Article

Drafting an Army: The Playful Pastime of Warhammer 40,000

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Abstract
Multiple recent works have emphasized the contribution that nondigital game scholarship can make to the study of games and gameplay. Warhammer 40,000 is the market dominator of the nondigital tabletop wargame genre. In this article, we perform a ludological analysis of the process of preparing, or drafting, an army for a competitive Warhammer 40,000 tournament. We find that there are four inter-related categories of resources that influence this fundamentally playful process. Our results indicate that this process of preparation constitutes a core component of the appeal of Warhammer 40,000. This emphasizes the importance of under-standing the diverse activities that go into gameplay that often exceed the computer game "client" or board of play. We suggest the category of engagement *pastime* to encapsulate these extended, ongoing elements of Warhammer 40,000's appeal, which we define as *a collection of interlinked and associated activities that serve to occupy one's time and thoughts pleasantly.*

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Introduction

Warhammer 40,000 (W40K) is a tabletop wargame played by two or more individuals using 1-inch models. It is its developers' most popular product, accounting for a significant proportion of Games Workshop's worldwide annual revenues of over US$130 million (Games Workshop, 2012a). In the context of the increasing "casualization" of games—in the sense of the reduction in barriers for entry and moving toward freemium payment models—W40K is a remarkable phenomenon. Players will spend thousands of dollars on small figurines, paint, and player manuals and devote hundreds of hours in preparation to engage in tabletop battles. We set out to study the attraction of W40K, given the enormous competition from the digital games market for the leisure time of players, and to see what lessons can be learnt for the study and understanding of digital games.

In this article, we report on ethnographic research investigating W40K tournaments. Our focus is on Arcanacon 40k (sometimes shortened to Arc40k), the largest W40K tournament held in the southern hemisphere and considered by many of those who participated to be the most prestigious Australian tournament. In 2012, Arcanacon involved entrants playing 6 individual battles of W40K over 2 days in two swelteringly hot high school gymnasiums at the height of the Australian summer. One hundred and forty-six players from around Australia and New Zealand participated in the tournament, and several hundred more nonplayers visited throughout the weekend. Prior, during, and after this weekend, we interviewed 40 participants, visitors, and tournament officials, focusing on their experiences and motivations for engaging in the game of W40K.

Subsequently, we provide the results of our analysis into the process of preparing an army list for Arcanacon. Players at the tournament have to preselect an army they will use during battles, a choice that occurs several months prior to the tournament. This component of W40K may naively be viewed as external and subordinate to the actual tournament battles. Instead, we argue that it enables the immensely enjoyable experience of Arcanacon and W40K more generally. In this ludological analysis of player experiences, we identify four separate categories of resources—factors included in the army list decision-making process—that are involved in what we understand to be an indispensable component of playing W40K. The four categories of resources are the hobby (modeling and painting), the battles (winning, strategy, fun, and what players call "theory crafting"), limitations (time, cost, and skill), and what players call "fluff" (army themes and backstory).

In order to develop an appropriate conceptual grounding for understanding the experience of W40K, and other games like it, we suggest the new concept of *pastime*, defined as *a collection of interlinked and associated activities that serve to occupy one's time and thoughts pleasantly*. We argue that this category of game engagement more suitably encapsulates the player's experience of W40K as one of a broad variety of inextricably interlinked practices engaged in by players, and, furthermore, it would be analytically dishonest to understand these practices

individually. The collections of activities that constitute a pastime are entwined across a wide variety of times, locations, and contexts. This is distinct from (yet complementary to) understanding games within their cultural context, as it allows for a meaningful distinction between cultural activities—properties of the pastime—and the cultural context of the play. Through this we argue that understanding games as pastimes further enables appreciation of the extent to which games like W40K, which involve hundreds of hours of preparation, are *temporally interlinked*.

Tabletop Games in a Digital World

Academic research into games has matured significantly in the past 15 years alongside the rapid rise of digital games as one of the primary entertainment mediums in the developed world. Although the epistemic foundations of the game studies discipline was concerned with predigital games (e.g., the work of Caillois, 1961; Huizinga, 1938; and Suits, 1978), many of the tabletop games that have influenced the design of numerous popular digital game genres are comparatively understudied. We believe this lack of attention is problematic. Stewart Woods argues that the primary reason for the understudied status of tabletop games is "perhaps due to the inaccurate perception of the genre as a niche in decline" (2008, p. 2). Rather, modern tabletop games are an established game form that have resisted obsolescence and are both historically and ludologically important.

By tabletop games, we refer to the broad category of board, card, role-play, and miniature games that are played sitting around a table including board games like Settlers of Catan and Chess; card games such as Magic: The Gathering, and Poker; role-playing games such as Dungeons and Dragons; and war games such as W40K that do not involve the digitization of game processes. To further distinguish these games from structured play (e.g., Tag or Murder-In-The-Dark) and sports, we also understand tabletop games as having rules, structure, and (frequently) materials supplied and dictated by a third party to the players (e.g., the game publisher or World Chess Federation) and to rely on interactions between tokens or playing pieces rather than the physical interaction of player bodies. However, Fine (1983) contrasted war games to fantasy role-playing games like Dungeons and Dragons, finding that the structured play of tabletop war games offered very little (if any) role-playing or fictional identity construction during matches:

> A third feature of war games is a lack of *involvement* of players. While war games may provide much more engrossment in the game and identification with one's side than other leisure-time activities, players identify with a side, an army or a nation. One does not act as *oneself* in the game. Even in *Diplomacy*, the structured semi-role playing-game, individuals identify with nations. Full engrossment is unlikely because of the structured positions in the games. (p. 10)

In this way, W40K has more relation to the modern real-time strategy (RTS) genre than to many role play games. It should be noted that Fine (1983) was writing at a time when war games were overly concerned with "historicity"—the replaying of battles, rather than with fantasy/scientific-fiction (sci-fi) settings, as is the case with W40K. Based on what we observed in our fieldwork, we believe Fine's distinctions still hold true for W40K, despite its fantasy roots. Fine claimed fantasy role-playing games have many design elements that parallel war games and that war games "had a direct influence" on the development of games like Dungeons and Dragons (p. 9), which in turn have influenced modern digital games.

Most games in the category of tabletop games share many of the same design elements and processes as modern digital games, often as a consequence of their historical importance in game design. We believe the study of these tabletop games has tremendous value for the modern game studies discipline. There are many excellent examples of tabletop games' scholarship that demonstrate this potential for contribution. Zagal, Rick, and Hsi argue that the study of board games can contribute significantly to the game studies discipline because their gameplay is "fairly constrained and their core mechanisms are transparent enough to analyse" (2006, p. 24). Consequently, the relationship between game mechanics and the resulting gameplay are more pronounced and accessible. Similarly, Costikyan and Davidson (2011) argue that board games offer a more appropriate avenue for learning about game design. As a result of this transparency, Berland (2011) argues that playing tabletop board games can turn users into more expert computational thinkers because, through this transparency, players are actively involved in analog computational thinking.

Costikyan and Davidson (2011) further argue that the development and evolutionary lineage of the digital game industry can be better understood by including the study of tabletop games . This contribution of tabletop game scholarship is particularly evident in Patrick Crogan's (2003, 2011) examinations of historical and strategic wargaming. In his review of Crogan's *Gameplay Mode* (2011), Ian Bogost states that game scholars "should embrace the many traditions that intersect with digital games" (2012), and commends Crogan's emphasis on the role wargaming has played in the development of digital games.

Another important study of a nondigital game genre is Stewart Woods' recent examination of *Eurogames* (2012). Woods argues that the principle form of pleasure derived from this genre of board game is the sociability of play (2012, p. 173). Both Zagal, Rick, and Hsi (2006) and Björk, Falk, Hansson, and Ljungstrand (2001) argue that tabletop games offer accentuated social experiences compared with digital games. This is not due to an increase in sociability through the necessary colocation of players, but due to the way these games are designed for social interaction. As game enjoyment is commonly linked to social interaction this facet of their design further suggests the potential contribution that the study of tabletop games can have on game design.

A separate body of research into tabletop games has attempted to digitally augment them. Hinske and Langheinrich (2008, 2009) have experimented with

augmenting W40K by incorporating radiofrequency identification (RFID) technology into each individual figurine or model. Similarly, various projects have explored the possibilities of digitally augmenting tabletop and other nondigital games and/or have attempted to recreate tabletop game experiences in a digital format (Bakker, Vorstenbosch, van den Hoven, Hollemans, & Bergman, 2007; Björk, Falk, Hansson, & Ljungstrand, 2001; de Boer & Lamers, 2004; Magerkurth, Cheok, Mandryk, & Nilsen, 2005; Magerkurth, Memisoglui, Engelke, & Streitz, 2004; Mazalek, Mironer, O'Rear, & van Devender, 2008; Peitz, Eriksson, & Björk, 2005; Watts & Sharlin, 2007). However, in this article, rather than attempting to examine how digital technologies can be used in tabletop gaming, we have sought to understand the continuing appeal of W40K in the face of the burgeoning array of digital games competing for players' attention and time. We are also interested in understanding how the tournament setting changes the way W40K is experienced and how this echoes the findings of other studies on large gaming-based social events such as "LAN parties" (Jansz & Martens, 2005; Jonsson, 2011 Jörissen, 2004; Simon, 2007; Taylor, 2012; Taylor & Witkowski, 2010; Witkowski, 2012).

This endeavor is important because, without engaging in the magic circle debate itself, there is a well-trodden academic path to fully illustrate the wide variety of ways in which games do not exist within a circumscribed, separate, and bounded sphere of activity (see Consalvo, 2009). This has been done in a variety of ways through illustrating its economic and cultural permeability (Castronova, 2005, 2007; Steinkuehler, 2006), social persistence (Chen, 2012; Taylor, 2006; Williams, Ducheneaut, Xiong, Zhang, Yee, & Nickell, 2006), its mobility (Montola, 2005), mundaneness (Pargman, 2008), pervasiveness (Lehdonvirta, 2010), and interfacing with the social context of play (Juul, 2008; Woods, 2012). It is worth noting, however, that this conceptualization does perform work for some analyses (Harviainen, 2012; Harviainen & Lieberoth, 2012; Lastowka, 2010). Although the magic circle debate has been criticized (Zimmerman, 2012), its contribution to game studies has been a transformation in the values of our research, accentuating the importance of investigating the intersections between our cultures, play, and its context. Our proposed concept of pastime intends to add to these contributions by highlighting the way in which play is entwined across a wide variety of times, locations, and contexts. This is distinct from (yet complementary to) understanding games within their cultural context, as it allows for a meaningful distinction between cultural activities—properties of the pastime—and the cultural context of play.

W40K

Originally called Rogue Trader, the science-fiction themed W40K was first released by Games Workshop in 1987. Set in a dystopian science fiction universe 40,000 years in the future, the descendants of mankind are perpetually at war with each other and several alien races. The rules have undergone multiple revisions over the years and the current edition is markedly different from the original.[1]

Figure 1. A Warhammer 40,000 battle underway.

According to W40K's original designer Rick Priestly, "Rogue Trader and Warhammer [Games Workshop's fantasy war-gaming system] both grew out of the role-playing boom of the late 70s and early 80s—in their original forms they were open format role-playing style games played with miniatures" (Andy, 2011). The first edition encouraged the use of a games master (GM), a player independent of the competition of the game, who would organize scenarios and arbitrate the battle. The rule book contained extensive background into the races, characters, and factions in the sci-fi narrative for players to utilize when playing the game, and left room for the GM to settle disputes. This is in contrast to modern editions that owe more to the genre of wargaming (and the modern genre of real-time strategy games) than role-playing, consequently relying on an extensive collection of rule books to codify the rules rather than relying on a GM. Consequently, the modern player experience bears even less resemblance to role-playing games of the era such as Dungeons and Dragons that Fine (1983) described.

Superficially, W40K is a tabletop war game played by two or more players who control equally sized armies (based upon a complicated points' system) of 1-inch miniature figurines. It is typically played on a 6- by 4-foot board containing scenery and obstacles (terrain; see Figure 1). As we overview in this article, such a description fails to adequately capture the W40K experience (see also, Harrop, Gibbs, & Carter, 2013). Consequently, we refer to this simulated combat as the battle rather than game in an effort to demark them as a constituent of, rather than a core focus of, W40K.

Each figurine in a player's army is delicately assembled from sprues of plastic components, fine cast metal, and/or resin parts. Players often use modeling putty, the

component parts of other miniatures, or suitably sized and shaped found objects to create their own unique models or "conversions." These conversions can be as simple as adding extra weapons or clothing to a unit or installing working light-emitting diode lights in each model. These assembled miniatures are then individually painted, often with incredible artistic detail. Players are free to paint their miniatures however they want, but they are normally painted to conform to what is known as fluff—the complex and sprawling sci-fi narratives of the W40K universe. For example, the narrative behind the Imperial Guard "Catachan" army involves a battle over a dense jungle planet. Consequently, they are typically painted and modeled in color schemes that mimic the appearance of the U.S. forces in the Vietnam War.

The histories and stories that provide background to the armies and characters used in W40K have been continuously explored and expanded since its first edition. Alongside the rules, W40K rule books contain paragraphs and snippets of narrative information that has no explicit bearing on the rules or gameplay. In addition, Games Workshop has a publishing arm known as Black Library that has published over 120 novels set in the W40K universe.

Furthermore, there is a great deal of choice in what Army to develop. There are over a dozen playable Armies situated within the W40K universe. Each major Army has a supplemental rule book called a "codex" that sets out the special rules, skills, and weapons of every unit that can be fielded as part of that Army. These codices also detail the "special characters" units with a unique name and abilities and a background situated in the game narrative. Each Army has different strengths and weaknesses that are linked to their background, but a wide range of unit choice allows players to mitigate these weaknesses. Armies range from the ancient "Necrons" (an entire race of sentient beings tricked by star gods and enslaved into automated, Terminator-like regenerative machines) to the "Imperial Guard" (innumerable regiments of weak foot soldiers supported by powerful artillery and tanks).

The codified rules that govern battles are extensive; the main 6th edition rule book has over 400 pages (Games Workshop, 2012b) and each Army has a codex of around 100 pages. Approximately a third of each of these rule books is devoted to rules; a third to narrative elements; and a third to the craft of building and painting models. Play is divided into turns, with each turn having three phases: movement, shooting, and assault. Players take turns completing each phase in sequence. A variety of actions can be performed by each unit in each phase. The success of these actions is resolved by rolling six-sided die. It is common to see players counting out 30–40 dice to roll to resolve an action by one unit. A W40K battle typically has between five and seven turns. At the end of the fifth turn, a die is rolled to determine whether there will be a sixth turn and so on.

The rules attempt to ensure that opposing players have equally matched armies by giving each unit a point's value based upon its strengths and weaknesses, then limiting the amount of points a player can bring to a game. For example, a weak Imperial Guard foot soldier might be worth 5 points, whereas the powerful armored tank it fights beside may be worth over 100 points. The limit at the Arcanacon tournament

was 1,200 points. The makeup of a player's army is loosely defined by the rules. Each unit is considered to be of a particular type (headquarters [HQ], elites, troops, fast attack, or heavy support), and there are limits to the number of each type of unit that can be used in a match. Typically, a player's army must have one HQ unit and two troops, and it can have no more than three of any other type of unit and a maximum of two HQ units. In addition, although often weaker than the other specialized units, troops are the only units that can capture objectives during battles. The purpose of these limits is to stop players from fielding disproportionately overpowered armies and thus to encourage strategic play. As a result, players put considerable effort into designing "army lists" to be within the bounds of specific point limits. The research reported in this article has focused on the how players designed army lists for a competitive tournament.

Methods and Approach

This research combined participant observation and semistructured interviews prior, during, and after the Arcanacon tournament. The members of our research team had varying experience with W40K, bringing different perspectives to the research. Carter has nearly a decade of experience playing W40K. Gibbs has spent dozens of afternoons at his local Games Workshop store with his 11-year-old son watching battles, reading rule books, getting painting lessons as well as chatting with staff and other patrons. Harrop played a few battles as part of this research and struggled to find it enjoyable. He gave his models to Gibbs' son.

Our first data collection occurred at an informal social play session held at an Arcanacon participant's house, several months before the tournament. In the lead up, we participated in this informal group that fluctuated in size and frequency of meeting, occurring more frequently and growing in size in the lead up to the event and culminating in a final day where 10 players were furiously preparing for the impending weekend.

On the weekend of the tournament, members of the research team were consistently present to observe the event and conduct interviews with participants. One member had attended the previous day to volunteer with setting up the venue, where a small amount of data collection also took place. Information about the research project was then placed around the tournament venue (in hallways, above urinals, and near play tables). Our presence was announced at the opening of Arcanacon by the tournament organizer (TO), which encouraged enthusiastic participants to seek us out and offer us their time, thoughts, and opinions.

Interviews with players were conducted between battle sessions and during the lunch breaks. In total, we interviewed 28 participants and 4 nonplayers at the tournament. Due to the busy nature of the setting, the majority of these interviews lasted for around 25 min, though some exceeded 40 min in length. The majority of the participants were male. Two females participated in the study, though only one was a tournament competitor. A small number of participants returned to the interviewers to provide further insight or reflect on events that occurred throughout the tournament.

Following the tournament, we conducted a de-brief interview with two of the players from the informal playgroup and met with the TO and a tournament official to discuss the design of the tournament and reflect on some of our initial findings. Audio recorded interviews were then transcribed manually by the researchers. Informed by Glaser and Strauss' (1967) grounded theory techniques, these interview transcripts were then coded for relevant themes. Through close reading of multiple interview transcripts and through discussion and reflection among the research team, clear themes emerged regarding the question of army list design. These themes were used and refined in the analysis of subsequent interview responses. These themes form the structure of this report and provided the basis for conceptual development.

All names used in this article for research participants are pseudonyms unless the participant can clearly be identified. In these cases, we have permission from the participant to use their name.

The Arcanacon Tournament

In 2012, Arcanacon involved 146 participants, playing 6 battles over 2 days of the Australia Day weekend (a national holiday in Australia). This competitive tournament is decided by a final score, based upon four differently weighted categories: Generalship (120 points), Comp[2] (30 points), Sportsmanship (120 points), and Painting (30 points). Participant's final scores are read out in ascending order at an awards ceremony at the immediate conclusion of the tournament. Prizes and skull-shaped trophies (jokingly treated by organizers as the "actual" skulls of the tournament winners) were awarded in each category and for overall ranking.

The Generalship score is the category for battle skill, where tournament points are awarded for performance in each battle. Twenty points are awarded; 5/10/15 for a loss/draw/win, respectively. Five additional points are available to both players for strategic accomplishments, such as killing the enemy commander or the enemy unit with the highest point value.

Equally weighted to Generalship is Sportsmanship, which is the score a player gives to the sporting behavior of their opponent. Having a Sportsmanship score is common at competitive W40K tournaments,[3] but the Arcanacon organizers put particular emphasis on Sportsmanship, by valuing it equal to Generalship and also in the tournament materials. The informal tournament motto *Don't Be a Dick* was often used as a rally cry by the TO during prematch briefings to all participants. Tournaments without sportsmanship scores are notoriously more ruthless than Arcanacon. The Sportsmanship score is determined at the end of each round, where players are asked "to rate their opponents in terms of how sportsmanlike they are," giving a score out of 10. A guide is given to the players, and they are asked to use these options to give a score that "most represents their feelings about the game they've just played" (see Table 1).

The scores out of 10 are then normalized by the organizers, giving each player a total score out of 120 for their Sportsmanship. Final scores ranged from 62 to 107, and

Table 1. Guide for Giving Sportsmanship Scores.

10	Star Player!	Talk to a TO about giving a score this good! It doesn't get better than this, and I doubt I will player better all tournament! (This score must be TO Approved).
9	Beyond Expectations	My opponent did more than just display good sporting behaviors,
8		was very easy with rules, and even let me go back and move units I forgot to move!
7	Expected ARC40k	This game was to the standard that I would expect coming to an
6	Experience	event like Arcanacon. My opponent was upbeat, wanted to have
5		some fun, and displayed good sporting behaviors. There were discrepancies, but they were easily resolved.
4	Below Standard	My opponent consistently displayed poor sporting behaviors, and/
3		or fiercely contested every rules discrepancy.
2	Skull!	Talk to the TO about your opponent's behavior if the game was
1		this bad. (This score must be TO approved)

Note. TO = tournament organizer.

in the event of an overall tie (which was the case for the 2012 tournament), the winner is determined on highest Sportsmanship score and not the highest Generalship score.

Valued much lower, Painting and Competitiveness (Comp; or army balance) are worth 30 points. Comp is done similar to Sportsmanship—a player's six opponents allocate a score between 0 and 3 points at the conclusion of each round. The purpose of this category is to penalize players who bring "overpowered" armies (armies that are very difficult to defeat) and equally to reward those who prioritize having a "fun" army to play against. Particularly overpowered armies are possible in W40K due to overlooked exploitative synergies in the rules that can produce devastating "combos." The remaining 15 points are awarded by a panel of four judges who take into account other factors such as variety in army selection, the number of powerful combos in the army, and armies with "random elements."[4] Again, this echoes the effect of the Sportsmanship score, prioritizing an enjoyable weekend over winning through army optimization. The guide given to players regarding these scores reflects the sentiment of the sportsmanship scores, see Table 2. The Arcanacon player's handbook states, "We believe that games and missions should be fun and memorable, first and second, and the importance of winning should come a distant third."

The final category, Painting, is scored by a panel of judges who inspect each army based on a specific set of criteria. This covers the very basics of a painted army: 8 points for the models being given at least one coat of paint; 2 points for being able to tell squads of soldiers apart; 2 points for a cohesive painting scheme; and so on. Beyond that, points were awarded for extra details such as squad markings, custom conversions, highlighting, shading, and creativity. The average score was 20, with only six players receiving full marks in all painting categories.

For some, prestige in the painting component of the tournament comes from the "Player's Choice" award, rather than the Painting score. At lunch on the first day,

Table 2. Guide for Giving "Comp" Scores.

3	Star Army! This army was well themed, I had a great time playing against it, if I had it my way I would play it again in the next round.
2	This is exactly the sort of army I like to play against. It had some combos but I would be ULTRA happy to play it again.
1	Expected Army! I really enjoyed playing this army, it had some great combos but nothing over the top! Exactly what I came to Arcanacon to play!
0	POINT & CLICK. . . . This army fell under my expectation to play at Arcanacon. Had too many nasty combo's that made it not enjoyable to play, and just smashed my army. My mate's little sister could win games using this army.

players left their armies on display. During this extended break, participants and other visitors voted on the armies they consider being the best on show. The 2012 winner of player's choice had flown to Melbourne to attend Arcanacon, specifically to showcase a new army. His journey was almost a disaster when his airline misplaced his baggage (and entire army) on a connecting flight. For him, Arcanacon was about the painting competition, "not so much in the gaming, but the painting and hobby. It [Arcanacon] always brings out the best armies, and the best painters."

Another surprising feature was that, for many players, Arcanacon was the only tournament that they attended. Of those who attended other tournaments, many remarked that Arcanacon was their main one. Arcanacon involved to 2 full days beginning at 8 a.m. and finishing at 6 p.m. Many participants traveled from other regions of the state or from interstate. For players with family and work commitments, devoting an entire weekend to "man dollies" (as many players described it) was a huge commitment. The participants we interviewed identified the social atmosphere of the event to be the primary reason why they choose to attend Arcanacon and Arcanacon only.

In the following section, we describe the various factors that influence the army lists players draft for competition in Arcanacon. These factors are presented through four categories: battles, hobby, fluff, and constraints.

Drafting Army Lists

Based upon the analysis of our interviews, we have identified four categories of resources that players utilize in the creation of their army lists for Arcanacon; the hobby (modeling and painting), the battles (winning, strategy, fun, and "theory crafting"), limitations (time, cost, and skill), and narrative (army themes and fluff). Particularly in the context of our discussion section, it is important to understand that army list creation for a tournament like Arcanacon is often a gradual process, taking place over many weeks and months prior to a tournament. These results illustrate how the complex game rules and tournament rules interplay with contextual factors across a wide variety of times, locations, and contexts, and the unique interests, desires, and motivations of the player further inform this gradual *playful* process.

The Battles

Unsurprisingly, as the focal activity of the tournament, numerous factors relating to the six battles were important to many players in the development of their army lists. In this section, we outline the broad variety of factors that are involved. We argue that these factors show how the process of developing a W40K army list is both calculative and social, involving social engagement with other players, in addition to being a long, leisurely experimental process. We highlight how the specific structures of the Arcanacon tournament encourage players not to focus solely on the battles of W40K but also to incorporate the broader constituent factors of W40K in their army selection process.

Demonstrating this, few were eager to confess that winning battles was their primary objective when choosing their army lists, despite indications suggesting otherwise. It was evident that the Comp score component of the tournament had an influence on this. Alberto, a competition judge for Arcanacon, who has been playing for 16 years and goes to numerous tournaments a year, stated:

> You tailor your list to a tournament. You look at the comp score system; at how they're going to score it. Sometimes there's no comp events and that's when I'll bust out the Nob Bikers [a powerful Ork unit] with wound allocation and feel no pain [a powerful combo] and put two war bosses [even more powerful units and combos] in here and just go really horrible because that is what everyone else is going to do.

Another player, Arthur, also spoke of how he e-mails his army lists to friends not to ask, "what do you think of this list", but "how do you think it will affect the comp score."

Most other players however spoke of "holding back" and not bringing overpowered lists. Their justifications for this approach were typically explained using a narrative of fun. There was an overall sense that players felt it was important to bring a list that was fun for other players to play against. Even Arthur, who admitted to considering the Comp score in making his army list, said that an Army should be "fun for your opponent. Which I think is very important, because you do not want your opponent to sit the whole game going: 'oh god, this is a terrible game, I am not enjoying this at all.'" Even tournament winner Damien stated, "I would never take a list I thought wasn't going to be fun to play against." However, this is not to say he made significant game-changing concessions. "I took an army I thought, which was fair and would give my opponents a good game, but I was aware it was definitely an army that could win games in its own right."

Fun, in terms of battles being a challenge for the player, also appeared as a component in tempering army list selection. Alberto mentioned that he challenges himself to "take a softer army to be the better player on the day rather than being someone who crunches the numbers." We found this to be the case for other players as well. They considered their armies to be difficult to play rather than being

overpowered. This was a source of pride. Richard, a player who had brought an army that consisted entirely of units on motorbikes, stated:

> Because I've played for so long I tend to migrate towards more difficult armies to play. So for example I've got the bikes they're a very tactical army . . . it can be quite hard if you make a tactical mistake with them you tend to get punished quite quickly. . . . If you win with them, you know that you've had to play really well with them. Very few times do you get a win just because you've managed to just move them around the board and shit just goes your way. You've got to work with them to get the most out of them and I find that quite rewarding.

Another component of the battles was *exploration*. Some players chose the codex used to construct their army list based on a desire to explore and experiment with a new army. Fred who had brought an army based on the newest available codex, Necrons, said he brought them "to see how they went." Tournament winner Damien also brought Necrons, "I thought, 'yeah, I'll get the Necrons ready' and, they were kind of more interesting to me because they're a newer army to me."

The comfort found in playing a familiar codex was also important for other participants. Players, such as Karl and Omar, brought armies they were familiar with; Karl admitted that "I tend to pick armies that I feel comfortable with." Interestingly though, while Omar had brought a codex he had played for 6 years, the list he brought to Arcanacon "had a special character, Kharne the Betrayer, and a monstrous creature neither of which I've run before, so I thought, 'sure, why not!'" While comfort influenced Codex selection, an explorative component was present in the specific army list he chose to bring.

Beyond these motivational factors influencing their army creation process, players also seemed to have their own personal strategies toward the initial phase of building their lists, which tied into a variety of strategic factors or preconceptions about how the games will be played and the opponents they will likely face. Alberto, spoke of a 60/30/10 rule of thumb he used. For example, in a 1,000-point list, he would spend "600 points on reliable things, 300 points on less reliable things and 10% is just something completely off-the-wall, something that probably wouldn't work." Another player, Miguel, spoke of the importance of having both enough "antitank" firepower but equally, enough "anti-infantry." He incorporated this into his own formal doctrine, similar to Alberto. Not everyone had an established doctrine like Miguel and Alberto; others had less refined strategies that effected army creation in similar ways. For example, the variety of missions[5] that they might have to play at Arcanacon meant Peter took the likely scenarios into account, "you are going to need to be able to stop the enemy but you also need to be flexible . . . but also if you've got to . . . stand still and shoot and stay alive, you've got to have that too."

Omar, who frequently uses online W40K forums, spoke similarly about bringing "enough anti-tank firepower," but his reasoning came out of what he called the

"tournament metagame."[6] "[I consider] what most people will bring to the tournament . . . so you look at how, the sorts of trends are . . . so you build your army to counter the trends." Similarly, the tournament winner said, "I look at wargaming forums and see what other people are doing with whatever codex I am working on, and um, generally avoid it." Participating in online forum discussions regarding their own and other army lists was one of the very few instances of modern digital technologies being incorporated into W40K.

Players also frequently spoke of a rule optimization process (called "math-hammer") that followed this initial army list construction. Similar to theory crafting[7]—an emergent practice in World of Warcraft, which players are motivated to engage in because it optimizes their odds of success—researching the optimal conditions for their army lists is a pleasurable activity. One participant described it as:

> [W]here you work out if you've got 8 guys and they've got two attacks each and they hit on 3s . . . statistically how many wounds I'm likely to get [and then] work out whether it's a good idea or a bad idea to do something.

This type of theory crafting is where players put faith in the statistics associated with the game, despite tactical deployment playing a larger part in a unit's effectiveness.

Participants spoke of a "tinkering" process through which they play tested their army and "just tweak it a little bit" each time they battle. For some, this meant going to a local hobby store or gaming club and playing "as many armies as you could and see what worked and what struggled." These changes were not necessarily to make an army better or more powerful. Bill spoke of how "some people do sort of tailor towards a certain thing, that's not what I do, I tailor for fun." For others, the Internet played a prominent role in this part of the army list creation process. Some players, such as participant Fred, simply "go online to see what's out and about," whereas others like Omar "spend a lot of time online, on forums reading tactics. I posted a couple of different lists, asking for advice." One participant in the interviews, who as a father has little time to play W40K, frequently watched YouTube videos of W40K battles to compensate for not being able to participate in this tweaking process.

The variety of these factors in army list creation, which related to the battle at the tournament illustrate that army list construction, was a process that was both calculative and social. It involved social engagement with other players but was also an experimental process. Although army strength was an important consideration, it was very rarely a primary concern. In the next sections, we discuss further factors that fall outside of the battle that similarly reprioritize goals in the process of creating an army list.

Constraints

Many players mentioned limiting factors such as cost, time, and skill that had an impact on their army list design. W40K miniatures and paints are very expensive;

an army at Arcanacon is likely to of cost Australian players over US$600, some over US$1000. Similarly, players commented that they likely spent over 100 hr painting and modeling their army. Peter, a married father, was very conscious of both the time and cost of a W40K army:

> There are a lot of nice armies, but they're mostly metals and that costs more, so I never go those armies, I go for armies where I can primarily buy the plastic kits and make modifications to make all the choices. It's not a matter of, 'Oh, I just like those ones' and buy them. You've got to look at the cost, that's definitely a factor.

This also affected his codex choice; in the past, he had preferred Orks that allowed him to build vehicles from scratch while still staying aesthetically couched in the reappropriating, scavenging element of the Ork narrative. The army he played at Arcanacon was also built so that the core components could switch to become part of another army, essentially getting two armies for the price of one.

Similarly, Richard's army contained heavily magnetized components that allowed him to switch out the weapons on units to give more flexibility when making lists without increasing the cost of the army. The enthusiastic account of this flexibility that Richard gave suggested he achieved great satisfaction from overcoming these limitations. Although some players echoed this highly cost-aware sentiment, especially those married with children, many did not mention cost or time being a factor in their army creation process. These players frequently described painting and modeling as a relaxing, "chilled out activity"[9] and justifying the cost in the craftsmanship and physicality of painting and owning an army. Further, players argued that the cost per hour of W40K was reasonable when compared to other hobbies.

Craft

The craft, that is, the painting and modeling component of W40K also emerged in the data as an important resource for the process of drafting an army for the tournament. In emic usage, the crafting components of W40K were often referred to as the "hobby."[8] It was a near-universal sentiment at the tournament that the aesthetic appearance of an army was very important to players. Even for players like Omar for whom painting "sometimes feels like a chore" still put effort into making their armies "cohesive, like all in a uniform. I think even if they're not spectacularly painted they still look good if they're in uniform." As such, the expected appearance of an army influenced some player's codex selection, as some players seem to prefer alien armies for their monstrous appearance, while others prefer the uniform-like paint schemes that accompany the human codices and lore.

Another aspect of the craft that influenced army selection was the physical models that represent a unit; Danny mentioned that "If I think a model looks cool and I like it, then I will try to fit it into a list." This sentiment was reiterated by many

participants in the study. In addition, Damien included a Monolith in his Necron army, an enormous tank model:

> Because, the idea of having a centre piece model to kinda aesthetically make the army more, kind-of, unified . . . the overall look of the army is something I put a lot of time thinking about.

For those few players who were hopeful about winning the players choice award for the tournament, model crafting had a significant impact on army list creation. For these players, it was clear that the potential to show off particular painting or conversion skills was very influential on the units that they selected for their army. The winner of player's choice spoke of the "the challenge of painting what is known as Non-Metalic Metalics" (paints without metal in them which visually appear as metalic paint) and as such that played into the choice of army. Again, he reiterated the sentiment that players take into account the model choice when developing a list, "I pick models that I think I will enjoy [painting], then write a list to make sure they're in them." But this is not at the wholesale cost of a competitive army; "I do put my list on the web to get feedback."

Similar to how the performance in the battles was a playful social process, the craft and aesthetics of W40K not only enhanced the experience of the battles but are also enjoyed for their own merit. This is not dissimilar to computer game "modding" (see Sotamaa, 2010), a similar creative cultural activity practiced in parallel with games. Players prioritized factors of their craftmanship differently, depending on their own personal desires for engagement with the craft of W40K. In the following section, we further explore related ways from which players derived enjoyment from the aesthetics of an army.

Fluff

As touched on earlier, the narrative of an army—the back story or "idea" inspiring that army—also plays an important role in the army list creation. These influences can be loosely categorized into theme, such as the biker army, or fluff, adhering to the canonical lore in the fictional W40K universe circulated by Games Workshop in books, digital games, and film. Both of these influences were broadly represented among participants.

One pronounced influence of narrative on army list creation was that narrative appeared to be used by players, or players were suspected of, using "theme" to justify the selection of an overpowered or "harsh" list. Interestingly, a perception that seemed commonplace at the tournament was that an overpowered army without theme or fluff would be scored more harshly than one that was not cohesive or did not sit well within the narrative of the game. Although not present at Arcanacon, players spoke of a "Carpark" list that has been common in previous years, where "Imperial Guard" players would bring excessive armored vehicles that would be

"parked" in a line at the very rear of the playing area in order to barrage the opposing armies as they crossed the table to attack. Such an army is strategically fixed; players will not move their tanks for the duration of the battle, but within the back story of the W40K universe such a deployment is cohesive. As one player commented, "it was a very hard [to win or do well against] list, but that's allowed within their army types so you accept it."

Often, theme and fluff were linked to the craft but in a variety of ways. One player stated that they pay attention to the theme or fluff "in the painting stage, not so much the list writing stage." This was something that appeared almost universal at the tournament; players tended to paint their armies the way "they should be painted" based on their described appearance in official tournament materials. For example, Ork armies were green because that's the color Orks are in popular imaginary. Contrastingly, Barry had uniquely painted his Ork army with a beige skin color, we asked why:

> Because I want them to stand out on the table. Because you walk past and see Orks and keep going. But I want them to pay closer attention to it. So that's why I've changed my paint scheme so that it's really different. [. . .] Not so much fluff, it's more logic. They [Orks] are meant to be spawned from fungus. And my logic is: there's white mushrooms, they're a fungus, so they should be able to have white Orks. So that's why they are pink coloured. I think it works. And I had people comment on it when they were displayed for the painting.

Again, we see the tournament structure influencing the way these resources are taken into account in order to receive more votes in the player's choice, Barry chose to make his army unique and stand out but still felt the need to root or justify this change in the fluff of the Ork species. However, the level of fluff involvement was not rigid for each player. Take, for example, this interview excerpt, when the participant was asked about the importance of fluff:

> Player: Sometimes, it wasn't so much for this army. I read through the fluff and there was nothing, there was no character or like particular story that jumped out at me, of like, "I want to base my army around that." So, I just kind-of did my own thing.
> Researcher: What about Dark Eldar, your other main army?
> Player: Yes, very much so. There was an army in the Codex that really struck me and then I focused very hard on it, on every little detail that I could get from that and based it very strongly on that. [. . .] The wych cult of Red Grief.

Theme does not need to be related to the fluff or the battle. Alistair, who won player's choice at the tournament, commented (in an email interview following the tournament):

> I had never won players choice, and it is all about the popular vote. 3 years running i had great armies and very well painted. This year . . . ok, i will say it. Boobs appeal to

men who don't get out often like the nerds!!! So i got lots of boobs on my models to make a play for extra votes lol. the theme was correct, and the painting was still good, but i selected a theme that would appeal both on a hobby level, and on an immature male level. Yuck! Truth hurts lol. It worked though right?!?

Again, the structure of the tournament can be seen as having a large impact on the way narrative is involved in the process of army list creation. Although these exemplify the impact of the tournament setting, many players appeared to involve narrative resources in their army selection for its own benefit. We believe the sense of satisfaction of having a coherent theme in a player's army, or fitting in with the W40K fluff is similar to having an army that has a cohesive aesthetic appearance.

Finally, several players involved fluff in their army creation process as a way to incorporate another aspect of W40K in their Arcanacon experience; the books and other forms of media that build the background and story of the W40K universe. Karl remarked:

I read all the black library and 40k books (or most of them if I can) . . . and because I'm big on background and fluff. (I come from the publishing industry so I'm very interested in that.) So I try to reflect that through the armies so they always have a theme behind them. I try to think about them and what I'm going to put in the army and what will fit the theme as early as possible . . . I play Ultramarines like in the books, [where] they've got few vehicles. In the later books they do have a few, predators and things right? But there is no mention of a Land Raider, so I try and stick to that.

By involving fluff as an important component in the way Karl develops his army list, he is able to weave his appreciation for the books in with the battles and modeling components of W40K, creating a more enjoyable experience. At this strict level, it is fair to portray his engagement with the fluff as "research" for his W40K experience but also to portray W40K as recreations or simulations of what he reads (or might read) in the fiction, demonstrating the complex interplay of these factors.

Discussion and Conclusion

This article has provided an account of how players prepare for a competitive W40K tournament, as a lens through which we can understand the broader W40K experience. The purpose of this account has been to explore the appeal of this nondigital game in the "digital age" of gaming. While there are many lens through which this could have been explored, we focused on the decision-making process involved in army selection. The strength of this approach is that it has highlighted the interrelation between the numerous practices that encapsulate the experience of W40K, and further, the way in which these interrelated practices are selectively reappropriated by players to maximize personal enjoyment. We believe that it is due to the way that W40K facilitates this interrelation that W40K continues to grow in popularity,

despite the requirement of such a (comparably) immense time and cost to play. We consequently propose the term *pastime—a collection of interlinked and associated activities that serve to occupy one's time and thoughts pleasantly*—to describe a category of engagement with a game, or other leisure time activity, to facilitate an appropriate conceptual understanding of the game W40K.[10]

In introducing W40K, we stated that the "game" of W40K could be described as a strategy game, whereby two players simulate military scenarios with miniature figurines on a 6- by 4-foot board. Although there is no doubt that this is the focal point of the associated activities and industries that constitute W40K, our results indicate that the experience and enjoyment of W40K is intimately linked to the wide variety of activities and practices outlined in earlier sections. Without the modeling and painting, overcoming various limitations, engagement with fluff and themes, exploring rules and strategy, it would not be possible to participate in a strategy battle in which the experience passably resembles either the Arcanacon experience or the W40K experience more generally.

What the description "pastime" is intended to capture, which terms like game, paratext (Consalvo, 2007; Genette, 1997) or metagame (see Carter, Gibbs & Harrop, 2012) do not is the sense in which W40K is constituted by an assemblage of distinct but interlinked pleasant activities that are enjoyed for their own individual virtues. Modeling and painting an aesthetically pleasing army from bland plastic components is of itself pleasurable. Reading W40K fiction and imagining complex strategies are of themselves pleasurable. Thus, although the experience of most games is fundamentally the one guided by a broad and multifaceted interplay of contextual factors, the strength of this notion of pastime is that it recognizes the independent appeal, as well as interplay, of its constituent parts. This independent appeal is consistent with numerous people we have met over the course of this research project who collect and paint armies, or only read the W40K fiction, but never play the strategy battles of W40K.

We illustrated while discussing the academic context of this article that the analytic focus of research into the context of digital games has predominantly been to identify the way in which games do not align with any real/virtual dichotomy implied by their technological situation (Lehdonvirta, 2010). In other words, the focus has been on their interfacing with the physical (e.g. Benford et. al., 2006), physiological (e.g. Apperly, 2009), social (e.g. Juul, 2008), economic (e.g. Castronova, 2005; 2007), or cultural context of play. Although advantageous, we further advocate that (for some games) it is also critically important to analyze the way in which gameplay occurs within the context of an ongoing and interlinked system of heterogeneous practices. To overlook this is to risk an impoverished understanding of the attraction and enjoyment of the game.

A further property of pastimes, well exemplified by W40K, is the extent to which its design ensures that the different activities involved in W40K are presented to players to be selectively reappropriated in order to create an appealing experience. Consider those players discussed earlier in this article, who enjoyed the library of

W40K fiction and consequently involved such fluff in the development of their W40K army lists. This can be at a light, casual level; players may simply appreciate knowing the history of conflict between two W40K races to better frame the engagement. Or, as exemplified by participant Karl (who restricted his army list choices to accord with the fiction), this can be taken very seriously and facilitate new modes of enjoyment. Thus, it is through this capacity for players to be selective about which of these activities they engage in (and to what extent they engage with them) that pastimes are successful games. Different people will selectively reappropriate the diverse components of this pastime differently and as such lays the additional appeal of pastimes over games; one does not have to engage with and enjoy every aspect of the pastime to still enjoy the wider activity.

It is by no means a novel theoretical contribution to suggest that players play games in different ways to ensure their experience is in accordance with their own desires and motivations to play (e.g., see Stenros, 2010; Yee, 2006). Rather, the contribution of this discussion is to emphasize the extent to which games that encourage or enable the form of engagement characteristic of pastimes can be attributed with better facilitating this process of selective reappropriation. We argue that this is one of the key factors involved in W40K remaining successful, despite its high costs to play and in the face of competition for the leisure time of players, and is a feature common to all pastimes.

With regard to game pastimes, it is then attractive to categorize some digital games (e.g., EVE Online, World of Warcraft, or Starcraft) within the category of pastimes. EVE Online has elsewhere been identified for the extent to which it is unbounded by the game client (Lehdonvirta, 2010) and constituent of a wide variety of activities beyond interacting with the game client, which have a bearing on in-game events and success (Carter et. al., 2012). There is an active blogging community, 24-hour news websites reporting in-game events, volumes of player-produced "propaganda" (Bergstrom, Carter, Woodford & Paul, 2013), numerous applications to assist in theory crafting, market speculation, and managing industry commitments. Members of EVE's in-game communities frequently play together in non-EVE games, and EVE even has a popular eSport (Carter & Gibbs, 2013). This is all in addition to the wide variety of "careers" afforded to players of EVE: player-versus-player, scamming, mining, industry, market trading, espionage, leadership to name a few. The wide variety of activities available to players of this sandbox massively multiplayer online game therefore allows for selective reappropriation and interpretation specific to an individual player's desires and motivations. As we've argued elsewhere (Carter et. al., 2012), many of these activities can be classified as paragames through the way that they transform the motivational appeal of other activities, but the broader assemblage of these activities is what lends to understanding EVE Online as a pastime, as these practices are fundamentally interlinked in unique ways for each player across a variety of times, locations, and contexts.

We similarly argue that, for example, the enjoyment of Starcraft eSports is a fundamental component of the Starcraft pastime as playing Starcraft and watching

Starcraft are, for many (nonprofessional) players interlinked; understanding the user experience of Starcraft is impossible without examination of the player's attitude toward the eSport that surrounds and informs client play (e.g., see McCrea, 2009). Although the consumption of eSports occurs in different venues, social contexts, and at different times, it is more appropriate to understand them as an integral component of the game experience rather than as a paratext that simply inform its interpretation in a one-way manner. Starcraft eSports can then be more appropriately understood as a constituent part of the Starcraft pastime, along with playing Starcraft, reading about Starcraft and learning and developing new strategies more broadly situated within the cultural contexts of gaming culture and Internet café cultures. Although it is possible to play Starcraft without engaging in these activities, it is not possible to have an experience that passably resembles the experience of a player of the Starcraft pastime.

This analysis has explored the W40K experience in the context of a competitive tournament that quantified many of the activities we have discussed that constitute the pastime of W40K—painting and modeling, for example, is given a numerical score. This is indicative of how the structure of the tournament engenders the W40K pastime for players. In fact, in addition to rewarding sportsmanship, winning, battle strategy, sociality, painting and modeling with points, other tournaments occasionally provide players fluff scores, rewarding "bios" of armies contextualizing the army list within W40K's fiction. It is in this way that tournaments like Arcanacon are truly "festivals of the hobby," a term frequently mentioned by attendees, which facilitate selective reappropriation in addition to providing additional practices to include in the experience competition, tournament metagame strategies, and so on. Rather than being a core property of pastime, we believe the competitive context of this research simply provides an analytical lens for understanding W40K. The competition at Arcanacon frames transforms and highlights W40K practices, increasing player engagement and interaction and providing new motivations. However, competition is not a necessary component in defining W40k as a pastime, as demonstrated by many W40K "players" who rarely (or never) engage in competitive battles.

Finally, although we have emphasized throughout this article the comparatively long lengths of times players spend preparing for and playing W40K, we do not believe that it is a requirement of pastimes to consume large amounts of "active" time. The "time" of pastime is carefully selected to emphasize the way in which practices of pastimes are temporally interlinked—they occur at across a wide variety of times, locations, and contexts. This notwithstanding, we expect that the majority of games that can be categorized as pastimes do consume a comparably large amount of a player's leisure time. However, as a conceptual understanding and lens for ludological analysis, we readily anticipate how pastime may also guide the analysis and understanding of other games in which the experience constitutes a collection of interlinked and associated activities that serve to occupy one's time and thoughts pleasantly.

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Notes

1. The sixth edition was released mid-2012, following the Arcanacon tournament. Consequently, unless otherwise referenced, when we refer to Warhammer 40,000 (W40K) we are referencing the fifth edition. These changes have not altered the overall way the game is played in any major way; the changes simply revise the hard-coded rules.
2. "Comp"—short for competitive—refers to an armies' inclusion in the tournament with regard to its suitability for the competition, rather than an attempt to rank the strength. Both armies that are too weak or too strong will receive low marks in the Comp section of the tournament.
3. While common in Australia and the United Kingdom, sportsmanship scoring is generally uncommon in the United States.
4. There are several units in W40K that are "random," that is, they rely on chance for their effectiveness. For example, if a player successfully hits with the Ork "Shokk Attack Gun" they roll two six-sided dice to find out the effect that ranges from hilariously unfortunate for the Ork player to a devastatingly powerful blast.
5. W40K battles are made more variable by including missions, victory scenarios beyond completely obliterating the opposing army (which is often difficult to accomplish in seven turns). A common scenario involves strategic objectives, and the winner of the match is determined by who "holds" most of these objectives.
6. See Carter, Gibbs, and Harrop (2012) for an overview of the varied and often confused use of this term.
7. Theory crafting is described in detail by Christopher Paul (2011, 2012) as "a way of playing WoW [World of Warcraft] that depends on work and analysis outside the game" (2011).
8. We use the term craft to refer to this dimension of W40K for clarity, despite there being an emic term for the practice. This is because hobby also has a similar meaning to pastime, often being used to refer to a leisurely practice engaged in regularly.
9. One player commented that they watched every episode of Star Trek: The Next Generation while painting, and another, every Lord of the Rings movie, and several W40K audio books.

10. As a category of engagement, pastime is similar to hobby. However, as previously noted, hobby has numerous connotations, in particular emphasizing crafting activities (like painting or woodwork). We suggest pastime, not to distinguish it from hobby but to avoid confusion over the varied meanings that the concept already has in emic usages. Similarly, the concept of pastime is similar to Robert Stebbins' (2012) notion that some hobbies can be considered to be "serious leisure." However, for reasons indicated, we have sought to avoid this term in order to maintain clarity.

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