# The First Hour Experience: How the Initial Play can Engage (or Lose) New Players

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#### **ABSTRACT**

The first time a player sits down with a game is critical for their engagement. Games are a voluntary activity and easy to abandon. If the game cannot hold player attention, it will not matter how much fun the game is later on if the player quits early. Worse, if the initial experience was odious enough, the player will dissuade others from playing. Industry advice is to make the game fun from the start to hook the player. In our analysis of over 200 game reviews and interviews with industry professionals, we advance an alternative, complementary solution. New design terminology is introduced such as "holdouts" (what keeps players playing despite poor game design) and the contrast between momentary fun vs. intriguing experiences. Instead of prioritizing fun, we assert that intrigue and information should be seen as equally valuable for helping players determine if they want to continue playing. The first sustained play session (coined "first hour"), when inspected closely, offers lessons for game development and our understanding of how players evaluate games as consumable products.

#### **Author Keywords**

Game design; first hour; approachability; first impression

#### **ACM Classification Keywords**

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous; K.8.0 [Personal Computing]: Games

#### INTRODUCTION

Retail computer and video game sales from 2009 to 2012 ranged from 188 to 298 million units per year<sup>1</sup>. Combined with the statistic that 58% of Americans play games, naïvely speaking, this averages to 1 to 2 new games purchased per gamer, every year. Thus, unlike productivity software that is adopted once and used for years or decades, video gamers consume new game products on a repeated, regular basis: encountering and learning new games frequently.

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Consumable games are designed to be experienced for a set period of time (i.e. a promised amount of gameplay that rarely exceeds 100 hours). On a repeated basis, gamers commit a number of hours to learn how to play and, then, to experience these games until they have completed the storyline, all of the game content, or, as Raph Koster asserts [13], when the player has mastered the game.

In this paper, we focus on the initial segment of this timeline: the first hour. By "first hour", we mean the initial play session where players encounter the gameplay and familiarize themselves with it. In reality, this ranges from a few minutes to 4 or 5 hours, depending on the specific game. In fact, our interviews reveal a variety of names for this period: the "initial experience", the "first time user experience", "tutorial time", the "5-5-5" (five seconds, minutes, hours), "the first 10 seconds, the first minute, the first ten minutes, the first hour", and "setting the hook". We retain the shorthand, "first hour", due to its use in industry [5] and in the media (e.g. firsthour.net). Also, we prefer this name because it is clear that players have played the game and have done so for a sustained period of time.

We focus on the first hour because it is the gateway into the main experience of the game. This is a probationary period. In this time, players reconcile their expectations with their initial experience, setting the tone for the rest of the game or, perhaps, giving up on playing the rest of the game entirely. Secondly, the first hour is a learning experience. Players may lack the knowledge or skills to enjoy the game. Even experienced gamers need to figure out how this game is meant to be played. Also, there is synergy with gamification [8]. One goal of gamification is to draw users into a non-game activity. Similarly, the design of the first hour is to drawn in users to the full experience of the game. We believe that the design concepts in this paper can be transferred with minimal adaptation to the gamification domain. Furthermore, the first hour generalizes beyond the typical publishing model for retail games. Alternate models of releasing game content include trial periods (e.g. in the "freeto-try" option for the game streaming service Ouya), game

<sup>&</sup>lt;sup>1</sup> Essential Facts about the Computer and Video Game Industry: Sales, Demographic and Usage Data 2013, http://www.theesa.com/facts/pdfs/esa\_ef\_2013.pdf

demos, free to play models (e.g. **League of Legends** by Riot Games or **Clash of Clans** by Supercell) where the first experience is critical, not only for future enjoyment of a game, but in convincing trial players to become regular ones.

In summary, this paper offers a thick description of the first hour that applies to many domains such as software-as-aservice, free to play models, and gamification. Now, we turn to the related work in which we surface the tacit knowledge of game designers regarding the first hour.

#### **RELATED WORK**

#### **Expert Game Designers**

Game designers consider the first hour to be very important. User researchers have specifically mentioned the "first hour" as critical and influential on continuing play [5].

Game designers are well aware that players abandon games. Phillips [16] reports that popular games only have about 70% of players play to the end. For those who quit out of frustration, Phillips recommends better feedback and appropriate goals for players who are still learning to play.

Game designer Bruce Shelley writes, "A player must be actively engaged by a new game within 15 minutes of starting or we risk losing the player forever." He writes that designers need an interesting start situation, minimal barriers to entry, and to design a good progression from a few decisions that increase in number [17]. If the game is complicated due to special controls, character introductions, or back story, Shelley's advice is to include tutorials or to find clever ways to educate the player while providing entertainment. He warns that uninteresting manuals, introductions, or tutorials (what he calls 'pre-play work') and frustrating interfaces are likely to stop new players.

In Sid Meier's keynote, "The Psychology of Game Design", for GDC'10, he explains that the first fifteen minutes need to offer rewards that are "really compelling, really fun, almost a foreshadowing of all the cool stuff that's going to happen later in the game". Meier advises designers to make players feel comfortable in the game world and on the right track. During this initial time period, he believes that the game almost cannot reward the player enough to get them invested, committed, and part of the game world. One example is in his game, **Civilization IV**. This game offers nine difficulty levels to give players a way to progress and advance while feeling mastery and challenge.

Henry Jenkins also reports that game designers craft a solid emotional payoff and an early moment of mastery or movement to spark the player's appetite [11].

These assertions are based on game designer's rich experience in the industry. They make it plain that game designers wrestle with the first hour, wanting it to be approachable and, above all, fun. We now turn to related literature in the field of game studies.

#### **Game Studies**

There is a great deal of work that is relevant to the first hour, but research with a specific focus on the first play session is relatively under-explored.

Desurvive and Wiberg [7] address the initial experience of gamers in their heuristics for game approachability, coined GAP (Game Approachability Principles). These heuristics include recommendations for allowing practice of new skills/tools, good demonstrations of how to play, feedback, offering self-efficacy, scaffolding, clarity, and information. In the process of validating their heuristics, they show that approachability is a distinct area from usability. Their work establishes how important it is to treat the first hour differently than the rest of the game play experience and offers key themes for understanding the first hour. Our contribution will build on this work by taking a naturalistic approach, examining data from a large set of games, reviewed by people who have actually purchased the game. This will provide additional context and describe causal links that flesh out Desurvive and Wiberg's work.

One study by Wu et al. [20] examines how online games retain users. It claims to study the initial trial experience. Wu et al. hypothesize that "player's initial gratification (trial) experiences in playing an online game will positively affect their continuance motivation". These gratifications have three categories. They are achievement, enjoyment, and social interaction. Although their survey results are statistically significant, Wu et al.'s survey instrument does not contain questions that specify the initial experiences of gameplay. Instead, the survey focuses on the continued use of the game alone, leading to a possible conflation of the first hour and later hours of play.

Livingston et al. [15] study the time *before* the players touch a controller. They measure players' first 15 minutes of gameplay after they read a positive or negative review of the game itself. Among their results, they find that reading reviews does not directly affect play experience as measured through physiological sensors.

Other related works only cover some facets of the first hour such as game tutorials. Anderson et al. [1] conduct a multivariate experiment on the effectiveness of game tutorials for three games. They conclude that investment in tutorials may not be justified for games that can be learned through experimentation. They find tutorials are effective depending on the complexity of the game. Only their most complex game, Foldit, benefited from a tutorial. The other two games were simpler, casual web games that were easier to learn through experimentation. Also, they found no evidence that players learn better in a restricted training mode.

Player engagement is another topic that intersects with the first hour. Here, the sign of a good first hour is when the players become so engaged in the experience that they keep playing into the future. A related theory is flow [4], the psychological theory of how a person can become deeply

absorbed in a challenging and enjoyable activity. It is relevant to games [19] as well as the first hour experience. Csíkszentmihályi [4] describes flow as a careful balance between skills and challenge. An overly easy game is boring. An overly difficult game creates anxiety about failure. This could apply to the first hour. A game starts with simple challenges to deeper ones and requires players to become increasingly skillful. The first hour must provide the right balance of challenge and skill to put players on the right track to enter a flow state.

Similarly, Brown and Cairn conducted a grounded investigation of immersion in games [3]. They characterize immersion as a series of deepening degrees that are divided by barriers. For example, the minimal stage of immersion is engagement which occurs early in time. Brown and Cairn identify barriers at each stage. For the engagement stage, do the gamer's preferences (e.g. genre or theme) prevent them from getting involved? Do the controls offer enough feedback to allow them to learn to play? Also, players think about investment of time, effort and attention. Naturally, they look forward to a reward for these investments. Like most of the related work here, Brown and Cairn are not precise about the timing of immersion which is understandable due to the idiosyncrasies of each game. Their two latter stages of engrossment and total immersion both contain efforts and features that could apply to the first hour. They report about how players prepare the physical environment by turning off the lights before playing to prepare to be engrossed. For total immersion, they identify features such as graphics and sound to be important for atmosphere, however, it is not clear that these features are necessarily preceded by the lighter forms of immersion.

In summary, the industry consensus is that games must start by grabbing the player's attention, feeding their interest for the future. Frustrations must be minimized. The player needs to be taught how to play, rewarded emotionally and with a sense of control.

Meanwhile, the research directly focused on the first hour is introductory. Preliminary heuristics exist as well as a clear delineation of game approachability as its own topic of game design. Individual aspects of the first hour have been widely studied, but findings need some care to be transferred to the first hour. The work on tutorials offers some understanding to the learning portion of the first hour. Also, much has been written about immersion and continued play. Although this is useful in discussing facets for increasing the depth of engagement, our understanding of the first hour requires a more comprehensive picture, attention to what makes the first hour distinct, and greater detail about features of games and how they are encountered for the first time. We aim to provide this in our naturalistic study. Last, our study contributes a time-based view of software that is shared by other studies of technology [12].

#### **GOAL**

Our goal is to explain the first play experience of gamers. We contribute a thick description of the progression of the first hour and insights about designing a compelling one. We frame a game as a product with a natural lifespan and ask what is best in this lifespan's first hour?

#### **METHODOLOGY**

#### Approach

Since our current understanding of the first hour lacks a diverse perspective on the breadth of games, we sought a larger contextual picture. Thus, we collected data that crosses over many games. We sought to create a thick description for situating the prior literature on approachability, tutorials, and immersion. Another approach we could have taken would have been a finer-grained, telemetric accompaniment to Desurvive and Wiberg's think-aloud procedure. However, this was an impractical approach for the number of games we wanted to study. Certainly, such indepth analysis will be useful for a narrower set of games (e.g. targeting one game genre).

#### **Data Collection**

We collected reviews from gaming websites (35 reviews) and Amazon (212 reviews in 30 different genres; see Table 2). We scoped our study to Xbox 360 games because of the popularity of the console and because of similarities across all first hour experiences such as a common hardware specification. Amazon reviews have proven to be a useful source of usability and user experience data [10]. We chose them because they offered self-reports from contexts that are more naturalistic rather than a lab and because the large numbers of reviews per game would increase the likelihood for finding data about the first experience. On the Amazon website, the first author navigated to the review page for Xbox games and used the site's search box. He searched for game reviews that contained keywords such as "first" or "hour(s)". As data collection progressed, he added terms that also appeared frequently in the reviews such as "start", "minute(s)". He also included reviews without a search

	212 reviews Search terms	
Amazon reviews	first	67
	first, hour	50
	hour	40
	start	31
	first, minutes	11
	minute	4
	hours	3
	first, hours	1
	minutes	1
	none (found while read- ing other reviews for the same game)	4
Game reviewers	35 "first hour" reviews	
Professionals	Interviews: 3 Game Designers, 2 Test leads, 1 UX Researcher	

Table 1. Data sources

term that were displayed in the reviews page and fit the criteria of a first hour review. His inclusion criteria was that the review explicitly identified part or all of the review as a first time experience by mentioning an initial time period. Table 1 includes a break-down of the search terms used. Despite the name "first hour" in this paper, we reemphasize that our collection was not restricted to exactly 60 minute reviews. Our data range from initial seconds to initial hours.

Because they offered greater detail than the Amazon reviews, 35 long-form reviews were collected from game review sites (firsthour.net, gamesforlunch.blogspot.com, videogameimpressions.blogspot.com, shakkirules.com, and GameSpot). These reviews specifically report on the first hour. Many describe the gameplay in a minute-by-minute format (e.g., see Figure 1). The reviews were written by 13 different authors. As sources by domain experts, game reviews are a genre of games journalism [21] that has value in informing game design [2].

We decided to analyze the Amazon reviews together with these 35 reviews because the reviews were written from the perspective of a first-time player. Together, the Amazon and first hour reviews comprised our sample of the first

hour experience for gamers. Although we do not distinguish strongly between the two datasets, when we refer to our dataset, we will use "Amazon reviews" to refer to the set of 212 reviews and "first hour reviews" to refer to the set of 35.

To situate our findings in the game development context, we also conducted 6 interviews with professionals in the game industry. (Hereafter, Designer A, B, C, Test A, B, and User Researcher A.) There were three game designers, each with about 20 years of experience in the industry working on AAA-class games and each having worked for 3 or more major game studios. The two interviewees from game testing worked in the area with 15 years and 8 years of experience each. The game user researcher had 10 years of experience at a major studio.

rised our sample of th	ic ilist
Genre	Reviews
Action	28
Modern First-Person Shooter	32
Sci-Fi First-Person Shooter	21
Modern Action Adventure	17
Role-Playing	16
Sci-Fi Shooter	16
Fantasy Action Adventure	10
Puzzle	9
Adventure	9
Rhythm / Music	7
Sports	6
Racing	5
2D Platformer	4
Shoot-'Em-Up	3
Strategy	3
Beat-'Em-Up	3
Driving	3
GT / Street Racing	3
Action Role-Playing	2
3D Platformer	2
Wrestling	2
Football	2
Snowboarding	2
2D Fighting	1
Sci-Fi Action Adventure	1
Modern Shooter	1
Historic First-Person Shooter	1
Rhythm / Dancing	1
Fantasy Online Role-Playing	1
Olympic Sports	1

Table 2. Genres of Collected Amazon Game Reviews. The genre categories for each game are based on the online games publication, GameSpot.

- **00** I click New Game and the first hour of Call of Duty 4 begins. We're looking at a view of Eastern Europe. A voice over is introducing the situation and explaining everything that is going on in the area. The game zooms in to a U.K. training ground. I have control now, a man tells me to take a rifle from the table. He points me to a shooting range and I take aim.
- **01** We conduct various aiming exercises. Looks like there's some auto aim built in when you look down the sight.
- 02 I knife a watermelon. "Your fruit killing skills are remarkable!"
- **03** I follow my objective pointer and meet Captain Price. I have to run an obstacle course now.
- **05** I had to complete the obstacle course in less than 60 seconds, which is easy enough. Basically just have to shoot targets and toss flash grenades. My recommended difficulty is Recruit, the easiest difficulty level. Hmm... I'll go with Regular.
- **07** Quick loading screen and then the globe whips around to the Bering Strait. We're looking at a cargo tanker, looks like it's our first mission. I'm told the crew is expendable, sweet.
- **08** We blast the crew members on the bridge catching them off guard. Whoops! Just shot a friendly, as in someone on my own team. Ouch. have to start the level over now.

Figure 1. Minute-by-minute style of a first hour review

#### **Analysis**

We analyzed the data with Dedoose [6]. The coding process was conducted by the first author from a phenomenological lens and using grounded theory [18] which is well-suited for the underexplored nature of the first hour. In this method, there are three steps: open, axial, and selective coding.

For this study, open coding involved the discovery of codes through sentence-by-sentence analysis. The Amazon reviews and the first hour reviews were both subjected to open coding. Bond and Beale's grounded analysis of game reviews [2] was used as sensitizing theory, meaning that their findings and categories informed the coding process but did not strictly dictate the analysis. Bond and Beale's categorization served as a generic categorization of game review topics (e.g. narrative, gameplay, etc...) that allowed the first author to start coding for first hour-related categories inside generic game review categories. The open codes were closely associated with the data in that, often, the names for these initial codes were direct quotes, such as "Stuck". Next was axial coding [18], the goal of which was



Figure 2. Photo of the analytic process with excerpts from the Amazon and first hour reviews organized by code.

to draw out larger themes. This involved grouping sets of codes together by affinity and reviewing these sets for cross-cutting themes. Using the software, the existing codes were re-organized into sets of similar codes. The sets of excerpts were printed out for closer scrutiny (see Figure 2). The description of the codes and the discovery of larger themes were informed by analysis of these aggregated excerpts. Last was selective coding where, by logical inference, the first author revised and refined the categories.

In addition, during the axial phase of analysis, we solicited interviews from domain experts: industry professionals with years of experience. We used the developing codes as an interview guide. This was a single iterative loop in the analysis where the interviews allowed us to supplement our ongoing analysis and to better situate our findings.

Because we only had the first author analyze the data, we improved the trustworthiness of our findings by following the guidelines by Lincoln & Guba [14] for auditing our findings. An outside auditor was invited to review the study methodology and the developing categories. The auditor reviewed samples of the raw data, the coding process, and the developing categories. He was instructed to confirm that the initial codes were driven by the data and that the inferences from the data were logical. Under his advice, we recognize that some user experiences are not easy to verbalize as a written review and may not have been captured by our method. Also, small adjustments to the category structure were implemented according to his recommendation.

Our findings are presented next. First, we set the stage with a description of the relationship of the first hour to the professional game development process.

# THE INFLUENCE OF THE GAME DEVELOPMENT PROCESS ON THE FIRST HOUR

Our interviewees were familiar with the common topics about the first hour of gaming: capturing the player's attention, easing them into a complex game, abandonment, and setting the tone for the rest of the play experience.

For example, the designers expressed that they had thought a lot about what to offer new players early in a game (coded as "Locked elements" in our analysis) such as a weapon too expensive to purchase. They report that there are two schools of thought about locked elements. The first is to make the players earn progressively powerful items as they play. The second is to offer a glimpse, a "taste of power", in the first few minutes, then strip it all away so that a new player will have enjoyed the core gameplay, but still be challenged (and incentivized) as they pursue those powers.

Additionally, designers were current on the ongoing discussion in industry about the pros and cons of offering free demos, the developing free-to-play business model, and the fact that many players never finish a game.

In the remainder of this paper, we show that our analysis complements this industry knowledge with more contextual details and surfaces new, useful design rationales. But before moving on, we would like to discuss a cross-cutting theme that emerged from the interviews as a whole.

There is an influence of the game development process on the game's design (and software quality) especially on the first hour of gaming. Because our interviews cut across design, UX research, and quality assurance, we collected observations from different corners of the game development process. We found that because of the structure of the game development process, the first hour of gaming receives a higher proportion of development attention than other parts of the game experience.

As developers for AAA commercial games, game designers understand that their choices have implications on a large scale, affecting the enjoyment of a large user base. Because they are aware that not everyone plays a game to the end and that everyone will at least encounter the first hour, their design attention gravitates towards it. In the quality assurance (QA) department, attention is weighted to the first hour for three reasons. First, QA receives much of its direction from the game designers, so, naturally, their priorities follow the designer's priorities for the first hour. Secondly, because games are often designed and programmed sequentially (create the 1st level, then the 2nd level, etc...), the QA department spends more time testing starting levels. Third, due to constantly changing builds and limited testing tools, in some games, QA testers cannot always jump to a chosen section in a game to test mid-game or end-game stages. Instead, they must play a game from the beginning every time they test a feature. Thus, the first hour is the path most traveled (and most tested). In the user-experience department, the researchers own research process favors the first hour. Conducting a usability study means that all participants will be first-time players and follow-up studies with the same users are too expensive. The result is that from the design department to QA and to usability, the most polished aspects of a game can be expected to be the first hour, due in part to how important the first hour is, but also heavily due to the structure of the game development process.

This attention is a reasonable fit for the games as a consumable product. In the interviews, designers regard their game as a success as long as the player had an entertaining experience for a set period of time, no matter if they didn't finish the game. A positive first hour translates to a positive recommendation to friends and a likelihood of offering players a sufficient return in enjoyment for their purchase.

Extending this thought beyond the scope of the first hour, we recognize that there are other models for releasing games. For example, some games are expected to have a lifespan not of hours, but of years. Consider the area of games as electronic sports: One might see the attention on the first hour to be less relevant for the successful design and development of a game like **League of Legends**. After an electronic sport has gained traction among a user-base, design attention is better spent on fine-tuning game balance

to improve the sport experience. Thus, the development process outlined above is a poor fit for maintaining a successful competitive franchise. Also, alternate development processes exist such as independent games created by individual programmers. Suffice to say, our understanding of the relationship between the development process and the end-product promises to be interesting future work for game studies as new models of games emerge (e.g. software-as-service or free-to-play) and as game development processes evolve.

#### FINDINGS ON THE FIRST HOUR

Our qualitative analysis produced a comprehensive description of the first hour. Three major categories emerged. In the first category, we describe the experiences of the players. The second describes how the player learns to play. The third is a shift in perspective. It describes the how players approach the experience proactively.

#### THE FIRST EXPERIENCE ARC

# Expectation → Experience → Outcome

The experience of the first hour maps to a simple arc: Players have expectations; they play the first hour; and, based on new expectations, they choose to continue playing or to stop. Broadly speaking, this progression aligns with the concepts of flow and immersion: greater flow and immersion leads to greater motivation to keep playing. While this may seem no different than the advice for general game design, our analysis uncovers nuances that are specific to the first hour. In the next section, we briefly describe each category for completeness sake and then highlight characteristics that are particular to the first hour.

#### **Expectations**

Unsurprisingly, players enter gameplay with expectations. Early expectations stem from personal experience with an earlier game in a franchise and similar games or genres. The surrounding gaming community will also influence expectations. This includes a vague sense of what others think of a game, influential reviews, industry buzz, and recommendations from friends. Last, players experience snippets of the game: they see trailers of gameplay, rent the game, or play demos.

Here, a key first hour subcategory is what we have identified as anticipated elements. These are expectations that are concrete and specific – as exemplified in this quote:

"Can't wait to actually tackle this first main mission--the intro level doesn't count as that was clearly more of a tutorial and lacked fun augmentations and options--and see how Jensen does sneaking past terrorists and saving hostages" Amazon review of Deus Ex: Human Revolution

An anticipated element may not actually appear within the first hour of play. The advice given in a review of **The Elder Scrolls V: Skyrim** is to look forward to meeting your first dragon, a creature that isn't encountered until a few hours in. Thus, there are times when players have an unfulfilled

anticipation throughout the entire first hour experience – sometimes because it is simply infeasible to get to that point in the game in a typical initial play session.

#### **Experiences**

Like any evaluation of a game, experiences can be distinguished as positive or negative, but a further distinction can be made between those that satisfy a player versus those that intrigue her. These intrigued players express interest in playing beyond the first hour. We have labeled these experiences as memorable versus engaging. Memorable experiences are positive, but can be momentary. Players express awe at a detailed, well-crafted environment, weapon, or enemy unit. Key descriptors include, "cool", "awesome", "wow", "exciting", "fun", "impressed", and "neat". The reviewers mention these highlights in a positive light, but really do not have more to say.

In contrast, engaging aspects are those are accompanied by a reviewer's enthusiasm for more. These are experiences where they express being "hooked", "engaged", "interested", "addicted", "immersed", and emotionally invested. Features that elicit this engagement are compelling narratives, novel game mechanics and conceptual themes. For example, a first hour reviewer of **Condemned: Criminal Origins** is intrigued when he discovers that his ammunition is designed to be limited.

"I hit Y to reload my gun, only to realize that it doesn't actually get reloaded. Instead, my character checks the amount of rounds in the gun. According to the game, I'm limited to the ammunition that is found in weapons. Hmmm...I'm going to have to be a little bit more conservative with my ammo and quit hosing down these perps with a steady stream of lead. Very interesting game concept..."

This same distinction can be applied to negative experiences. Disengaging experiences are ones that reduce the confidence that first time players have in the rest of the game. In our analysis, the emergent categories for negative experiences fall into three buckets: annoyances, frustrations, and tedium. Each risks disengagement in its own way. Annoyances are small negative experiences for gamers such as annoying music, sound effects, or glitches in the camera view of a game. Alone, they can be dismissed, but when they accumulate, players begin to disengage. Frustrations are acute, immediately causing players to consider quitting: being unable to play a game because of hours of patching are required, an unbeatable first level, and terrible controls. Tedium builds when a game is boring or repetitive, lacking variety. It is a signal to players that they may have already exhausted the value of the time spent playing.

#### On souring impressions and winning over skeptics

Building on this categorization, we evaluated changes of sentiment in which an initial positive experience can sour or where a skeptic is won over. In the reviews where there was a such change, the following pattern was observed. When there is a change in sentiment, both positive and negative initial experiences are accompanied by momentary adjectives that are replaced by engaging or disengaging elements. A common descriptor in the Amazon reviews is "at first" which allowed us to identify reviews that changed directions. Here are two examples:

"each section gave you the declassify option which would just give you various ways to make each section harder. <u>At</u> <u>first</u> it was cool, but it quickly became very gimmicky." Gears of War: Judgment

"At first I felt that [slow motion-style combat] didn't go well with heck&slash gameplay, but in half and hour I began to love it and I especially enjoyed the creative use of it during enemies and boss fight. [sic]" Metal Gear Rising: Revengeance

This simple relationship implies that we must reprioritize our design choices for the first hour. The typical advice from industry is to polish the "wow"-factor to grab the player's attention. Ian Milham, art director for Dead Space 2, in a GDC 2011 lecture, describes a strategy where the first encounter with an alien is constructed as an "epic moment", carefully directed to be cinematic and memorable, using extra detail in the character modelling to impress the user. Later, these models are swapped out with lower polygon models for performance reasons. He reasons that the first impression has done its job, positively influencing the player's perception from that point on. While this "epic moment" may impress the player, we argue that it does not compel players to continue playing. In fact, this is the dilemma of offering game demos, free trials, and the free-toplay model. If the player is satisfied by the first taste of the game, why play more?

Our answer is because there is more to see and explore. Thus, our recommendation is to polish the engaging aspects (as mentioned above: the narrative, the depth of the game mechanics and conceptual themes) and if it is impossible to truly experience it in the first hour, to give players the informational cues about the depth of story and depth of gameplay so that they choose to further invest themselves.

# Outcomes

The close of the first hour is an outcome; the reviews that we analyzed were a mix of eagerness to play again, giving up and returning a purchase, and everything in between.

#### Abandonment

Players quit, or "eject" (Designer A), or "shelve the game" (Designer B). Not only might they quit, but on a smaller scale they also abandon parts of the game experience. Reviewers reported that they turned off the music, muted the voices, and gave up on certain levels.

Sometimes, abandonment is gradual. In the reviews, low quality (e.g., bugs or bad controls) or boring games simply "ground to a halt". (Amazon review of **Dead Island: Riptide**).

Sometimes, the abandonment is abrupt. Disappointed reviewers would complain about deal-breakers. As expected, deal-breakers are frustrations in the game experience that supersede all positive experiences. According to one Amazon reviewer, **Blitz: The League** interrupted the simulated football game with too many unskippable cut-scenes. He exclaimed, "Reselling this ASAP!" Even though he expressed that the gameplay was pretty good, his frustration was too great.

The category of deal-breakers inspired us to ask a follow-up question. If something can supersede good experiences, how about the reverse? Can something (or the promise of something) supersede the bad?

#### Holdouts

Clearly, positive experiences lead to continued play, but some players also promised to continue even when the game experience was mediocre. Also, even those who quit express regret. They would have liked to continue, they say. These players are being pulled back towards the game. In surfacing these reasons, we have identified what influences players to continue playing a game that they don't want to play. We have named these reasons holdouts.

A holdout is something that keeps players playing even when annoyance, frustration, or boredom accumulates. It does not mean that the player is excited about a game. Instead, holdouts buy the game a second chance. Ideally, players who hang on past the first hour will find a reason to enjoy the game.

Observed holdouts include anticipated elements as defined above. Players will stick with a game at least until they get to an anticipated element. As mentioned before, there is the **Skyrim** player who was advised to keep playing until he fought his first dragon. In the first hour review of **Crysis 2**, the reviewer expresses some disappointments, but exclaims, "I can't stop before meeting some aliens, right?".

A holdout can be a single enjoyable game mechanic. In **Captain America: Super Soldier**, it is the combat system that keeps this gamer playing for the moment:

"Would I keep playing? I guess so. I really do like the combat system, which captures Captain America's acrobatic grace and power quite well, but the limited enemy variety is allowing that repetitious feeling to sink in. ... I'll soldier on for a bit, but I don't expect to finish this fight." First hour review of Captain America: Super Soldier

A good narrative can act as a holdout. This first hour reviewer of Army of Two: the 40th Day laments the lack of story as motivation to continue. "So far seems an extremely linear, hard-to-control, ugly third-person shooter slog with no interesting story or even motivation to pull me along."

Aside from game features, some players are self-described completionists. They want to be able to say they beat a game. Others, like the **Skyrim** example, were encouraged by their friends to keep playing. A first hour review of **LEGO** 

Harry Potter: Years 5-7 continues to play for social reasons despite repetitive game content: "only because my wife and I have a blast figuring these out together. If I was going at this alone, I might actually be worried that I had bought the first game for a second time. From what I've seen so far, all of Hogwarts has been copy/pasted over into the new game..."

In summary, we have mapped a progression from expectation to experience, then outcome for the first hour. Specific to the first hour, we have introduced subcategories such as anticipated elements, momentary vs. engaging experiences, and holdout features. Together these imply that modeling the ideal first hour as a simple progression in immersion is an incomplete picture. Instead, in addition to enjoying the first moments of the game, players are assessing how they will enjoy gameplay elements into the future. Having described this arc, we now discuss an accompanying trial period in the first hour.

#### FIGURING OUT THE GAME

A new game must be learned. Games each have their own distinct control schemes, game mechanics, and user interfaces that impose a learning curve on their players. Plus, designers have their own agenda for gameplay:

#### The way it's supposed to be played

In our interviewees consistently described game designers as people with a clear vision of how they want players to play their game. They feel responsible for bringing the player into contact with that experience as soon as they can.

Players are aware of the ideal play experience. They want to "get the hang of the game", to "figure it out", and look forward to when the game "opens up". There is a consistent connection in the Amazon reviews from (a) figuring it out to (b) attachment: "once you get the hang of it you won't be able to pull yourself away." (Far Cry 3, Amazon Review) Naturally, the negative case occurs where the core gameplay disappoints: "once the patterns were figured out, the enthusiasm died down quickly." Kung Fu Panda 2 (Kinect)

We now note two challenges: pitfalls and a tricky tradeoff.

# Pitfalls: Simple, Costly Mistakes in Understanding

If a player misses a key detail in learning about the game and it is a deal-breaker, he will abandon the game. This is a pitfall of the first hour that is primarily an information problem rather than a game-play issue. For example, it turns out that the player who hated **Blitz: The League** did not know that he could skip the annoying cut-scenes. Had he known this, he would not have abandoned the game. One Amazon review of **Defiance** chronicles a dramatic reversal after being misinformed. What is now a glowing review ("First impressions - not withstanding - the worst game ever is now a Favorite!") was once a list of complaints. The reviewer was blaming the game for a poor experience when the culprit may have been his internet connection instead. The comment section for this review has several people explain-

ing this. The frustrated player fixed this and came to enjoy the game so much that he revised his review.

Tradeoffs: Discovery vs direction, emotional ups and downs The data shows both a demand for clear directions and, yet, for the freedom to discover the game on the player's own. This echoes the challenges that designers have in locking elements early and that Anderson et al. investigate for game tutorials [1].

As confessed in the reviews, players get lost. They run into impasses. They make incorrect assessments about the difficulty of an enemy unit. They get confused with the crafting system, where to go next, how they died, inventory management, mini-games, game controls, and even the interface ("I think it's a loading screen in disguise" first hour review of Assassin's Creed). They want directions that tell them: where to go in an open-world game (LEGO Harry Potter: Years 1-4), which missions are the main narrative path and which are optional (Borderlands 2), the meaning of the jargon in the game (Stoked), or simply how to get out of a tutorial section (Bionic Commando).

In the absence of explicit directions, players struggle to make sense of the game world. They die often. They look for clues. Subcategories of clues include visual clues (e.g., glowing items), narrative clues, and artifacts in the environment (e.g., what might look like a spawning point for an enemy unit). These clues are grasped by players with varying success. Often, a game has poor cohesion between its story and the game mechanics. **Overlord** places the protagonist in the role of an evil overlord. This moral reversal put one player at a loss when the he encountered a farmer asking for help. Is he supposed to help him or murder him?

We observe an emotional facet in all of this. When directions are missing, players feel frustrated. "Finally after running everywhere, I see there's a hallway up above the room with no access to it for anyone who can't fly. ... Not seeing it made me feel stupid. I don't like it when games make me feel stupid." (First hour review of Iron Man 2) In contrast, when players discovered things on their own, they were enthusiastic. In Forza Horizon, a player discovered a golf course big enough for him to drift his car, later exclaiming "Man that was fun!" (Amazon review). Thus, on one hand, self-discovery is rewarded by enthusiasm and on the other hand, the lack of direction is met with frustration.

In summary, we want to emphasize that the learning portion of the game requires more than just a low-level acquisition of gameplay skills, but also a high-level grasp of the ideal game experience as conceptualized by the game designer. The challenges that we outlined are, in many ways, information challenges laced with a risk of emotional letdown. Before we enter a closing discussion, we want to make some brief remarks about player agency.

#### **PLAYER AGENCY**

So far, our focus is on how the game designer can entice the gamer. This is a passive view of the end-user that does not

account for the player's own initiative. To accompany our experience arc and the learning curve, in this section we offer observations about player agency.

## Doing your homework

Some gather information before playing and urge others to. "If you read all of the in-game instructions and you aren't afraid to dig around in the menus, you'll work through the learning curve quickly." (Create, Amazon review)

"At first it was hard to play and I got my butt handed to me, but that was because I just went straight into the match and tried it right away. Then i studied the controls and figured it out." (WWE '13, Amazon Review)

Players may take a practicing stance. Death comes quickly and often, but they expect it. They expect to fail if they do not yet know the controls or if they didn't get the hang of it. Players do not complain about dying but about the precision of the controls and slow loading times between deaths. This echoes Phillips' [16] recommendation for good feedback.

#### Skipping ahead

Players take a direct route to the action, skipping tutorials, levels, and other decision branches. This is sometimes premature, as shown in the **WWE '13** quote above, but this is what the players are eager to do. They want to have the full experience of the game, not a tutorial level, not character tweaking, nor exploring upgrades. In our data, players wait for cut-scenes to end, skip tutorials, skip crafting systems; reviewers count the minutes to action; they wonder when the game will "open up" or when they'll finally meet the alien, kill the dragon. They search for the direct path, shortcuts, and experiences that allow them to get figure out the game and to do this quickly.

# Adjusting to the game

However, players also take time to prepare themselves to enjoy a game. To improve their experience of the game, players tinker with the difficulty level of a game. After finishing three levels of Captain America: Super Soldier, one player restarted it on a higher difficulty setting to transform his experience from an overly easy game experience to an enjoyable challenge. Despite a rocky start, his adaptation to the game proved positive, leading to a rating of four out of five stars. In a similar example to the prior work on immersion [3], one Amazon review describes a husband and wife preparing to enjoy the first mission of Aliens: Colonial Marines at its best by dimming the lights, tweaking the volume settings, and adjusting the difficulty level. They also assert that they've read the negative reviews and have tailored their expectations accordingly.

#### **SUMMARY**

Our investigation paints a picture of a first hour that is playful, but tentative. The predominant perspective from the related work is that there is a simple progression from low immersiveness to greater that should be exciting and enjoyable. Our findings reflect this, but we have found a collec-

tion of outliers to this model which short-circuit it (such as deal-breakers and pitfalls) or contradict it (e.g., holdouts).

What leads players to retain their interest in the game? It appears to be the depth of the narrative and the gameplay, both of which cannot be fully absorbed in the first hour of play. Thus, as players struggle to figure out the game, it is imperative for them to glimpse the designer's vision. As a result, they are not only playing the first hour, but are evaluating it, skipping around, and adjusting to it.

# **IMPLICATION: INTRIGUE TRUMPS ENJOYMENT**

As a concrete design implication, consider how one might design the first element in a game: the first weapon or enemy unit. We assert that intrigue and engagement trump enjoyment. Momentary pleasures are not valuable for leading into further play except by promising the player that he will see more of the same. Even this can be a false promise. For example, the high quality model in **Dead Space 2**, as mentioned before, will never resurface in the remaining hours of play. One might even argue that if beautiful graphics are desired and after encountering the most intricate unit model in the game, there is no reason to keep playing.

Thus, we although agree that the memorability of a first game element is important, we would emphasize intrigue over memorability. For example, acquiring a weapon can engender confidence about the way the rest of the game will play out. "... as soon as i whipped out two crimson blades i knew i would like the game, and spent the next two hours fighting stormies." (Star Wars: The Force Unleashed II, Amazon Review #2) For inspiring greater engagement, designers should ask how a new weapon, enemy, or element might spark the interest of a new player.

Furthermore, we can apply this prioritization to explain what is important about existing design strategies such as showing players unaffordable items in a store or offering an initial taste of power. The goal is to fix an anticipated element in the player's mind and to show them the possible depth of gameplay. We further advise that the balance that designers must strike with the early taste of power is to use it to communicate the strengths of the game-to-come and not just to be a momentary enjoyable experience.

## Game evaluation doesn't have to be 'fun'

It should not escape the reader that we are deemphasizing fun in the first hour. We argue that this can be done because players are looking for the central purpose of the game and that information seeking behavior should be evaluated by efficiency rather than entertainment value. This explains why players skip levels or are willing to do their homework. As an illustration, consider how online websites such as GameFAQs.com are highly valued for learning how to play a game. Users would not be much better served if these sites were redesigned to be more flashy or entertaining.

Taking this utilitarian approach to the first hour, we weigh in on the dilemma between direction and discovery (our aforementioned tradeoff). We assert that players who are in 'practice mode' or 'learning mode' may enjoy spontaneous moments early on, but are more interested in acquiring information about the game. Thus, while skills are being learned, the less emotional route (direction) is preferable. Design the first hour to emphasize direction in a way that both instructs and hints at the depth of the game into the future and save room for discovery after the first hour.

#### IMPLICATIONS FOR DEVELOPMENT

Our findings show that the first hour receives a lot of game development attention as a consequence of the structure of the game development process. However, we are not convinced that this attention translates to improving the way the first hour can inspire players or solve their information seeking problems. Arguably, the process favors the creation of memorable first hours rather than intriguing ones. We encourage game development teams to continue to explore how process impacts the game as an end-product.

#### LIMITATIONS, FUTURE WORK, & THANKS

Our analysis, conducted from a phenomenological lens, is limited to what could be verbalized by players and what they chose to post online. Also, the genres in Table 2 ought to be taken into consideration when transferring our findings to domains such as children's and casual games.

A natural next step will be to explore other "hours" of these games-as-consumables. What, for example, makes an ideal "last hour" of play, ending a game well? Also, we have found a utilitarian activity in information-seeking for games. This mundane aspect in a playful activity ought to be further examined. Furthermore, we observe that these solutions are embedded in the design of the game. For example, story-gameplay cohesion is not a usability solution, but rather, an aspect of game design. Understanding how game design is a source of information would have wider implications; and, of course, would improve the first hour, leading to many memorable hours of future play.

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