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Why We Play Games: Four Keys to More Emotion Without Story

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Player Experience Research and Design for Mass Market Interactive Entertainment.

Why We Play Games – The Player Experience

To create more emotion in innovative future games, we at XEODesign want to know more about the role of emotion in games and identify ways to create emotion other than story cut-scenes. In improving over 40 million Player Experiences during twelve years of research and design we have seen people get angry, excited, and on occasion even cry. These reactions make us wonder how many emotions do games create? What makes failing 80% of the time fun? Do people play to feel emotions as well as challenge? If emotions are important to play, where do they come from? Do people modify games to feel differently? Is it possible to build emotions into games by adding emotion-producing objects or actions to game play rather than cut scenes? To what extent are game developers already doing this?

Pioneers in Player Experience Research and Design methods XEODesign conducted an independent cross-genre research study on why people play games and identified over thirty emotions coming from gameplay rather than story. Our results revealed that people play games not so much for the game itself as for the experience the game creates: an adrenaline rush, a vicarious adventure, a mental challenge; or the structure games provide, such as a moment of solitude or the company of friends. People play games to create moment-to-moment experiences, whether they are overcoming a difficult game challenge, seeking relief from every-day worries, or pursuing what Hal Barwood calls simply “the joy of figuring it out.”

We were curious about what could be said of all computer and video games and what, other than story, triggers emotions. What types of internal and external experiences (inside and outside a player’s head) do players appreciate and expect from games? We wanted to learn what adult players thought made good game experiences, after all, not all games with good graphics and advanced features are fun. A game’s value proposition is how it makes its customers think and feel. We wanted to observe how popular games deliver these experiences, and consider how to do it better.

To answer these questions XEODesign conducted a research study with 15 hardcore gamers, 15 casual gamers, plus 15 non-players. We looked for clues in what happened before, during, and after play. We considered theory from pertinent psychological studies. We went off in search of emotion and found Four Keys to releasing emotions during play.

Research Methodology

The observations were conducted by XEODesign, Inc. a player experience research and design firm with an eleven year history of improving player experiences for games and consumer software for companies such as Sony, Leap Frog, Ubisoft, Broderbund, and Mattel.

XEODesign performed a field study in which 30 adults were asked to share their thoughts and feelings while playing their favorite PC, console, handheld, or internet games. Players spent 90 to 120 minutes playing where they normally do in their homes, fraternity houses, public gaming rooms, or workplaces. Most played the games by themselves except for four console multiplayer sessions of 3-6 players, which were conducted with participants playing in the same room. We also observed two online PC multiplayer sessions over the internet. Using Contextual Inquiry as well as our own XEOAnalysis™ methods a researcher observed participants during play and administered a questionnaire at the end of the session. To collect the opinions of non-players about gaming, we also interviewed 15 friends and family members of participants who were nearby during the observation sessions.

We collected three types of data: video recordings of what players said and did (45 hours), player's questionnaire responses, and verbal and non-verbal emotional cues during play. We analyzed over 2,000 observations from video transcripts, facial expressions, questionnaire responses, and session notes that we sorted into affinity groups. XEODesign used these groupings to create nearly a dozen consolidated models of player behavior and processes that facilitated or inhibited enjoyment. The four most important pathways to emotion in games are presented here as Four Keys.

This report contains highlights from XEODesign's upcoming work on "Why We Play Games." The models for these Four Keys draw from our research of game preferences as expressed by players using qualitative methods. Where appropriate this paper also references the research of Paul Ekman on Emotion, Mihaly Csikszentmihalyi on Optimal Experiences (Flow), and Don Norman on Affective Computing. It is beyond the methodology and scope of this study to produce statistically significant results; or draw causal relationships between the biological, developmental, or cultural reasons people play; or the behavior of any brain structure or system. Here we focus on what players enjoy most about their experiences of play.

Games observed as part of this study include these titles (players refer to others as well):

Fighting	Racing	Puzzle	Sports & Strategy	Other
<i>Brute Force™</i>	<i>APEX™</i>	<i>Atomica</i>	<i>Back Yard</i>	<i>Buzz Lightyear</i>
<i>Counter-Strike™</i>	<i>Mario Kart® (N64)</i>	<i>Collapse® I</i>	<i>Baseball™</i>	<i>Action Game</i>
<i>Conflict Desert Storm</i>	<i>Mario Kart®</i>	<i>Hearts & Black Jack</i>	<i>NBA Street</i>	<i>Dark Age of</i>
<i>Tom Clancy's Ghost</i>	<i>Double Dash™</i>	<i>JT Blocks</i>	<i>Top Spin™ Tennis</i>	<i>Camelot™</i>
<i>Recon & Splinter</i>	<i>Need for Speed™</i>	<i>MSN Crossword</i>	<i>Civilization II</i>	<i>Online Gambling</i>
<i>Cell™</i>	<i>Underground</i>	<i>Pop and Drop</i>	<i>Heroes of Might and</i>	
<i>Grand Theft Auto</i>	<i>MX2002 featuring</i>	<i>Puzics</i>	<i>Magic</i>	
<i>Vice City</i>	<i>Ricky Carmichael</i>	<i>Rampart</i>		
<i>Halo: Combat Evolved</i>		<i>Snood</i>		
<i>Soul Calibur® II</i>		<i>Tetris®</i>		
<i>Virtua Fighter 4™</i>		<i>Word Whomp</i>		

To ensure candid feedback participant names used in this report have been changed.

Overview of Four Keys to More Emotion without Story

XEODesign created 12 models of Player Experience from the data collected. In looking at how games create emotion without story we created 4 Keys to emotion without story that met these requirements:



Criteria for 4 Keys

1. What Players Like Most About Playing
2. Creates Unique Emotion Without Story
3. Already Present in Ultra Popular Games
4. Supported by Psychology Theory and Other Larger Studies

XEODesign's research shows that each Key is a reason people play and is a mechanism for emotion in a different aspect of the Player Experience. Both players and games vary in how important each Key is to having fun. However, analysis of best selling games such as *Bejeweled*, *Halo*, *Grand Theft Auto (GTA)*, *EverQuest*, and *Mario Kart Double Dash* reveals that these games create emotion in at least three of the Four Keys. For these popular titles many layers of the experience stand on their own as entertainment. Combined these factors make a deeply enjoyable game for a wide market. Designing deep game experiences for each Key offers a different avenue to enhance the Player Experience as a whole and by refining them through play testing provides more opportunities for emotion in games.

1. Hard Fun

Emotions from Meaningful Challenges, Strategies, and Puzzles

For many players overcoming obstacles is why they play. Hard Fun creates emotion by structuring experience towards the pursuit of a goal. The challenge focuses attention and rewards progress to create emotions such as Frustration and Fiero (an Italian word for personal triumph). [2] It inspires creativity in the development and application of strategies. It rewards the player with feedback on progress and success. Players using this Key play to test their skills, and feel accomplishment. In our study players who enjoy the Hard Fun of Challenge say they like:

- Playing to see how good I really am
- Playing to beat the game
- Having multiple objectives
- Requiring strategy rather than luck

Games with this Key offer compelling challenges with a choice of strategies. They balance game difficulty with player skill through levels, player progress, or player controls. In *Mario Kart* the difficulty of the challenge matches the skill of novice and advanced players (if you can't drive, you can at least throw stuff); plus it offers emotion opportunities from cooperative and

competitive gameplay. Games with this Key include *Civilization*, *Halo*, *Top Spin Tennis*, *Crosswords*, *Hearts*, *Tetris*, and *Collapse*. Some games offer a choice of winning conditions such as *EverQuest* and *The Sims*.

2. Easy Fun

Grab Attention with Ambiguity, Incompleteness, and Detail

Other players focus on the sheer enjoyment of experiencing the game activities. Easy Fun maintains focus with player attention rather than a winning condition. The Immersion Key awakens in the player a sense of curiosity. It entices the player to consider options and find out more. Ambiguity, incompleteness, and detail combine to create a living world. The sensations of Wonder, Awe, and Mystery can be very intense. Players using this Key play to fill attention with something new. In our study players who enjoy the Easy Fun of immersion say they like:

- Exploring new worlds with intriguing people
- Excitement and adventure
- Wanting to figure it out
- Seeing what happens in the story, even if I have to use a walk through
- Feeling like me and my character are one
- Liking the sound of cards shuffling
- Growing dragons

Games with this Key entice the player to linger, not necessarily in a 3D world but to become immersed in the experience. Rich stimuli and ambiguity as well as detail cause the player to pause with wonder and curiosity. Repetition and rhythm can be hypnotic. In *Mario Kart* the visual display, cart technology, and zany game obstacles inspire curiosity and immersion. Other games with Easy Fun mentioned by players include *Myst*, *Splinter Cell*, *EverQuest*, *GTA III*, *Max Payne*, *Halo*, *Civilization*, *Collapse*, *Tetris*, *Dark Age of Camelot*, and *Hearts*.

3. Altered States

Generate Emotion with Perception, Thought, Behavior, and Other People

Players report that how a game makes them feel inside is one of the major reasons why they play, or “games as therapy.” They describe enjoying changes in their internal state during and after play. The Internal Experience Key focuses on how aspects of the game external to the player create emotions inside player. This aspect of the player’s experience is the way in which perception, behavior, and thought combine in a social context to produce emotions and other internal sensations most frequently those of Excitement and Relief. Players using this Key play to move from one mental state to another or to think or feel something different. In our study Players whose enjoyment focuses on their internal state say they like:

- Clearing my mind by clearing a level
- Feeling better about myself
- Avoiding boredom

- Being better at something that matters

Games with this Key stimulate the player's senses and smarts with emotion from compelling interaction. For example *Mario Kart* combines rich visceral graphic and audio stimuli, intriguing concepts, and behaviors to create wildly fun emotions in the player. Games from our study strong in this Key include: *Collapse*, *Crosswords*, *Halo*, *GTA*, *Civilization*, *Tetris*, and *EverQuest*

4. The People Factor

Create Opportunities for Player Competition, Cooperation, Performance, and Spectacle.

Many player comments center on the enjoyment from playing with others inside or outside the game. In addition to buying multiplayer games players structure game experiences to enhance player to player interaction. Participants play games they don't like so they can spend time with their friends. Wisecracks and rivalries run hot as players compete. Teamwork and camaraderie flourish when they pursue shared goals. Dominant emotions include Amusement, Schadenfreude, and Naches. Players using this Key see games as mechanisms for social interaction. In our study players whose enjoyment came from interaction with other people say that:

- It's the people that are addictive not the game.
- I want an excuse to invite my friends over.
- I don't like playing games, but it's a fun way to spend time with my friends.
- I don't play, but it's fun to watch.

Multiplayer games are the best at using this Key, although many games support some social interactions through chat and online boards. Games that offer both cooperative and competitive modes offer a wider variety of emotional experiences. For example *Mario Kart's* multiplayer mode allows two to four players to sit and play together providing performance opportunities and plenty of spectacle for anyone watching. Other games with this Key include *EverQuest*, *Dark Age of Camelot*, *Soul Calibur II*, *Halo*, and *GTA (it is fun to watch)*.

Why Some People No Longer Play

"I won't play his games, because someone has to take care of the kids!"
–Wife of a Hard Core Gamer

Non-players we interviewed have several reasons why they do not play. The onset of job responsibilities and raising families reduces game play turning some hard core gamers into non-players. Many never play as adults, finding games meaningless or a waste of time. Others reject games because of their moral theme or graphic violence. Interestingly several that have tried playing games in the past actively avoid games because "they are too addictive." For them it is better not to play than risk developing a bad habit.

Emotions During Play

To arrive at these Four Keys we observed many emotions from gameplay in facial gestures, body language, and verbal comments. Close observation reveals some unusual emotions in addition to those we expect such as excitement and frustration and amusement and sensory pleasure. Playing favorite games participants enjoyed many emotions such as Fear and Surprise in *Halo*, the combination of Disgust with Naches in *Odd World*, Schadenfreude and Fiero in head to head *Top Spin Tennis*, and Wonder in *Halo's* ring and *Myst's* linking books.

Emotion	Common Themes and Triggers
Fear	Threat of harm, object moving quickly to hit player, sudden fall or loss of support, possibility of pain
Surprise	Sudden change Briefest of all emotions, does not feel good or bad, after interpreting event this emotion merges into fear, relief, etc.
Disgust	Rejection as food or outside norms The strongest triggers are body products such as feces, vomit, urine, mucus, saliva, and blood.
Naches/ Kvell (Yiddish)	Pleasure or pride at the accomplishment of a child or mentee. (Kvell is how it feels to express this pride in one's child or mentee to others.)
Fiero (Italian)	Personal triumph over adversity. The ultimate Game Emotion Overcoming difficult obstacles players raise their arms over their heads. They do not need to experience anger prior to success, but it does require effort.
Schadenfreude (German)	Gloat over misfortune of a rival Competitive players enjoy beating each other especially a long-term rival. Boasts are made about player prowess and ranking.
Wonder	Overwhelming improbability. Curious items amaze players at their unusualness, unlikelyhood, and improbability without breaking out of realm of possibilities.

[2]

Summary and Conclusion – Why We Play Games

People play games to change or structure their internal experiences. Adults in this study, enjoy filling their heads with thoughts and emotions unrelated to work or school, others enjoy the challenge and chance to test their abilities. Games offer an efficiency and order in playing that they want in life. They value the sensations from doing new things such as dirt-bike racing or flying, that they otherwise lack the skills, resources, or social permission to do. A few like to escape the real world; others enjoy escaping its social norms. Nearly all enjoy the feeling of challenge and complete absorption. The exciting and relaxing effects of games is very appealing and some apply its therapeutic benefits to “get perspective,” calm down after a hard day, or build self-esteem.

Direct observation reveals details about player emotion. We find emotion in player’s visceral, behavioral, cognitive, and social responses to games. Players play to experience these body sensations that result from and drive their actions. Some crave the increased heart rate of excitement from a race, the skin prickling sensation from Wonder, or the tension of Frustration followed by feelings of Fiero. For others it is simply the exchange of worries and thought and feelings for relaxation and contentment or a feeling of achievement knowing they did it right.

The Four Keys unlock emotion with:

- 1. Hard Fun:** Players like the opportunities for challenge, strategy, and problem solving. Their comments focus on the game’s challenge and strategic thinking and problem solving. This “Hard Fun” frequently generates emotions and experiences of Frustration, and Fiero.
- 2. Easy Fun:** Players enjoy intrigue and curiosity. Players become immersed in games when it absorbs their complete attention, or when it takes them on an exciting adventure. These Immersive game aspects are “Easy Fun” and generate emotions and experiences of Wonder, Awe, and Mystery.
- 3. Altered States:** Players treasure the enjoyment from their internal experiences in reaction to the visceral, behavior, cognitive, and social properties. These players play for internal sensations such as Excitement or Relief from their thoughts and feelings.
- 4. The People Factor:** Players use games as mechanisms for social experiences. These players enjoy the emotions of Amusement, Schadenfreude, and Naches coming from the social experiences of competition, teamwork, as well as opportunity for social bonding and personal recognition that comes from playing with others.

What surprised us most was the dramatic contrast in emotional displays between one vs. several people playing together. Players in groups emote more frequently and with more intensity than those who play on their own. Group play adds new behaviors, rituals, and emotions that make games more exciting. We were also surprised at how aptly "Flow" describes challenge and the promise this holds for making games that can improve quality of life. For the game designer, the Four Keys to unlocking emotion in moment to moment game play offers new opportunities for generating emotion through player choice.

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Nicole Lazzaro has over fifteen years of expertise in Player Experience Research and Design for mass-market games and consumer creativity products, with clients including Sony, Ubisoft, Sega, Roxio, LeapFrog, Mattel, The Learning Company, PlayFirst, Xfire, Broderbund, and Maxis.

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