other hand, taken a critical lens the way that time is discussed in research: it aims to interrogate claims of technology speeding up tasks, for example, and turns findings of devices speeding up housework on its head (Cowan 1987; Wajcman 1991, 2007, 2015). STS proposes, as do I, that technological systems cannot be understood in isolation from the people (and their culture and biases) who create them and the people (and their innovations and interpretations) who use them. This approach accounts for my methodological decision to analyze both sides of the screen throughout this project. The very sense of time, how time is allocated to leisure (and how that varies by social status — economic position and gender, specifically), and the ways that specific notions of temporality are built into artifacts are all important areas for inquiry for scholars of STS and are, I argue, increasingly relevant for the sociological study of contemporary groups as well.

Survey findings

As introduced in chapter 2, I conducted large-scale surveys with existing users of the Fantasy Sports platform. Interviewees were then selected from those who opted into the follow up study. The tables presented below establish the broader context of users' self-reports of how they spend their time when it comes to their Fantasy Sports game play.

Table 3: Self-reported time spent per day playing Fantasy Sports at draft, by Sport

Minutes	Baseball	Football	Basketball	Hockey
n/a	1.53	0.52	0.49	0.48
<5	12.39	22.66	24.17	24.05
5-15	18.9	28.12	29.83	27.63
16-30	25.06	11.21	10.82	10.64
30-60	29.63	9.83	8.19	10.68
60+	12.49	27.66	26.49	26.63

In interviews and open-ended survey responses, users discussed the meaningful ways that Fantasy Sports factored in their lives, and yet their fixed-choice survey answers reflect their self-reported time spent playing is relatively low. Table 4 presents responses from the question, "How much time spent per day do you spend on your Fantasy [sport] team before the draft?" The results for baseball form a curve: around 12% of users report spending less than five minutes per day as well as over 60 minutes per day. In the middle, around 55% of users report spending 15-30 minutes per day (25.06%) or 30-60 minutes (29.63%) per day on their team. The remaining three sports (Football, Basketball and Hockey) have very similar bi-modal distributions. In each, over half of user's report spending 15 minutes or less per day on their team while preparing for the season. On the other hand, over a quarter report spending over an hour per day on their team leading up to the Fantasy season.

Table 4: Self-reported time spent per day playing Fantasy Sports at survey, by Sport

Minutes	Baseball	Football	Basketball	Hockey
n/a	0.44%	0.18%	0.28%	0.73%
<5	12.05%	30.26%	31.68%	32.82%
5-15	30.48%	32.97%	32.39%	35.03%
16-30	30.16%	13.11%	11.3%	10.92%
30-60	20.49%	7.66%	6.91%	6.49%
60+	6.38%	15.82%	17.44%	13.00%

By the week of the survey – around the midpoint of the season for each sport – around two thirds of users per sport were reporting less than fifteen minutes a day on their leagues. Taken together, these self-reported estimates of time spent daily on Fantasy play suggest that the actual amount of time invested is, for most users, fairly minor. This is unsurprising in light of Wacjman's discussion of the increasingly squeezed leisure time among working adults, which we know comprises many of the Fantasy Sports users. Additionally, leisure time for many is now comprised of more multi-tasking behaviors rather than "pure leisure"; Fantasy Sports participation is well-equipped (with its geographic dispersion and capacity for asynchronous play) to be played in brief moments salvaged for leisure. These findings initially seemed contradictory, but ongoing analysis suggests these two outcomes are mutually reinforcing rather than mutually exclusive.

Daily

The daily cadence of Fantasy Sports engagement is an interesting paradox: it reflects both an intensive investment of time (every day) on the one hand, but often a minimal amount of time spent each day. While not all Fantasy leagues require daily

lineups, and each sport does not last a full year, most competitive leagues will require at least a few moments a day during the season to set an active or optimized lineup. That is to say, to varying degrees, each Fantasy Sports involves what users typically refer to as a "grind." The sport with the lowest barrier to entry and minimal time investment is professional football, in which the great majority of games are played on the same day — Sunday — over a relatively brief 17-week season (weekly, one game is played Thursday night and one Monday night, the remaining 12-16 matchups each week are played on Sunday.

This means that a Fantasy player needs to make any final roster decisions on Sunday mornings in order to field an active lineup; this is a manageable (brief) and memorable (fall Sundays have a clear cultural association with American football) for many people. By contrast, Major League Baseball lasts over a 6-month span with each professional team playing several games weekly, on irregular days. This requires closer attention to the daily ins and outs of matchups, schedules and game times. Put another way, while there were only 256 regular season NFL games in 2018, that number was 2,430 games for Major League Baseball, and 1,230 for the National Basketball League and National Hockey Leagues. By spreading the games throughout the entire week and at sometimes unpredictable times, the users of Fantasy Sports become attuned to trends and rhythms in the calendar as well as orient their days around habits to maximize their opportunity for success playing Fantasy Sports. The following two extended cases present vignettes from very different baseball users, one with well over a decade of experience in a league of fellow combat veterans and one a novice player in a league of pastors, that

demonstrate two different ways that daily participation manifests as meaningful markers of time in users' experience of game play and community building.

Dane, a user from a Rocky Mountain state, is a 39-year-old military veteran who has spent the years after returning from active duty earning a master's degree to help him support other veterans in a more formal manner – through social work with safe houses. Dane was recruited into the Fantasy Baseball interview pool, the first set of interviews I conducted, though like many users he plays more than one Fantasy Sports. His path to Fantasy Baseball participation was typical — he was invited to play one Fantasy Sports (football) with friends, and he expanded to play more Fantasy games with the same group over time. He says that he got into Fantasy Baseball play as a way to continue the experience of Fantasy Football, which he considers his "biggest hobby." Of baseball, he says, "It's longer [than football]. It's easier to win and keep track or stats. Baseball, you can kind of guess and people progress but football, it's a disaster *all the time*. People get hurt, and they don't do the best at th*e end of the year*, like baseball players do. They take *breaks* and rests, so that can ruin your whole [Fantasy] team between playoffs. That's kind of how I got into the baseball one, was by a friend. We've been doing it I think 8 years on that [baseball league] one. Fantasy football [league] has been [going for] 16 years." For Dane, a key distinction in the games of Fantasy football and baseball are framed in the temporal progression of the season, which he has internalized over the 16 total years of play.

Based on his expression of strong motivation by Fantasy Sports being a ("biggest") hobby of his in combination with the motivation of keeping up with friends ("It's just fun to stay connected") I expected Dane to indicate a high level of engagement with his baseball roster over the course of the Fantasy game play. Additionally, he offered early in

our interview that he "got into Fantasy Sports because that's how we stay connected. We all got out of the army, and we're all over the world. It's more just for smack talking and stuff like that. We don't do it for money or trophies or anything. It's just fun to stay connected." When I asked him to walk me through his process of play, however, Dane indicated the opposite:

> "Usually I just have my app on my phone to my Fantasy Sports, and it has my teams there. I click on that. Scroll down the list to see if my players are playing, which pitchers are starting. I put them in the lineup. *Done. I don't know, 30 seconds maybe. I set that each day*. Then the rest is just checking in on them, or if it's about to rain. That's it."

Later, when asked specifically what he likes about Fantasy Baseball, Dane again returned to the language of daily play – even when talking about longer range timeframes:

> "It's daily for me. Seven days a week because baseball is every day and it's [a] long [season]... Everything kind of lines up. There's not really that many upsets after that many games. To me that's great, and that's why I keep doing it. If anything, I might check in to [watch] a game or two. I'll watch [the ESPN show] Sports Center or something to try to get a highlight of my guy. I do like the highlights that you can click on and show, because I don't watch a lot of baseball. That's cool… I would've lost contact with at least 4 or 5 of these people. A couple of them they were privates in my squad, and I was the sergeant squad leader. This is the only way I'm keeping in touch with them to be honest because of the [not using] Facebook thing… I'd probably lose contact with probably about half. It'd be a lot less at least. Maybe

once every year or two years I'd check in with them. *This is constant checking in.* It's just nice."

I tried to understand the substance or content of the "checking in" but Dane insisted that they only talked in smack-talk style insults, briefly, throughout the course of the season. Again, he emphasized the *tempo* of interaction over the *content* of the interaction. It was only over the course of my analyses, when I heard many users express the same seemingly contradictory position that less is more when it comes to the substance of their interactions and the temporality of them, that this reality of the game play in their community more broadly. That is to say that it is because of, not in spite of, the brevity of these routine interactions that the Fantasy communities are so durable. Dane continues, "that's the one that keeps us in touch the most. We probably argue more about the football league than the baseball league… I think its more, baseball it's really interactive. *You always got something going on every day… It's more interactive because we're going to talk daily to each other some of us."* Here we hear Dane describe how the cadence of the game play directly influences the cadence of their interactions – Fantasy Baseball's more intensive day-to-day schedule yields the "most" interaction despite the frequency of conflict and controversy in their very active Fantasy Football league.

I closed my interview with Dane with a specific question that had been on my mind throughout our conversation: whether or not he, a veteran training to assist other veterans with mental health issues, would recommend Fantasy Sports to men and women returning from the armed services. Again, he emphasized the daily, routine, mundane actions

associated with Fantasy Sports (and baseball in particular with its exceedingly long schedule and daily game play):

> "Oh, I totally think it could connect to ... [pause]. When we all get out, we lose touch. We all have that camaraderie. Soldiers have a hard time transitioning in the real world, back to civilian life. They're stuck with people that are different than them. Some of them go downhill from there. I think it's a big connection that we did – [that] I think people should do. We have privates, sergeants, I have a first major in the league. Those are people you couldn't even talk to [in the service], but now they're your friends and they're there for you. You might go see one or two in another state. *It helps us check in on each other*. Something for mental illness or see if somebody is going down the wrong path or needs a pick up or how they're doing. We're there.
>
> It's like a support group *instantly*. Everybody will be there for you. You always have friends. *I don't like getting connected [online],* but [Fantasy Sports are] a promotable thing. I think a lot of people do it [Fantasy Sports] in the service. Or not, because they might go to the woods for a month and that screws it up, or they get deployed and they don't have access. *Definitely to keep people together after they get out is way cool. Probably the reason why we do it the most*...I started this just on my own. Maybe I had one friend who joined the league. Nothing compared to knowing everybody in your league. It's just cool. Everybody is all over the place. It's probably ten times better to have that support group and we're there for each other, and we use it to stay connected and to have fun at the same time. We could

still smack talk like in the army. We used to be really competitive. When I just join a league and you don't know those people, there might be more trading going on because nobody knows anybody and one person could have maybe a couple teams. Just some shady stuff. Here we check each other."

For Dane, setting his baseball lineup is part of his daily routine for six months out of every year for the past eight years. Despite being a meaningful part of his life, he estimates that it occupies less than 30 seconds per day to play. That routinized time invested in the league, I found, is one key reason for the durability of these leagues as enduring social groups. Dane refused to join social networking sites like Facebook and admits he would have lost contact with these men with whom he shared a very important life phase with: their time serving in the military overseas together. As a mental health professional in training with an interest in helping veterans like himself transition to civilian life, he views the game as a key "support group" despite the fact that their check-ins are not substantively meaningful: when they talk, it is in insults or smack talk, not about struggles and challenges. It is precisely the mundane, routine action of daily lineup settings is a bridge to maintain relationships without requiring anything else from the members of the league beyond "showing up," virtually, every day. This allows the other managers to identify – if someone is not setting his lineups – someone they need to "check in on" or to see if they need a "a pick me up." Dane's case is a particularly stark example of a trend I found throughout my interviews: the routine, mundane action of daily lineup engagement is not the fun or glamorous part of playing Fantasy Sports, but it is the foundation for its long-term success and a main factor in the durability of fantasy leagues.

Nathaniel

Nathaniel also talked about orienting his practice of Fantasy Baseball play around a daily ritual. Nathaniel is a Pastor in a state in the south east. When we sat down for our interview over a video call, the hum of his air conditioner was drowning out his Southern drawl so he shut it off until we wrapped up our conversation. I was excited to talk with Nathaniel because he was brand new to Fantasy Baseball during the season we talked, and he stood out in a few other ways from my other interviewees. Nathaniel worked as a pastor, and his league was populated by other pastors from nearby churches as well as his own. He knew them all from a professional setting, not from a background of close personal ties as had been the case with my previous interviewees. Finally, the league Nathaniel played in is a keeper league, which you will recall is a type of league that is more involved than the standard game play. Keeper leagues extend the league across years, mirroring professional league franchises in that most of the players on a team return year after year. In a keeper league, after the season is over each manager can select a predetermined number of players from his or her team to "keep" for next year.

The league predated his joining it, though he had long wanted to join this or any other league. Nathaniel was very eager to play and, despite being a novice Fantasy player, was a long-time baseball fan. Most importantly for the league, it seemed, he was grateful for the spot in this league that opened up for him. He explained the extenuating circumstances that allowed his entry into the league: "The first thing that we did was they had a guy that they kicked out of the league just because he did not participate. They gave him plenty of chances so they were really fair, but he just chose not to participate, so I inherited his team." Nathaniel had received his much-desired position in a league through

the inactivity of another; this informed his sense of excitement as well as fear motivating his experience moving forward. He excitedly shared the on-boarding into the season: a fun and exciting draft party (hosted at the commissioner's house and attended by all of the league managers) to kick off the league immediately followed by the mundane daily grind of Fantasy baseball:

> "Then, we did the draft, so we did that on a Saturday. We all went over to our manager's house and I had a good day of it. It was a lot of fun. Then, after the draft is when we had a flurry of pre-season trades going on which is always fun. Then the season started. From that point on it's just doing your typical duties of checking for prospects on the waiver. Doing research on trades. Making sure you have a lineup that's solid. That sort of thing. It's kind of just going week to week making sure I'm keeping track of everything"

However, Nathaniel's particular fear of being kicked out due to inactivity infused his day-to-day practices (not just "week to week" as explained above) with daily rituals that shaped his experience of the season. When asked about a typical game day, Nathaniel said,

> "Right, so one of the things I learned from our [commissioner] was he reminded me of this, I knew this already, to make sure that you know when the games are being played so that you can check your lineup shortly before the games start. For instance, if you've got someone who's not going to be in the lineup, if you're not paying attention to that, you could have a position where you're not going to score any points that day because somebody's not in the lineup. What I did was I set a timer to go off on my phone ten minutes prior to the major game times for east

coast, central, and west coast… The alarm reminds me and as long as I'm not in a meeting or with someone. If I'm in a meeting, then I'll just go with what I've set up at the beginning of the day. If I'm available, I will just do a quick double check of my lineup when the alarm goes off."

Unlike Dane, a seasoned Fantasy Baseball player who checks and sets his lineup in minimal time at the start of each day – who has, in other words, internalized the timing of Fantasy Baseball – Nathaniel is learning the rhythm of the season through daily play and the "typical duties" of setting his lineup every day. To avoid having any missed scoring opportunities, he set a daily reminder for the start of the games in each time zone. This means he has, for six months a year, a daily alarm at 7 pm and 1 pm local time for different time zones, a total of at least 6 daily alarms. This ritual is in addition to his morning routine of setting his lineups before work, which will serve as his default lineup in case he cannot check his lineups again when the alarms go off. Having "inherited" a team from an inactive manager, Nathaniel was anxious to make a good first season showing and avoid committing "rookie mistakes" so as to not also end up losing his team. Like Dane, Nathaniel knew that "showing up" every day and putting in the good faith effort of setting the daily lineup was often enough to keep managers competitive in the league, and kept their spot safe from being ejected based on inactivity. He therefore integrated the Fantasy advice he was given ("make sure you know when games are being played") and created a digital artifact – the alarm on his mobile phone – to structure his day, orient himself to the external timing of each Major League Baseball and position himself for Fantasy success.

These seemingly small daily actions are not merely routinized and repeated but form the building blocks and individual rituals that underlie the larger, meaningful communities of Fantasy Sports play. Having internalized them as part of the routine of day to day practice of being in a Fantasy league, as an outside observer, I did not anticipate the importance of these daily actions to users but found it early and persistently in my analysis. Zooming out from the small daily interactions and practices that users implement to structure their time and relationships, we now turn to looking at how these unfold over time. In the section on seasonal friendship, we look to how rituals tied to external time markers and the rhythmic seasonality of game play contributes to the durability of Fantasy Leagues and brings friendship "levels" back up after periods of interactional distance.

Seasonality and friendship

"*When you're playing with somebody and you chat with them about the matchup that week, it keeps you in touch"*

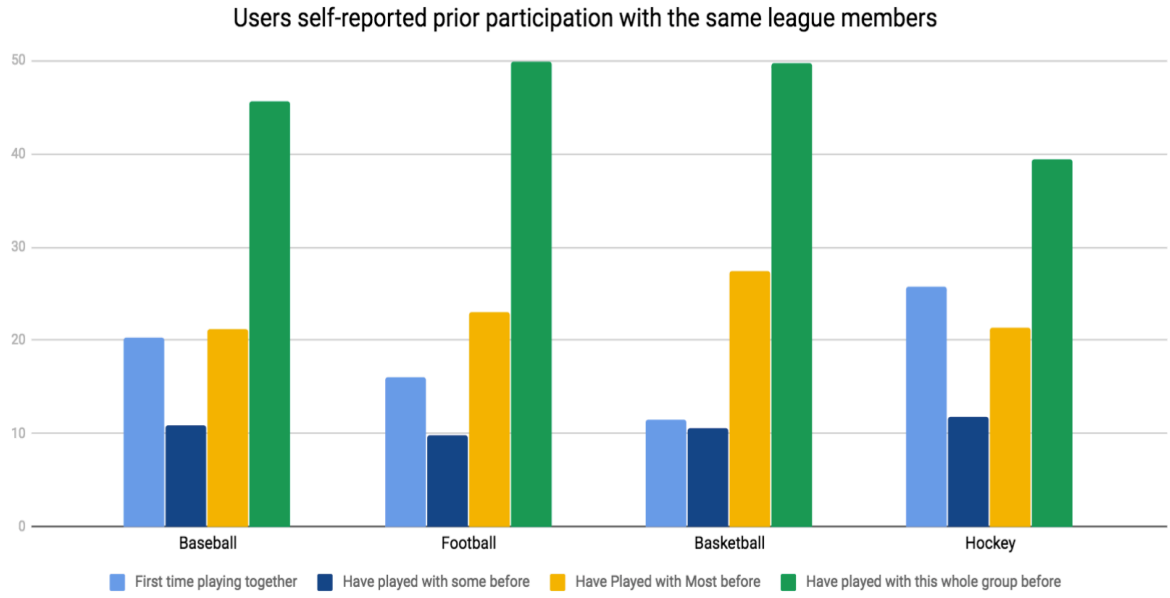
The seasons of Fantasy Sports contain key rituals and markers of time that happen at the same points each year. Many of my interviewees specifically noted that the seasonality of their Fantasy Sports leagues meant that their relationships with the people with whom they play follow seasonal patterns as well. While the strongest ties persist throughout the year and in their daily interactions, it is on the weak ties that the seasonal rhythms of Fantasy Sports have the greatest impact. Many users – over a third of users in each Fantasy Sport (and about half of all Fantasy Baseball users) self-report playing Fantasy Sports in a league with the entire league they played with the previous year. Those proportions jump dramatically when considering that a substantial proportion report

playing with *most* of the same group year over year. Many players specifically referenced the seasonality of their play and tied it to the cadence of or sustaining of their relationships with league mates. In the opening quote of this chapter, Fantasy Baseball interviewee expressed this with striking clarity, saying:

> In my baseball league versus my football league, there's some people who are in both so if I'm with my friend John in baseball league and John's sometimes not doing football, me and John might lose touch, but during baseball season, I talk to John maybe 3 times a week. It gives you more reasons to keep in contact with somebody like that and if you don't, baseball season will be back around the corner and my friendship level with John should go up because now baseball is happening.

DJ's experience was quite typical among users. As the chart below shows, for each of the major Fantasy Sports, "I have played with this whole group before" is the most common temporal affiliation between league-mates. Notably, for each sport besides hockey, the second most frequent answer is that they have played with "most" of the same league before. This is common practice, and we learned more about how that might play out in Nathaniel's league: the same group returns but they removed the negligent manager and replaced him with Nathaniel. This league's members would thus all answer, that they have played with *most* of this group before.

Figure 8 Users self-reported league retention year over year, by Sport



Accordingly, that means that after an off-season of Fantasy game-based interactions, a quorum of the league's members came back together for another year of play. This seasonality and rhythm built into the game by the off-season between the end of the championship of the season before and the draft of the upcoming season offers the context for most leagues to disband. In fact, the actual digital game itself is "closed" between seasons for engineering maintenance. It is the phenomenon of the returning league, often orchestrated by the commissioner (whose roll in the preservation is discussed in more detail in chapter 4) that will be considered in detail below.

Carrie

Carrie, a woman in her early thirties in the same southern state as Nathaniel, plays in two Fantasy Football leagues. When she was in her early twenties, Carrie and many of her young professional friends spent their Sundays in the small but growing city they lived in, attending games and the pre-game social events ("tailgating") for their favorite NFL

team. They were serious football fans and thought the newly popularized game of Fantasy Football would be a great way to deepen their engagement and add to the fun social aspects of fandom that they were already participating in together. She explains, "That one, I joined it the second year that it was in effect, it was just a bunch of girls, that actually all connected through the [home team]'s games. So, we would tailgate and watch football together. I think the girls wanted to prove to the guys that they could have their own league, so it just kind of grew out of that, friendships already and friendly competition I guess." That was six years ago, when their original league would have in-person drafts complete with fun challenges and a party atmosphere – they had draft-specific drinking games that would lead to managers drinking shots of alcohol.

Now, Carrie and her Fantasy league still play every year but they had to phase out the alcohol as managers in the women-only league began attending the drafts while pregnant. Now a stay at home mom to an infant, Carrie plays in the same league with their in-person, offline draft. Some things have changed, though: the main event is no longer the beginning of the year party. Rather, it is an end-of-season spa day organized by the league's "social chair"[10] (which will be discussed further in the following chapter).

When I asked Carrie to tell me about her "girls league," she said:

> "For that league we actually have an offline draft.[11] So, we meet in person now. Since it's been six years since we've [been] doing it, half of us, most of us have kids now, so we actually did a girls' weekend and went to a cabin. We have an

[10] This league has a social chair, who is a woman who wanted to participate in the fun events that were associated with the Fantasy play, but who did not possess the football knowledge to join this very competitive league (they hold auditions for new players who must answer Football trivia questions, for example).

[11] Its noteworthy that this is a pretty rare form of draft, and it signals expertise, commitment to and a competitive style of play.

offline draft, so we actually sit in the room for a couple of hours and you put your sticker up on the board and everything. Then the commissioner has to go in and enter it into the actual Yahoo account behind the scenes. That's how we do our draft… The regular season we just kind of ... It's a ten-man league and we ... You have your head-to-head match ups and playoffs."

When asked about activity levels, Carrie articulated Nathaniel's fear: "Yeah. If you don't set your line up you get kicked out" but also his great motivation: "We get together a couple times a year for mid-season parties." Unlike the pastor parties of Nathaniel's leagues, Carrie says her league enjoys it as "Just kind of an excuse for a girls' wine night. We actually have our end of season celebration coming up in a couple of weeks, we're doing a spa day. We have a trophy that we give out. We're total dorks about it."

Though they have been friends since before the league began, and the league is not the only reason they keep in touch, it does amplify the quantity of interactions. She says,

"During football, it's weekly for sure. It's not every day. Some of the girls that I'm closer friends with, we'll have things more frequently. The text chain, it will be on [their shared favorite team's game time] and [home team] game days and that kind of thing. But also, just random stuff during the week, a lot of the kids' birthdays, or we'll send pictures around, things like that. There's always [players from the home team] sighting pictures that go around, that kind of thing. Several times a week during the season. Off season, it's very ... Actually, I'd still say it's weekly, but just not as much."

By facilitating an inflated level of interaction each year, followed by a period of less intensive interacting, Fantasy Sports supports a seasonal rhythm that assures the return of each community member each year – the value of participation is high because its rituals are fundamentally intertwined with the sustaining of the community. For Carrie, her league is the social space that creates a shared focus for the friendships that predated participation in the game. Through scheduling regular offline, in-person events that correspond with important moments in the Fantasy season, Carrie's league engages in ritual practices that reinforce their social bond as well as the value of the group. This is a core group[12] of friends for her, and their established friendship is refreshed and reified through these regular events.

In her other league, comprised of mostly weaker ties in which she plays with her husband and his colleagues, there are many couples. The couples are not all equally close, but they enjoy the competition and staying in touch. Carrie reports that her league is pretty active in chatting with one another during the season. Though she talks with her primary league – the girls league – throughout the year, with this group of more distant ties, she says, "For that one, no. Some of the friends, it definitely falls off. You might text them every once in a while. We have one friend ... We were going to see one of the couples there this weekend, that we're staying with them, but that's because they're closer friends. But, some of the other people in the league, we're not as close with, you chat with them occasionally, but not as often."

She says that playing Fantasy Football helps keep these friendships going through occasional check-ins, explaining, "It's kind of like with Facebook or something like that,

[12] "Core groups" as a standard way of thinking about group dynamics are discussed in chapter 5.

you see people and you get little snippets of what's going on in their lives, it's that same kind of concept, *of when you're playing with somebody and you chat with them about the matchup that week. It keeps you in touch*. And then they might say something that's going on in their lives or something and you're [like], 'That's good to know.' There have been several birth announcements sent over the fantasy football chains, the text chains, which is kind of funny."For Carrie, the Fantasy League provides the structure for regular contact throughout the year with her close friends, with whom she has been playing for years.

The important endpoints – the draft at the beginning and wrap party (or "spa day") at season's closing – create an annual rhythm to their relationship and game play. For her secondary league, of mostly weak ties, Fantasy Sports' communication pathways facilitate a passive way of staying up to date with the goings-on in people's lives. This is much like what Dane, who also referenced Facebook in this context, referred to as a "constant checking in." In fact, she notes that it is specifically momentous events – birth announcements – that are conveyed to the group, rather than the mundane backchannel of conversations prevalent in the more tight-knit groups.

That the league is recurring means that, with little effort, the framework that puts users in the same digitally mediated space is reinitiated annually and each pair of managers plays each other at least once. Year over year, users can digitally bump into information about others in the league, learning details about them and having reason to specifically reach out at least once per season – the week of their matchup against the other person. During those moments, Carrie says, she reaches out to the opponent. Carrie's league has ritual gatherings each year that help maintain the feelings of community throughout the year and, over time, they have also been able to draw on the tradition and past time-marking

moments (such as particularly notable draft stories and birth announcements), which form a collective memory and set of standardized stories that are drawn on not only throughout but also across years. Carrie's league is unique as an all women-league in a male-dominated pastime, but they also stood out for the intensity of their Football knowledge and the practices around it. Having an offline draft, for example, is a particular challenge in and of itself, and reflects the high standards of participation in the league which is Football-only but returns year over year. We now turn to another especially competitive user, Liam, who plays all year across multiple sports.

Liam

Liam represents a category of user that we on the Fantasy Sports team often call "power users." Though they represent a small proportion of total users, they are significantly more engaged than the typical user on a number of dimensions: time spent in the app and on the website, sports knowledge/expertise, and number of Fantasy Sports played[13]. Due to their participation in multiple Fantasy Sports games, they end up playing in at least one league for most, if not all, of the calendar year. Liam associates different holidays with different Fantasy tasks and behaviors. These users, like Liam, are often very analytical and create and monitor detailed spreadsheets and data sources to inform their game play. They tend have encyclopedic sports knowledge as well. Liam is active in Fantasy baseball, football, and hockey, meaning that he is playing Fantasy Sports throughout the entirety of the calendar year. Though Liam thinks of himself as "typical" he is, in fact, part of a smaller subpopulation of highly engaged users.

[13] Note that I didn't call Carrie a power user. This distinction has more to do with the number of sports / games they play over the course of a year. Carrie and her league mates are intense Fantasy Football players but are not playing in other games across the year.

As a year-round player, Liam talks through his behavior and practices associated with Fantasy Sports as tied to specific external markers of time, such as holidays. He also notes that overlapping Fantasy seasons means spending *more* (rather than less, as one might expect splitting the existing allocated leisure time). He says,

> Okay, this year ... I usually start my baseball research vaguely around Christmas, just recapping what happened last year and seeing when important dates come out and major injuries or whatever. Usually around February is when I start to get a little more serious about it. I did some mock drafts or whatever. This year I *only* did two leagues. I had both drafts, I believe, in mid to late March right around St. Patrick's Day, between St. Patrick's Day and the first of April. The other league, which is a head-to-head categories league, which is generally my preferred format, I am in last place because two of my first three picks have either been hurt or just been terrible…I don't believe in just giving up on a team [though], especially now where I still have the other league to keep me invested *daily*. Around now I'll check it more frequently because I just, by nature, am used to the startup of fantasy football season, meaning that I'm on Yahoo more often.
>
> If I'm on there more often, I'm going to be more likely to check baseball. September comes and a lot of my time is primarily football at that point. It will really depend on what I'm doing in the league. If I'm in the playoffs of a head-to-head league, I'm checking in every day. The rotisserie league I'm still checking four or five times a week at least. Then I would assume by second or third week of September I'm pretty much done with the head-to-head league because the playoffs start and

> I'm obviously not going to make it. He proceeds to discuss the way that the playing in multiple leagues leads to a seamless wrap of interaction across the seasons, with infrequent interactions for those with whom he has an actual offseason.

Liam's knowledge of the Fantasy Season is totally tacit at this point, with clear and durable anchors throughout the year. He ties the meaningful moments in game play to moments in the actual calendar year, using holidays and seasons to orient himself to the specific moment and associated tasks in game play. When asked about the relationship between his league's timing and the social dynamics, his explanation mirrors DJ's sentiments:

> For the baseball league in question specifically, through football, I'll talk to them at least because most of them are in the football league. Hockey, a couple of them are in so we'll chat once or twice from like December until February, but not all that often. Then once the baseball season starts around ... Most of the communications that we have are centered upon setting up a draft date and then the actual draft and then the results of the draft and the lead up to the season. Then once the season starts ... The question you asked specifically was about the off season, but once the season starts, it dies down a fair amount.

As a follow-up to this, I ask, "Are there people you think you're closer with after playing Fantasy Sports together?" to which Liam replies:

> Yeah, absolutely. My friend Tim that's the commissioner. I had never really met him before, but I've gotten to know him pretty well. I would definitely say that I'm

> closer with him. The friends that I have now, people that were in my wedding, are people who are in that very first fantasy league that I played in. A lot of that is just the fact that they were close friends then and they're still close friends now. A lot of that is also because we have these shared interests and shared common activities where we have more of an opportunity to interact with each other. It's something where just because I don't talk to them for a month or something like that ... It's like a friend of mine who was in my wedding, I might not talk to for a couple of months, and then say, "Hey, we're going to have this fantasy football league or this fantasy baseball league. Are you in?" Then that's an opportunity to reengage with someone and then you can talk about what's going on in your life or whatever. That way even if you do have time where you are [out of communication] whatever, which everybody ... That happens. It's an opportunity to come together and to reengage with people that you haven't dealt with in a while, at least. They are, for the most part, people that I have only met at live drafts. There have been a couple of opportunities where we hung out other than that, but it just, for whatever reason, hasn't worked out.

For Liam, though he knows most (not all) of the managers in his league, this seasonal rhythm and the shared experience has brought almost every manager back year over year. Though he does not know them outside of the Fantasy context, after several years they have established a durable community which returns regularly and now gets together from time to time in person to socialize, they reach out to one another when their other leagues have available open spots, and they communicate throughout the year.

Indeed, he opens his quote with a reference to Tim, his *friend*, whom he had never met before. Again, we find that drafts are the key co-located moment that unites people and the Fantasy Sports players are then able to draw on that affectively-laden experience throughout the year (or *years*) that follow.

The paradox of this game play is that the small rituals of daily engagement sustain the longer-term communities that come together around game play. The micro- and longer-term time elements of Fantasy Sports game play factors coalesce, forming a sweet spot for the creation of durable communities. On the one hand, league play requires very little daily time spent. It is precisely the minor time commitment required that makes participation sustainable – rather than taking the men and women managers away from their families and jobs for an immersive online experience, to use Dane's words, he or she can "click on the app, scroll down the list to see if my players are playing, which pitchers are starting. I put them in the lineup. Done." A user can do this on the way to work, while sipping coffee, or before checking his or her email. In this way, Fantasy play is easily routinized and thus both memorable and not inconvenient. If a manager slips or forgets to set his or her lineup as a matter of habit, the social sanctions (such as, in Nathaniel's league, being warned and then having your team taken from you and given to someone who promises consistent engagement) pressure managers to remain invested. Modifications to the game, such as incentivizing strong finishes (what Liam called "playing it out") and linking play with a drafted team across years ("keeper" and "dynasty" leagues), shift outwards the temporality of the game and simultaneously serve to add weight to the social norms of daily engagement.

Eviatar Zerubavel has argued extensively that the study of time is seriously under-considered in sociology. Specifically, he argues that there are two ways to think about the study of time: the *sociology* of time and the sociology of *time* (Zerubavel 1981). To make the case he first conducted and wrote up an extended case study of time as created and shared, in the case of a hospital, and then further developed the approach by studying a broader set of cases to demonstrate the generalizability of the study of time. In this second book, he analyzed time in cases he proposes as seemingly distinct, but even here, chooses as half of his four case studies, religious sites: Benedictine monasteries and Orthodox Judaism among Revolutionary France and hospitals. He argues that there is a quantitative philosophy of time that is rigid and measurable; Wajcman adds that this sense of time is "internalized [as] a socially sanctioned norm of time discipline" and that "schedules presuppose and promote a historically and culturally distinctive orientation to lived time" (Wajcman 2018; Zerubavel 1981).

Time in Fantasy Sports

The practice of participation in Fantasy Sports fills an important need identified as going "beyond being there" in that it is a tool that does not aim to replicate physical proximity but rather offers an alternative tool that may be preferable to co-located interaction and "leverages the strength of the new medium to meet those needs" (Hollan and Stornetta 1992). Though it does not fit the definition of a social networking site (SNS) as articulated by boyd and Ellison(2007), Fantasy Sports in many ways mirrors how interactions and relationships are maintained on SNS more so than it does immersive games, such as video games or eSports. Fantasy Sports as an artifact has been configured and developed in a feedback loop with its users. Consequently, over time the web platforms

that host Fantasy Sports have increasingly incorporated tools for communication, collaboration, and an enhanced social experience. This suggests that scholars ought to take Fantasy Sports seriously as a communication media and community building mechanism, as well as a competitive pastime, that is meaningful to users.

It is easy to explain the daily, seasonal and annual rituals of Fantasy Sports play as naturally occurring or inevitable. However, the temporality of our social groups and the temporality of our technological systems are never inevitable (Wajcman 2015, 2007). Both the engineers and the users have organized around dual temporalities: the brief check-ins and the quarterly or longer-term, more intensive rituals with the same kind of cadence. Draft day and quarterly planning are similar in that they have the same kind of rituals and ways they are done, and each reaffirms commitment to the community.

Through a digitally mediated platform, users invest time – often in small chunks and increasingly done while mobile – in playing Fantasy Sports. This play does not involve an immersive "fantasy world" with an alternative social order. Instead, Fantasy Sports users are participating in a "game within a game." The metrics and data associated with sports fandom and athlete performance are recalibrated and shuffled around to generate a new way to "play" with professional sports. As such, the game attracts users with a shared "real world" affinity: professional sports. That is to say, Fantasy Sports players in totally unrelated leagues can connect around their shared knowledge and interests in the world of sports which provides the shared data and informational infrastructure of their distinct Fantasy communities. Sports is an area of social life already laden with rituals and meaning-making (Kornblum 2013; Lindquist 2006; Serazio 2012; Tavory 2013). Adding

to it, the active ritual that Fantasy Managers engage in when they transition from sports fans – part of an affinity community – to the active participation in a game of their own.

How the Engineers produce time through ritual

In the next section, I will explore the temporal dimensions of the teams who build the digital system of Fantasy Sports on this platform and will demonstrate the synchronization between the two. This section draws primarily on ethnographic research and participant observation over a two-year period working alongside the engineering and product teams; as noted previously, my embedded role as an ethnographer includes participant observation in the enterprise chat client, and some of the evidence presented herein draws on excerpts from the CorpChat, usually refined and edited for clarity when necessary and anonymized with the same pseudonyms used throughout this dissertation.

Similar to the analysis comprising the first half of the chapter — the users' side of the screen — the flip to behind the screen takes us on a parallel journey. First, I introduce how the ideal-typical commitment to daily standups — brief meetings to begin the team's day and plan/distribute their work — reflects and maintains a culture that is oriented inward towards the team. The Fantasy Mobile team, which is the only team to maintain these daily rituals throughout the year, is especially community-centric, while other teams who operate more independently and arguably with less cohesion tend to forego the daily meeting and replace it with chat-based updates to supplement less frequent standups. This becomes evident through a discussion that occurs over CorpChat to debate the merits of each standup frequency — daily vs every other day — which ended with an engineer summarizing: "no one is saying stand ups are a waste of time... we're just evaluating how many days a week are optimal." I then pivot to the engineers' quarterly ritual of planning, which is the primary

event that brings all product-facing members of the sports organization to co-locate in one office for a full day of meetings followed by a routinized "fun" event.

Daily routines: Stand Ups

Aligning with the West Coast engineering culture more broadly – and in part due to the structural routine of the mass transit of the shuttles many employees take to work – the working hours of the mobile development team tends to operate on a shifted schedule relative to other white-collar jobs: Fantasy Mobile developers in the Sunnyvale office typically arrive at their desks around 10 in the morning and routinely work until 6 or 7 pm. Some regularly exercised in the on-site fitness center before beginning their work day and with rare exception, everyone enjoyed a full (complimentary) breakfast from the campus cafeteria "URLs" (pronounced *Earls,* riffing in name and decor on an old-fashioned diner). Typically, a core group of the engineers would convene around a cafeteria table and chat leisurely over their meals before the day begins, heading upstairs to their desks on by 10 am when meetings would be starting for the managers of the group. Engineers themselves were rarely in meetings, with few exceptions: weekly check-ins with one's manager, an engineer working on a specific feature might be in a review meeting where that feature was being discussed or in hiring related meetings when they were interviewing candidates[14]. On the other hand, managers were often in consecutive meetings for hours at a time. The main exception for all engineers was regular "standups," the cadence of which were

[14] When I joined as an intern and participant observer, I learned that the shared calendar system was used similarly across the company; you could use the shared enterprise calendar system to book a meeting room or schedule a meeting with anyone internally. It was only later when reading "How Silicon Valley Sets Time" did I learn that this was an implementation of the philosophy of transparency; she writes, "It is quite common in Silicon Valley high-tech firms that laud their radical openness for employees' daily schedules to be fully visible, allowing others to book appointments in empty slots" (Wajcman 2018)

determined by the engineering lead for the product (for example, by Nima and Kevin on mobile and front end, respectively).

Standups are an organizational tool that are standard operating procedure in many Silicon Valley companies. They are the daily units of a management style called "Agile" that consists of daily standups, weekly sprints, and quarterly planning and review. A standup is a regular, brief meeting that goes over the daily increments of a task for the weekly sprint for each member of the team. The archetypical approach for standups is daily, with the meetings valuing brevity and structure. Individual projects might also have their own standup cadence. During my fieldwork, the Fantasy mobile team adhered to the daily standup model more faithfully than any other team I observed.

A sprint lasts two weeks. The team has a ritual for naming the sprints. Convention dictates that they progress alphabetically: the first sprint has a name beginning with an A, then a name beginning with B, and so forth. This ordering is further organized by theme, which is decided by vote. For one rotation through the alphabet (which amounts to about half the year), each sprint shares a themed name, which is decided by vote. Here's how the process works: first, a theme is set by soliciting recommendations. Past themes have included "casual dining", "good-bad movies" and the popular TV show "Game of Thrones." In the example of the first Sprint, four casual dining restaurants beginning with an "A" will be put to the vote by Nima. The winner has the most votes and each task to be completed by an engineer — the content of what is reviewed in the daily standup — is noted on each JIRA ticket. In the example above with casual dining themed sprints, the weeks' names might progress as follows: Arby's, Bojangles, Church's, Dairy Queen.

At 11 am every weekday, the Fantasy mobile team assembles in turn, first iOS then Android for their daily standup. There is a recurring daily calendar invitation on everyone on the mobile team's calendar for this, that includes a link for folks who are working from home or remotely to dial in. The calendar invitation includes a reminder 10 minutes in advance of the call, and the calendar invitation blocks a full 30 minutes for the meeting, though the meeting typically lasts fewer than 15 minutes in total. The meeting begins with Nima and the iOS team huddled around a video-call equipped monitor in the shared seating area on the Fantasy Sports floor - known as D5 (that is to say, Building D, 5^{the} floor). The iOS team stands around Nima facing the monitor, where he projects from his own computer their shared JIRA board with tickets, assigned to each person[15].

The standups are brief, involving a quick and consistent rhythm. The predictability of the standup is punctured with sports-specific language. Nima starts the meeting with a "bring it in, iOS" and the team "huddles up" around the monitor. From there, each team member in turn says what he or she worked on 1) yesterday and 2) will be working on today. This format progresses with direct reference to the tickets on the monitor which serves as the shared focal point of the meeting. In these meetings, each engineer is expected to let their teammates know if they are experiencing any "blockers" or obstacles impeding their progress; manager Nima is there to help shift work, improvise solutions, balance the workload, set and maintain reasonable expectations, and match the right team member to resolve specific problems. This daily ritual is an exercise in team work as much as managerial oversight. Nima's language is often in the first-person plural: *"Do we think we*

[15] JIRA is a tool used to manage, prioritize and organize all engineering and design tasks as well as assign them to the person who will fix them and be watched or monitored by those to whom it is directly relevant.

can get this fix pushed out today?" and "*How are we feeling about this?"* If a blocker or problem does arise that cannot be resolved within the brief format of a standup, Nima will say "let's take this offline" or "we can sync on this after," using networked language for in-person communication. After the iOS team performs this ritual, which marks the start of the engineering workday, they return to their desks to execute the tasks they just listed as their day's work. Nima says, "thanks iOS, bring it in Android" and the ritual repeats with a new set of engineers.

Again, we find that the structure — built into the tool in the case of the users' experience — and standardized in form in this subset of the corporate world, reifies the social ties that bind the group members through a temporal orientation, routinized and mundane but perceived as central to the successful functioning of the team. Nima mirrors this official, formal ritual with an informal ritual that closes the day: before he or an engineer on his team leaves for the day, he asks each "is there anything you need from me?" I have witnessed this end-of-day ritual take the brief format of unanimous "nopes" as well as result in Nima being delayed headed home for an hour or more. This routine was another ideal-typical process for team-building. While the organizational prescription for standups was daily, many teams eventually transitioned to less frequent meetings. Indeed, a debate over the value of daily standups took place over the CorpChat when direct reports from Nima (who has daily standups) and Kevin (who has standups every other day) each defended their own manager's system. The counter-argument is a diminishing return on a daily meeting for the engineers and an unnecessary use of time. Nima chimed in that his standups "never run over" on time, and that they are not just for the engineers, they are for him as a manager. The ritual of the standup facilitates improved management, team

oversight, and a daily touch point that orients each team member towards the group and shared goals every day.

Despite being an ideal-typical way to run a team, the Fantasy Mobile team adhered closely to the format of daily standups. As the team I was most closely embedded within, I took these daily conversations for granted. As engineering-specific meetings focused on the minutely specific individual tasks assigned to each engineer, these meetings were the tightly ritualized official start to each of the team members' day. If a developer was working remotely, he called in and joined on the screen equipped for that purpose in the corner of the Mobile team's area of the floor.

In the Playa Vista office, standups alternated between in-person and online updates: a hybrid of digitally mediated (for example, updates shared via CorpChat) and in person meetings rotated through their week. The idea of digitally mediated standups was favored by many engineering teams, with the understanding that it fostered efficiency (more time working, less time reporting on what they are working on) and that most projects did not require daily updates – thrice weekly would suffice for information sharing when teammates were always available online or in person if an urgent update or request arose.

I found the standups useful to attend or observe in CorpChat rooms; they kept me abreast of the work being done which helped me understand what features were going to be "shipped" -- going live – into the product and when. Nima ran his standups like he runs his team, declaring "I run a tight ship." He welcomed me as an attendee when I requested to join remotely (no longer able to merely overhear them, as I had been while co-located with his team in the Bay Area), with the caveat that the meetings were brief because of their focus and to remain as such non-engineers were welcome as spectators but not

participants. My attendance was helpful for my own understanding but also for the daily contact it provided me with the team, reinforcing my team membership despite my exclusion by physical proximity. It was a classic example of co-presence though no co-location. Indeed, as I was often especially busy and my time was very scheduled while I was visiting the office, Nima joked that I attend more standups remotely than I do when I am physically present in the office.

When, on CorpChat, it was proposed that all teams within the sports organization move to a "meeting free Wednesday" so that they could focus on work without the interruption of meetings, a heated debate emerged. The two main voices in the debate were Mobile Developer Sid and Desktop Developer Frank. The following excerpts are a condensed version of that conversation:

> **SM** We sorta had that [meeting free rule] for Thursdays back in the' day. It's nice to have it blocked off for people outside the team and a slight roadblock for people inside the team! In practice, though, I've usually seen it fall off after a couple months and we start eating into it with our own meetings (because we know everyone is available :P).
>
> **Frank** Wednesday is usually my non-meeting day; I'm a big proponent of having stand up 3 days a week
>
> **Thomas** Oh, yeah, definitely on board with 2-3 days a week standup. I think (hope?) that most of our sports teams have moved away from every day standups

’unless we're in a crunch for a release.

SK yup, we had no huddle offense Thursdays. I still have it in my calendar. :slightly_smiling_face:

Tristan Would love to get a daily vs. every other day standup debate going

Thomas Do we have daily standups (like, every day, not DF) for any teams right now?

Here, Thomas, a senior backend engineer, notes that he expects that few if any teams maintain their commitment to the standard daily standups. Nima is instantly called to mind as the only team that still enforces this daily routine, though he does not join the conversation until later he is explicitly called (using the @ notation to notify him he has been “mentioned”) into the conversation. Sid, his direct report, picks up the conversation to give voice to the experience of the daily standup.

Tristan I think @Nima mentioned he’s a fan of the daily-format

Thomas Ah, got it. Yeah, those two projects are where I could see exceptions for crunch time; curious about Nima’s thoughts about [daily standups being] normal operating
procedure.

Frank I have done daily stand ups... IMO they are more for managers than engineers

Sid Standups being for managers goes without saying. Engineers aren't expected to wait till standup to bring up a blocking issue. However, they do force you to think of your work at hand in terms of daily milestones. Many people are deadline driven. personally, I like the pressure of having to report some progress on my work at standup. Can't speak for other ppl obv

Frank I think stand up every other day is more than enough, crunch time very rare... maybe a month out of the year. you optimize for the majority use case

Sid If you attend multiple standups, having daily standups for every project is a pain
[of course]. Otherwise daily has never been a problem for me…

Sid Anyway, I am *for* fewer meetings. I'm just [of the opinion that] short jira focused standups every day don't bother me

Frank but what if you are working on a large feature? that might take a week or two? every day you go to the stand u" and are like, "Still working on the same thing... "hope this helps you" lol

Sid that's not informative. most managers understand Engineering terms. it can be more detailed.

Engineer1 Agree with the earlier comment about standups being mostly for managers. I think posting status updates online/slack would be just as useful and save people time. No meeting day blocked off or even a no meeting time of the day would be great for productivity

Thomas, We did that first bit for our Fantasy operations "standup". Used to do it daily, switched to 3 days a week plus a dedicated CorpChat reminder on the off days to remind people to use the dedicated room if they have anything they want to share (which people rarely do, but sometimes). Seems to work pretty well.

The engineers above (notably, it is all engineers and not Product Managers) all are discussing the cases for which a daily standup is necessary, with the exception of Sid, the only engineering with experience in perpetual daily standups. For the others, daily standups are an organizational tool to wade through specific features — the largest of which might take a week or two. Omitted above is a sidebar between Frank and Sid about the proportion of their yearly work is conducted in "Crunch time" which, all agree, benefits from standups. Sid offers that the Mobile team is rarely *not* in "crunch time" while Frank proposes 10% of time being "crunch time" is a generous estimate. These different takes on the way that daily management fits into the larger (annual) scope of work and pressure reflects the

perceived cultural difference between the two teams: Fantasy Mobile as a small but mighty team always working against deadlines while the Fantasy Desktop team being more consistently paced.

When Nima does join the conversation, he reiterates his hard stance on daily standups — that they are a non-negotiable feature of his management style. Indeed, he returns to the original question — how to eliminate meetings on Wednesdays — by categorically shifting the idea of standups away from being considered as a meeting at all, which is met by Frank with skepticism.

> **Nima** i won't run a project without every day standup, sorry guys. it is for me [as a manager], but also my standups are short
>
> **Nima** The nice thing is a standup isn't a meeting as far as i'm concerned
>
> **Frank** 🤔[16]
>
> **Nima** i run a tight ship
>
> **Nima** also my iOS and Android teams are split up so people aren't listening to things that doesn't matter to them, which i find is an issue in standups that go too long

[16] This "thinking face" emoji represents skepticism at what was just said by Nima, calling into question the idea that a stand up is not a meeting

Ismat Our standup runs 15-20 minutes, It doesn't feel like its a waste of time

Frank no one is saying stand ups are a waste of time... we're just evaluating how many days a week are optimal

These contingents of the whole sports org converged on this debate — which is one of the most intense and protracted I ever witnessed on CorpChat spanning 64 replies within an hour. It also made clear distinctions in processes and culture among the different teams, with the cleavage line emerging between the Fantasy Mobile team and everyone else, with "everyone else" making exceptions for "crunch time" and project-specific tasks. Nima's take is that all of their work is project specific, but also taking seriously his responsibility (after all, they all concede that the benefit of standups is for *managers* and not *developers*) to know each day what his reports are working on and where, if at all, they are blocked[17]. While the consensus is that these standups benefit managers, I suggest that the benefit that accrues to the reports is a meaning-laden one. By having built into the start of *each day* the ritual of discussing individual tasks — identifying blockers, seeing who needs help and who can offer it, and learning what one's peers are working on — the tone is set for an improved flow of information and collaboration.

Many standups involve Nima uttering the sentence "let's take this offline" which means that the scope of a question is too large for the brief standup (again with the "tight ship" or narrowly focused ritual of standup) but indicate that often, there is an issue to be resolved

[17] Blocked means unable to proceed because of a dependency on something that is not done/ready.

or question that requires additional attention or thought. While for many teams, taking things offline might actually still result in discussions happening online, just elsewhere, the mobile team was likely to continue the conversation in person with Nima and the engineer at hand "huddling" immediately following the standup (Vertesi 2014). These moments of manager-focus on engineering questions are specific and detailed on the Mobile team, a distinction from other teams that emerges in the above conversation when Frank mentions glibly that on a typical day he may have no update other than "'Still working on the same thing... hope this helps you' lol"; Sid immediately responds that those are not the quality of update expected in a mobile standup. Culturally, this also gets at a point of accountability. Sid explains the external accountability mechanisms at play in a daily standup: "personally I like the pressure of having to report some progress on my work at standup."

As a participant observer, my sense is this accountability to not just one's manager but the public proclamation of your work to your teammates helped everyone remain on the same page about the workload and expectations, redoubling the sense of teamwork and linked fate. This approach benefited the team because most of their work was indeed conducted individually and with focus on specific concrete tasks, but they were socially shaped and closely linked to the larger project of the sprint. That is to say, a feature, project or release required not just the engineer's new code, but approval and review by another member of the team as well as quality assurance checks and automated testing by yet another member of the team. No part of the product was a solo project, but no team was attuned to this fact and philosophy as much as Nima's team.

The alternative suggestion of moving to less frequent standups or supplementing the in-person huddles with text-based updates on CorpChat was totally reasonable, and many teams made use of this approach with no trouble at all. It was especially beneficial when individual engineers were involved in multiple projects; in that case, a daily standup for the two or three distinct projects you were contributing to could get out of hand, which is among the points that Frank offered. However, Nima's team (represented by Nima himself and senior report Sid) clung to the daily in person huddle that served as the first touchpoint of their day, the way they organized their time daily, and the foundational building block of their deeply linked social ties. Affectively, it was meaningful. It reflects a specific way of doing things, and sets the team apart while also bringing them together, literally daily, to connect and focus.

Quarterly Planning

Users sometimes compared their Fantasy draft to being like Christmas or a family reunion. For me, as an observer and a participant, quarterly planning in the Sports Org held that same wonder and excitement for me. Teams across Silicon Valley conduct all hands, and separately, have "off-sites" which are fun, informative or team buildings events that take place outside the office. On the Sports team, these events had a unique pattern and routine that went far beyond the typical 1- or 2- hours meeting in which goals were set and reviewed. The engineering team's legacy ritual of planning and assigning work through a fantasy-sports-engineering-wide meeting had evolved by the time of my arrival on the team in 2016. What was once a dreaded mandatory day-long gathering for many of the engineers I spoke with had evolved into a more functional and fun format: a review of the past quarters' goals, a list of achievements, and a review of the upcoming quarter's goals, all

divided up by sub-team. As an ethnographer and a product researcher, I found these meetings invaluable for their insight on the goings-on across the organization and as a way to hear from senior leadership. As a team member, I realized that for many of the engineers the great value in this quarterly meeting was not the "knowledge-share" but rather the ritualized fun associated with attendance. Notably, they mirrored the cadence of the Fantasy experience: intense co-presence followed by several months of networked but more asynchronous work.

Like the standups just discussed, quarterly planning seemed to benefit management and executives' more than the on-the-ground engineers, but the opportunity for coming together afterwards over an activity and some food and drinks was just about an unanimously positive experience that the engineers could draw on to energize them or give them something to look forward to as a reward for the grind of the day-to-day work. The collective effervescence of the routinized fun offered an affective touchpoint at regular intervals for the team.

Planning the quarterly meetings is time intensive but has been streamlined through networked processes. Documents and spreadsheets on the shared network document repository make for straightforward collaboration. The documents outline required tasks to pull off the day's event, with columns for the task, deadline, status (in progress? To do? Done?) and designated task "owner." The tasks range from easy ("remind everyone to wear sports gear") to involved ("coordinate food and beverage orders and delivery"), from substantive ("compile and time the slide deck"). In combination with CorpChat channels dedicated to the purpose of planning, delegation and execution of tasks happens both in communication with the responsible parties *and* asynchronously. The tasks required are

themselves cyclical, allowing for a routinization of the process and planning that shapes a predicable rhythm for the event, an efficient planning process that can be distributed between members from the highest managers through the most junior committee members.

The meetings follow the same general timeline quarterly: they begin with presentations, goals and recaps. The presentations include users from across teams and products, with a representative from each giving a "Pride" presentation to show the organization some of their key wins over the past quarter. There is a catered lunch with free time for people to interact informally (though teams often sit with their usual colleagues). Presentations continue after lunch, with an emphasize on messages and goals from leadership. The day wraps up with a fun outing, which is organized by the culture committee (discussed further in chapter 4) and revolving around a competitive game — options have included ping pong, challenge courses, and foosball tournaments. These quarterly meetings are the only time that the entire group of engineers and product-facing employees are co-located, spread as they are between offices in San Francisco, Sunnyvale, and Los Angeles. The routinized fun outings (Ch. 4) that follow also serve as a way to cross the team boundaries that typically divide the groups (Ch. 5) by randomizing the teams, and taken together they re-orient each individual towards the shared goals and offer an emotionally enriching ("fun," "exciting,") touch point that the individuals can draw throughout their daily work.

These outings are designed to be fun. The team leads — vice presidents and directors, engineering leads, PMs and senior managers — invested their time and energy in iterating on the meeting quarterly in an effort to always move it simultaneously towards more engaging/interesting and more informative/impactful. This investment by leadership

to get the entire team together regularly made the event a non-negotiable part of the team culture; by setting apart this time and honoring the commitment to keep everyone from the most junior engineer to the executive suite abreast of shared goals, shared history, shared struggles, and shared victories they fostered a meaningful connection to the organization as a whole. The opportunity to share the pride one has in one's own team but to also link it to the larger goals of the organization helped build bridges across sub-components of the team, reinforce ties within the team, and fostered the opportunities for colleagues to become friends by creating situations for people to connect and interact in a context that is work sponsored but with the goal of play and socializing rather than task focused work.

The rituals themselves foster group identity and a clear sense of community. For example, there is a raffle among attendees; a ticket is distributed to everyone who attends wearing one or more of the following: a shirt/hat/jersey of a sports team, your alma mater, or the Yahoo Sports team. Since logo-emblazoned t-shirts, hats, and water bottles — casually known as swag — are common giveaways in Silicon Valley and comprise the majority wardrobe for engineers, they mark inclusion and most members have many from which to choose. The symbolic value of the encouragement to wear sports gear or represent your alma mater serve multiple purposes. They signal information about the wearer - where they went to school, where they are from, and where their sports allegiances lie. As such, they serve as an ice breaker of sorts to facilitate conversation between Sports Org members who may not have otherwise known or initiated conversation with one another. By dressing similarly, bringing each individual's personal sports affiliation to the group, the group is charged with energy and shared focus on sports that represents the team's shared goals and philosophy.

What is made visible through this lens? In the literature on organizations, attention is given to the ways that firms monitor employee's time (Sundstrom 2008), how time is spent (Wajcman 2018, 2015), and more. However, taken together the focus on any repeated temporally bound actions are thought of as part of a routine or the study of time and efficiency. Here instead we focus on the ways that these routines are ritualized and the time is set apart and made sacred as meaningful parts of their days or years.

More specifically, in the STS literature, attention has been paid to the specific artifacts of time: for example, how calendars are set and managed and how the work of families, households, and organizations do the labor of time management and coordination (Forces and Sep 2016; Vertesi 2015; Vertesi et al. 2016; Wajcman 2018; Zerubavel 1981). However, similar to the analysis in the previous section, I consider the affective dimensions and meaning among the community of developers. I begin with an ethnographic vignette of the standups of the Mobile team which is uniquely positioned across the sports organization (though not unique across Silicon Valley; the standup is part and parcel of the organizational system related to sprint planning and *Agile* project management).

Careful attention to the ritual and community dynamics are a driving force of this project, and the analytical focus on temporality is a direct product of this approach. While other microsociological approaches might also lead the analyst to consider the interactions at the individual level, the community orientation and focus on rituals help highlight the mundane processes that provide the scaffolding for durable and meaningful groups. For many of the users and developers invested in Fantasy Sports, the game is not merely an online community or a job, it is a routinized part of their lives and relationships.

Conclusion: How does the organization of time reflect back on relationships?

The paradox of this game play is that the small rituals of daily engagement sustain the longer-term communities that come together around game play. As these users remind us, Dane "would've lost contact with at least 4 or 5 of these people" while Liam says that it keeps him contact with a friend who was in his wedding, but as they have grown and drifted towards their separate lives, they have shifted out of touch. He attributes much of their current relationship to Fantasy Sports, because of the combination of their "shared interests and shared common activities where we have more of an opportunity to interact with each other." The micro- and longer-term temporal elements of Fantasy Sports game play factors coalesce, forming a sweet spot for the creation of durable communities. On the one hand, league play requires very little daily time spent. Slightly over half (53.7%) of Fantasy Football respondents report spending 15 minutes or less on their team early in the season (presumably when interest and engagement is highest) with that percentage rising to over 63% spending less than 15 minutes a day by mid-season. It is precisely the minor time commitment required that makes participation sustainable – rather than taking the men and women managers away from their families and jobs for an immersive online experience, to use Dane's words, he or she can "click on the app, scroll down the list to see if my players are playing. Which pitchers are starting. I put them in the lineup. *Done."* A user can do this on the way to work, while sipping coffee, or before checking his or her email.

In this way, Fantasy play is easily routinized and thus both memorable and not *in*convenient. If a manager slips or forgets to set his or her lineup as a matter of habit, the social sanctions (such as, in Nathaniel's league, being warned and then having your team taken from you and given to someone who promises consistent engagement) pressure

managers to remain invested. Modifications to the game, such as incentivizing strong finishes (what Liam called "playing it out") and linking play with a drafted team across years ("keeper" and "dynasty" leagues), shift the temporality of the game and simultaneously serve to add weight to the social norms of daily engagement.

Understanding the ways that minor, digitally mediated and chronologically distinct (i.e., users do not need to be "online" at the same time) facilitates longer term community building is important for understanding how mechanisms that make an online game and tool for competition apt for facilitating and galvanizing social communities. It has implications for the way that social online games are developed and what sort of interactions – if any interaction in the traditional sense at all – is required. As participation in voluntary organizations shifts from in person interactions to more digitally mediated groups, we ought to consider seriously unexpected sites of community building and bridging for busy men and women.

In this chapter, I have argued that these online communities are so durable because the low day-to-day time investment paired with the annual cycle of the game with specific dates/times of the year associated with returning to the community make it easier to keep up with than, say, a bowling league or fellowship group that requires set in-person participation weekly or monthly; those things are easier to cut out of your schedule when you get busy with family life (many users who play less than they had previously attribute their growing families for opting out of the leagues with which they are less engaged, etc. By showing how the men and women involved in these communities carve out and set aside – make sacred in the Durkheimian sense, small, manageable chunks of time daily and seasonally to come together, to connect in on an emotional and visceral level, they are able

to remain committed to and engaged with their Fantasy leagues in a durable, sustainable way.

These small bits of time allocated to ritual *moments* are meaningful because they build the habitual orientation to the group and entrainment in a community that we would expect to see result from activities that require full immersion in that group at the expense of other day-to-day activities. Instead, in Fantasy Sports, the unique combination of episodic rituals and co-presence combined with daily practices mirror a classic temporal structure of religious groups: perhaps a religious adherent attends a worship service on either Saturday or Sunday every week, but maintains the connection to that spiritual community by praying briefly and asynchronously (as is the case of many Christian traditions) or synchronously, at set times (as more common in Islam and Judaism) throughout the week. In the cases of religion in the classical sense, these additional prayer or meditation activities operate as brief but ritually meaningful ways to extend and maintain one's orientation to the religious community.

This is made clearer through the lens of rituals because it helped us see the additional structures that sustain the communities and the rules that define and constrain acceptable behavior. Beyond making perspicuous the rules and roles, the ritually focused approach highlighted why those structures (rules) and key figures (roles) are meaningful for the community, how they increase emotional investment in and commitment to the group. They shape a shared social orientation and set of norms and prescribed behaviors. Taken together, this is distinct from other ways of understanding roles and rules which may focus on power dynamics, authority, or deviance from rules, rather than the ways that they are used to externalize and extend the group norms and values. This framework can not

only help us understand the processes for perpetuating gameplay (on the one hand) or collegiality (on the other), but can also give scholars a new area of focus when looking at workplace culture, online communities, or leisure groups in general.

Chapter 4 Rules & Roles: The ritual production of community

"A ceremonial rule is one which guide conduct in matters felt to have secondary or even no significance in their own right, having their primary importance — officially anyway — as a conventionalized means of communication by which the individual expresses his character or conveys his appreciation of the other participants in the situation" Erving Goffman, Interaction Ritual.

"We get to discuss the roles before so we kind of know what needs to be changed. I assign two co-commissioners just in case, if my computer goes out or I die or something weird goes on, so those guys have access and they can change and help me. It adds another layer of shit talking too… Makes them feel good, makes them feel involved. Then we go about collecting the money and sometimes we send different auction orders, things like that. But we're really clicking, we're really on it. We get excited. I get excited to see that the league is posted… Fantasy is the glue of [our friendship], and I'm the glue of that"- Eric, 4-Sport Fantasy Commissioner

Introduction

In the late summer of 2018, as Fantasy Football draft season rolls around again, and a Fantasy Football manager goes into labor with her second child shortly before her league is scheduled to draft. Her husband, a fellow manager in the league, shares on Twitter that

his wife is in labor and refuses to auto-draft[18] her team, nor ask the league to concede to any number of compromises. She could, for example to (in the interest of fairness), ask that they *all* auto-draft (thereby reducing the level of competition and ownership for every member of the league) or reschedule the draft, thereby missing the first week of the football season. Liz Loza, a Fantasy Football expert employed by Yahoo — and mother of two children of her own — sees this tweet and spurs into action, offering to draft on behalf of this "fellow mama." But how can one person, a company representative no less, get access to the account of another? How can Liz get the necessary permissions and log in credentials? How can ownership be transferred to her in time for the draft? The infrastructure of the Fantasy Sports product is not built to transfer team ownership from a laboring mother to a public figure. The editorial team, of which Liz is a part, sends a call for help on the enterprise chat service, which mobilizes the engineers and product managers into gear.

A flurry of messages populates the shared channels, with the back-end engineers working to identify how they can delay the start of the draft to buy some time for a solution to work out the behind-the-scenes permissions. The product managers — a whole team of men (many of them with kids of their own) are reviewing policies and protocols to identify potential solutions to get this league drafted. It is peak draft season — the labor-intensive span of a few weeks in which the engineers' workload spikes, with many of the team working long days well into the evening, going home to their own kids exhausted. They paused their work without question to come together and make sure this woman had a

[18] Auto-draft is a feature of the game in which, if a user cannot or opts not to manually select each of the players that comprise his or her team, an algorithm automatically selects (or "drafts") the players for the manager.

competitive team drafted and poised for success. With the woman's consent, and communicating with the husband via Twitter, Liz is granted co-manager access to the team in question. Liz completes the draft, mom and baby are happy and healthy, and the whole engineering and product team congratulates one another for what is, undoubtedly, the highlight of a very long work week.

Liz Loza is one of the few women in the industry who occupy the public-facing role as a Fantasy Expert. By her own account, she was perusing Twitter during a routine afternoon of meetings shortly before Football season 2018 when she saw a tweet posted on the microblogging platform in which a husband and father was relaying the following information: "My wife is in labor, but she has her @yahoofantasy draft tonight at 6:30pm. She is insisting we don't auto draft. I guess she will be screaming out picks to me in between contractions?" Liz saw the Tweet and jumped into action, volunteering "Mama to Mama" to handle the woman's Fantasy Draft. Liz also recounted her own story of having her second child during the weeks of the Fantasy Football playoffs. Liz and her boss turned to CorpChat, asking the Fantasy Engineers and product team what they would need to make this happen. The pace in the chat channel was frenetic while permissions were secured, league power was transferred, the dad and mom communicated with Liz herself, Liz finished up her commute home, and the draft began. In all, it was a spontaneous feel-good moment for Liz, for the Fantasy community, and for the engineers to participate in making Fantasy special for a user. When summarizing the events, Liz wrote "People always ask me why Fantasy Sports has become so popular. My answer is always the same… 'because it connects people.'"

Figure 9: Image of Tweet from Liz Loza



Let us consider the connections in the story above. A woman and husband are in a Fantasy league together, itself a way to move a relationship from one context (marriage) to another (a shared leisure activity). The wife insists the league does not auto draft; though this would have given her equal participation and more parity with the other members (if everyone auto drafts, one could argue, its fairer)[19], it would have diminished the experience for the whole group. As the primary, most exciting interaction for the season, this would have undermined the whole experience the league had been looking forward to for months.

[19] Having one player with a lower level of competition / engagement does have serious consequences for the whole league; if there is less parity, standings and competition can be swung more dramatically when a player wins against/loses to the poorly performing team.

The husband is able to directly and quickly access a Fantasy expert via Twitter. The expert is able to reply instantly, and then reach out to her own institutional network of Fantasy Sports engineers to pose this request. The engineers, who themselves rarely interact directly with the content producers such as Liz, leverage existing infrastructure and pathways to secure permissions and transfer temporary ownership to Liz for draft purposes. The mother in labor's team was successfully drafted and the mother reports being satisfied with her expertly-drafted team. The team congratulated themselves for the swift and efficient teamwork that facilitated the temporary team ownership swap; that swiftness possible because of their dense network and ties that help each person know who to ask for help, where to get the information they need, and how to work together. The engineers all passed along their well wishes to the mom, the Fantasy Content manger thanked everyone for a job well done, and an editor compiled the story into a published article. On Twitter, the story reached a larger audience who added their own well wishes and related stories to the conversation.

As Liz's tweet summarizes, the game really connected people in a brief but meaningful way. She points out that not only was it a meaningful interaction but is also an encapsulation of what she likes most about her job. In short, her favorite part of her job is the same finding that I expound upon at length in this project: the rituals of Fantasy Sports and love for the game and community are uniquely adept at bringing – and keeping – people together.

This moment is illustrative of many of the key concepts at the heart of this chapter (and dissertation project as a whole). While a focus on rules and roles might sound clinical or detached, this chapter looks at how the organizational infrastructure of groups fosters

community, facilitates the redoubling of ties, and provides the context for emotionally laden social moments. Additionally, this interaction sequence has at its center the networked, digital interfacing of the two sides of the screen — user and creator — to create the framework for an experience that is on the one hand about the game, but on the other hand about something much bigger than the game: family, teamwork and a commitment to the relationships of the community in its broadest sense. Finally, to echo the framing of the previous chapter, I note here that many subfields consider roles and rituals, as well as rules and organizations — notably organizational sociology and STS. What I emphasize here in my approach that draws on the Sociology of Religion is the additional layer of meaning-making, relationships and affective ties that are reflected in and sustained through the rules and roles. That Liz Loza is in a high-visibility, high status role facilitated responsiveness to this unusual request. The engineers came together to leverage the capabilities of their own roles *within existing rules* to secure permissions and act without disrupting the entire system. A formal system — the technical requirements built into the platform — was repurposed within its existing functionality to *extend* and be flexible enough to meet an unpredictable community need.

STS as a dominant approach would look at this structurally, taking a careful look at the infrastructure and systems of how this process unfolds. This would take seriously the inscribed possibilities of the technological systems as built and aim to understand how and why they are built that way. In this case, for example, security or privacy reasons, internal systems and code bases are not equipped to easily or quickly transfer teams between non-users. This is what the field site actors would an edge-case, an unlikely scenario that they have not accounted for. On the other hand, using organizational theory as our lens we

would focus on the social ordering of the people behind the scenes. Therefore, we would reach to an analysis of the organizational charts and the links and hierarchy between the individuals involved in setting into motion this plan to come together and help this mom – but more importantly, a loyal member of their Fantasy Sports family – get her team drafted in this crucially important moment for her IRL (or "in real life") family.

The rituals discussed in chapter 3 set the foundation for a community among league or team members. The word most frequently used to describe the feeling that permeates the community is "camaraderie," of being "part of a team." The team dynamics are fostered not only through the shared sense of – and valuation of – time but also the structures, rules and roles that are ritually implemented and maintained. They are then able to draw upon these, symbolically revisiting them and creating a shared history of the community's collective memory. Drawing on these shared histories and feelings help sustain communities through the "grind" of the season or the mundane experience of managing rules and roles to extend the experience of both fun, effervescent, and connectedness throughout the year.

The word "team" is used both literally and figuratively in the community of Fantasy Sports. The men and women who play Fantasy Sports draft and manage their teams within a league of members (or "managers"), and in turn the men and women who build it ("engineers" and "developers") are members of specific task and skill-oriented teams that work together towards the end of building the best product for those users. But the word *team* conveys more than just boundaries of who is in any individual group. It reflects a larger commitment to a community and the rituals, rules and organizational infrastructure that sustain it. While the previous chapter focused on the way that time is constructed as a

shared concept across teams through rituals, this chapter will shift to focus on how community is also formed and sustained through ritual. Both the Fantasy Leagues and the Fantasy Engineering teams operate in relatively informal bubbles: they are not especially hierarchical or rigid in organization. To foster intensity and durability of relationships within these small communities, they often generate internal logics, rules and rituals that further organize and formalize the groups. The unique character of each group helps shape its' members sense of ties to the community. This poses a puzzle: how do different actors and networks, discussed throughout this dissertation as "the two sides of the screen," relate to the techno social system of Fantasy Sports? How do they both influence and react to the rules inscribed in the system? And how do they foster communities that draw on the rules and roles built into Fantasy Sports while generating their own informal rules and roles?

There are two forms of rules being discussed: informal and formal. By informal rules, I mean the boundaries of acceptable behavior to the groups being studied. In a micro-sociological sense of looking at the dynamics of small groups, this could be best understood as the behaviors that maintain the face of interactants (Goffman 1967). Formal rules refer more specifically to infrastructural constraints inscribed into the system of the game, in the case of the players or the formal rules of the workplace in the case of the developers. By roles, similarly I refer to the interpersonal, micro-sociological *lines*. Both face and lines rely on the actor being embedded in a social world that constrains behavior. Per Goffman, "the person must… take into consideration his place in the social world beyond it." These interactional approaches are especially useful for thinking about rituals. Goffman, Durkheim, and later, Collins all emphasize how these individual moments of interaction gain momentum and predictability through use, transitioning into rituals in which shared

focus, understandings and expectations of membership take the form of a community (Collins 2010, 2014; Durkheim 1965; Serazio 2012).

Part of what is gained by this intellectual legacy is the focus on the group, interpersonal interpretation of behaviors and practices. This is in contrast to the microsociological legacy dominant in STS which centers on Garfinkel and a more ethnomethodological orientation. That is to say that it is not the substantive interest in time, rules, roles that is unique about this project. Sociologists of all kinds are concerned with time, roles, and boundaries. To briefly review examples discussed in this dissertation, Zerubavel has studied time extensively, Garfinkel himself is interested in roles in particular how they relate to social order, and Goffman, Collins and Lamont are concerned with boundaries. What I suggest is that what *is* different from the sociology of religion approach is the focus on the *person*, relationships, and group-level consequences of shared orientations and actions. While the informality of the game of Fantasy Sports and the laid-back workplace of those who build it may feel like a perk or goal of these groups, sociologists of religion and organizations both have established explanations for the emergence of formality. The previous chapter on rituals and temporality helps us understand what internal structures facilitate and sustain the participants' commitment to the community throughout and across years. This chapter will explore questions such as how rituals shape a sense of cohesiveness among individuals; what rules, roles and artifacts shape the interior life of a community, and gesture to how a community is in part shaped by its boundaries (which will be explored in the next chapter).

In addition to a shared sense of time, rituals sustain shared meaning, focus and behaviors that form the fundamental sense of belonging associated with communities and

mark the expectations that accompany membership within a community. Rituals themselves function as such powerful tools in the maintenance of community through their execution of a specific representation of that community. Rituals depend on rules for the social construction of the sacred, and the communities themselves depend on rules and boundaries to shape their edges. As such, communities and rituals are always intertwined with power; they mark the distinction between insiders and outsiders and exert social pressure on members' behavior (Stald 2003). Understanding the rules and roles within a community help us understand the formal ways that they are shaped.

Here, I focus on my two case studies, in turn. First, we look at the way that users' rituals and behaviors shape a sense of community. To illustrate this point, I focus on the creation of micro-organization within the leagues and the routinization of fun. I then transition from the users to the producers of Fantasy Sports, similarly focusing on how the internal structure of their product and engineering teams create a sense of community through an informal policing of rules of conduct as well as routinized roles that organize fun and helps create more durable bonds among members. I make this argument through the ethnographic data I collected over two years of studying the users and producers of Fantasy Sports.

Defining the communities

Defining communities in online systems can be a complex endeavor. Etzioni and Etzioni (Etzioni and Etzioni 1999) note that the term community can be applied to "tight knit social groups" as well as loose ties. Throughout this chapter, I refer to two interrelated communities. The communities of users are most frequently composed of individual Fantasy leagues. Recalling the previous chapters' description of leagues, a league is

typically comprised of about 10 people who know at least one other person in the league (and most frequently, know the commissioner). Though there is a larger universe of Fantasy Sports players, who share the experience of play and may enter into relationships through that shared affinity, I consider here the more immediate community of leagues. Within the larger universe of Fantasy Sports players – that is to say, across leagues – there is a Fantasy Sports Trade Association which, among other things lobbies on behalf of Fantasy Sports in legal cases and hosts professional conferences and networking events annually. There are also vibrant online communities housed on message boards and regular friendships initiated or strengthened through a shared interest in the game. Respondents in my interviews shared stories of accepting brothers-in-law and breaking the ice with new neighbors through this shared interest. While this broader community is interesting, it is harder to identify its bounds and the ties are more ephemeral. Instead, I focus here on the more tangible and durable bounds of membership in a specific fantasy league.

Regarding the developers, team membership is also a self-identified and clear community. Again, there is a broader population of teams who share an identity as Sports developers. The most immediate community boundaries extend to members of teams who work together on shared platforms. While one might assume that all of the people who work on sports are on the same team. However, a huge number of internal sub-teams exist. The first major cleavage is around Sports as a product and Fantasy Sports as a distinct product. Sports, known internally as "Core Sports" is a product that deals with sporting events scores, updates and even live video streaming, news and media around games and players, and information about sports leagues such as schedules and standings. Core Sports covers a wide range of sporting events, such as the Olympics or the Super Bowl, which fall

outside of the range of Fantasy games available. The Fantasy Sports product handles all things related to the *game* of Fantasy Sports. This includes all of the main Fantasy games (baseball, football, basketball and hockey), Daily Fantasy Sports, casual games such as "Pick 'Em" games and the features related to Fantasy Sports. Such features include content and news related to Fantasy, the chat feature for leagues to correspond within the product, and commissioner tools for setting up and organizing the league. Internal team boundaries, for example, could be drawn first as distinguishing Sports from Fantasy, but within Fantasy there are teams that operate distinctly (though in close proximity, coordination and collaboration) including Fantasy Mobile, Fantasy Front End (desktop) team, Fantasy Back-End engineers, and so on.

As discussed previously, they come together as a larger group (the Sports Org) at key moments such as quarterly planning and annual events. Day to day, however, they have internal logics and primary loyalties to their specific team. Neither users nor developers would consider themselves a single community with the other. In my role as a participant observer I served as one of the few nodes in the network where these two sides of the screen intersect. As a User Experience Researcher, I worked at the locus of where and how these groups communicate with one another over the shared focus of the Fantasy Sports system. To be sure, they are connected. However, I do not argue that the users and developers are a single defined community. Rather, I am using an infrastructural approach: beginning with the platform, I follow the infrastructure (the system and rules) to better understand Fantasy Sports as a sociotechnical system. The social aspects of the technical system are both the users and creators, and understanding them in conversation with one another is useful to understand its development to the platform's current iteration.

This exercise also serves to demonstrate the utility of applying a lens of ritual and community, exporting a set of useful concepts from the sociology of religion to apply to different groups of actors in the realm of technology studies and digital media (Guhin 2014). To do so, I focus not the analysis on the rules and roles that are either built into (that is, are part of the infrastructure) or built *onto* (that is, developed in addition and externally to) the game. What does it look like if these rules and roles become the central analytical focus? If the background is reconceptualized as the foreground, what does that look like and what does it tell us? This chapter tugs on the rules and roles inscribed in the product unearths the infrastructure of the community and suggests that the infrastructure of rules and roles prop up a cultural infrastructure that shapes the community life of the teams and leagues discussed (Turner 2009).

Though the rules and roles of Fantasy Sports are inscribed in the technical system, the technical system emerged from an analog game. The original developers of the digital platform created an infrastructure based on a game played by men and women on their own. The users defined the original infrastructure, the early developers codified it based on available technology, the users made use of the existing system and created their own modifications, and some of those were then integrated into the platform. This feedback loop continues today, with the User Experience researcher as one of the few, but increasing, nodes through which this interchange of information flows. Theoretically, we can think about this feedback loop not just as information flowing in both directions but also to constitute a sort of mutual shaping of the communities, such that local innovations get absorbed by the creators and get integrated back into the product, galvanizing the relationship between online and offline processes (Boczkowski 2004).

Users: Informal communities formalize to last.

In the sociology of religion, groups with low barriers to entry were expected to thrive as they rose to challenge more formal and rigid structures. Megachurches, for example, enjoyed rapid growth as a modern, young, fun, technology-friendly medium for Christianity (Ellingson 2009). Megachurches boasted weekly attendance in the tens of thousands as Catholic churches in historically Italian, Latino, and Polish neighborhoods across the country were shutting their doors. The low barrier to entry was cited as a reason for the growth of megachurches, but over time it became apparent that those churches had consistently high attendance numbers with very low retention of members. Indeed, it was only through the creation of additional requirements and investments (especially the proliferation of "small groups" and more demands on membership) that sustains continued attendance (Dougherty et al. 2018; Iannaccone 2016). It is through the creation of small, meaningful groups with stronger ties and higher levels of engagement expected of members that sustain membership. The rigidity of the Catholic Church, with its rules and exhaustive organizational apparatus, was recently decried as its downfall; it is now often considered its lifeline.

Another way to describe this phenomenon is a Weberian appeal to authority. Charismatic authority, such as that typically wielded by cult leaders and famous religious personalities, are both magnetic and fleeting (Weber 1955). It is the mundane, bureaucratic authority that sustains organizations – from churches to companies, from Fantasy Leagues to software engineers – over time, and the most durable organizations are the ones that transition from charismatic authority (which is useful in building momentum and attracting

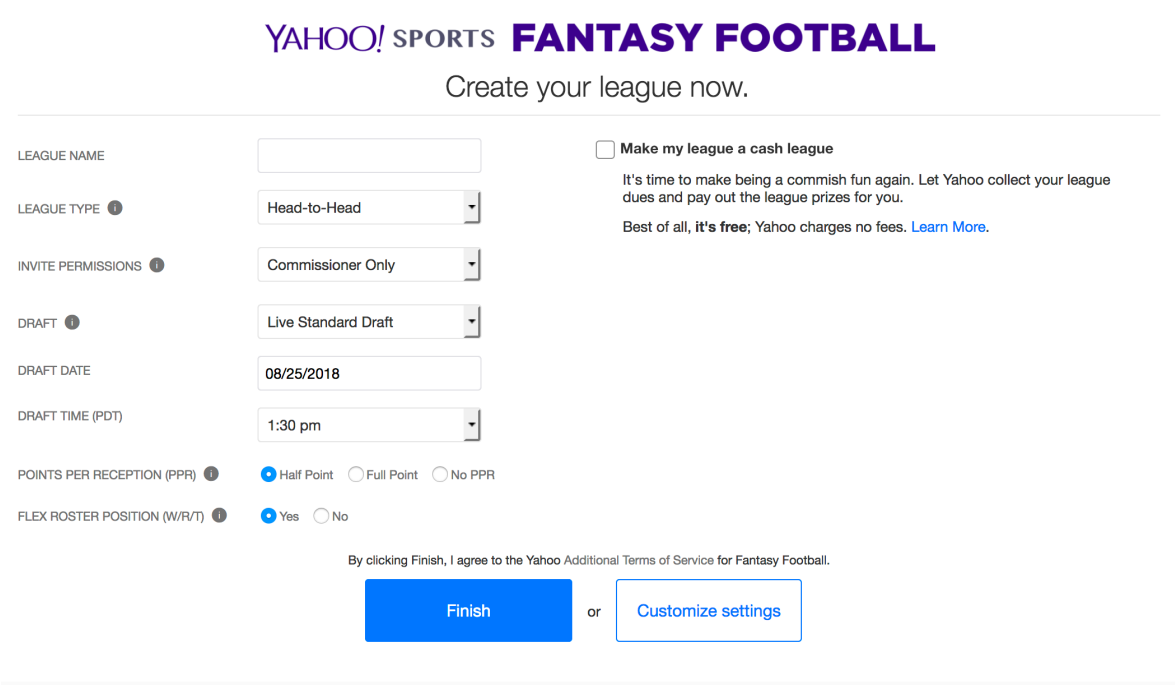
membership) to bureaucratic authority. In bureaucratic authority, because the authority is vested in the role and not the person occupying the role there is a plan in place for the transition of power and the sustenance of the group during moments of change (for an excellent review of types of authority, especially as they relate to organizations, see Kenney 2018). In the case studies here, both sets of communities strive to incorporate both informal and formal elements to their community. The Fantasy Leagues start with the necessary, inscribed system role of *commissioner* and then generate supplementary, analog roles and rules to strengthen the internal commitment to and investment in the group. The teams of Developers have the inverse: they have a formal and structured relationship to one another dictated by their employment, but they take on informal roles and rules in order to monitor behaviors, function smoothly as a team, and build solidarity through ritual fun with their colleagues.

Users' Rules and Roles in the Game

When a user signs up to create a Fantasy Football league, he navigates to the website and opts to create a league (see Figure 10). Typically, he has discussed the idea with his friends already, and perhaps they have already agreed on the type of game they would like to play. He signs up for a league, deciding to play a head to head categories league and selects from a set of simple scoring and roster preferences that are among the most frequently changed settings among all Fantasy leagues (points per reception [PPR] scoring and the *flex* roster position). If the commissioner decides to further "customize settings" he is greeted with a suite of dozens of customizable rules, from how long each user gets to make their draft pick (typically between 45 and 90 seconds) to how special team points are awarded. Once the league is created, an invitation can be sent out to all potential managers, who can (and

typically do) review the rules and settings selected before joining. Before the season begins, the commissioner will typically hear out complaints or concerns about scoring or rules and any adjustments can be made prior to week 1 of the season.

Figure 10: Create a League web page for Yahoo Fantasy Football



In addition to official rules, all leagues have organizational roles inscribed by the digital artifact on which they play. In private leagues, in which a league is created and then the commissioner invites people he knows to play, the socio-technical system assigns each human player the role of manager, and each set of managers that comprise a single league (or community) is organized by a commissioner. In Public Leagues, the group is comprised of people who fill the roles of "manager" but there is no commissioner; the system functions as the organizer. These roles are built in. By default, each league also has a set of rules that constrain and guide league play. While default settings are available (and decided upon by the developers and product team, with the aim of meeting specific ends), leagues

can and often do adjust the settings according to the available options built into the game system. Leagues are formally constrained in their play by the available options within the Fantasy Sports platform. However, many leagues have opted to create hybrid versions that extend beyond the rules available within the infrastructure of the game. These often require additional formal roles to implement the changes and perform the additional labor not supported by the automated platform. These leagues tend to trade the additional work of a more customized league for a higher commitment to the community, which is more often durable in the cases of these more involved leagues.

Users: Ritual Rules

Pastor Nathaniel from the previous chapter was motivated to careful attention to his lineup from fear that, by breaking the written or unwritten rules of his newly joined league he would be summarily ejected. From the survey data, 34% of Fantasy Football players reported that they are motivated by the feeling of being like a real team's general manager; that number is even higher for Fantasy basketball and hockey. Like sports and competition, perceived fairness is a key element to the enjoyment of play. Much of the fun of participation and thus the durability of the community depends on a fair game with clear rules and a sense of sportsmanship. A popular Fantasy Sports podcast even included a segment known as "Hard Justice" in which the hosts would serve as arbiters of Fantasy league conflicts submitted by users, much like an advice column for Fantasy players[20].

Many users use the default settings for each Fantasy Sport, which are decided by the product team to maximize straightforwardness of play, fun, and the informal standards.

[20] You can find the Fantasy Focus Podcast, produced and hosted by ESPN, here: http://www.espn.com/espnradio/podcast/archive/_/id/2942325

One of the most frequent and impassioned critiques I heard from users occurred when they felt a breach of the rules: collusion, abusing the waiver wire (the system by which new players can be added), and lopsided (or unfair, in which the league seemed to think one person was being taken advantage of) trades. These users appealed to rules both formal and unwritten (or a violation of the spirit of the rules). Violation of the rules was more frequent in public leagues, where social ties were weak and thus the ability for any member to sanction breaches was equally weak. The absence of the ability to enforce norms were the mark of an incipient community with an unpredictable future. Public leagues rarely carried over years. As a user experience researcher, one of the most moving complaints from users were the inability to really sanction users who were behaving offensively. When users and their leagues generate rules, they create a sense of ownership in the league. Users often talk about two types of commissioners, those who establish and change rules democratically and those who impose rules. Though it may seem intuitive to prefer a democratic commissioner, rarely did users express a preference for one style commissioner or another. Indeed, rules that were endlessly debated (i.e., a practical implication of the more democratic approach) could end up with less consensus than having a commissioner make informed decisions before the season began. Users were generally content as long as they felt the rules were fair, clearly defined and consistently upheld.

Rules do not only govern acceptable conduct within the community, they also serve to exclude or excise members from the community. In the previous chapter, Pastor Nathaniel oriented his daily fantasy baseball practices to abide with the general rule of remaining engaged. Having acquired his team through the forcible removal of an old manager from the league, he was carefully attuned to the way that the rules monitoring

engagement, though vaguely defined, could serve to exclude members from the community. In Carrie's league, a mutual friend of many league members who could not pass the entrance qualifications to join the league was excluded from game play by rule (she did not meet the sports knowledge-based qualifications, thus could not join), but was allowed to serve an auxiliary role as the Social Chair. This flexibility benefits the league; if they had made an exception to the league, they would have diminished the quality of play and compromised the fabric of what has sustained the community for years. By formalizing a hybrid role of community member as a social chair, this friend was able to contribute her own skills and labor to the group without challenging the order and logic of the group by weakening the competition.

To enforce the smooth running of leagues and to facilitate the regular return of the league year over year, many leagues (and in particular, more successful leagues) have developed a micro-organizational infrastructure. Each private league, by default, has a commissioner who takes on the organizational burden for managing the league. This role is inscribed in the technology: a league cannot form without a commissioner to own it; there are some exceptions to this, but as a rule it is by and large true. Additional roles are devised by the leagues by necessity or choice. These take a variety of forms. The most common supplementary role I witnessed was the role of treasurer. Beyond the initial responsibilities of setting up the league, managing the pool of money (often, leagues impose a $10-50 "buy-in" that is redistributed to winners at the end of the season) is frequently the most time-consuming part of running the league for commissioners.

Commissioners occupy a crucial spot in a league: they are responsible for renewing leagues and maintaining the vitality of their communities.[21]

The responsibilities associated with the role of commissioner could be burdensome, and the labor is only multiplied in the most engaged leagues where rules and game play are modified in order to maximize some part of the experience. However, the role of commissioner is often highly valued and his or her work is acknowledged as the backbone of the league Despite the refrain that being the commissioner is a thankless job, the labor inputted by commissioners is typically repaid in part in engagement. An active and engaged commissioner is required for the durability of leagues if there is not an informal rule to ensure an agreed upon transmission of commissioner duties from one person to another.

In addition to the inscribed role of a commissioner, some leagues decide to generate analog, auxiliary roles. Common examples of these roles include having a vice commissioner, a committee of commissioners, a treasurer, and an arbiter of disputes. Any version of a committee functions to attempt to maintain fairness during the arbitration of disputes, as fairness and objectivity is essential to the sustenance of a commissioner's authority and reputation. Multiple commissioners also help sustain the league when there are extenuating circumstances (for example, through military deployments).

For some leagues, the role of commissioner rotates annually based on a pre-determined criterion, such as "this years' loser is next years' commissioner" (which is problematic if the loser shows disinterest and thus will not commit to returning). Another common approach is for this years' commissioner to be the next years' Vice Commissioner,

[21] Note from figure 10 that you can outsource this role to Yahoo's system of tools by checking the "cash league" option, further showing the feedback loop between the roles that the users devise and the response of the developers to build a system that reflects those user needs.

to help smooth the transition. Having a formally imposed order to the leadership yields continuity across seasons. In the inverse situation, for example in public leagues where no leadership role is appointed, leagues often devolve within weeks. This is a main concern for users without in-person fellow fan ties who would like to simulate the close ties of a league. It is the rare (but happy) exception when public leagues transition to private leagues, converting a group of strangers into a more durable community with its own rules and roles.

Commissioners, Vice-Commissioners, Treasurers and Social Chairs: The complex structures of Fantasy Leagues

In Eric's league, which as a yearlong (four sport) league is on the highest end of the engagement spectrum, his reign as commissioner spans multiple years but different roles are delegated to managers both to ease his own work but also to create a sense of investment in the community that they share. The formalized roles lead to community continuity as well as engagement and investment. The dynamic plays out similarly in many leagues. In Nick's Fantasy Football league, he explains how his league's organizational infrastructure (including a commissioner, a vice commissioner, a treasurer, and a competition committee) functions:

> So, our *commissioner* and our *vice commissioner* are on the *competition committee*. The vice [commissioner] is basically if the commissioner is not available for something, or if the commissioner is involved in a trade or something like that, then the vice will take the action, so that the commissioner is not ... doesn't have a conflict of interest there … the *treasurer* is basically hounding everyone for league

> dues prior to the draft. We have small weekly payouts that we do… [for the week's] high score and things like that. And then we pay all of our payouts at the end of the year. He maintains a *league ledger* that shows balances paid. I did that on the initial year… and then the *competition committee* is the treasurer is automatically a member [of the committee], and then the commissioner and the vice commissioner. And then we get *four other members of the league that volunteer* to be a part of it. Basically, what they do is review anything that may come up during the season that would be an issue that's not covered by our *rules*. We'll have a competition committee *vote* on what's the way to handle this or that."

By maintaining a committee with specific roles, they facilitate the seamless transition from one season to the next, minimizing the chances that the community dissipates between seasons. They have also developed an infrastructure that is flexible: by having a committee that votes on rules and changes, the leagues are able to adapt, which maintains trust with the fairness of the community and encourages durability.

Carrie, the Fantasy Football player introduced in the previous chapter, was in a league characterized by their commitment to offline drafts, rituals that transitioned with the life course, and a very competitive league. Carrie's league also had a social chair. This league of women, largely co-located in the same city at the league's founding but more spread out at the time of our interview, enjoyed regular camaraderie-building outings. However, their high level of competition meant that friends without a high football IQ were excluded from league activities. One such friend, remiss to be excluded from the official league community, offered to become the league's "social chair", helping coordinate the

logistics of all Fantasy Football league activities — from spa days to draft weekends — despite not being qualified to join the league as a Fantasy team manager. She effectively leveraged her skills, labor and close ties to the community's insiders to secure a spot within the community while lacking the formal qualifications. While this was one of my favorite stories of the emergence of organizational roles within this leisure activity, it is only one of many.

Rituals often have affective dimensions, and those were explored in the previous chapter. Here, we pivot to look at the formal aspects of rituals: how rules and roles shape community. These elements are often intertwined. In a quote opening this chapter, a user submitted the following comment in an experience survey.; he wrote, "Continuing on my thoughts above, you should make Yahoo Fantasy Baseball a 365 platform. My league loves your product and yet there are so many activities we engage in that are necessary to meet the infrastructure of our keeper/dynasty league that go 'offline' from your product." This user links the time spent and ritual aspects of his league explicitly with the limitations of the system's infrastructure. His league has expressed *love* regarding his experience using the existing built technical system, but as a result his league became more sophisticated in their needs than the platform supports. They create analog supplements, including keeper and dynasty rules, which require careful organization and documentation. To complete the feedback loop, these users submit their thoughts, including on User Experience surveys that I fielded, to request that the development team consider expanding the limits of the system to meet their needs.

League members interviewed frequently developed internal micro-organizations ranging from simple divisions of labor, rotating leadership positions, and involved written

artifacts detailing their league's specifics rules, roles and quirks. The keeper logs and records above are one common example. When I expressed interest in their supplementary rulebooks, managers I interviewed were typically excited to share their elaborately constructed and carefully negotiated documents with me. Users walked me through their multi-tab excel files dating several years back, spiral bound league manifests, and annually updated PDF rule books. They are, on the whole, very proud of the leagues they have created and sustained over years, through the temporal dimensions of play and the miniature bureaucracies that become ritually associated with specific times of the day or year. For them, these additions make their leagues uniquely *theirs;* it reflects their individual community's goals and motivations for play and moves them towards those goals while setting them apart from other leagues.

It is typical when leagues develop their own leagues to simultaneously build up routine points to revisit and discuss the rules. These may often be moments of tension, but working through their tensions together, when successful, leads to a shared understanding and investment in the outcome, which itself reifies commitment to the community. It is worth recalling that both STS and microsociology make the case for using moments of tension as important analytical cases (Collins 2014; Vertesi et al. 2016). An interview participant explains how his league resolved two rules disputes between two Fantasy seasons:

> We had 2 different disputes going on, so you had me on one dispute, and then they were on the other. We basically open it up to the message boards, and have them add in their 2 cents, so it became a very democratic way of doing things, and so everybody is able to kind of set in their opinions on it. That way, we're basically

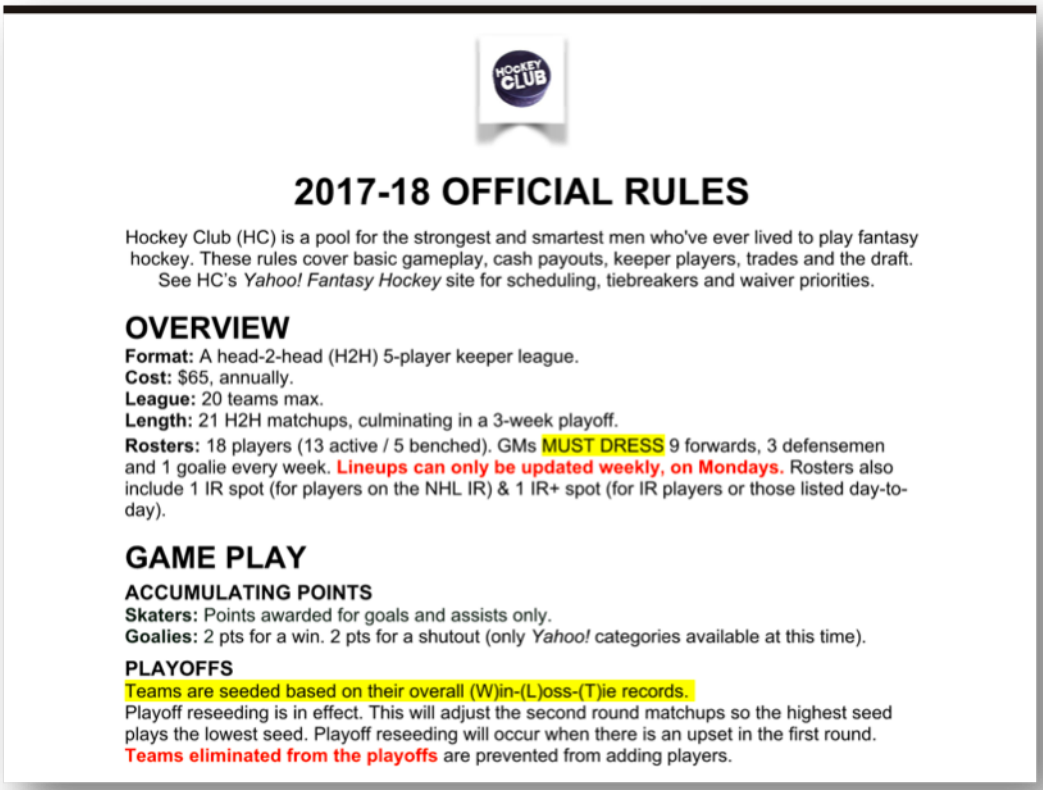
> able to sit back, and then take all the information in, and then know, really, what kind of resolution [to go with], so we were making compromises. Then it also, it set the stage for next year, because then we knew, *really*, where the issues were, and then we made next year a lot better because of that. *Everybody was all on the same page*. Basically, it improved the communication of the league to another level than what it was. It's basically understanding other people's viewpoints, and being able to have empathy to their stance, and then also to be able and understand how to communicate to them on what your viewpoints are. It definitely helps in that area, and it expands out and helps in other areas as well. I think we'd be a better nation and world if we had those kinds of skills, if everybody had that.

This user felt more empathy and connectedness to his league mates, despite starting out on what he described as two opposing sides. Though he did not get his way – he had to make compromises – his league emerged from the process with a new set of rules and a renewed commitment to the group as well as a refreshing perspective on problem solving and communication.

What do these supplementary rules and roles look like? I will briefly present a few examples below. In the first example (Figure 11), a user I interviewed in the winter of 2017 sent me his league documents immediately following our call. His Fantasy League established a fictional professional Hockey league called "Hockey Club." The heading of the document explains, "Hockey Club (HC) is a pool for the strongest and smartest men who've ever lived to play fantasy hockey. These rules cover basic gameplay, cash payouts, keeper players, trades and the draft. See HC's Yahoo! Fantasy Hockey site for scheduling,

tiebreakers and waiver priorities." This league, or *pool* as they are often called in Canada, uses their own automatically generated "Yahoo! Fantasy Hockey site" for the basic infrastructure of the league: schedules, calculating ties, and managing the waiver wire. However, to make the pool more *fun* and establish the tone and character of the community ("the strongest and smartest men who've ever lived") they employ this supplementary document approved by every member of the pool prior to the season.

Figure 11:User Generated League Rulebook for a Fantasy Hockey League



2017-18 OFFICIAL RULES

Hockey Club (HC) is a pool for the strongest and smartest men who've ever lived to play fantasy hockey. These rules cover basic gameplay, cash payouts, keeper players, trades and the draft. See HC's *Yahoo! Fantasy Hockey* site for scheduling, tiebreakers and waiver priorities.

OVERVIEW

Format: A head-2-head (H2H) 5-player keeper league.
Cost: $65, annually.
League: 20 teams max.
Length: 21 H2H matchups, culminating in a 3-week playoff.
Rosters: 18 players (13 active / 5 benched). GMs MUST DRESS 9 forwards, 3 defensemen and 1 goalie every week. **Lineups can only be updated weekly, on Mondays.** Rosters also include 1 IR spot (for players on the NHL IR) & 1 IR+ spot (for IR players or those listed day-to-day).

GAME PLAY

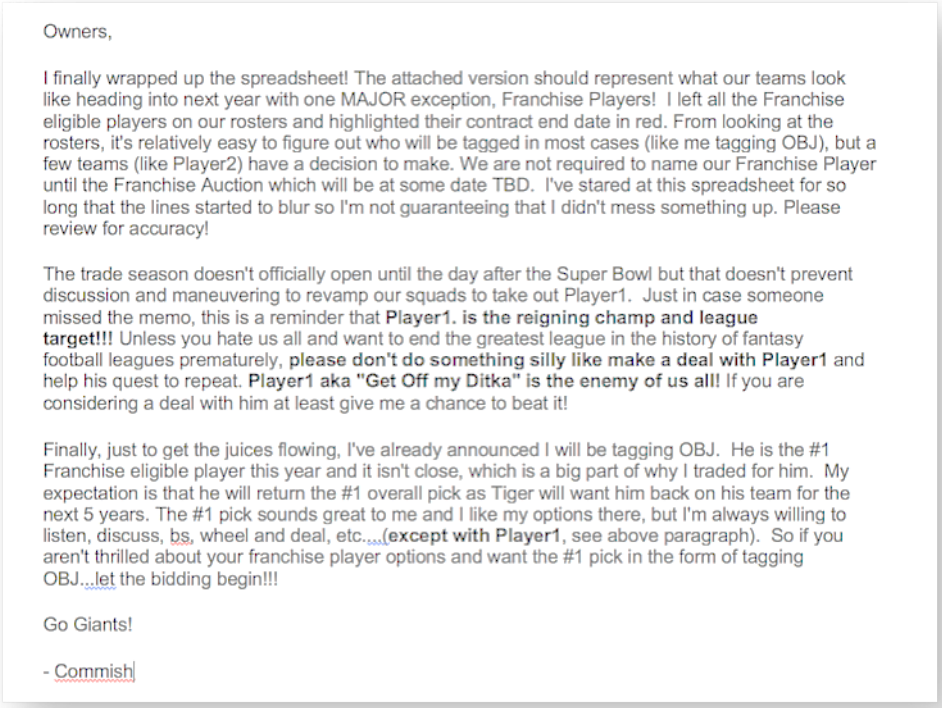
ACCUMULATING POINTS
Skaters: Points awarded for goals and assists only.
Goalies: 2 pts for a win. 2 pts for a shutout (only *Yahoo!* categories available at this time).

PLAYOFFS
Teams are seeded based on their overall (W)in-(L)oss-(T)ie records.
Playoff reseeding is in effect. This will adjust the second round matchups so the highest seed plays the lowest seed. Playoff reseeding will occur when there is an upset in the first round.
Teams eliminated from the playoffs are prevented from adding players.

Similarly, the league of Navy servicemen introduced in Chapter 1 enthusiastically shared their artifacts with me and invited me to observe their draft. This league's commissioner sends out weekly recaps he writes, covering the matchups within the league and engaging

in the sort of smack talk I have come to recognize as a hallmark of these masculine communities of competition (example in Figure 12). Names have been anonymized, but the formatting and emphasis is in the original document. The commissioner of this league sent this update to his elaborate dynasty league to move forward with the logistics of setting the league up for play. He references the completion of the spreadsheet – a complex and labor-intensive document ("I've stared at this…so long the lines started to blur") that the commissioner puts together each year according to the custom rules of this league, some of which are described. Here, the combination of inscribed rules, supplementary rules, real sports fandoms ("Go Giants!"), Fantasy pride and shared history come together in a written encapsulation of the league as community.

Figure 12 Email content from a commissioner to his league



Owners,

I finally wrapped up the spreadsheet! The attached version should represent what our teams look like heading into next year with one MAJOR exception, Franchise Players! I left all the Franchise eligible players on our rosters and highlighted their contract end date in red. From looking at the rosters, it's relatively easy to figure out who will be tagged in most cases (like me tagging OBJ), but a few teams (like Player2) have a decision to make. We are not required to name our Franchise Player until the Franchise Auction which will be at some date TBD. I've stared at this spreadsheet for so long that the lines started to blur so I'm not guaranteeing that I didn't mess something up. Please review for accuracy!

The trade season doesn't officially open until the day after the Super Bowl but that doesn't prevent discussion and maneuvering to revamp our squads to take out Player1. Just in case someone missed the memo, this is a reminder that **Player1. is the reigning champ and league target!!!** Unless you hate us all and want to end the greatest league in the history of fantasy football leagues prematurely, **please don't do something silly like make a deal with Player1** and help his quest to repeat. **Player1 aka "Get Off my Ditka" is the enemy of us all!** If you are considering a deal with him at least give me a chance to beat it!

Finally, just to get the juices flowing, I've already announced I will be tagging OBJ. He is the #1 Franchise eligible player this year and it isn't close, which is a big part of why I traded for him. My expectation is that he will return the #1 overall pick as Tiger will want him back on his team for the next 5 years. The #1 pick sounds great to me and I like my options there, but I'm always willing to listen, discuss, bs, wheel and deal, etc.…(**except with Player1**, see above paragraph). So if you aren't thrilled about your franchise player options and want the #1 pick in the form of tagging OBJ…let the bidding begin!!!

Go Giants!

- Commish

However, it is not merely an encapsulation of the past but a documentary artifact that also externalizes and objectivates, or makes real, the norms, practices and expectations of the current and future members of the community. As long as the shared expectations are held to, the community as such exists and continues to be such.

Users and their rules: More realistic, more competitive, more fun.

The established rules of a group help shape the edges of the community. They shape norms and behaviors and can be enforced through social sanctions on the one hand or predetermined, mutually agreed upon consequences. For many Fantasy leagues, the foundation of the rules is built into the artifact they chose to host their pastime: they select the standard settings for game play. Rules are customizable, and many leagues do indeed tweak their league's rules to meet some goal; perhaps they want to make it more competitive (especially for more expert users), to skew the scoring higher in order to make the game feel more exciting (especially for more casual users), or to make it more realistic (better aligning with the sort of decisions a professional sport GM would have to make, for the users most excited about the idea of making realistic managerial decisions).

The most engaged and durable Fantasy Sports communities are carefully organized, structured, and monitored for perpetual play. For leagues designed to span across years, known as dynasty or keeper leagues[22], nuanced rules must be established and agreed upon

[22] A typical Fantasy League is a "re-draft" league in which, each year, all the managers fully re-draft their team. Dynasty and keeper leagues are two league types that extend year over year with some subset of players on a manager's team "kept" year over year to create some continuity in the game. Typically, keeper leagues assign some cost/value to the kept players, such that if you keep a player drafted in the tenth round of your league's draft, it costs you your ninth round pick the next year to keep him. This game is closer to the real decisions that a major league manager might have to make rather than starting with a fresh slate each year. Dynasty teams extend this further; their whole core of players returns and they are typically able to draft several new players

precisely because they operate beyond the scope of available internal settings. They require elaborate supplementary rules and decisions, for the commissioners to engage in time intensive "off line" organization that can then be inputted into the system. The platform of Fantasy Sports has adjusted to this sort of feedback loop (van Oost 2003), in which the most engaged users begin having needs and preferences that exceed the systems' ability. Their love of and commitment to the game play phases them out of its' target audience. As such, these "power users" will develop hybrid systems in which the manual work they do outside of the formal game play is able to plug into the existing system (and the developers do listen to and prioritize small fixes they can implement to make the work easier and more fun for these most engaged users). For example, in the image of settings provided at league registration, above, rather than an online draft, the commissioner can select an "offline draft" in which the players can be allocated offline in any way determined by the league and then manually inputted to teams within the platform. While this is a labor-intensive occupation for the commissioner, it facilitates a near limitless suite of options for the leagues' draft.

How do rituals shape a sense of cohesiveness among individuals? Eric, a commissioner for his four-sport, yearlong Fantasy Sports league, had the following to say about the roles in his league during our interview:

> We'd like to renew early. Everyone signs up within hours. They see the email. We have the same 10 [managers as last year], but before we had to change over a few. We wanted to get to a point where everyone played the four sports. To commit to

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to round out a full team. In these leagues, drafting is especially consequential, trades are more common to shake up the teams, and managers may not see success for many years so strategy tends to be long-range.

all four, we're looking for that. We're there now. It's been the same for two, three years. We get the email [automatically generated within the Yahoo site and then] we all renew. We get to discuss the roles before so we kind of know what needs to be changed. I assign two co-commissioners just in case, if my computer goes out or I die or something weird goes on, so those guys have access and they can change and help me. It adds another layer of shit talking too… Makes them feel good, makes them feel involved. Then we go about collecting the money and sometimes we send different auction orders, things like that. But we're really clicking, we're really on it. We get excited. I get excited to see that the league is posted.

I try to get done as much as I can. Especially now. But for a couple of years, I didn't. We're all trying to pitch in with [our trip to] Reno. Yeah, we have a lot of help. A guy is in charge of getting the night club. Another guy is in charge of getting the rooms. I put together the agenda but I get input from the guys all throughout the year. At one point we had a slideshow presentation. We do troll through these. Our league is called "the Degenerates" and we have a separate trophy called "the Degenerates cup," which is a cumulation of all the four sports and all the points throughout the year. We only award the cup along with our football trophy and then we go over all of it. …Delegating a little bit with those guys. It just makes them feel involved. Then there's some other guys that don't want it, they just want to pay the money for their teams and not worry about it. I know which guys to go to and which guys I need to get some input from because they feel a part of it more. Guys like to be part of it. I know that about them. It's about knowing the people that you're

with, if that makes sense.

In his role as a commissioner and through creating annual rituals and time-bound events such as spring meetings, Eric fostered a level of engagement and commitment to their Fantasy community. The rituals around the draft, traveling together, teasing one another (what he calls "trolling") and including as many people as possible into the organizational apparatus of the league all serve to increase commitment and engagement among the league members, and contributes not only to how fun it is but how meaningful it is as a source of friendship and connection between the participants. Having meaningful and regularly scheduled events recur annually offers the league mates the opportunity to demonstrate their commitment and actively participate in a way that redoubles their sense of investment in the community. When he reflects on the main friend group of his adult life, Eric says, "Fantasy is the glue of it, and I'm the glue of that." For this community, though they know one another in real life, the shared investment in Fantasy Sports as a pastime undergirds their whole sense of connection, and though they are all somehow connected to the commissioner, Eric, they would not all be connected to each other without the game.

The Developers: rituals and roles

While user communities create formal roles, which makes them more durable, the developers have formal roles but supplement them with informal rituals to build a more affective and strong connection to the team as community. In many ways, the mundane tasks of a job within a large international corporation was multi-sited, decentralized within the small groups, and reoriented towards play. This is not a unique finding; Turner (Turner 2009) elucidates the relationship between engineering culture and playful interaction styles

while Kunda and Van Maanen explore the ways that emotional labor is increasingly an expected part of the employment condition at high-tech engineering firms (Kunda and Van Maanen 1999)[23].

With few exceptions, workplaces have explicit hierarchies. In many offices, the unofficial or informal social work that facilitates community - for example, recognizing birthdays and organizing get togethers - is carried out by women. Organizationally, the developers who build the Fantasy Football product are in clearly defined roles that map onto their professional experience, company tenure, and education. On the Fantasy Sports engineering team, which is overwhelmingly constituted by men, the work of maintaining the community was not low status work. Much of the organization of ritual play and the formalized roles were occupied by men who were at a higher end of the status spectrum. As discussed in the previous chapter, routinized fun was an important way that time was marked throughout the year. Here, I focus on how it also shapes the boundaries and content of the community.

The work undertaken by members of the Culture Club engage them in roles separate from their work function. Here, the goal of the work is purely interactional: building camaraderie and performing the organizational labor that undergirds the routinized fun introduced in the previous chapter. Though the work is guided by spreadsheets and

[23] Nor is this unique to the Fantasy development workplace: during my user interviews, I spoke with a senior executive who described the value of playing in a Fantasy Baseball league as having an equalizing influence on his workplace. He said he relished how it gave him a way to relate to employees in his company at all levels of seniority and status, and though he spent more money each year hosting the league at his home for the draft than he could possibly win through playing, it was a crucial part of building and sustaining the workplace dynamics. Playing Fantasy Sports together on the platform they collectively built has much the same function as described above for the developers who count each other as colleagues.

logistics, the ritual production of these fun events happens because of the men and women who donate their working hours to producing spaces and places for team building.

Among Silicon Valley companies, the concept of company culture ostensibly emerged as a way to define and internalize a corporate mission and rally workers to a shared goal (Kunda 1995; Kunda and Van Maanen 1999; Turner 2009, 2005; Wajcman 2018). In practice, it often functions to justify a range of negative outcomes, from homophily in hiring practices to abusive labor practices and uncouth (or illegal) workplace behaviors (Lyons 2017). At its best, a corporate commitment to company culture facilitates community and meaning-making among workers. On the Fantasy Sports team, many workers have selected into the team because of their interest in sports (or quickly get socialized into the culture if they were not already sports fans). Having a shared affinity as the basis for their workplace culture itself fosters community. In addition to the official company infrastructure, the formalized but auxiliary roles of team members and the unofficial rules of team membership also underpin a shared sense of community.

Informal rules, formal consequences

During the course of writing this chapter, tech giant Google made the news for removing the clause "Don't be evil" from their code of conduct for employees, known as Googlers. This coincided with the controversial revelation that Google has been using its artificial intelligence technology to help the United States military improve certain defense technologies. Many found this hypocritical, unacceptable or directly antithetical to the sort of work they committed to when they joined the company. A flurry of resignations followed

suit[24]. This is a dramatic example illustrative of an important point: it is often the informal rules and cultural norms of a workplace that define and bring together its members. Former Yahoo CEO and Google executive Marissa Mayer was committed to the idea of employees' allocating 20% of their time to informal work or passion projects in which they innovate and think outside of the box and regular mundane tasks; by making this process part of the work culture this informal time management practice becomes formalized (Turner 2009).

While formal rules govern workplace behavior, the official rules within the company often felt fairly lax. Most of the strictest rules, around security and coding practices, were routinely enforced through established practices, many of which were routinized through software and automated procedures. However, interactionally, work in such a casual yet corporate environment can be a confusing space. Most of the engineers I interviewed cited their autonomy as a key perk of their daily work. Engineers had flexible hours, could work from home when they needed to, and enjoyed a suite of (regulated, but luxurious) benefits: an on-site gym, paid buffet-style meals for breakfast and lunch, and (my own favorite perk) full barista-staffed coffee shops in every building in which everything is complimentary for employees.[25] Other formal rules govern areas of professional conduct: each new employee undergoes extensive "on-boarding" which

[24] See, for example, these articles: http://fortune.com/2018/05/14/report-google-employees-resign-pentagon-contract/ , https://gizmodo.com/google-employees-resign-in-protest-against-pentagon-con-1825729300.

[25]My own favorite rituals was to venture down to the coffee shop in building D after lunch; typically I was accompanied by 1 or more developers for an afternoon chat and stroll. We began calling this ritual the *appuccino*, or "afternoon cappuccino". It was a great way to get to know each other, and it regularly transitioned into a walk outside around the campus until our appuccinos were finished and, refreshed, we returned to our desks. Personally, I attribute these afternoon walks and talks, most frequently with Sid, to our enduring friendship (and as of this writing, we are on our fourth season of co-managing a Fantasy Baseball team together in the developers' Fantasy sports league).

includes training on privacy practices, the rules around interpersonal conduct and engineering best practices. While those rules are requisite for membership in the larger community of the engineers' corporate employment (and employment within the corporation broadly) it is informal rules that signify membership in the community of the Fantasy Sports team which, for most, is their primary community identification. Indeed, despite a corporate transition that changed the official corporate ownership, the day to day identification as Fantasy Sports engineers was relatively unchanged.

The informal rules that tie together the members of the Fantasy Sports engineering community include using the product, which itself initiates the community mechanisms discussed above (that is to say, the developers *become users* and thereby experience most of the same dynamics that emerge in leagues generally) and socializes them into a particular identity and will be discussed in the following chapter. The rules discussed below are informal rules of conduct that guide behavior, guard the boundaries of the community by protecting membership.

The key players in the mobile team's "core group" are Nima (the engineering lead), Sid, Kyle, Brian, and Ekram. Design manager for all of sports, the quirky and fun Fiona, is also a key member of the conversations, and as the only woman permanently embedded within the team at the time my fieldwork began, her edgy humor was a noted part of the team dynamic. This reputation preceding them, the hierarchy directly above the team (second-level managers) and those team-adjacent are routinely patrolling the teams' conversations. In practice, then, the reputation for "bro" styles of interaction serve a protective function. That is to say, the awareness leads to sensitivity about the boundaries of acceptable forms of talk. While the constant backchannel of conversation on the

workplace chat was part of the community norms, there was more ritual policing and monitoring – in a publicly visible way – of the mobile team's (written) behavior. Recall also from the introductory chapters that this team is more likely to engaged in "offline" chatter than official, networked conversations than many others. As a mostly male group, the masculine conversational norms, which often involves engaging with each other in a jocular or teasing way and the informal work culture means that boundaries might seem more fluid around conversational norms, and the impact of ambient masculinity on group norms and boundaries will be discussed in more detail in the following chapter. Here, we will remain focused on the roles of the developers.

Even in mundane interactions, there's policing of jokes, and this is further facilitated by the written format of so much of their daily interactions. In effect, there is a second-order norm of pointing out violations of these social norms and organizational policies. Their team was known for having a loud personality, and much of that was led by the charismatic authority of their engineering lead. Nima inspired loyalty among his team, perhaps best evidenced by their tenure in a broader employment in Silicon Valley where occupational mobility and staying at a company under two years common. During the time of my fieldwork, mergers and acquisitions were occurring, which resulted in some attrition across the board. While several teams lost members to other companies, Nima's team remained remarkably intact over the years of my study.

Despite a reputation for being jocular and overwhelmingly male, the mobile team (which I noted is very internally oriented) did not treat gender as a requirement for membership, and in many ways was especially respectful of the women on the teams' status and authority, in part through being very proactive in soliciting the feedback and expertise

of the women – researchers like myself and designers. In many ways, their laid back and joking interaction style whether women are or are not present reflects their general inclusivity to new members, but their internal orientation meant that making an effort to engage with them and be in community with them – which would include eating lunch together as a team, participating in standups, etc. – meant that that inclusion was reciprocated and nurtured. This is in contrast to the other teams, which are more polite (and less likely to joke around with people outside of their immediate team) but were more likely to engage in more exclusive behaviors, many of which appeared around rituals (such as going to lunch as a group without inviting the others who sit among them) or professionally, by not being as proactive about incorporating research into their process. The more distant, professional engagement with women meant their interactions were hardly ever formally moderated. Both styles were work-appropriate. However, with the mobile team the boundaries of "in-group" membership were extended more readily and through ritual participation in banter, shared meals, and team outings. This is not to say they had completely porous boundaries or an open invitation to share in work related discourse. The process around boundaries is discussed in the following chapter.

When a designer asked to join their daily standup (a brief daily planning meeting that typically lasted fewer than 15 minutes, but gave Nima an overview of what each of his engineers was working on any given day), he replied, "Remind me next week. But design isn't allowed to participate. Just listen in. I don't want my stand-ups running long." This response sounded uncharacteristically exclusive at first glance, so I followed up with Nima offline. He was candid in his response: he was not being exclusionary, in fact the aim was the opposite. He reiterated that non-engineers were welcome to attend. However, he values

this ritual of order in their team's day. To reiterate the extended discussion of standups in chapter 3, it facilitates him knowing more about their daily work than most managers know about their own reports and ties them together in solidarity on projects, workload, and shared goals but is only sustainable when it retains its predictability and short length. Their product depends on all of them carrying their weight, and this brief daily ritual is a public accountability tool as well as a place to ask for help and a way to demonstrate commitment to going above and beyond for the team.

However, similar to the dynamic discussed in depth in the previous chapter, it is sustainable *because of* (rather than in spite of) it's brevity. Because the mobile engineers (and their manager) hears what everyone is working on every day, they are more cognizant of everyone on the teams' work than any other team I observed. This had the effect of having a deep awareness of what everyone was working on or going through; it strengthened their ability to lend a hand, understand a fellow engineers' stress, and tackle problems together. It reinforced the shared work bond that undergirded their community. The ritual proceeds smoothly and predictably: the team co-locates around a large monitor. Any member who may be remote that day dials in. Nima streams his own laptop screen onto the monitor, where they review all of the tasks for that day, by platform ("ok iOS, let's start with [Engineer]", "ok thanks iOS. Android, bring it in"). Each engineer in turn tells the team what he or she is working on that day.

With the Fantasy Mobile team, it is not all about shared awareness of work. Known for being informal, casual, and having fun, their isolation from the rest of the Fantasy team based on their more removed location on the fifth floor was conducive to more chatter aloud than other teams. In the co-located spaces of the open office floorplan conversations

often emerge from one person finding something funny (like a joke or image) or interesting (like breaking news or a sports factoid) on their own screen and speaking it out into the shared space. Conversely, engineers will often send something funny to another nearby engineer via the chat, but they will then turn to a conversation out loud about the subject.

When, through the course of a typical conversation occurring aloud, an engineer made a comment or joke that was approaching the boundaries of work-appropriate conversation, whether it be about their own dating life, sports news, or even a colleague, boundaries begin to emerge through a process I saw repeated. Sometimes, the others laughed from their own desks, which are all generally facing one another with no cubicle walls or office doors to divide up the space. The conversation ebbs and flows along an emerging boundary: nothing said crosses the line of what is acceptable in the workplace. The highest-ranking member of the conversation – Nima, their manager – attuned to the conversation gaining momentum, warns: "don't say anything to get yourself fired." In the collective memory of the team is the case of the manager, Nima's predecessor and the manager responsible for assembling the core of this engineering team, getting swiftly fired for crossing a workplace line: he sent an email which contained a slur which he was quoting from a popular song lyric. The email was forwarded by incredulous recipients, and that managers' own boss was swiftly summoned from his vacation to fire the offender before the end of the business day. "Don't say anything to get yourself fired" is a phrasing that puts the responsibility of adhering to workplace guidelines squarely with each individual and is signaled out loud, demonstrating a lack of tolerance for not work-appropriate conversations that would be at odds with expectations around the "bro" or fratty cultures described in analyses of mostly male development teams. Instead, language and behavior

are monitored and flagged throughout the community to provide ample warning to proceed with caution and accountability[26].

This refrain signals a rapid approach to the line of acceptable conversation. The conversation ebbs back, towards more neutral ground. In the climactic moment of this ritual, Nima picks up the pad of canary yellow Post-It notes from his desk and raises it straight above his head, until his elbow is locked and the notes are stationary in a raised position. He's silent and looks straight ahead. It took me only a second to read the gesture: in the most befitting of sport engineer analogies, the manager, Nima, has transfigured a common office supply into a facsimile of the soccer yellow card. Drawing on his organizational authority, he makes the interactional move from team member to referee, an arbiter of behavior, to issue a warning. The symbolic meaning of the action is read by all. Nima wanted to look out for his team and keep them together by enforcing the rules (which is, indeed, his role), but the responsibility to behave appropriately (to not *get yourself* fired) is up to the individual: each is held to the same standards and must respect the rules of the game.

Finally, as each day with the mobile team begins with the ritual of a brief standup (which represents the closest to the ideal typical organizational form of the *scrum* I witnessed (consider referencing Agile teams and scrum organizations here), an even more informal ritual binds the community. Each evening before leaving, Nima stops by each of his engineer's desk and asks, "You good? Do you need anything from me?" This routinized check-in gives each engineer the opportunity to connect with his or her manager and it

[26] from field notes

reifies the community ties by flattening the hierarchy: Nima does not leave until all of his reports are sufficiently looked after.

Developers: Ritual Roles

The hierarchy of the sports team is explicitly organized; every individual is assigned a seniority level upon hiring and promoted accordingly. The vast majority of workers are ICs, or "individual contributors." Each individual contributor is associated with a level; the most junior workers are IC1s and the most senior are IC8s. One's level is associated with experience and education, and the level is correlated with pay and the substantive requirements and expectations of the work. Managers are no longer individual contributors; they manage their direct reports, who are themselves individual contributors. In their study of the transforming roles of individual contributors and their managers in engineering culture, Kunda and Van Maanen write, "By all accounts, managers and professionals (particularly engineers) are those who most closely identify with the companies for whom they work. They are the heart and soul of the modern corporation, representing its intellectual capital, organizational memory, and, in business school code, core competencies" (Kunda and Van Maanen 1999:65). Their work stands out by paying close attention to the emotional labor or (per Hoschchild's canonical 1983 work,) "publicly displayed investment and passion for the work they do, the work relations they forge, and the company that employs them" (Kunda and Van Maanen 1999). Where it is distinct from the analyses I undertake herein is that Kunda and van Maanen are focused on considering the functional and instrumental outputs of this emotional labor for the benefit of the

company. What I suggest here is that while these rituals do benefit the company by improving commitment to the organization and redoubling the interpersonal ties an employee feels to the others in the firm, these rituals and roles are actually meaningful to the individuals and groups who perform them.

Despite the clearly defined roles of the bureaucracy, the informal roles that emerged shape the culture and climate of the team and also help the individual employees form and maintain the type of community in which they *want* to work. In particular, a "culture club" boasted representatives from engineering, product, design, and UX research (myself) across products (sports, daily fantasy, and season-long fantasy). Similarly, the "Culture Club" – a group of team members who volunteer to help organize events and initiatives that are good for the culture of the organization – is composed of employees from all the offices with a sports representation: San Francisco, Sunnyvale, Los Angeles, New York City, and Chicago. It is truly one of (if not the single) most bridging group in the whole organization, and it is a completely informal committee existing almost exclusively in a chat channel. The role of culture club was to improve, enhance, and sustain a fun and positive culture across the sports team. Having an internal culture club formalized the nebulous idea of *team culture* also represented a real and symbolic investment of formal resources: a financial commitment of budget for events and an even more significant investment in the working hours. The Culture Club is responsible for organizing regular, *fun,* team building things for the teams to do. With the exception of regular charity events — gift drives, beach clean ups, and donations — typically involve some sort of competition. During the time I was embedded with the team, official Culture Club activities included a ping pong tournament, basketball and flag football games, and card game

themed game night. These events and outings are all centered around a competitive activity, with the exception of charity events which have included gift drives and associated days wrapping donated gifts in warehouses, beach clean ups and more.

The committee that organizes these events spans seniority levels and roles; both managers and their reports are represented within the only official record of the committee: the work chat channel where most of the organizing happens. Notably, on a mostly male team, by default much of this organizing work was undertaken by men. It has been noted that it is often women in offices who disproportionately undertake the labor of facilitating social events within the workplace. In an organization with few administrators and nearly no executive assistants, these efforts were adopted by the informal "Culture Club" which is proportionally male. Many members of Culture Club are also senior, again inverting the typical valuation of social organizational labor.

One typical example of a Culture Club initiative is around celebrating Halloween. Each October, the Culture Club organizes a multi-site Halloween event. They assign decoration duty to volunteers, who bedeck the space on D5 with Halloween décor strung from the ceiling. D5 is overrun with spooky themed, homemade baked goods (many reflecting the nationality of the engineer who brought it) with the cups and plates provided by the club. Per usual (a ritual in its own right) in a Sports team event: a competition was present. There was both a costume party and a "trick or treat" event, in which teams were responsible for creating a theme for their team and bringing in treats to share. The teams were generated by a script written by backend engineer Thomas, who is unanimously liked and respected as a brilliant engineer and helpful colleague. He hung faux spiderwebs from the ceiling

himself. The competitive part, the costume contest, was broadcast across sites using the enterprise video conferencing system that was set up in each

While other scholars – notably Gideon Kunda and Fred Turner – have considered rituals and emotional labor in the workplace, their bodies of work are distinct from the analysis I present here. On the one hand, Kunda's analysis focus on a narrow, employer-proscribed version of "culture" that is intentionally curated and circulated among employees (Barley and Kunda 2001; Kunda and Van Maanen 1999); in those case studies, a company has a top-down culture led by a charismatic CEO and that culture is posted (literally) on bumper stickers and bulletin boards, and is taught in day long trainings. On the other hand, Fred Turner's broader consideration of a Silicon Valley ritual of leisure and "an annual celebration of art and temporary community staged in the Black Rock Desert" which "incorporates the syncretic religious impulses historically common to West Coast countercultures and the pro-art, anti-consumerist sentiments of contemporary do-it-yourself culture" (Turner 2009). Both approaches offer interesting insights, but my approach is a bit of a hybrid of the two. Like Kunda, I am exploring dynamics internal to a company, with the level of analysis being a work team – managers and their reports. However, at Yahoo I am not looking at how they absorb and internalize top-down cultural edicts. Rather, I am exploring how they build, develop, and sustain community and meaning within their roles but also beyond them. That is to say, what is made meaningful and durable about their work is not how their emotional labor benefits the company but how it makes their own lives and experiences as part of a team enriching and personally meaningful. In this way, this work is more similar to Turner's broader analysis of what he

calls the "cultural infrastructure" of Silicon Valley specifically and the emerging umbrella category of "New Media."

The ritual festivities on the Sports team do not merely reflect obligations of time at certain predetermined intervals. They are labors of love undertaken thoughtfully by members of the team at varied levels of seniority and status in order to reward their ranks for a job well done and to reify the bonds that tie them together through ritualized fun and competition. In part because of the overrepresentation of men on the team, the informal roles also put high-status men in the role of organizing the relational work of the team. Finally, the informal rules of interaction shape the surveillance and reaction to mundane conversations, more so for teams that those in formal leadership roles expect to be problematic within the community; the interactions in the quasi-public spaces of the chat tool spans the time and place of the teams and its surveillance allows for the performance and reification of existing informal rules.

Conclusion

The Sociology of Religion has a rich history of considering the relationship between rules and authority and the ways that guides behavior and membership in communities. Expanding on the argument of the previous chapter, in which the temporality of rituals and their repetition reinforces a shared sense of time and energy (Durkheim 1965) this chapter considers how the rules that govern those rituals also form a shared basis for community membership. The informal organizations of Fantasy leagues seek the addition of layers of rules and roles in order to foster investment and commitment as well as draw on the affective dimension of being a team manager. On the other hand, the formal hierarchy of the Fantasy developers is peppered with rituals that shape their day and the

proliferation of informal rules and roles that shape their daily lives as well as important moments for bonding and unwinding through fun and competition. Taken together, I suggest that both of these layers of organizational formality – (1) the bureaucratic (formal) which helps maintain and order and longevity of a group combined with (2) the fun and leisure-driven (or informal) organizational orientation are important for preserving the group as well as allowing it to innovate and remain a desirable group in which to participate actively. While leagues are informal groups that formalize to last, the engineering culture is formal and has developed informal roles on top of their corporate titles in order to create a *community* of teammates from a set of colleagues.

In this chapter, I argue that rules and roles are a central part of the community of Fantasy Sports play and production. I demonstrate that, for both users and developers – albeit it in differing ways – using creativity and establishing rules and organizations that extend beyond the basic requirements or features of their roles, helps foster a sense of community and meaning. These practices bring people closer, since the extension of these organizational requirements or enhancements is innovative and voluntary but towards the end of doubling down on the specific *culture* of their community.

To demonstrate this, I showed that the ways that these leagues build up additional structures and roles also help secure their durability because by distributing responsibility in an informal game creates investment and structures for community maintenance. In some cases, they served to include people who might otherwise be excluded, better merging their primary social circle with their Fantasy league; in others, they put additional requirements on managers, raising the barrier to entry in ways that facilitated high levels of engagement; in still others, they distributed responsibilities and delegated roles in order

to make every member feel invested in and responsible for the continuation of the league year over year. This is made clearer through the lens of rituals because it helps us make sense of the link between individual decisions, actions, and behaviors to the internal, social life of a group that exists and operates as a good in and of itself.

Chapter 5: Boundary making and socialization into leagues and teams.

"What is more, it is within society, and as a result of social processes, that the individual becomes a person, that he attains and holds onto an identity, and that he carries out the various projects that constitute his life."

- Peter Berger, The Sacred Canopy, p 3.

"On the one hand, individuals must be able to differentiate themselves from others by drawing on criteria of community and a sense of shared belonging within their subgroup. On the other hand, this internal identification process must be recognized by outsiders for an objectified collective identity to emerge" (Lamont and Molnár 2002)

"I've learned you have to set expectations appropriately for people above you to cover your ass but it also sets their expectations and they know what they're going to get. But also, I always have managed down, not up. I manage for my team. I almost don't give a shit about the people above me — You guys, I work for you. You're using me, I'm using my guys but my guys are my guys and don't mess with them." -Nima

Introduction

In sports culture, there is a notion of a "core" group within an organization. In sports play, that might be the core of the team — such as the starting lineup in on an NBA roster

or the daily starters at the heart of a baseball batting order — that connotes value and membership in a particularly meaning-laden way. In the broader sense, it might be those who have been around an organization for a long time, providing the steady management and year over year consistency that helps build a legacy of success. Everyone on the team is officially a member. Everyone who is listed on the roster of a team that wins a Super Bowl is honored with a Super Bowl ring, regardless of whether or not he participated in a play during the game. However, the *core* of the team refers to a specific subgroup that might be defined by specific merit-based value (play production, for example), seniority or tenure within an organization, or authority granted by virtue of charisma or office. In my research, I found that members of both communities (the users and developers) adopted this language of a core group to draw boundaries and distinctions within their own social circles. The language of a core was strikingly similar and consistent across groups. In both communities, core membership could be established by virtue of substantive knowledge such as being an expert software developer or an experienced Fantasy Hockey player with extensive knowledge of the National Hockey League. In this chapter, I explore how the communities studied in this dissertation are bounded as a way to help us understand what constitutes membership.

Because in-groups are often best understood in relation to their outgroups, this chapter focuses on the bounds of membership, taking in turn language of "core groups" and using gender as a case study in each of the groups studied. Across these groups, which are mostly (or *ambiently*) masculine in terms of gender composition, the "core groups" are often also mostly men as well, on both sides of the screen. In this chapter, I will also consider more directly the ways that gender is experienced as a condition of inclusion, in

particular for the women users. In leagues that are either all-male or mostly-male, the men are often unreflexive about the absence of women in their midst, while the women feel this exclusion and are motivated to play in part because of being treated dismissively. On the developers' side, they are often acutely aware of the gender imbalance in their profession and make a conscious effort to be inclusive and move towards gender equity.

In chapter 3, we looked at how rituals help users externalize and internalize a shared sense of time; chapter 4 explored how a shared sense of time as well as other shared rituals foster a sense of belonging to a durable community. In this final chapter investigating the relationship between rituals and the larger social elements of Fantasy Sports and online play, we look at how rituals do not only create shared meaning but help the individual within those communities understand him or herself as part of the group. While the rules and roles (among other things) that provide the cultural infrastructure of the Fantasy Sports managers and developers help facilitate a community orientation, it is the active and ongoing participation of a community that shapes an individual's place within that community. The ritual creation of the self as member involves the socialization of individuals into the community and also serves as a force to identify and regulate the boundaries of the membership. Building on the previous chapters' understanding of time and community, this chapter explores how these factors contribute to a sense of self that is part of a meaningful group: that ritual production of time and community shape membership as part of these communities.

As first described in the introduction of the dissertation, the sociology of religion does not endeavor to identify Religious Truth*s;* that is the domain of theology. Instead, the sociology of religion explores the behaviors and practices of the men and women religious

communities, and then exploring the consequences and social facts that emerge in those groups. For example, it is thought that many of the advantages attributed to religiosity are in fact attributable to being part of a dense social network (Malhotra 2010; Williams 1999).Through socialization, a shared sense of membership and clear boundaries around what membership means (and who is not a member), the community creates boundaries that help shape their own experience. We have looked at how both developers of the Fantasy Sports experience and those who use the product shared features of a larger community. I will next turn attention to the individuals' role and experience as part of that community. Who is included within the group? How do communities develop and thrive despite internal variation? And what does membership mean to individuals? This chapter will continue in the style of the previous chapters, by looking at ritual as well as at both users and developers, in turn.

To that end, I begin with a reflection on my own positionality as a researcher and how I experienced the boundary making as I became part of the team. This includes reflections on gender as a membership and boundary marker as well. I then turn to the empirics and analysis to highlight the processes that produce membership and boundary making. then turn to the way that fantasy users internalize and externalize — or socialize — into the communities they are part of. I focus on the way users talk of themselves as part of (or becoming part of) the community.

A reflexive moment

In my own experience at my field sites I was often occupying a liminal status: I identified as a member of the Fantasy Sports team, and on many occasions had that identity confirmed and thus more deeply internalized by external actors and forces. Other times, I felt like an

outsider, especially in the earliest weeks at my field site but occasionally later as well. In a group that gained status by demonstrating engineering chops - writing and deploying code that was both functional and beautiful (in that order) - I had almost no working knowledge of computer science. In a group that was overwhelmingly - what I often described as "ambiently" - masculine, I expressed my own gender identity in a very feminine way.

My PhD work granted me a high-status position among the group, and having a working knowledge of sports and Fantasy Sports elevated my status even further. Other women who had very low levels of sports knowledge were rarely granted full symbolic[27] membership to the group though they were valued for the particular technical or professional contributions they made (this was often the case with the rotating cast of design associates assigned to sports, many of them women with limited knowledge of American sports).[28] But perhaps most importantly for the Fantasy team's ability to categorize me, I spanned multiple teams. Though the Fantasy Mobile team was in my ways my home base, my occupational role spanned the product and its many subgroups. I supported Product goals but was not a Product manager; I represented the User, yet I worked to give the designers and developers actionable insights; my manager's manager was not the VP of Sports but to a research-oriented organization. I operated outside of the waves of change that accompanied tectonic shifts and workplace politics. When fault lines of tension emerged, I did not have to pick a side and indeed often did my best to smooth

[27] symbolic in the sense that unless you are engineer, which will be discussed below, you are not truly a full member

[28] It's helpful to note here that there is not necessarily an expectation to come IN with extensive sports knowledge; however, when new hires made an effort to ask questions and commit to learning more about the substantive area in which they worked, that effort was typically appreciated. This might look like posting questions about rules in CorpChat, signing up to play informal "pick up" games at the on-site basketball courts, etc.

them over or facilitate common ground between the lines of misunderstanding or points of view on either side of a question. Though I fit in across many groups, I was always a welcome visitor, a valued expert, and an impactful collaborator. I was an official member of the Culture Club, a routine attendee of a number of planning meetings, a daily observer of Fantasy Mobile standups and an active participant in the Fantasy Sports team life. I was an honorary member of the Sports Org; when visiting the Bay Area, I sat with the mobile team but also "hung out" in the common spaces, watching games on the couch while working on my laptop, receiving invitations to social events and outings, and more. However, over my three years I was never formally a member of the Sports Org. This is in some ways emblematic of my experience. I am welcome but set apart, included to a relevant extent. In short, my embeddedness, like any researcher, was subject to constraints and boundaries which were not static but were occasionally made salient.

There were several moments across my fieldwork that I was recognized as an "insider" by people beyond the small team of Fantasy Mobile. Once, I was on the receiving end of a prank. Throughout my time on D5, I noticed evidence of past pranks: a keyboard painted in glitter, a child's Dora the Explorer backpack interns wore their first week to represent their status as a novice, and — most confusingly — plate weights hiding under desks. Plate weights are the flat, disk-shaped weights that are added to barbells in the gym to increase the weight of the bar. I knew many of the engineers were regular exercisers, and I also knew there was a gym on campus (in fact, seeing the longest-tenured engineer, Eric, in the gym daily during my internship was one of the first ways I became associated with the team and our friendship grew through this routine and persisted beyond it), but I did not understand why there would be weights on filing cabinets and hidden under desks.

I asked but got a vague response. That same day, Sid offered to drive me to the airport for my return flight. As I got out of the car with my bags at the departures drop-off area, I noted that my bags were heavy but did not think anything of it – after all, I had a laptop and chargers in my work bag. Sid laughed, "you really don't notice?" he asked. "Notice what?" That's when I looked in my bags and realized that five-pound plate weights had been distributed into my carry-on bag. "*That's* what the weights are for." In this harmless prank (they could not believe I left the office with the weights and did not notice, but also made sure Sid did not let me approach security with unknown metal objects in my possession), I was teased and a photo of me holding the weights and grimacing was circulated among their CorpChat group. This prank, small though it was, would only extend to people within the group and marked my feelings of belonging within the team; it is also now part of the collective storytelling of the team, which thinks of itself as fun, when they reflect back on the pranks and the artifacts that represent them. "*Remember when*" they might say, "*Sam almost brought weights onto a plane and didn't even notice?"*

On the other side of the boundary, some moments made salient my external position to the team. Though an active member of the culture club, because I "rolled up" (or reported upwards) into a separate organization, I could not manage the payment logistics of anything event-related. That is to say, when I was on the committee and helped plan a menu and order food for the quarterly planning event, I would have to create the proposal and do the coordinating and then ask a colleague to complete the payment and manage the work of the expense report. I was ineligible to attend a whole category of meetings where proprietary or business-related information were discussed while I was in my academic collaborator role, making visible (by virtue of being an excluded member) my liminal

status. Those were bureaucratic classifications that excluded (Bowker and Star 1999). Symbolic classifications existed too: when t-shirts were designed and ordered (this is a very common practice in Silicon Valley, with tech t-shirts the standard uniform of programmers specifically and tech workers generally), there was often a minimum number of size smalls ordered, since the mostly male team was in sizes medium and up; this resulted in a shortage of t-shirts in size small. On the topic of dress, the male employees tended towards extreme informality: jeans, sneakers, and hats were all common workwear. Tech company or sports team logo emblazoned t-shirts and hoodies were also part of the standard uniform. The women, by and large, did not dress as informally. While jeans were still standard, the women engineers, designers, and researchers like myself tended to wear more business casual blouses and shoes; I cannot think of any occasions that women wore hats to work with the exception of the prescribed sports-themed attire for quarterly planning. Symbolically, the informal clothing choices did signify membership in the community of software engineers but it was not a symbolic option equally appealing to everyone on the team.

Sociologists are adept and recognizing the ways that rules shape communities. Bowker and Starr (Bowker and Star 2000, 1999) focus on how rules function to not just maintain what is "in" using classification systems but also to make judgements about what is good and right, not to mention draw boundaries around who is "out" (discussed in this chapter). This boundary work is also inherently linked to the power and identity dynamics that will be discussed in the following chapter. Taken together, this chapter considers the ways that the rituals associated with organization, roles and rules also facilitate the construction of community among users and developers of Fantasy Sports.

Gender: Ambient masculinity

The game of Fantasy Sports and the teams that build the game share a characteristic I call *ambient masculinity*. Ambient masculinity refers to the immersive sense of masculinity, defined by characteristics in the physical space, self-presentation, interaction style, value system and content of discourse that operates in a specifically male valence. Viscerally, it feels like a self-awareness by virtue of not being masculine-presenting. As a non-male, experientially, it is the awareness of being the only woman in the room, of feeling unsure how to respond to the volley of barbs, and of feeling undermined by the casual teasing that does not undermine the men in the room but feels like it may pose a threat to one's face (in the Goffmanian sense) in the ambiently masculine context. Ambient masculinity is not a problem, per se; having a shared interaction style helps in many ways with communication and camaraderie and is one of the many available dominant interaction styles available to choose from. Like Dan Lyon's description of the idea of "culture fit" advocated when searching for placements in departments as different as PhD departments to software engineering teams, ambient masculinity is a set of social norms that amplifies specific characteristics. On the flip side, having a single dominant interaction style could be used as a way to exclude people from membership without being explicit; if attributing rejection to something amorphous and subjective like "culture" rather than, in the Lyons example, age, groups can perpetuate inequality without engaging in overt age discrimination.

Ambient masculinity features in both the leagues and the development team. In the photo below, an image from the main area of D5, the home base of the Fantasy Team, demonstrates one visual representation of ambient masculinity. In contrast to the blank

walls and standard office decor of other teams in the building (which might include bookshelves, houseplants, and artifacts that reflect the team's interests or work), the area on D5 has a multi-TV set up for watching sporting events, features a supply of sodas and snacks, features professional team wall decor on the tables as well as walls, and very casual seating, such as a bean bag chair and couch. The overall aesthetic is a sports-themed living room.

Figure 13 Photo of D5, the floor of the mobile and back-end engineers



Users

For the leagues interviewed, common dimensions of the ambient masculinity are the assumed dominance and centrality of "smack talk "or "shit talk," an expectation of sports knowledge that is more typical in the socialization of boys and men, and an

orientation towards competition over all else. Among users, the motivation with the highest agreement (consistently across sports) was "playing Fantasy Sports is a hobby of mine." When users have been playing for more than one year, and especially with the same core group of managers, the game becomes a hobby to them. Hobbies are individual decisions and affinities but also reflect larger social, political and individual change. For example, the hobby of spectating different sports — such as basketball and boxing — are credited in part with helping race relations evolve over time (Lane 2007). Robert Putnam famously argued that the individual-level decision of group-based hobbies such as joining a bowling league is indicative of other political shifts in the national landscape (Putnam 2000). People's hobbies are part of who they are because they become what people do, and what they *choose* to do when they are free. However, those choices are often arrived at in ways that reflect social trends or groups. Returning to the Putnam example, his core argument involves how the decline of hobby organizations, represented by bowling leagues, is indicative of a population-level transition towards a more individualistic society. In the case of the users, I consider how larger forces of the masculine community of sports fandom permeates league organization and the experience of membership within a league. Specifically, I consider how leagues use the language of a "core group" to draw boundaries around participation and membership, and then turn to gender as a case study for understanding this dynamic.

Users create or join leagues that have a baseline set of rules and roles, as discussed in the preceding chapter. Many users, when describing their league over time, describe them as having a "core" group that returns annually, with a set of transient fillers (almost always, friends of friends looped in to fill the empty roles). Recall from Chapter 3 that

around three-quarters of respondents from each sport reported playing with their entire or most of their previous years' league. Between 20-28% of users per sport reported that they had played with most of their league before. The language of a "Core group" was ubiquitous among respondents, and when I inquired about this surprising permeation of the term. Liam, the power-user introduced in Chapter 3, is a useful example to consider here. When introducing Liam, I focused on the cyclical nature of his relationships. However, the cycle is only durable if there is a minimum amount of momentum from some quorum of community members. In Liam's case, he reports, "A lot of the guys that are also in a league are people who, for the most part it's been a pretty consistent league. There hasn't been a lot of turnover. We did have more turnover this year, but that was mostly because of the health of one of the guys, but other than that it's been pretty much consistently the same. *If it's a 12-team league, it's 10 or 11 [of them returning] every year for three or four years by now*." What forms does this ubiquitous description take? How do users describe their community in terms of a core group? Charles, below, introduces his preference for league stability year over year, saying:

> I like it when [the league is active,] up and moving around. We did have some other, some outside people that have come in over the last two, three years that they put energy into it, but they've also exploited loopholes and they're in it to win it. A lot of other people that we have in our league, we're all older, we've been doing this forever, and we're not really so much in it to win it, *we're* in it to stay connected and things like that. Yes, we want to win, but *they* are a lot more competitive, and since they don't know us personally they don't care. It takes the fun out of a lot of it, so a lot of the core people have just checked out a bit.

> They're the only ones that do a lot of the trades and their trades are beyond lopsided. It's really bad, so the core group tries to just interact with each other. We've been talking about just creating our own new one outside of that and not inviting them anymore, just getting back to the core eight to ten people. We might end up doing that, because I think it took a lot of the fun out of it with just having them try to just go be cutthroat and exploit and all that. Because it is a keeper [format league], there's a lot of different rules, there's a lot of different nuances to it, so people are pushing the borders on what they can and cannot do. Even though it's technically legal, it makes it a little bit more difficult.

For many leagues, the idea of a core group is essential to membership. Ideally, for most groups the full league will return year over year. Attrition is inevitable, and in some cases (like Pastor Nathaniel) it is enforced as a way to maintain the competitive spirit of the league. Year over year consistency is a benefit that serves much the same function of the rules and roles overlaid on a league from the previous chapter: it serves to extend the group into the future by making externally viable specific expectations of the league's ongoing existence. However, as the above quote suggests, having a core necessitates some maintenance. For the understanding of who is *in* a group, it is crucial to enforce the boundaries of who is not (or no longer in the group). In a Durkheimian analysis, the careful maintenance and enforcement of these boundaries helps define and keep alive the core group, which is to say, the community.[29]

[29] I am grateful to Andrew Lynn, for helping me develop this point.

In that sense, punishment or excising the group members that do not internalize and externalize the norms of the group is important for healthy community maintenance. In what is an interesting counterpoint: many leagues enforce "punishments" or consequences for a poor finish (for example, in one league the loser gets their name engraved on a toilet bowl statue; in another, the last place finisher must buy the food for the following year's draft; in the developer's league at Yahoo, the last place finisher receives a temporary tattoo in front of the whole team at the quarterly planning meeting). In those cases, punishment is actually a ritual form of *inclusiveness* and boundary maintenance. There is typically no actual negative association for a league member who finishes last but was actively participating besides being the target of teasing. Instead, the social punishment arises from lack of participating or for the cases of deviance from group norms – such as violating the spirit of the rules. In cases like that – such as Charles' league above and Pastor Nathaniel earlier – we see enforced separation from the leagues as an act of community maintenance.

Gender and conditional membership

When users discuss the core group of their league, they often took for granted the ways those boundaries were drawn. I asked most interviewees if there were any women in their primary league, and most reacted in the same way, a reluctant no. For many, they reported, women were simply not part of the groups that transitioned into durable Fantasy Leagues: groups of high school friends who bonded over sports, the veterans who were deployed together, the college roommates who moved to different cities after graduation. In this way, participation in this voluntary leisure activity reinforces existing social boundaries and perpetuates homophily that exists offline in the online communities.

A Fantasy Basketball User I spoke with, Laura, is a major Basketball fan, actively following her hometown team. She is a single parent (she named her son after her favorite NBA player) with a flourishing firm in a white color occupation and season tickets to her local (though not hometown) basketball team. Of her participation in Fantasy Sports, she tells me, "And I've been doing the season long ones on Yahoo, I think this was my fourth season. And I love it. I always do one with strangers. And then last year and this year I ran my own league with friends. Not for money, just for shits and giggles you know. And I love it." From here she immediately references the relevance of gender in her public league. "Because the common [public] one I'm in this year, I'm the only woman and I've spent over half the season in first place. So, you know, that just makes me really happy." I followed up her question, asking directly "So, here's a question for you. How do you know in the public league that you're the only woman?". She very evenly replied, "It's crystal clear from the names and the conversation. During the draft the conversation was pretty entertaining. The people who think they know everything and I just smile and go (at this, she nods knowingly). You know that feeling." She was directly appealing to my gender, referencing what she (correctly) assumed was the shared experience of having men in the context of Fantasy Sports interact dismissively. Laura's account was unique among the users I interviewed because she took her public leagues more seriously regarding competition, while being more casual in her private leagues. I excerpt her transcript at length below:

> Researcher: Cool. So, Laura, can you tell me a little bit about why you play fantasy basketball?

Laura: Entertainment. I love it. I mean I love basketball, and it keeps me much more up to date on players across the league. So, then I'm well prepared for when other teams come to town[30]. You know, who to be watching for, what to be watching for, what flashes of brilliance they might have.

And as a woman, I absolutely love going to the games. You know, there's the 60-year-old guy, the 60-year-old millionaire that thinks he knows everything about basketball. And then I can whip out some bizarre fact about Miles Turner, and then they're like, "Who?" And then the game happens and he's phenomenal and those people seek me out after the game and say, " Oh my God, you were right. That kid was amazing." So, I really like to pull some of the obscure players and stats and rattle off whose ranking for triple doubles this year. Everybody knows James Harden, Lebron James, and [Russell] Westbrook. But not many people know who's 4th, 5th and 6th on the list.

Researcher: Have you always enjoyed that?

Laura: Yeah. I've always, yes, I've always enjoyed being like, "I know more than you." I know that's horrible. I've always been fond of useless information. I love Jeopardy knowledge. Rookie of the year was a category on double Jeopardy the other day and sure enough I got every single question right. No problem, I'm like

[30] Laura is referencing her season ticket holder experience; because she will attend most home games, she wants to be "prepared" by knowing players on the opposing team, which Fantasy helps her with

‘it’s simple.’

Researcher: I know you said you love being entertained by Fantasy Sports, you love basketball. Is there sort of a qualitative difference between the public league and the league with your friends?

Laura: I probably take the public leagues more seriously. I mean as much as I love the bragging right amongst my friends, I am not as über competitive in that one as the one where I'm the only woman, I just want to crush everyone in that one. And of course, the competitive level in the paid [daily] ones are much higher. And I get a lot more frustrated about things that go on there, then I do on my season long ones.

Laura, in person (at NBA games) and online picked up on an implied boundary in her participation in sports fandom and Fantasy Sports game play. This boundary is manifest in many leagues across the Fantasy Sports universe online as well. Most leagues I interfaced with were exclusively men, and a few like Carrie’s, were all women. Most of the women who play Fantasy Sports are in leagues with mostly men, and those I spoke with — such as Laura — emphasized a deep-seated desire to demonstrate their competency in a space where they were perceived as less knowledgeable, talked down to, or patronized in some way. In this way, it makes sense that Laura, whose private league is primarily an exercise in sharing her hobby with friends, invests more pride in her public league, which

is a finding unheard of among the men I interviewed, in part because of her experience in mostly male spaces as a female sports fan.

Given that most Fantasy Sports players are male, it is unsurprising that most men play with mostly men. However, many women are sports *fans*; they attend games, follow sports news, and have played sports. That the leagues tend to lack gender balance –though I do not have data on this at scale, among my qualitative respondents I found that many leagues are all men or all women – they tend to double the gendered norms within the groups. Carrie's league, with a social chair and spa days, could describe any number of women exclusive social organizations; Laura on the other hand does what she can to introduce her friends – men and women – to Fantasy but plays with almost all men in public leagues where she encounters more hostility or worse – condescension. Men may interact with mostly other male sports fans, but their reactions to my question about having any women in their league – usually a reluctant or defense "no" – suggests that they were not thinking about gender much in their league formation or play. Even Carrie, with her all-women league, reported that one motivation to create their league was to "show the boys they could do it." For users, the gender homophily rarely went questioned for the individuals in the majority position, but the implicit – even if unintentional – exclusion was salient to those who were on the outside of the group norms, like Laura and Carrie.

Developers

There are two types of boundaries that operate vis-a-vis the Fantasy team. First, there is an inter-organizational boundary (where the team fits with relation to other teams at the company and the relationship between teams) and the status attributed to the team among their peers. The second is internal boundaries. These are more salient for individual

developers, but also have much room for permeability and shifting. Some internal boundaries are formal — which product do you work on and on which platform? Sports iOS? Fantasy Android? Daily Back End? These combinations are just two of the huge number of identity markers within the team. Less formally, we can ask who is part of the in-group and how do they attain that status? Part of an employee's status comes from one's degree of autonomy over his or her work. Despite the daily oversight (Ch. 3) and networked communication and oversight (Ch. 4) discussed in previous chapters, nearly every engineer I interviewed cited the autonomy and ownership of projects as a top rewarding characteristic of the work.

Work friends are a unique category of friendship in adulthood. In fact, I was not surprised when my quantitative analysis of Fantasy Sport players found that playing Fantasy Sports with *friends from work* was statistically significant in its relationship to overall satisfaction, while playing Fantasy Sports with *colleagues* was not. The valence of those two groups are not equivalent, which was something I quickly observed while watching the developers of Fantasy Sports in action. In part through the rituals described in detail in previous chapters — including ritual events, routinized fun, and team participation — colleagues were transformed into friends, or at the least *teammates.* This transition is also durable, as I learned over time through the introduction to many an alumnus of the Fantasy team. I met Matt, a former Fantasy engineer who now runs a startup in San Francisco with his girlfriend, another engineer, at a joint birthday party held by two of the current engineers; Brian regularly ate breakfast with the team and was a gym buddy of more than one engineer, it was only after about a year that I learned he was laid off from a Fantasy-adjacent team before returning to the company as a contractor; Sid's roommate

Lou, another former Fantasy engineer, left the company but remained a constant presence in their shared social circle. Other engineers who had left the team for other parts of the company routinely returned to the lunch table on D5 to eat with the Fantasy Mobile team. Beyond being colleagues, the daily rituals — not just the standups but the daily shared lunches on the Mobile team, and the ritual of afternoon ping pong and a round of video games before departing for the day on the Front-End team, redoubled the ties that bind them into durable friendships.

There is a socialization into the team membership that occurs as engineering hires become part of the team. I asked Nima about this in our interview, asking, *"Do you think the average users are like your team at all?"* and, to my surprise, he replied in the negative. Nima explained,

> "I'd say no because I know the mobile development side, we've traditionally had a different mentality toward hiring. We don't hire based on sports fandom. We attract people based on sports fandom but you have to be equally qualified. Oftentimes you hire guys who don't have a passion for fantasy, don't have a passion for sports, but they also develop into that [working here] because they know that's beneficial to them."

> "I have a few examples on my team right now that guys came in, no knowledge of American sports or very loose knowledge and now they're talking about the handcuff to the backup[31]. It's just like, okay, these guys really, they know more about these guys than I did. [They'll say] 'This guys a sleeper, pick here' while [I'm

[31] That is a reference to an obscure piece of Fantasy Football knowledge

like,] ‘I’ve never heard of him! You've got to be kidding me.’ It's fun that way.”

If the team does not hire developers — which is also to say, select its members — based on fandom, then how do they come to all be invested in sports by the time of my arrival in the field site? A back-end engineer, T., spent his first five years working for the company in his native India and is now working out of LA described this paradox of being a cool team by virtue of the tie to sports but also the challenges not being a football fan:

> Yeah, I don't know but ... Not the sports team in particular but I've known friends from other teams. I know a sports team who came here and they were like, "Oh you guys are cool. You guys spend a lot of time together. You guys play video games. You're highly motivated." Things like that. I think other teams don't have common interests to work around. We have this common interest in sports, right? … Yeah. Sometimes I find it hard, too. I'm not a big football fan so to be in a group talking about fantasy football all the time, it's like, "Oh no."

Talking to many of the engineers, they noted that this is indeed what set them apart from other teams and bounds their interactional norms. However, many of them noted that while Sports can provide one pathway to improving the ties within the team, it is insufficient for membership because not everyone shares it and it does not constitute the full range of commitments that the shared community holds. It *helps*, surely, in a workplace occupied with the substantive domain of sports but it is not a criterion for being part of the team. The *team* is in many ways a sport of its own; the groups are internally oriented towards their own internal logics, timelines, rules, roles, and rituals.

Ambient Masculinity embodied: mostly-male teams

When I arrived on D5 in the summer of 2016, there were no women engineers in sight and only a few women on the floor at all, including the design lead and, with the arrival of myself and my intern supervisor, two researchers. By the conclusion of my fieldwork, each sub-team within the Sports Organization had at least one woman working on it, and we even fielded the first all-women Fantasy Sports hack day team (comprised of an iOS developer, designer, front end developer and the two UX researchers); Nima's small team had one woman on each platform — iOS and Android — Kevin's front end team converted a woman intern to Full Time and hired an additional "NCG" (New College Grad) and the backend team hired a woman as well. It is notable that the team was intentional about hiring practices. While research suggests that many teams reflect the demographics of their hiring manager (see, for example, Jacquemet and Yannelis 2012; see, for example, Rivera 2012) it is notable that qualified software engineers often have some flexibility about the teams or companies they join in the employment bubble of Silicon Valley. The appeal of joining a team that is focused on a sports product can be unappealing for many non-sports fans regardless of gender because the barrier to entry feels steep or worrisome. As Nima emphasizes, their approach to hiring is to hire the best possible engineers they can and not necessarily sports fans. However, non-sports-fans developers might prefer to join a team without this additional dimension to their community. While sports fandom is a hugely popular pastime in the general population, the overlap of the specific tech or geek masculinity is not huge with the population of sports masculinities. That is to say, it is not only that women engineers are not especially likely to have a motivation to join a sports

engineering team, but also the same reluctance applies to men engineers who do not share a passion for sports.

Indeed, a review of my fieldnotes includes quotes from Nima from 2017 sent to me over CorpChat: "I wish we had more female engineers. i even suggested we make a generic posting with no reference to sports in it. we just have a serious gender imbalance. all our designers are women and it'd just be better to have more women across the board." Nima made several attempts, including proposing experimental tactics to human resources and hiring teams to eliminate references to sport in job postings to see if they could increase gender diversity in their applicant pool.

The improved representation and commitment to diversity in hiring was an area of focus in recruitment for the team, but did not fundamentally alter the context or dominant modes of interaction – that is to say, ambiently masculine interaction styles – within the culture. During the initial period of my interviews with developers, Emma was the only woman developer on the Fantasy Sports team. She was a very new hire and very quiet, both factors contributing to my worry about initiating the conversation about her experiences as the lone woman on the team. Emma, throughout our conversation, makes a few references to her status as an outsider in a few ways; being from India, she does not really understand or follow U.S. Sports, and also makes note of her status as the only woman on the team. The following transcript excerpt is abridged for clarity and focus:

> Researcher: How do you think other teams at Yahoo would describe the fantasy mobile team?
>
> Emma: I guess they would describe it as the people who are 100 percent into

sports. Yeah, that's what I even used to think. That it will be people where, you know, everyone would just be talking about sports, sports, sports. And I'm new to this, US sports. But it's not that.

Researcher: What kinds of things do they normally talk about?

Emma: They talk about everything… I like that. And sometimes it gets boring, just work, work, work. So, people here talk. Though I don't talk much. But yeah. I like that. At least someone is speaking something.

Researcher: Is it different from other teams you've worked with before?

Emma: Yeah. It is different. In previous teams, people, they don't ask. If they get stuck, they try to, you know, be on that problem and [they end up] just wasting their time. But here, people don't feel ... I mean, they just ask questions. And even if I ask a question to someone, they don't feel, "oh why she's asking such questions." So, this is thing which I like about that.

Researcher: … So, as a software engineer, I'm assuming there aren't many women in the jobs generally. How is it to work with all men?

Emma: Well, for me, this is not a different thing. Because in my previous job also, I have worked at a place where ... In my previous job in the US, there were less

women in iOS. Even in my previous internship, there were just men. There was not even a single girl in the office. And same here. So, I'm fine with it. Yeah, I guess Nima had asked me the same question before I joined the team. He said, we don't have any girls yet. Are you fine with that? But I'm used to that thing.

Researcher: …Is there anything different about working here, or other things about working here that you wanted to share?

Emma: I feel the culture of Yahoo is really, I mean, really good. There are so many events that's going now. I joined in October, and there were so many events back-to-back going on. And the team is good to work with. The code is a little bit complicated, but once you understand, it is very easy to use it. So, for example, there was one task given to me. It took one full day to do it for the first time, and then I did it for the second time, it was done within a couple of hours.

Researcher: Right, right.

Emma: And my manager is good. It's good working with Nima. He understands, like, I want to go for ... I've not seen my family since I came here [to the US] since two and a half years [ago]. So, yeah, I'm going to visit them. He allowed me to work from [India]… He told me that you can do work from home… The work hours are flexible. In my previous job, you know, there was, like a window. Back in India, I had to reach between 10:00 to 10:15. So I just used to literally run and

> reach to my office. Yeah, so those things are pretty good and flexible here. In my previous work culture, [everyone is] given a task and you had to do it exactly the same way. You cannot do any little twist in it. If you do, then you are screwed. Here's it's different. You know, you can give your own thoughts. Hey, this is not doing good. You can do this, this, this. So, that is a good thing.

In short, despite having some distinctions in membership categories, Emma feels fully part of the team even more so than she has in previous jobs where she was similarly alone in being a woman on the team and where she did *not* have to be concerned with the additional layer of membership: sports fandom. What both Emma and her counterpart on the Front-End team both allude to is that what at first feels like a barrier — being perceived as fully focused on sports — can be tiring or limiting in terms of conversation topics, their first basis of membership is being part of their work team. Thereby, to echo manager Nima's hiring motto, "We don't hire based on sports fandom. We attract people based on sports fandom but you have to be equally qualified. Oftentimes you hire guys who don't have a passion for fantasy, don't have a passion for sports, but they also develop into that [working here] because they know that's beneficial to them" sports fandom is neither necessary nor sufficient for successful team membership but each teammate is socialized into the process of a baseline amount of knowledge because they must be able to follow the substantive ebbs and flows of the product they are building. However, being a proficient engineer is both necessary and sufficient to be part of the team.

What can feel *othering* in groups of technical expertise – even ones committed in both theory and practice to gender equity and progressive notions of inclusion – include

the seemingly "native competence" that is assigned to gender identity (Dunbar-Hester 2008a). In the case of Dunbar-Hester's study, the technical background of DIY FM radio activists gave the background context, skills, but most importantly *confidence* to engage and tinker with the hardware related to FM radios; the women who did do so tended to present a more masculine gender identity and, the author argues, doing the activity classified as more masculine is a way of subverting and creating distance from a feminine identity. While not all of the men who joined the Sports org in an engineering capacity were themselves experts in sports knowledge, they tended to have the background "native competence" of having played at least some sport growing up (as is common for male youth) and have generally been exposed to and engaged in more of the sports culture in their personal lives. For many, even those who were not particularly inclined to sports fandom independently, going to the large public schools that tended to serve as pipelines into the engineering roles also facilitated sports fandom or knowledge in association with their American universities. Like the FM radio community, this background exposure – regardless of actual competence – facilitated a sense of confidence and willingness to engage, ask questions and take up sports information as a hobby for the men who joined and became socialized into the teams.

Becoming socialized into the team mentality — which includes sports awareness but also meritocratic commitment to engineering excellence, helping others (asking questions) and accepting help, and being flexible to account for people's individual priorities such that they remain committed to the team (i.e., Nima making an exception to bureaucratic [formal] policies and allowing Emma to go into a vacation-time deficit to visit her family in India) all echoes the importance of team orientation above any other

membership category. However, the processes that creates that community involves many of the community-building features mentioned previously. For example, Emma specifically calls out the importance of the "many events" that were going on during her early tenure at Yahoo that contributed to the culture *feeling good*. She also emphasizes that despite the complexities of the code base, familiarity and expertise are valued as is autonomy (flexible hours and oversight) and ownership over the tasks and means of accomplishing them (a "little twist in it" and "giving it your own thoughts"). These features of technological work are all described as fundamentally masculine in previous studies of the tech world, which with its mix of art and science is historically hard to gain status in as a woman engineer (Cooper 2000, Ensmenger 2015, Wajcman 2018).

Crossing boundaries: being outsourced

Within the corporate structure of a sports org, and even within the further subpopulation of Fantasy Sports organization, intra-team groups were salient among the developers. At different moments, different boundaries were more salient. At company-wide events, everyone whose work related to sports was one team. In quarterly planning, where all product-facing teams gathered for a day of presentations than routinized fun (Ch 3), the editorial side of the Sports Org was notably absent (given that the meeting was intended as engineering and product specifically, this was not a surprise or capricious exclusion; however it did create a visible boundary as those invitation lists began getting re-inscribed for other purposes, such as the dissemination of information).[32] In daily stand ups, even the

[32] For many users, this might be counterintuitive: for the men and women who use the app to consume content, the content *is* the Fantasy Experts who they watch and read and the advice therein. One interviewee who uses the app and website, when I asked him to think of the actual *product* and not the Fantasy personalities he was used to watching, replied incredulously, "but they *are* the

smallest group of Fantasy Mobile Software developers was split by platform boundary into iOS and Android subgroups, with the roster of either platforms' developers sinking as low as two people per platform during my research and maxing out at about 10 over the summer when interns were present.

While embedded within the Fantasy teams, I learned of a practice of outsourcing developers between teams. Because many of the skills that software engineers on any given team had were transferable to the other teams, individual engineers could be "on loan" to another team to help meet urgent resourcing needs and complete high-priority projects; some engineers could work on multiple platforms (both iOS and Android) or both user-facing and back-end engineering tasks. Typically, there was a learning curve to adjust to a new platform or product's "code base," but with a little guidance and the familiarity that time and experience brought, there was an expectation that this sort of engineer-loaning was manageable for the good of the org's shared goals. I expected this process to help create bridges between the teams, making the boundaries more porous as individuals could move between teams.

To the contrary, I found that this practice often led engineers to experience fatigue or frustration, as well as galvanizing loyalty to their home team's culture, practices, and infrastructure. Being part of an adjacent team helped emphasize the shared goals (a successful product launch and crisis-less sports seasons) across different elements of the

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product." Internally, the editorial team was never conflated with the product. This fact yielded a tug of war between the sides, with the content team always making requests for features or tweaks to help them do their job but helpless to actually enforce those requests get prioritized by the PMs or built to their satisfaction by the engineers. It was during the summer of my internship (2016) that the UX researchers first attended the quarterly planning meeting and the team readily extended the invitation.

product; it did also foster a sense of linked fate and ownership. To management, I suspect it signaled an engineer was especially valuable when he performed well wherever he was needed. However, on a day-to-day basis, the individual engineers describe eagerness to return to their own team, with its familiar infrastructure and code base, language and rituals. In the summer of 2018, I was attending the daily stand up meetings of the Fantasy Mobile team. One iOS engineer, Chad, worked remotely and dialed in to the standup every day. He was "loaned out" to a separate app — the Sports app — to provide additional support in advance of Football season 2018. It was several days into his new assignment when his manager, Nima, said, "Chad you know, while you're on the Sports app you don't have to attend our standup." Chad, usually very reserved, uncharacteristically let out a laugh and said, "oh, yeah. I guess I should attend their standup then" before hanging up. Despite doing work for the Sports app team, Chad viewed himself as a member of the mobile team at the core.

In fact, when I asked Nima what his least favorite part of his job was, the emotional labor of managing egos while sharing "resources" — resources being his team members — was the first thing he mentioned. He describes how it was a surprising part of his role, as well as a draining one: "I wouldn't expect it. There's lots of egos and emotions and stuff and people looking out for themselves. I'm not that mentality. When something [else] is the priority, I send my team's resources to other teams and I try to keep them happy. And I bribe them at times and go, 'I'll take you out for a drink. I'll take care of you guys. I owe you for this. Thank you for doing me a favor.'" Nima, as a manager, is aware that the different teams share a linked fate in which honoring organizational priorities, which are set from the top-down, are good for every member of each team. That is to say, while the

teams operate side by side, they have a shared goal which is to make the Fantasy Sports product the best it can be. Sharing resources is good for the product, and a top-notch product assures the development teams their own continued high-status position within the company and frankly, job security, and thus moments like this reinforce their mutual benefit. From his work on the ground, he knows from experience that breaching the boundaries of their tight knit community of mobile fantasy engineers by outsourcing teammates can be bad for morale, but in the interest of upholding the boundaries of the larger organizational group it is not optional. As such, he reinforces their identity as mobile engineers by entreating them with promises of activities that reify that tie to the group: going out for a drink with their manager, or being able to work on a fun (called a "Thank You", indicating it is a just-because enhancement for users) feature, which the mobile team loves to try to integrate whenever they have extra bandwidth or resources beyond "keeping the lights on" (product maintenance).

Though Nima refers to this as a bribe, it is a savvy exchange that is not only good for his own team, it benefits the individual developers to participate in this exchange: they get familiarity with different code bases (making them more valuable as a flexible resource who can help on multiple projects and products), get increased visibility, and are seen as a team player. This, to my understanding, is considered and valued when the time comes to review individuals for promotion. Internally (within one's home team) it is experienced as a necessary part of the job and being part of a larger team and organization. In this way it both extends the boundaries of who is considered part of the team (I.e., the entirety of the sports org with their shared goals despite distinct platforms or products) as well as contracts it (by highlighting the temporary loss of a core member of a small team). This outsourcing

reflects back on Nima – often known to be steadfast in his particular way of running his team (for example, will not run a project without daily standups, is very passionate about his vision/planning for the product) as more of a "team player" than may be expected. It is one way to enact commitment to the good of the org, respecting larger goals than one's individual product team. Because his team is known for being especially good (and quick) despite being an undersized team for much of my time there, his willingness to outsource *his guys* was an important and impactful expression of his commitment to the org.

Conclusion

Taken together, chapter five has zoomed out of the specifics of ritual production of time (Chapter 3) or rules and roles (chapter 4) and in doing so dug into what those communities actually look like and mean to their participants. We hear from users and developers in their own words what it is to be part of these groups. They focus on how they *love* to play and how it is an important part of how they interact with their friends and families and colleagues. Being *part* of the community is meaningful, but access and inclusion sometimes feels limited. Here, I also discuss how gender relates to membership and how the concept of a "core" of the team applies to the users and developers alike. I also reflected on my own membership in these groups, and considered how different features of my biography—including research skillset, interest and general knowledge about sports, and team orientation of eager participation and reliability – led to being considered a part of the team. This inclusion greatly facilitated my access to the teams of developers and the communities of users, increased the value and impact of my research, and contributed to the qualitatively felt joy and satisfaction I felt while embedded as a participant observer and fellow teammate.

Chapter 6: Conclusion

In this project I have attempted to answer the question, "why are people so committed to their Fantasy Sports league?" and have suggested that a complete answer to this question necessitates a look at the rituals involved not just among the users but also among those who build the game. Though I have not ventured to demonstrate causality, I have emphasized the ways that the users' experience has strong similarities to the organizational and experiential structure of the men and women behind the screen. This looks like a similar cadence that organizes their time, with episodic co-presence with its emotional requirements and supplemented by mundane and asynchronous work between the routinized fun. It involves having both formal roles and rules to organize norms and expectations supplemented by informal behaviors and practices that deepen commitment to and affect for the group – and improvising whichever of those that are not built into the existing structure. It also looks like having a core part of a team, the subset of people who are most densely tied to and integrated into the community or group. Though participation in Fantasy Sports can be just a minute a day or merely a job, for most people it becomes a meaningful part of their social world. Why would people take a fun, leisure activity and add infrastructures to social relationships? Fantasy Sports strikes the right balance of low emotional requirement with a high emotional benefit through the unique combination of rituals, shared temporality, rules and roles. As a community of mostly men, this style of shared focus and (digitally) shoulder-to-shoulder rather than face-to-face interaction may be especially amenable to the maintenance of durable ties.

Durkheim wrote that "god and society are one of the same…the god of the clan…can be none other than the clan itself." For Durkheim, ritual and religion amplify and reflect back to a society their values, beliefs and orientations. The sacred is a representation of the practices and rituals of a group." Taking up the questions and tools set forth by Durkheim in the seminal work of the Sociology of Religion, more recent scholars of religion have taken up the study of religion as behaviors and practices beyond the strict definitions of orthodoxy and traditional religious spaces. Edgell explains, "a core task for the sociological study of religion is analyzing the empirical variation in practices oriented to sacralization, the institutions (religious and other) that facilitate such practices, and the resulting religious experiences and moral orders that emerge in specific times and places (Edgell 2012). What this dissertation has aimed to do is apply this framework to a new set of field sites firmly planted in the digital world. Understanding the practices and rituals of the social groups invested in the play and production of Fantasy Sports is made sacred – that is to say, set apart and overlaid with an affective meaning – through those very actions. I have aimed to, first, draw new insights from existing frameworks and rich empirical sites, and second, to extend the conversation in the subfields of the sociology of religion and science and technology studies such that the two newly-extended endpoints meet. At this junction of the two conversations is the potential for analytical insights and impact where each field can learn from the other. Methodologically, I make two related contributions around the research role.

My goal has been is to learn from the lens of the sociology of religion's[33] concept of ritual by considering it in hand with a field site that seems removed from the pews and

[33] Additionally, just as the laity and clergy of a church do not have the same day to day or lived experience of their shared community, they remain inexorably linked. That is to say, they exist in

pulpits, and to then demonstrate the utility of such an exercise. The idea of personal meaning and identify is core to the sociology of religion and its theoretical tools and methodological approaches are especially well equipped to investigate questions of meaning, taking relationships and being in community seriously, and careful attention to group dynamics through shared focus, rituals, and processes. While shared focus, rituals and processes are studied in different ways by STS and organizational theory, the tools and analyses are distinct. In other fields, there tends to be an emphasis on the instrumental output of rituals, or the ways that deepening relationships benefits the organization, for example. What I have shown here is that these rituals, relationships and communities are valuable and meaningful constitutively – that is to say, they are goods in and of themselves. These friendships among Fantasy Sports players do not just improve the competitive nature of the game (though they do), they improve the lives of participants qualitatively. Sociology of religion's history of exploring communities of meaning and the layers of practices, rituals, and their affective consequences, and that orientation is what I aim to recover -- and bring to bear on a new field site -- in this dissertation.

In the chapters that precede this, I explored in extensive detail the field sites related to Fantasy Sports play — the mobile app where the game is played, the chat rooms that connect the members of Fantasy leagues, the living rooms and digital lobbies where their annual drafts take place, the engineering teams that work through dinner to ensure the

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relation to one another and in a feedback loop with one another; they in many ways depend on one another to provide the necessary context and materials for their shared focus and interest. Neither exist in a vacuum, instead, these two sides of a religious community grow together, evolve together, and help the other move towards their goals. Similarly, the developers and the full team of people who build and maintain the game work hard to hear the user needs and preferences of their users; the users give their feedback on existing features while supplementing the built product through innovations of their own. They operate in a feedback look that is mutually beneficial, though not without tensions and challenges.

release of a necessary update — with an eye towards the rituals, communities and boundaries that shape the experiences. By applying the approaches to both the users and the developers, I hope to highlight the ways that these linked groups share some traits while varying on other experiences, thereby demonstrating the utility of the lenses used for accommodating various findings and analyses.

The engineers and product team would not be sustainable – with their salaries, perks, expensive travel and quarterly trips – without a loyal user base that is committed to keeping their leagues' housed on the same site, with the communities both durable and engaged, both features that help generate ad-based revenue and valuable corporate sponsorships. For users, without a game that evolves with them to meet real user needs and expressed and hypothetical preferences, there is little incentive to stay on the same site rather than migrate to competitor sites. Beyond this functional purpose, over my years of collecting data for the Yahoo Fantasy Sports team, hundreds of users took the time to write into their survey responses comments expressing sincere gratitude that Yahoo's team was taking the time and interest to listen to their users, to solicit feedback to invest back into the community of users. That is, many users found the ability to give feedback as an indication of where the Fantasy users' and developers' communities intersect to reflect their shared investment and participation in the *same* community.

In my embedded role as a UX researcher, I sat at precisely the place in the network that this feedback loop was made most visible. It was not only through UX feedback that users communicated their behaviors and preferences with the product team; the developers were attuned to actual log or usage data, and the customer care team handled customer service requests and the app stores (iTunes and the Google Play Store). However, by

engaging with both sides of the screen in-depth and long-term, I am uniquely poised to consider these groups in conversation with one another. Additionally, I propose that this model of scholarship which involves the researcher embedded in the role of UX research is a fruitful approach for social scientists to partner with new and exciting field sites and leverage this positionality to better understand the full range of actors related to a technosocial, digital, or social artifact.

The dissertation begins with a pair of theoretical and descriptive chapters. In the first chapter, I introduced the context and field sites that will be unpacked throughout the successive chapters. Like the rest of the project, I first introduce information about the users' experience and then pivot to data about and describing the team of developers and their auxiliary teams (such as designers, product, marketing, etc.). Chapter two introduced the theoretical approaches and considerations core to the sociology of religion, including their more contemporary applications and case studies. I also briefly discussed how the theoretical approaches that might be more obvious lenses for my field site, for example those in the sociological study of science and technology, might approach this same data. This framing is intended to elucidate the analytical exercise that I undertook in this dissertation: applying a known set of theoretical tools to an unexpected field site, thereby extending the utility of that theoretical lens and adding new insights to the conversation of both the subfields of the sociology of religion and science and technology studies. The second of the pair of introductory chapters also described the methods used during the two years using a variety of sociological methods: interviews, large scale surveys, participant observation and ethnographic embeddedness. By providing a descriptive overview of the

data, chapter two set the context, key terms and characters for the empirical discussions that follow.

The arguments made internal to each chapter are evidence of how the application of these lenses highlight analytically interesting tensions or findings that might not have been surfaced using more typical approaches. For example, in Chapter 3 I argue that these online communities are so durable *because* rather than *despite* the low day-to-day time investment paired with the annual cycle of the game that are tied to specific dates/times of the year become associated with returning to the community make it easier to keep up with than, say, a bowling league or fellowship group that requires set in-person participation weekly or monthly. Those more ad-hoc commitments that have higher time investment requires become easier to cut out of your schedule when you get busy with family life or move away etc. In Chapter 4, I talk about how the ways that these leagues build up additional structures and roles also help secure their durability because by distributing responsibility in an informal game creates investment and structures for community maintenance. In Ch 5, I focus on boundaries and participation in the communities, as a way to better understand the interior life of the groups and their unique features.

Chapters 3, 4 and 5 are the core substantive chapters, each of which take as their focus a concept from the Sociology of Religion and each builds upon the previous chapter. By looking at the Ritual Construction of Time (chapter 3), we explored how those involved in the Fantasy Sports platform develop, through rituals and meaningful activities, a shared sense of time that shapes their orientations to one another. I suggest that the careful attention to the way that the *meaning* and *experience* of time is constructed through social interaction is an insight made visible through the lens of sociology of religion's attenuation

to this element. Further, I suggest that it is *because of* and not *in spite of* the brevity of social interactions in the product that the communities become enduring. While this finding has been made in other subfields, this is not often a consideration by sociologists (Kaye 2006). Communities are then the subject of the following chapter. How, through rituals, do these groups of individuals become socially meaningful groups with their own hierarchies, rules, roles, and values? By focusing on the ritual construction of community, I highlight how the internal logics and roles of formal (workplace) and informal (leisure) groups can help us understand broader dynamics about the communities. Finally, I turn to the politics of meaning-making within groups, with a focus on boundaries. As users and developers internalize a sense of what is important or unique about the games they play, they project an understanding of what is good, right, fair, and important.

Despite the relatively minor stakes of Fantasy Sports play, these experiences and communities are important to many Americans, most of whom are college educated men. Their lives are enriched by their shared focus on the game and the people with whom they share the experience. This dissertation takes seriously the idea that community building and maintenance happens online, that friendship, and in particular male friendship, is a socially meaningful category, and that the sociology of religion has much to offer the emerging world of digital field sites.

First, I argued that it is both methodologically and analytically relevant to consider the hybrid ways that any community, group, or person is connected to others. Jeff Lane, in his 2019 book *The Digital Street* compellingly makes the case that online interactions and relationships that bridge online and offline socials ties have a placefulness to them; that there is a digital *space* that people – in my case, the users on the one hand and the

developers on the other– that ought to be seriously considered in any contemporary sociological study. By doing so, I was able to focus on the ways that two seemingly disparate groups of people are intertwined and considering the points of intersection. Second, I made the sociological case for participant observation from the role of being a User Experience researcher as a particularly insightful node for this sort of ethnographic research (Wyche, Magnus, and Grinter 2009). Relatedly, this position is mutually beneficial for researchers and field sites. For myself, my field site research evolved into a full-time job conducting the very sort of research I first came to Yahoo to conduct as an academic scholar.

What this suggests is the demonstrable value of social scientific research to the private sector. Many young scholars and graduate students – myself included – travail graduate studies unaware of the opportunities for researchers in the world of technology and private industry. Silicon Valley -- from the halls of an Ivy League University on the East Coast felt a world away – full to be a place brimming with jobs for engineers and data scientists but not necessarily for the skills of social scientists or qualitative researchers. What I learned occupying both worlds is that, for the men and women in jobs in Silicon Valley, graduate programs feel a world away, full of smart people with an interesting and practical skillset who are inaccessible and unapproachable. The team of people I work with at Yahoo are endlessly impressed with the research training and critical thinking demonstrated by the social scientists with whom they work. I suggest that sending sociologists into research field sites is a process that is mutually beneficial to industry and social science, regardless of whether those interns or researchers decide to remain in industry or return to the academy.

Digital ethnography integrates fieldwork on the ground and in the feeds and networks of a single set of subjects to see and compare more of what subjects say and do. By layering and contrasting these modes of field knowledge, we can elevate the quality and reliability of our data to reach stronger conclusions. In this approach, digital ethnography is neither a substitute nor an add-on to the classic method of doing fieldwork in the neighborhood. Instead, neighborhood roles and relationships carry through the communication and technologies of our subjects to extend the limits of shoe-leather fieldwork (Lane 2018: 186). This resonates with my experience; prior to beginning my fieldwork I observed that Fantasy Sports leagues bridged the IRL ("in real life") relationships that men and women entered the Fantasy world with, but reinforced those ties and galvanized the network to make those emergent communities durable. By looking at the digitally connected ties a network is made visible but one cannot fully understand it by looking at *either* the digital overlay *or* the in-person interactions that undergird them – only by bringing these together. Further, by taking a close and careful look at how the pieces of these communities fit together, like the police and legal-administrative representatives in the case of the Digital Street, one sees more than merely the sum of its parts (in Lane's case study, a questionable narrative of criminal accountability emerged). In the case of the Fantasy Sports communities, what became perspicuous was, first, the way that the two sides of the screen interfaced in meaningful ways. It became important to not only understand the ways that meaning was made and interpreted by the people who were creating the platform the users were interpreting.

Increasingly, sociologists are finding that contemporary social life *cannot* be fully understood without the consideration of the networked ways that people are connected. In

this study, that yielded a methodological approach of careful analysis of both the users and developers of a single artifact. In other studies, that might look like taking seriously teen's friendships online (boyd 2014; Boyd and Ellison 2007; Lane 2014), networked workplace communication or surveillance (Levy 2015, 2014; Schwartz 2018; Vertesi 2015), the legal and justice systems (Brayne 2015; Lane 2018) and more. Many sociology-adjacent fields are currently doing this well and it is an important reality to which we ought to remain attuned.

Relatedly, I have operated as a sociologist embedded as an ethnographer in the role of UX researcher, which I propose is a methodologically strategic and insightful node of the network with advantages for looking at what I have called both sides of the screen. As a User Experience researcher, social scientists are well equipped to put to practice the many research and critical thinking skills we are trained to use in graduate school and positioning oneself to see not just both sides of the screen individually but the very loci in which they intersect, and where the feedback loops close or re-circulate. It also helps highlight the people-centered experiences of digital life. While the voluntary leisure game of Fantasy Sports hosted on Yahoo is a free game, it is expensive to maintain and relies on revenue driven by users. The dominant paradigm for driving revenue for free services and sites is designing for maximum time spent – *Addiction by Design* offers a detailed exploration of the ways that gaming spaces use design to manipulate behavior for maximum short- and long-term fiscal gain (Schull 2014). In the cases outlined above, we saw how a company and its users worked towards the shared goal of improving a product that is meaningful to both sides of the screen. While the engineering and product teams were mindful and driven by business and financial decisions, they were committed to building long term investment

and engagement while facilitating the small, quotidian rituals that kept users engaged daily but, more importantly, over the course of a decade.

This dissertation research has shown that community building and meaning-making can be established through rituals of many forms, including those that are primarily digitally mediated despite most theoretical and empirical studies suggesting that emotional energy and co-location are the main requirements for the sort of community building. In this exercise in considering these two conversations together, I (Ch. 3) identify a novel consideration of time that is practical for those interested in sustaining communities, online, analog or some hybrid of the two; (Ch. 4) consider how variations in infrastructure and formality relate to (and reach each member of) the community; and (in Ch. 5) think critically about how boundaries and membership are established and maintained through ritual, with a focus on the lens of gender. These areas of emergent community and tensions were brought into focus using the lens of Sociology of Religion, through attenuation to ritual, shared practices, and a sense of meaning and order through relationships and routine.

When we consider these different threads that have run through in this thesis – religion as a framework of thinking of the *site* where community happens, using technology studies as a way to leverage that expertise in and knowledge about how and why to study digital sites, and considering masculinities and the culture of technology firms – my hope is that they sit together to elucidate the meaningful ways that these digital sites overlay "real life" relationships, the ways that the community is a focal part of peoples' lives despite (and *because of*) the constraints on time spent and minimum emotional invested required, and the ways that the community of the users and the developers are in communication and communion with one another.

As a case study in a specific field site based in the world of technology and digital communities, this project has aimed to shed light on what is unique and interesting in the specific time and place of the world of Fantasy Sports from 2016 through 2018. Additionally, I have aimed to draw out points of generalizability – for example, what an evolving technology culture looks like, how products with minimum daily time commitment can actually command *more* time in the long run. I also put forth and applied the new concept of *ambient* masculinity, which sits in contrast to other discussions of masculinity such as toxic or hegemonic masculinities. I expect that this idea is relevant to a range of field sites, from science and academia to sports and leisure to finance and organizations and beyond. Finally, I have aimed to make a small contribution to the export problem of the Sociology of Religion by applying some approaches from that subfield to an unexpected field site – online communities – and used that lens to unearth insights about ways that people connect, make meaning, and set apart the rituals of their own localized communities (despite, often, a dearth of co-location) to come to identify on a visceral level as a Fantasy Sports player or developer.

Fantasy Sports, as a community, is well equipped to meet the emotional lives of participants where they are. Part of the draw, especially as an ambiently or overwhelmingly male pastime, of the game to users is the low time and emotional requirement to participate. My large-scale survey suggests that many of these users are involved in other communities – churches, families, recreational sports, etc. – that may be meeting their needs to engage on that level. However, the men and women I feature in this dissertation often relate their experiences playing Fantasy Sports to these other, more typically meaningful experiences: draft day is like a holiday, or a family reunion, they say. For Fantasy Sports players, I find

that what is meaningful manifests in a way distinct from religion but those differences enhance, rather than diminish, the experience. By applying a traditional concept from the sociology of religion – ritual – I help foreground a way to understand meaningful activities that are both new and unexpected places of intense emotional and social action. Existing ways of understanding online communities or digital spaces, when combined with the analytical lens of ritual, helps us see how existing ways of understanding meaningful or religious activities can fail to capture those who might not have the time or interest in developing and sustaining time intensive relationships through traditional means, such as a bowling league, to use a canonical example.

Though Fantasy Sports is a fun pastime and pastime on the one hand, and a fun and high-status product to work on the other hand, it has what could be considered an outsized level of meaning to the users and developers invested in the game. In this dissertation, I have outlined some features of Fantasy Sports that facilitate this sense of meaning and connection. This is a study of Fantasy Sports, but Fantasy Sports is a part of a broader phenomenon of online community building. In the same vein as, other recent studies of hybrid digital-and-analog contexts the argument is that observers of contemporary social life cannot truly understand social groups in 2019 without taking a careful look at how they exist online simultaneously and in parallel to in person modes of existing. In the dual cases I have contributed to this conversation, both the users and developers are groups that exist interactionally in a hybrid analog and online way. For the developers, they are interacting continuously – and often simultaneously – through online channels such as CorpChat and asynchronous work tools – while also conversing in person at their desks.) Users, similarly, often start their league with one or more in-person tie (modally, to the commissioner) and

when their relationship becomes digitally overlaid by the Fantasy Sports infrastructure, their relationship is moderated and maintained routinely through chat, asynchronous play, and a shared focus on an external online set of data.

I have outlined ways to look at such groups analytically and systematically while also contributing ways of understanding them. By using the lens of ritual, I have tried to highlight one way to do that analytical work and, substantively, what we might find when we look there. I found that, for Fantasy Sports workers and users, three experiences that apply to each group – a shared and ritually produced sense of time, the ritually enacted and rules and roles, and boundaries – combine to make these groups especially durable and meaningful to participants. They have in-real-life ritual touchstones that are emotionally charged, but are then extended beyond those moments through digitally mediated interactions. Each side benefits from ties to parts of the external calendar, with predictability and external accountability. In short, the process of engaging in a digital shoulder-to-shoulder activity has become incredibly meaningful to the millions of people who play Fantasy Sports and the dozens of men and women who support that game play through their work. This work has taken seriously these feelings and relationships and, I hope, demonstrated the immense social and relational value of this game-within-a-game for my readers.

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