

Managing Organizational Culture in Online Group Mergers

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Research in social computing has typically conceptualized community growth as a process through which a group welcomes newcomers individually. However, online communities also grow through formal and informal mergers, where groups of newcomers with shared experiences join in batches. To understand this process, we conducted a six month, comparative ethnography of two mergers of *World of Warcraft* raid guilds. While one merger led to a single, thriving community, the other led to the dissolution of both pre-merger groups. Analysis of our ethnographic data suggests that differences in managing organizational culture (a concept drawn from organization studies) led the successful and failed cases to diverge. The study contributes to our understanding of why some attempts to integrate members of different communities are more successful than others. We outline several ways that community leaders, researchers, and designers can effectively take organizational culture into account.

CCS Concepts: • **Human-centered computing** → **Ethnographic studies; Empirical studies in collaborative and social computing**; *Computer supported cooperative work*;

Keywords: organizational mergers; organizational culture; guilds; virtual worlds; newcomer socialization; online communities; social computing and social navigation; computer-mediated communication; World of Warcraft

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1 INTRODUCTION

Influenced by industrial and organizational psychology, social computing research has typically approached the creation and growth of new communities as a task of attracting and socializing newcomers individually [22]. In practice, however, online community growth can often look quite different, as groups may draw in newcomers with deep experience from other communities who arrive together in batches. In mergers, both formal and informal ways, communities may grow by merging with other communities. These groups of newcomers share a history of experiences, familiar patterns of interaction with each other, and assumptions about how effective online communities should be managed, organized, and led. If unmanaged, differences between sub-groups within a post-merger community can lead to instability, conflict, attrition, and even collapse.

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In studies of the mergers of firms, differences in organizational culture between pre-merger groups can lead to conflict, discontent among members, and reductions in team performance [18, 30, 37]. Given the importance of culture and the existence of mergers in online groups and communities, we would expect culture to matter when two or more online groups come together as well. However, we know of no work that has studied group culture and mergers in online groups. Because firms and virtual groups differ in terms of incentives, obligations, resources to resolve problems, and more, we understand little about the process of online group mergers and the way that online group leaders should manage them.

Drawing from a six-month ethnography of two pairs of similar *World of Warcraft* raid guilds that were planning and undergoing mergers, we describe how one merger resulted in a single, thriving community, while another failed and led to the dissolution of both pre-merger groups. Supported by analysis of our field notes, interviews, other data, and theory, we show that organizational culture played a critical role in the individuals' ability to participate effectively within the merged groups. We show how the mergers destabilized organizational cultures and how the participants in the successful merger strategically selected each other, engaged in intentional socialization across the groups, and cultivated solidarity to produce a new, stabilized organizational culture.

Our results illustrate the importance of organizational culture for the design and management of online groups. In particular, we expand the existing literature on newcomer socialization in social computing by demonstrating how this concept entails collective dimensions that go beyond the emphasis of prior work on newcomers as individuals. Our findings also build on previous studies of *World of Warcraft* raid guilds by showing the consequences of guild cultures and cultural conflicts on guild survival and performance. We argue that leaders of online communities, as well as future social computing research and design, should attend to organizational culture and its role in shaping the outcomes of cooperative work and play.

2 BACKGROUND AND THEORY

2.1 Newcomer Socialization

Newcomer socialization has been one of the most important topics in research into online communities [9, 22]. This work has relied heavily on a distinction between collective, *institutionalized* practices of socialization and on-the-job, *individualized* socialization [36]. In particular, researchers studying online communities have sought to evaluate the relevant effectiveness of the two different socialization tactics in different online contexts [22]. With their roots in organizational studies, the goal of both institutionalized and individualized socialization techniques has been to support the effective integration of new employees at firms who, typically, are hired one-by-one. Although classic examples of institutionalized socialization might involve the simultaneous integration of many newcomers, the process is still fundamentally conceived of as integrating individuals who enter without strong connections to each other, the organization they are joining, or prior collective identities.

Newcomers to traditional organizations can arrive in groups that have been socialized together—for example, through an acquisition of one company by another. This also happens in social computing environments when members of one community merge with or join another group [34]. Unlike both institutionalized and individualized socialization, this process requires navigating two distinct *organizational cultures* within the merged group. Although this process has been studied in organization science [6, 18], this model of newcomer socialization has received very little attention in studies of online communities.

2.2 Organizational Mergers and Culture

Organizational researchers have acknowledged organizational culture as playing an important role in determining the success of mergers. In particular, scholars have suggested that the leaders' ability to consider issues of cultural compatibility when considering mergers and acquisitions, and their ability to manage cultural differences during integration, influences the newcomers' abilities to integrate into new groups as well as their post-merger performance [18, 29, 30, 37]. Studies of the role of culture in mergers have largely focused on firms and major corporations [6, 29, 30, 35, 37].

We build on this prior work and borrow the concept of *organizational culture* from Edgar Schein as the framework for our analysis of organizational mergers. Defined by Schein [30], organizational culture describes:

A pattern of shared, basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.

In Schein's framework, organizational culture has three layers: a top layer with tangible indicators of norms and values called *artifacts*, a middle layer of espoused beliefs that define the unwritten norms and expectations of behavior, and finally, an underlying layer of *common sense* basic assumptions for guiding the group's everyday operations [30]. Schein saw group cultures as a "...common language of shared assumptions about the basic logistical operations..." that groups used to move from missions to accomplished goals. In this sense, organizational culture is a mental model for *what has worked in the past* and *how things should be going forward*. A culture's stability within a group depends on its success in achieving the group's goals. Schein argues that analyzing a group's culture at the level of shared basic assumptions allows for a better, more precise understanding for how groups should manage conflict and change [29]. For leaders of merging firms, understanding this deeper level of one's organizational culture allows for greater insight into how to manage potential incompatibilities.

Prior social computing research has addressed many dimensions of culture within online communities. For example, Levina and Arriaga [23] used Pierre Bourdieu's theory of cultural production to explain how the different types of content producers and consumers in online fields create unique power relations over the Internet. Yang et al. [42] showed how cultural differences should be considered in the design of social search systems. Eagar et al. [16] used virtual ethnography in a comparative study of online fan communities to understand how inter-community conflict can construct social boundaries.

Scholars have also addressed dimensions of culture in online gaming communities. For example, several studies of massive, multiplayer online games (MMOGs) consider intra-group conflict and cohesion dynamics [8, 28] as well as the importance of culture for newcomer socialization and community norms [22]. That said, few studies have considered the impact of cultural variation across online groups. Although very recent work by Tan [34] has shown that online groups frequently include a large number of members with shared experience in antecedent groups, the dynamics or effects of mergers in online groups have never been studied. Organizational culture provides a theoretical frame to help us do so.

3 EMPIRICAL SETTING

3.1 World of Warcraft Raid Guilds

MMOGs have provided ideal settings for social computing researchers to study phenomena related to organization, human-computer interaction, and computer-supported cooperative work [2, 12, 15, 25, 38]. Of particular interest has been *World of Warcraft* (WoW). Launched in 2004 by Blizzard



Fig. 1. A screen capture of the lead author’s WoW interface during a failed encounter with a raid boss, Fallen Avatar, in the *Tomb of Sargeras* raid on *Heroic* difficulty. The 13 rectangles at the center-bottom of the screen represented the status of all of the members on the raid team. Because all 12 of the members have the “Dead” status and the raid boss is still alive, this would be considered a *wipe*.

Entertainment, WoW continues to be one of the most widely-played MMOGs with millions of active players [41]. In WoW, players create and control avatars that exist in the game’s virtual world. A player’s character increases in power by collecting experience from activities, like slaying monsters and completing quests. The most powerful player characters can engage in *raiding*, the game’s most challenging and rewarding activity.

Raids are private instances of the game world set within a dungeon, in which the game’s most powerful monsters, called “raid bosses,” defend against the player characters. Player characters must join formal groups ranging between 10 to 30 other players to successfully defeat raid bosses. Raid bosses hold the game’s most sought after items, which are distributed to players as “loot” if the raid is successful. These digital items, like the *Robe of Aqueous Command* or the *Gauntlets of Spiteful Haunting*, increase the power of player characters who possess them by giving them statistical advantages in future combat. Raids “reset” weekly, restoring all raid bosses to life along with new random selections of loot. This arrangement provides an incentive for players to try again each week, even once they have been successful. WoW releases increasingly challenging game content over time, in a series of *tiers*. For example, in January 2017, WoW released a patch containing the *Nighthold* tier of raid content. In June 2017, the game added the *Tomb of Sargeras* raid tier that included a more difficult raid with a new series of raid bosses. Raids can be attempted at several difficulty levels: *Normal*, *Heroic*, or *Mythic*, as well as a special *Raid Finder* difficulty that can only be accessed using the game’s *Raid Finder*¹ system.

Encounters with a raid boss typically last for 5 minutes, although more difficult bosses may last longer. A completely successful raid boss encounter results in the raid boss being killed while every player character in the group is still alive. A failure scenario results in a “wipe”—the defeat of the entire group of player characters before they have dealt enough damage to the raid boss to defeat it, as shown in Figure 1.

¹Raid Finder is an in-game tool that matches players with others seeking to complete a specific raid.

As is common in many MMOGs, WoW players join together in formal groups called *guilds* to organize and schedule recurring activities [24, 38]. Guilds in WoW are formed by a single player, the *Guild Master*, who is afforded special privileges by the game to manage and organize the guild's bank (a shared digital space for storing virtual items) as well as a group calendar, in-game chat channel, and an informational dashboard. The Guild Master is afforded considerable power over their guild community: they may invite other members, assign ranks with corresponding privileges, and can even disband the guild entirely. Guilds can consist of up to 1000 members, although most guilds in WoW consist of 35 or fewer [15].

Most raiding guilds are focused on *progression*—a term used to describe the number of raid bosses that a guild has defeated in the game's most recent raid tier [3]. Raid guilds typically schedule raid activities geared toward progression for several hours at a time, multiple times per week. Because the game limits the size of raid groups to 30 players, raid guilds with more than 30 members select players for their raid team. This choice is usually made on the player's character's level, power as derived from their gear, and whether the character specializes in a role that fits within the raid team's composition.

Raid guilds are categorized by players in an unofficial typology: *hardcore*, *medium-core*, and *casual* [3, 10]. Hardcore raid guilds prioritize progression raiding over all other activities and compare their progress to other hardcore raid guilds [3]. Hardcore raid guilds primarily take on the game's hardest difficulty, *Mythic*, which requires exactly 20 members on a raid team. Progression in medium-core raid guilds usually takes place within *Heroic* difficulty raids, which require between 10 to 30 raid team members. Medium-core raid guilds are the most common type of raid guild and they are often more socially-oriented than hardcore guilds. Casual raid guilds usually consist of friends who take on the easier, *Normal* difficulty raids. These guilds are typically socially-oriented with very few in-game goals.

3.2 Studying Organizational Culture in WoW Raid Guilds

WoW raid guilds are a popular laboratory setting for studying teams and organizations in social computing research. A large body of research on guilds has studied member recruitment and retention, group stability, group dynamics, social dynamics, structural organization, and community [1, 3, 10, 14, 15, 24, 27, 32, 38]. Although none of this work has engaged with literature on organizational culture, some have described different patterns of group dynamics across guilds, hinting at cultural differences. For example, Choi et al. [10] differentiate guilds as either “task-oriented” or “social-oriented”; Bardzell et al. [3] categorize raid guilds as engaged in either “farm progression raiding” or “achievement progression raiding”; and Williams et al. [38] suggest that raid guilds are socially organized like military “barracks” or social “tree house” play spaces. Our study extends this line of research by using organizational culture to understand how guilds with similar social structures face challenges of integration and socialization.

Research has shown that many factors can feed attrition and lead to the collapse of even solidly established guilds [28]. Because raid guilds require some number of participants to continue, and because guilds may struggle to attract and retain members, guilds with too few members seek mergers as a way of avoiding collapse [38]. These mergers are frequently the source of conflict. For example, Williams observed that guild mergers were “...as contentious as any real world corporate-merger...” and usually resulted in conflicts over management style that were referred to by his informants as “culture shock” [38]. Although not focused on mergers, work by Chen [8] has shown how this type of intra-group conflict can also threaten the guilds' continued existence. However, neither Williams nor any other prior studies of online communities have attempted to explain why some mergers halt attrition, while other merged groups continue along a path of member attrition, often exacerbated by intra-group conflict.

4 METHODOLOGY

We pursued a six-month, comparative, ethnographic study of two pairs of WoW raiding guilds that were undergoing mergers. The two ethnographic studies were conducted separately and were sequential, but overlapping. Both cases were then analyzed together at the end of our time in the field, allowing us to develop inductive codes and reflect on how our observations related to prior literature on newcomer socialization and organizational culture in the context of online group mergers.

Although comparative or “parallel” ethnographies are rare in social computing research, they have played an important role in organizational studies [4, 20] and provide an ideal method for analyzing the impact of cultural differences across organizations. Culture scholars have emphasized the importance of ethnography for understanding the effect of culture, especially in new contexts [19, 29, 30, 38]. Ethnography is also seen as especially appropriate when investigating phenomena in virtual worlds, where engaging in the activities of games gives greater contextual sense of what is occurring [2, 5, 39]. Taking an ethnographic approach also allowed us to explore online community mergers, a previously unstudied phenomenon, in an open-ended way that captured the perspectives of participants as accurately as possible.

The lead author conducted all of the ethnographic fieldwork, attempting to follow the guidelines for ethnography of virtual worlds in Boellstorff et al.’s *Ethnography and Virtual Worlds: A Handbook of Method* as closely as possible [5]. Prior to the study, he had almost ten years of experience as a raid team member and guild leader in *WoW*, which provided him with proficient knowledge and skill for participating in the field site [5]. Guilds were recruited to our study via the official *WoW* forums from the middle of June to the first week of July in 2017. Because we sought to compare how typical guild mergers unfolded, we selected for active, medium-core progression raid guilds that had some degree of prior organization, consisted of experienced players, and expressed interest in merging with, or acquiring, other guilds. All of the guilds involved were engaged with the most difficult raid tier at the time, the *Tomb of Sargeras*. The lead author performed the recruitment and was transparent about the purpose and duration of the intended study, as well as the fact that he was willing to participate as a member of the raid team if requested. As per our IRB-approved research protocol, both guild and player names have been changed throughout to maintain the anonymity of our research subjects.

The lead author spent roughly 6 months in the field as part of this study. From June 20 through December 9, 2017, he participated in weekly raid activities with the two merged groups, using two separate characters, for an average of 10 hours per week, per group. This duration was selected to coincide with the June 20, 2017 release of the *Tomb of Sargeras*, which ended with the release of a new, more difficult raid on November 28. Additionally, he observed out-of-game interactions and discussions on the guilds’ forums and community *Discord* servers (a third-party text and voice communication platform that is popular with online game players [40]). As part of his participation in raiding activities, he used screen recording software to capture his experience. He reviewed these recordings the following day, reflected on social interactions, and took comprehensive field notes. Over the six-month period, he produced 120 pages of field notes, capturing these reflections. He also collected and transcribed roughly 8 hours of semi-structured, open-ended interviews with guild leaders and members in the periods after their mergers. Finally, we collected quantitative data on raid group attendance from the third-party application *WarcraftLogs*² for all of the guilds involved in the study over the period of field work.

Our analytic methods involved iteratively collecting and coding data to identify theoretical concepts that are “...integrated, consistent, plausible, close to the data...” and which we could

²<https://www.warcraftlogs.com/>

Empirical Attributes	Merger A (→Sun Bros _{SD+F})		Merger B (→Divinity _{D+M})	
	Salty Dogs _{SD}	Fragment _F	Divinity _D	Mirage _M
Founded	2008	2016	2017	2016
Progression raid nights per week	2	2	2	2
Highest raid experience	Heroic	Heroic	Mythic	Mythic
Total active and inactive members	88	82	44	?
Raid team size before merger	11	15	16	13
Progression in January 2017 raid tier	10/10	10/10	10/10	10/10
Theoretical Attributes				
Progression style	Farm	Farm	Achievement	Achievement
Goal orientation	Task / Social	Task / Social	Task	Task / Social
Social organization	Tree House	Tree House	Barracks	Barracks

Table 1. Features of the four pre-merger guilds in our case studies along dimensions frequently used by players to describe raid guilds in WoW, as well as theoretical attributes based on past guild research: progression style [3]; goal orientation [10]; and social organization [38]. Because of the way it was disbanded, information on Mirage_M's pre-merger membership was unavailable through WoW's public application programming interface (API).

operationalize for further testing [17]. Our analysis proceeded by first inductively coding the field notes and interviews. Most of our attention was drawn to the social interactions between the players and members of the guilds. This process revealed distinct social norms within the groups in both merger cases. As we iteratively coded our data, we incorporated sensitizing codes derived from theory [7] on organizational culture, while continuing to generate new inductive codes as well. Ultimately, our codes influenced a series of memos produced by the lead author that were discussed by the entire team and iterated on repeatedly. The findings below are derived from these memos and address the empirical puzzle that emerged through the course of the fieldwork: why did one of the two mergers result in a thriving, successful community while the other resulted in complete collapse?

5 ETHNOGRAPHIC CASE STUDIES

The two mergers and four guilds included in this analysis are described in the rest of this section. Features of the groups are listed in Table 1 and focus on *empirical* attributes used by players to describe raid guilds in WoW as well as *theoretical* attributes of guilds we identified as salient in previous research. Within each merger, the guilds were similar to each other in most of these ways. As a result, we had no reason to suspect that either guild merger would result in success or failure when we entered the field. For clarity, we use the following subscript and color-coding system to denote the guilds involved in our two merger case studies:

Merger A: Salty Dogs_{SD} + Fragment_F → Sun Bros_{SD+F}

Merger B: Divinity_D + Mirage_M → Divinity_{D+M}

5.1 Merger A: Salty Dogs_{SD} + Fragment_F → Sun Bros_{SD+F}

Salty Dogs_{SD} was a medium-core progression raid guild founded in 2008. They were highly organized and used a community website for announcements as well as a *Discord* server for voice-based communication outside of WoW. They used formal organizational processes, such as a detailed application process for new members, and a system for dividing loot, in which players bid for loot

from raid bosses using a point system maintained by the guild leader in an external spreadsheet. Players in Salty Dogs_{SD} fell into one of two categories: raid team members, who participated in the weekly scheduled raid activities, and social members who participated only in the guild's community but not in its formal raids. Salty Dogs_{SD} members shared strong social bonds outside of the game, often playing other games together like *Elder Scrolls Online* and casually socializing about their daily lives on their *Discord* server and guild website. By September, 2017, attrition had reduced Salty Dogs_{SD} to only 11 raid team members.

Fragment_F was established in September 2016 as a progression raid guild to take on the *Heroic* difficulty raid bosses in the game's most recent expansion. Only a few weeks after its formation, Fragment_F's initial Guild Master and several of his friends abandoned the guild as a result of poor performance in initial raids. Melvin, a Fragment_F member with no prior Guild Master experience, took on the leadership role, becoming the group's new Guild Master. Fragment_F found relative success in defeating raid bosses over time while also managing attrition and membership churn. By September 2017, however, Fragment_F membership had dwindled to 15 players.

To preserve the group's ability to continue raiding, Salty Dogs_{SD}' leaders sought a merger with another guild. After advertising in the official WoW forums for a merger, the Salty Dogs_{SD} leaders explored three potential guilds and eventually decided to merge with Fragment_F. Fragment_F's leader Melvin took interest in the merger request post from Salty Dogs_{SD} as a way of shoring up his own group's membership. After deciding to merge, the members of Salty Dogs_{SD} left their guild and joined Fragment_F as a group. Although the merger was understood by all parties as Salty Dogs_{SD} joining Fragment_F, the new combined guild was renamed *Sun Bros* to recognize the change.

The merger resulted in a single, thriving community. Before merging, Salty Dogs_{SD} and Fragment_F had progressed through 8 out of the 9 raid bosses in the June, 2017 raid tier at the *Heroic* level difficulty at a relatively similar pace. Both had struggled to defeat the 9th raid boss, with Salty Dogs_{SD} attempting and failing 34 times and Fragment_F attempting and failing 18 times. As a newly-merged raid team, they failed 37 more times but also succeeded in defeating the 9th raid boss 6 times in the period following the merger. In the succeeding months, attendance remained consistently at or above 20 raid team members per raid (see the top panel of Figure 2).

The lead author joined Salty Dogs_{SD} first as a casual member of the community on July 3, 2017, but later took a more active role as a member of its raid team in August. As a casual member, the lead author was permitted access to Salty Dogs' voice channel in *Discord* during their weekly, scheduled raids as well as the ability to observe one raid team member's perspective of the raid using the Twitch livestream service. The lead author was an active raid team member in the newly merged raid team from September 30 to December 9, 2017, and has remained as a casual member of the community following the study.

5.2 Merger B: Divinity_D + Mirage_M → Divinity_{D+M}

Divinity_D was a medium-core progression raid guild founded in 2017 by the group's Guild Master, Aiden, a former hardcore raider. While Divinity_D lacked a community website, it used *Discord* for voice-based communication outside of the game as well as for making announcements and some informal socializing. Divinity_D had few formal processes for applying for membership, dividing loot, or making group decisions. The players in Divinity_D were categorized as either raid team or social members, but there were very few of the latter. By mid-June, 2017, Divinity_D's raid team included only 16 members (see the bottom panel of Figure 2) prompting the need for a merger. The lead author joined Divinity_D as a member of its raid team on June 20, 2017, immediately after recruiting the guild into this study.

Mirage_M was a hardcore progression raid guild established in late 2016 to challenge the most difficult *Mythic* level raid bosses. Playing up to 3 or 4 nights per week, Mirage_M had been very

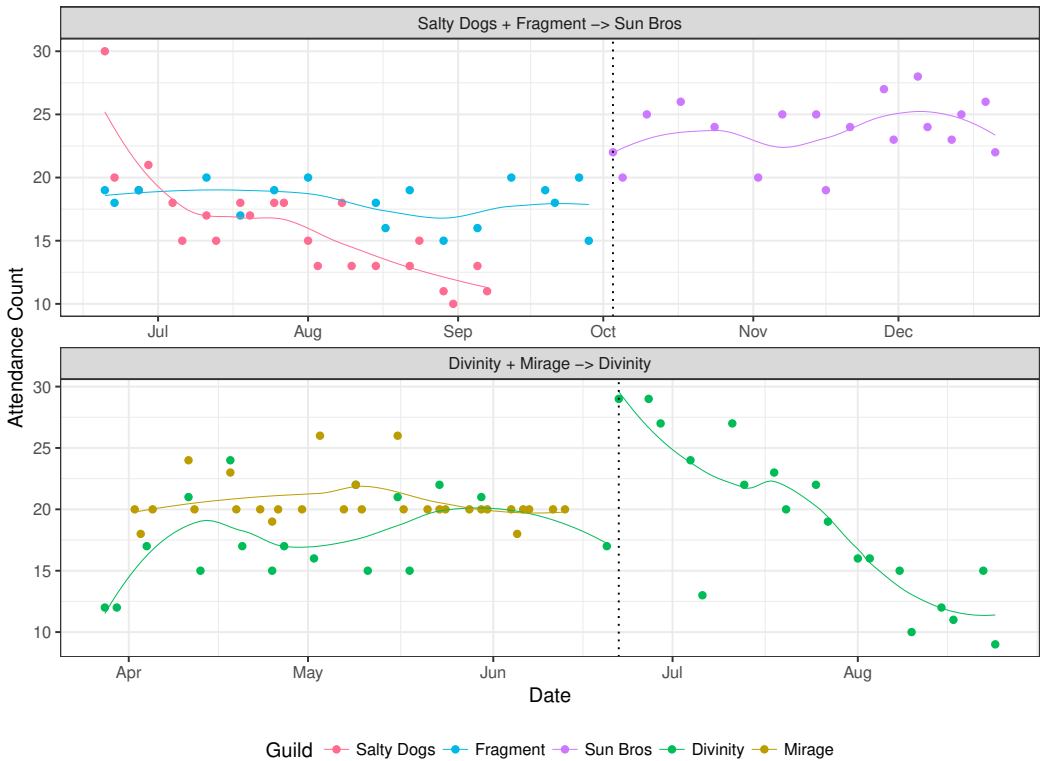


Fig. 2. Attendance in the observed guilds over six month periods around the mergers. Panels reflect the two pairs of merging guilds. Points reflect the observed attendance in each guild during raids. Colored lines reflect LOESS smoothed averages. Dashed, vertical lines reflect the point in time of the merger. Data was collected using the *Warcraft Logs* Interface Addon.

successful and defeated nearly all of the *Mythic* difficulty bosses in the January 2017 raid tier. However, after failing to defeat the last 3 *Mythic* raid bosses in the raid tier over several weeks in May, *Mirage_M* underwent a schism in which its leaders kicked 13 of its 20 raid team members out of the guild, took all of the digital resources for themselves, and then disbanded the guild completely.

The 13 ejected members of *Mirage_M* joined together under the temporary leadership of Oomkin who reached out to *Divinity_D* in hopes that Aiden, Oomkin’s in-game friend, would take in the group. Aiden agreed, and on June 22, the former *Mirage_M* members were merged into *Divinity_D*. *Divinity_D*’s leadership viewed this move as a strategic decision to better manage player churn and to fill out its depleted roster with skilled players accustomed to raiding at a higher level of difficulty and intensity.

The post-merger *Divinity_{D+M}* team progressed through the June, 2017 raid tier at a steady pace and had completed 8 out of the 9 *Heroic* difficulty raid bosses by July 24. Similar to *Sun Bros_{SD+F}*, the combined group encountered challenges on the final, most difficult raid boss, which they failed to defeat 63 times. This failure, combined with intra-group conflict, led to an attrition crisis (see the right half of the bottom panel in Figure 2). Over the following weeks, some *Divinity_{D+M}* members fled to a new raid guild while others quit the game entirely. Recruiting efforts by *Divinity_{D+M}*’s

Feature	Merger A (→Sun Bros _{SD+F})		Merger B (→Divinity _D)	
	Salty Dogs _{SD}	Fragment _F	Divinity _D	Mirage _M
Decision making	Democratic	Democratic	Top-down	Democratic
Leader-member distance	Low	Low	High	Medium
Delegation of leadership	Yes	Yes	No	Yes
Importance of community	High	High	Low	High

Table 2. Pre-existing differences and similarities of cultural assumptions that emerged from our coding process. The differences between the groups that were involved in Merger B proved consequential for the outcome of the merger.

leadership to balance the churn were unsuccessful. Divinity_{D+M} membership dipped below the minimum of 10 players and the guild disbanded by the end of August.

6 FINDINGS

When we began our field work, we saw no *ex ante* reason to expect one merger to succeed and the other to fail. After all, the guilds in each merger were empirically and theoretically similar to each other, as shown in Table 1. Both the Mirage_M and Divinity_D members were competent WoW players with years of experience in having success in defeating the game’s most difficult raid bosses. Some of the members from both groups knew each other before merging. Entering the field, we would have predicted the merger between Divinity_D and Mirage_M was more likely to be successful than the merger between Salty Dogs_{SD} and Fragment_F in large part because the players involved in the former seemed more committed to successful raiding. Given that our outcome surprised us, our analysis focused on understanding why Sun Bros_{SD+F}’s merger was more successful than Divinity_{D+M}’s.

Our analysis revealed two overarching findings. First, we found a greater cultural compatibility between the groups in Merger A (Sun Bros_{SD+F}). In the next subsection, we describe these differences in depth and explain how cultural incompatibilities led to sustained and repeated conflict in Merger B (Divinity_{D+M}). The second, more important finding focuses on the processes by which the groups managed cultural conflict. The teams involved in the successful merger used three strategies to effectively minimize and manage differences in organizational culture: (1) they took culture into account when planning their merger and strategically selected who to merge with; (2) they sought to intentionally socialize new members into their organizational culture through both formal and informal strategies; and (3) they cultivated collective solidarity by hosting informal socially-oriented group events in addition to their task-based group activities. Finally, we also found two additional factors that help to explain the outcomes of the mergers we observed: effective leadership and extensive tool use. We discuss these in a third subsection below.

6.1 Pre-existing Differences in Organizational Culture

Using Schein’s concept of organizational culture as a framework for our analysis, we produced a set of key basic assumptions shared by members of the guilds in each case to understand what differences, if any, could have produced incompatibilities in these mergers. These core cultural features, listed in Table 2, were produced in our inductive coding process. Although both mergers involved bringing together groups with distinct assumptions, interactions between members revealed much more evidence of cultural compatibility between Salty Dogs_{SD} and Fragment_F than

between Divinity_D and Mirage_M. Similarities and differences in culture reflected “common sense” assumptions about the nature of progression raid guilds and how they should be run.

Salty Dogs_{SD} and Fragment_F arrived at their merger with similar norms around group decision making. For example, when unsure about how to proceed during a scheduled raid night (such as choosing to end early or continue onto a new raid boss), raid team leaders in both guilds would issue the in-game command /readycheck to call a vote by everyone currently in the raid group. They would make decisions based on the majority’s opinion. Additionally, both of these guilds demonstrated democratic strategies for decision making outside of the game. For example, Salty Dogs_{SD}’ leaders held a group discussion on their *Discord* server with their guild members to decide which guild to merge with. Fragment_F leaders would also hold verbal discussions about the guild’s future in the guild’s *Discord* server and would use Google Forms to survey its members. In both cases, the general assumption among guild members was that decisions would involve democratic participation of both leaders and members of the community.

Salty Dogs_{SD} and Fragment_F also handled the relationship between leaders and subordinates similarly. In both groups, subordinates who consistently attended progression raid nights and volunteered to help other members were rewarded with leadership roles. In Salty Dogs_{SD}, this was the case with Aysa and Jin who, despite being relatively new to the guild, were promoted to guild leaders in August as a result of helping out and consistently attending raid nights. In Fragment_F, Smalls was promoted to a leadership role after suggesting the organizational tool *WoW Audit* to the Guild Master and helping out other members during progression raid nights. Leaders of both guilds also formed social bonds with their subordinates by playing other games together outside of progression raid nights and having informal conversations over in-game chat channels or their guild *Discord* servers. Getting to know each other and developing friendships supported a strong sense of community in these guilds. Along all of these dimensions, approaches to government, leadership, decision-making, and community importance reflected similarities in assumptions between Salty Dogs_{SD} and Fragment_F.

Although similar in many ways, the merger between Salty Dogs_{SD} and Fragment_F revealed some minor instances of resistance to change as well. For example, the different ways that Salty Dogs_{SD} and Fragment_F distributed loot during progression raids resulted in occasional moments of confusion for Salty Dogs_{SD} members, who would need guidance on how to navigate Fragment_F’s loot system. Fragment_F’s leaders helped to resolve these relatively minor structural differences.

Although it was not clear before they merged, members of Divinity_D and Mirage_M held very different assumptions along the dimensions summarized in Table 2. These differences led to sustained conflict and frustration. For example, disagreements about the appropriate relationship between leaders and members became especially pointed. While nearly defeated by a difficult raid boss, the leaders of Divinity_{D+M} called for the raid team to reset the boss encounter by giving up and letting the remaining living team members be killed. Several former Mirage_M members (still new to Divinity_{D+M}) shouted back over the voice channel to ignore the leader’s call and continue trying to defeat the boss. The remaining members successfully defeated the raid boss, but Divinity_D leaders stopped the raid to call out the insubordination. Aiden, the Guild Master, added, “Last I checked, coaches make calls and their team still follows through, even if they don’t agree.” This conflict illustrates how Divinity_D’s assumptions about appropriate leader-subordinate interactions differed from Mirage_M’s.

Other conflicts arose over group decision-making. For example, during one night in which the raid team was struggling, once again, to defeat the same boss, Locke and Fizz, two Mirage_M members, summarily quit. Locke left a departure message in the guild’s *Discord* server lamenting the new guild’s leadership style:

I also feel like this guild is not built as most should be, there is a lot of awkward tension and voices are not being heard and even worse, opinions are not being openly voiced—makes for a very uncomfortable situation ...There is a lot of decisions that are made without a proper organized and democratic system which makes some people feel abandoned or useless for lack of better terms—I understand that may be how yall do things but regardless I no longer wish to be apart of it all.

In follow up interviews, Divinity_{D+M}'s Guild Master Aiden revealed that he felt that Locke's criticism was invalid. Aiden argued that making decisions as a group is inefficient, saying, "I've yet to see a guild that works democratically," and, "You don't want to slow the raid down by making it democratic." Other members of the Divinity_D group expressed a preference for "militaristic" and "competitive" leadership styles, which they attributed to successful participation in hardcore guilds in the past. Aiden compared leading a raid guild to his experiences managing a business in the real world. Hector, another Divinity_D leader, compared raid leading to his experience directing a music group at his university. The Divinity_D members assumed that effective guild leadership involved investing leaders with power over their subordinates and authority to make decisions for the group.

On the other hand, Mirage_M was used to progression raiding as both an organized team as well as a community of friends who all participated in group decision-making. In the moments before progression raid nights would begin, Mirage_M members would often reminisce about their past experiences playing WoW together. After raids, Mirage_M members would sometimes play other games together while socializing over the guild's *Discord* voice channels. During an interview, Oomkin, Mirage_M's unofficial leader, stressed community-oriented values of feeling like a team in a raid guild and expressed an assumption that guild leaders should be "...making sure that everyone is equal and represented properly..." The misalignment between these expectations and the norms in Divinity_{D+M} remained unresolved.

6.2 Strategies for Merging Organizational Cultures

Although pre-merger cultural (in)compatibility can partially explain Sun Bros_{SD+F}'s successful merger and Divinity_{D+M}'s failure, post-merger group actions shaped the merger outcomes at least as much. Sun Bros_{SD+F} effectively employed several techniques to recognize, mitigate, and manage differences in organizational culture. These techniques included (1) strategic selection, (2) intentional socialization, and (3) cultivating solidarity to retain new and existing members.

6.2.1 Strategic Selection: Considering Culture When Deciding to Merge. Perhaps the most effective strategy that Sun Bros_{SD+F} used to minimize cultural conflict was to pay careful attention to issues of organizational culture when selecting potential partners for their merger. This supports Schein's claim that leaders involved in successful mergers critically consider organizational culture in the process [30]. After publicly posting on WoW forums about the desire for a merger, Salty Dogs_{SD}' members engaged in a week-long back and forth process with three guilds: Next Week, Memory Loss, and Fragment_F. In each case, Salty Dogs_{SD} engaged in raid activities with the group to assess potential incompatibilities and synergies. Once the Salty Dogs_{SD} leaders finished these trial raids, they held a group-wide discussion on their *Discord* server to discuss the three potential merge partners. One prospective guild, Next Week, was reported to be behind Salty Dogs_{SD} in their progression through the June, 2017 raid tier. Additionally, one of the Salty Dogs_{SD} guild leaders, Aysa, reported a more social incompatibility with Next Week, saying, "...it's just that their attitude—they had a much more...a much more immature, much more crude, attitude..."

The second potential guild, Memory Loss, had progressed much further in the June, 2017 raid tier than Salty Dogs_{SD} and was already restructuring into a hardcore raid guild to progress to *Mythic*

raid difficulty. Because succeeding at this higher level of difficulty requires intense discipline and commitment to the raid team, hardcore raid guilds typically have a more regimented organizational style [38]. Cheesy, a Salty Dogs_{SD} member participating in the guild merger discussion, noted the incompatibilities they would face with both Next Week and Memory Loss, both of which were at different stages in their raid progression and difficulty level:

We're not going half way back down [in progression to] like 5/9 [raid bosses] and we're not running with people who are like 5 bosses into Mythic either...Because we don't really belong to like either of those. There's a long way in-between those two worlds.

The third potential guild, Fragment_F, appeared to have the best potential synergy with Salty Dogs_{SD}. Outlaw, another Salty Dogs_{SD} member who participated in the joint activity with Fragment_F, described the similarities in his report:

It was almost like our alt-runs³ on Friday. It was almost exactly like that. Where we were effin' around, having a good time. Messing with everybody, and then when it came to the fight, everybody calmed down.

The guild leader of Fragment_F, Melvin, joined the Salty Dogs_{SD} *Discord* server to take questions from, and get to know, Salty Dogs_{SD}' members. Ultimately, the remaining Salty Dogs_{SD} members agreed that the best guild to merge with would be the one that most closely fit their group culture. Another guild member summarized this:

I was thinking we go to basically the closest to what we're doing. You know what I mean? So, there's not like culture shock for anyone or anything because I think if you want to keep what we have together, we want to make it as smooth as possible.

In a group interview after the merger, Fragment_F's leaders explained that their members had also considered potential conflicts when deliberating on their decision to merge with Salty Dogs_{SD}. Although Melvin was apparently ready to take the Salty Dogs_{SD} group with no questions asked, another leader in Fragment_F, Aramus, played devil's advocate to Melvin to address the potential for conflict. Aramus explained:

We were only seeing the potential positive sides. I was just trying to bring up everything that could be negative about it, which isn't the best look, but I think it was important at the time.

Aramus was concerned that the members of Salty Dogs_{SD} would require too much attention from Fragment_F's leaders and reminded Melvin that Fragment_F didn't "...super need this..." and that "...if it's going to be negative for our current members, it's not something that we should do". Melvin expressed appreciation for Aramus' perspective and agreed that they needed "...to look at our—at any issue we tackle—from all sides; it's not enough to say, well, 'let's just be blind to the negative consequences of something'". In these ways, both Fragment_F's and Salty Dogs_{SD}'s leaders considered and debated the potential merger carefully to assess the potential for cultural conflicts.

In contrast, the merger between Divinity_D and the group of 13 raid team members from Mirage_M was conducted in haste and without consideration of cultural compatibility between the merging groups. On June 16, the Mirage_M group of 13 was removed suddenly from their old guild. In need of a new guild to participate in the upcoming June 20 release of a new raid tier, Oomkin organized the merger with Divinity_D's leader Aiden. Aiden briefly considered merging with Oomkin's group of experienced raid team members as well as with two other possible guilds that happened to be on other game servers. Out of both the convenience of not having to pay to change servers, and because Aiden and Oomkin shared a social bond, Aiden quickly and unilaterally decided to take in the Mirage_M group.

³This is another name for their optional *Normal* difficulty raid nights.

In Divinity_{D+M}, the process for merging was swift as well. There was no trial to allow the Mirage_M members to take part in a Divinity_D raid activity. Divinity_D's leadership never even formally announced that a merger had occurred. Divinity_D's members were not made aware of the merger until halfway through their June 22 raid activity when several of Divinity_D's members privately messaged the guild leaders with confusion about the new players in their raid group. One of the Divinity_D leaders, Hector, responded to the confusion over the voice channel: "Yes, we did merge. We took in a handful of people from Mirage_M and now we're a bigger raid team. That's basically the long story short." This response underscored the extent to which Divinity_{D+M}'s leadership did not consider cultural compatibility in their merger.

6.2.2 Intentional Socialization: Planning Opportunities to Incorporate New Members. Sun Bros_{SD+F} developed formal processes to ensure that members could learn or co-create a shared organizational culture. In Sun Bros_{SD+F}, socialization occurred in the context of learning rules and norms during the two weekly progression raid nights, as well as through access to explicit community rules. Additionally, the merged group held easier *Normal* raid nights to provide opportunities to integrating everyone in the community in a more social-oriented activity. Even the process of renaming the merged group to *Sun Bros* incorporated participatory brainstorming and voting by members of both sub-groups. Doing so was not costless; the Guild Master, Melvin, used a \$10 game service to rename Fragment_F to Sun Bros_{SD+F}.

On the other hand, Divinity_{D+M} lacked any explicit community rules or mission statements. Instead, Divinity_{D+M}'s socialization process was highly individualized and occurred exclusively during its two weekly progression raid nights. This process primarily involved newcomers receiving negative feedback from Divinity_D leaders for breaking unclear or unstated norms. For example, after the Mirage_M members disobeyed Hector's order to reset, they were told never to ignore the orders of their raid team leader.

Divinity_{D+M} did not hold intentional opportunities for socialization outside of progression raid nights in the way that Sun Bros_{SD+F} did. When asked why Divinity_{D+M} only played two nights a week together and never on easier levels of difficulty, its leader Aiden explained that they "...don't want to burn too many players out..." and that "...we also don't want to be chained to [raiding] like our actual job, which is the case for a lot of raiding guilds". Divinity_{D+M}'s leaders actively sought to minimize the amount of time spent playing together, assuming that progression raiding already took up enough of everyone's time. As a result, newcomers to Divinity_{D+M}'s group were given insufficient opportunities for socialization into its new organizational culture.

6.2.3 Cultivating Solidarity: Retaining New and Existing Members. Retention is a challenge for most new online communities and guilds [10, 12, 13]. Social computing scholars have found that the line between work and play is increasingly blurred, especially in the case of online games like WoW [25, 43]. As we have shown, progression raiding entails work-like features, such as subordination of team members to guild leadership, commitment to the team, and repetition in the sense that members come together every week to fight against the same raid bosses—frequently failing dozens of times. Play in the context of progression raiding is linked with work as a result of the work-like traits needed for raid teams to succeed. Commitment to a team in the face of failure and volunteer work can be difficult to sustain—especially in a setting intended for play.

The different ways in which guild leaders managed this balance between work and play contributed to the merger's divergent outcomes. Both merged guilds engaged in progression raids during their two scheduled raid activities. Members of the raid teams of both merged guilds were expected to show up on these progression raid nights and work by defeating the raid bosses that were defeated the week before, as well as repeatedly trying to defeat more difficult, undefeated raid

bosses. In both mergers, progression raid nights often ended in failure and left raid team members with no progress made and no new loot or achievements to justify the work put into playing.

While this feeling of unrewarding work is an inevitable aspect of progression raiding, Sun Bros_{SD+F}' leaders attempted to balance the work of progression raiding with more relaxed time for play. The guild leaders carved out a weekly, optional *Normal* difficulty raid activity on a night separate from the two more difficult progression raid activities. As a result, they cultivated solidarity by balancing their work with opportunities for play.

These *Normal* raid nights differed from the workplace of progression raiding, allowing newcomers to interact with each other in a relaxed environment that was less critical and performance contingent. Additionally, these activities were socially-oriented as non-raid team members from the guild, as well as friends and family of guild members, were encouraged to attend. In other words, *Normal* raid nights acted as a *third place*, a sociological term referring to a "home away from home", neutral space, like a bar or bowling alley that is separate from the "first" and "second" places of the home and workplace. Although video games are often referred to as *third places* [25, 31], task-oriented, action-based teams like progression raid guilds can transform the game into a workplace where members must follow attendance rules, meet performance standards, and respect a leader-subordinate hierarchy. The social bonds that the Sun Bros_{SD+F} raid team members formed on *Normal* raid nights helped develop in-game friendships that built trust and motivated new members to commit to working with the guild's raid team.

Divinity_{D+M} lacked comparable *third place* activities or environments. In fact, when Mirage_M members tried to implement a *Normal* raid night during the first week of their merger, the idea was shelved by Divinity_D leaders who weren't interested in playing more than the scheduled progression raid nights. Like colleagues in a workplace setting, the relationship among the raid team members in Divinity_{D+M} was simply business. Without a *third place* oriented toward having fun and socializing, Divinity_{D+M}'s members failed to build social bonds that might have resulted in higher commitment to the guild in the face of struggles and misunderstandings.

6.3 Additional Factors: Effective Leadership and Technology Use

Two other factors shaped the outcome of the mergers, but do not fit neatly within the organizational culture framework: effective leadership and extensive use of communication tools. Because online activity is decentralized, virtual team leaders face the challenge of building trust among their members without direct interaction [21]. Scholars have shown that successful management of communication in online teams is a critical component of effective team leadership [26]. While our analysis suggested that organizational culture played the most important role in determining the success and failure of the mergers in our sample, extensive use of communication tools may have helped build trust between the leaders and members of the successful guild merger as well.

Both Divinity_{D+M} and Sun Bros_{SD+F} used the same communication tools to organize their teams, but Sun Bros_{SD+F}' more extensive use of their voice-based and asynchronous text-based channels in their *Discord* server made its leadership more effective in building trust among its members. The optional weekly *Normal* raid activity organized by Sun Bros_{SD+F} allowed for an additional opportunity to build trust among its members by using their synchronous voice channel in *Discord*. Sun Bros_{SD+F} text channels in their *Discord* server were also used extensively as an informal space for sharing personal stories, pictures, and banter. While Divinity_{D+M} had a *Discord* server as well, its members mostly stuck to using their voice channel during its two weekly main progression raid activities and rarely during other days.

Although Sun Bros_{SD+F} used communication tools to coordinate activities and manage guild work more effectively than Divinity_{D+M}, our strong sense was that this was a product (rather than a cause) of active guild social life and more effective guild leadership. Indeed, every technology

used by Sun Bros_{SD+F} was freely available to Divinity_{D+M} and known to its guild leadership. In other words, Sun Bros_{SD+F}' successful use of *Discord* and other organizational technologies was likely caused by differences in the way that they managed organizational culture and may have influenced but was not a direct cause of their merger's relative success. This is consistent with prior work showing that technology may influence organizational structures in some ways, but their influence is dependent on the cultures in which they're adopted and used [4, 42].

7 DISCUSSION

Applying Schein's concept of organizational culture, we find that cultural differences profoundly shaped the results of the mergers in our study. We find that the management of cultural compatibility and integration determined the outcomes for both Sun Bros_{SD+F} and Divinity_{D+M}. Leadership and extensive use of communication tools also mattered, but these differences appear to have emerged as expressions of organizational culture as well. In contrast to prior social computing research that has considered socialization primarily as a problem that communities solve for individuals, our results underscore how merging existing groups entails a distinct consideration: collective cultural integration. This result is particularly important given recent work that suggests that many online communities grow through incorporating groups of users with shared experiences [34]. We find that organizations can manage mergers through tactics such as strategic selection, intentional socialization, and cultivating solidarity.

Our work builds heavily on a body of research in organization and management studies that has stressed the often overlooked importance of compatibility of cultures in organizational mergers [29, 30]. Schein [30] proposed that leaders considering organizational mergers must know their own group culture well enough to detect incompatibilities and synergies with the other group and engage in joint activities to understand each other's basic assumptions. Our work also builds on prior guild research in social computing: group mergers are contentious [38]; matching recruits with appropriately fitting groups plays an important role in newcomer retention [10]; forming social bonds in online gaming groups motivates member retention [13]; attrition and unresolved conflict between subgroups can lead to group collapse [8, 14, 28]; players form social experiences on platforms outside of the game [11]; and MMOGs can potentially serve as *third places* that encourage solidarity among peers [25, 31].

Extending these insights, our work illustrates how mergers elicit friction between different organizational cultures, resulting in some degree of instability. To understand the way that groups undergoing mergers attempt to stabilize, we borrow Ann Swidler's concepts of *settled* and *unsettled* cultures. Swidler conceived of culture as a toolkit and a "...repertoire from which actors select different pieces for constructing lines of action..." [33]. Swidler argues that culture has a role in both "...sustaining existing strategies of action" as well as developing new ones. She argues that *unsettled* cultures are those in which "...competing ways of organizing action are developed or contending for dominance". *Settled* cultures refers to those which are "...not in open competition with alternative models for organizing experience". According to Swidler, groups fighting for changes in cultural beliefs move from unsettled to settled times—a continuum from ideological movements to traditions to *common sense* assumptions about every day life.

In our synthesis of Swidler and Schein, we argue that groups and organizations with a shared history of experiences in accomplishing tasks have transitioned from an unsettled culture in which beliefs and norms were tested against each other to a settled culture in which beliefs about the basic operations become common sense. These surviving beliefs become the structure for the group's culture, providing stability and consistency. For example, a group formed by recruiting random strangers will not automatically come with clear, basic assumptions to which everyone agrees. Instead, through their history of competing beliefs for organizing action in their shared

activities, some beliefs will dominate and lay the foundation for establishing the basic underlying assumptions that structure the ways that the group reacts to its environment and accomplishes goals. In Schein's terms, this is how organizational culture comes to be. In Swidler's terms, mergers *unsettle* organizational cultures. In this sense, effective mergers minimize the degree to which unsettling destabilizes both groups while also minimizing the time and effort needed to return to a settled state. Effective mergers navigate the threats of instability while also reaping the benefits of an expanded group with a larger base of knowledge, skills, and other resources upon which to draw.

For Sun Bros_{SD+F}, assessing compatibility in organizational culture minimized the degree to which their two group cultures became unsettled by the merger. Strategically selecting merger partners also minimized the time and effort needed to return the group to a settled state. Although their post-merger raid performance was marked with considerably more failed attempts than their pre-merger performance, these failures did not result in instability and conflict. Failing, while frustrating, did not undermine their enjoyment or persistence. Instead, Sun Bros_{SD+F}' members developed new inside jokes and played other games together outside of WoW. The post-merger group eventually achieved a newly stable, settled state in which they completed new raids together.

Divinity_D and Mirage_M's merger failed precisely because the merged group did not achieve a settled state together. By neither assessing nor acting to overcome incompatibility in organizational cultures, both groups ignored potential conflicts that resulted in negative experiences during merged group activities. The shift from settled states of group stability as separate communities to an unsettled one, in which the belief systems of both groups were in competition, never resulted in a productive synthesis of the two communities. Instead, Divinity_D leaders assumed that their belief systems for how progression raid guilds should be managed was *common sense* and that it was the Mirage_M members' responsibility to assimilate. This expectation of assimilation was made more difficult in the absence of any formal socialization processes. Divinity_D leaders ignored the possibility that the conflicts in *common sense* assumptions with Mirage_M members would destabilize their organizational culture and result in the dissolution of both groups.

Both mergers resulted in an unsettled state immediately post-merger. However, instead of managing conflicts and minimizing the time and effort needed for the group to achieve a settled culture, Divinity_D's leaders prolonged cultural conflicts with Mirage_M members, resulting in negative group experiences. With no informal group activities oriented toward developing collective solidarity or social bonds, the members of the merged guild were not motivated to stay in the community. Because of the negative experiences that resulted, members from both Divinity_{D+M} sub-groups either quit the game or found new guilds with which to continue raiding.

Our work has several limitations. For example, longer observation might reveal that the "successful" merger has other problems that we did not have the chance to watch develop. We chose a six-month period *ex ante* because it reflected a single cycle of the game. We also anticipated this period would be long enough to understand group culture because of the lead author's prior experience with WoW and understanding of raid guilds. A longer study of Divinity_{D+M} would not have been possible given that the merger ended in collapse a few months after our study began. Also, while Sun Bros_{SD+F} thrived, they scheduled a temporary hiatus in January 2018 in anticipation of the release of a new game expansion to WoW in August 2018.

Our study is also limited by its focus on organizational dimensions of culture within the guilds and their game world activities. Future work should compare organizational cultures of raid guilds across and between different regional settings, like the comparative study between Chinese and North American WoW players done by Nardi [25]. Other aspects of the cultural backgrounds of players are also likely to impact the organizing processes and cultural dynamics of raid guilds and other types of online groups.

7.1 Implications for Leadership, Design, and Research

Our study points to several paths forward for leadership, research, and design. First, virtual team leaders and online community managers can seek to better understand and accommodate the organizational culture of groups as they encounter potentially destabilizing intergroup conflicts. In that research has shown that these types of mergers are common on platforms like Reddit [34], unsettled and destabilized organizational cultures caused by informal and *ad hoc* mergers may also be common. We suggest that community leaders critically consider cultural incompatibilities between established members and groups of newcomers as their communities grow through these processes.

Second, our work illustrates the usefulness of Schein's idea of organizational culture for assessing group dynamics in social computing research. As we described in our findings, mergers of seemingly similar organized groups pursuing similar goals can have a variety of outcomes. The theoretical construct of organizational culture underscores how everyday processes and basic shared assumptions of these groups help explain differences in performance and survival. Prior approaches to culture in social computing have emphasized national, linguistic, or platform-specific (e.g., WoW vs. League of Legends vs. Reddit) cultural differences, but these can obscure the less immediately visible forms of collective understanding. Our work shows how comparative case studies can foreground these differences as well as some of their consequences.

Our results also underscore the importance of *third place* virtual activities as an effective strategy for newcomer socialization and for building solidarity to retain new and existing members. *Third places* provide a space in which hierarchical boundaries between group members and group leaders are blurred and cultural knowledge for the group can be tested in a setting that's more forgiving than their primary "work" activity. Socially oriented activities in virtual *third places*, like playing online games together or casually chatting over *Discord* servers, may result in social bonds and friendships that increase commitment to and retention in groups. Our work suggests that these are important considerations even in settings like games that are often described as *third places* themselves. When social computing involves the socialization of new individuals and collectives into focused, task-oriented, organized collaboration, we anticipate that online communities that incorporate *third place* activities will build stronger, deeper connections among participants than those that do not. In that *third place* activities span technical systems controlled by different interests (e.g., *Discord* servers are distinct from game infrastructure), supporting *third places* may pose a challenge to traditional socio-technical design processes.

8 CONCLUSION

We investigated the phenomenon of organizational mergers in online groups through a six-month, comparative ethnography of two pairs of raid guild mergers in *WoW*. One merger failed and led to the dissolution of both sub-groups, while the other merger resulted in a thriving community. We show that organizational culture shaped the outcomes in both cases, determining the ability of newcomers to join and contribute to both of the post-merger groups as well as the degree to which conflicts could be managed or resolved. The results expand existing notions of newcomer socialization in social computing by demonstrating how the process operates at a collective level. We also introduce Ann Swidler's concept of settled and unsettled organizational cultures to the social computing literature, synthesizing prior work from cultural sociology and management studies to capture the ways in which mergers can present both a threat and opportunity by destabilizing an existing cultural consensus of shared assumptions within a community. In order to sustain active, committed cooperation, the designers of social computing systems and leaders of communities must

navigate instability effectively. Our work demonstrates how mergers provide a unique opportunity to see how organizational culture plays a fundamental role in this process.

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