Goals & Genres

what are the possibilities?

Key Chapter Questions

- What are some non-entertainment *goals* associated with game development?

- What are the characteristics associated with popular game *genres*?

- Which goals and genres work particularly well together?

- Which particular game content is traditionally associated with certain genres?

- How are genre hybrids and new types of genres changing the way games are categorized?

Chapter 1 introduced you to some games that succeeded (or failed) during the brief history of electronic game development. Chapter 2 presented a closer look at the basic options that are available as you consider developing your own game. This chapter continues the discussion of game elements—focusing on goals and genres that are often part of the first step in the creative development of a game. You might be surprised at the wide variety of goals and genres that are in use today. As you read through this chapter, consider the types of games that you enjoy playing. Do most of them fit into a particular genre? There also might be a few genres described in this chapter that you never knew existed.

Goals

Why do you want to create a game? Do you want to entertain, educate, support, market, build a social community—or get players to work up a sweat? Games are developed for a variety of purposes—and pure entertainment is just one of them!

Entertainment

It is a common assumption that games should be developed purely to *entertain* the players. You will learn in Chapter 4 that many people play to escape from the stresses of daily life—or to relieve boredom. There are also those who play for the same reason they might watch a movie or read a book. It's a diversion that immerses them in an alternate world and engages them emotionally. Some games specifically allow players to become someone new—to role-play as characters, some of their own creation. Others keep them occupied by having to react quickly to physical reflex and mental problem-solving challenges. Notice that players are not just passively sitting and letting the entertainment unfold in front of them. Instead, they are involved in actions such as role play, physical movement, and problem-solving. This medium is uniquely interactive—allowing players to manipulate, modify, and sometimes even take part in creating the entertainment experience.

Sony Computer Entertainment America

Most games, such as *Uncharted 2: Among Thieves*, are created for entertainment purposes.

Social

In Chapter 4, you'll learn that one of the motivating factors for playing games is *social* interaction. Some multiplayer online games, discussed later in this chapter, are developed for this purpose. In these cases, entertainment in the traditional sense takes a backseat to community-building.

A non-game example of community-building include social networking sites and tools such as Facebook, Foursquare, and Twitter—or even a dating site such as Match.com, where people spend a lot of time browsing each other's profiles and communicating through secure email, IM, and chat. There are other types of multiplayer games (such as LAN-based and local, discussed in Chapter 2) that also result in a great deal of social interaction.

Social interaction as a focus can happen by accident. The original purpose of *The Sims Online* was to entertain players through scenarios that involved role-play and character maintenance. The ability to communicate through the game attracted players who preferred discussing non-game topics rather than playing the game. (Player communities within and outside of online games are so significant that an entire section of Chapter 12 focuses on this phenomenon.) Games developed for the specific purpose of creating communities need not be limited to online games with a large

customer base. These games would be appropriate for support groups, membership associations, religious organizations—or even "family and friends" networks.

It has been argued by some that games focusing on social inter-action (i.e., *social games*) could be more than just applications—but actual game genres (discussed later in this chapter). Social games have become incredibly popular due in no small part to the rise of Facebook. The immense popularity of games created for the social network helped kick off a resurgence in the casual player market (discussed in Chapter 4). Social games have also redefined the notion of "casual" as distinct from frequency of play; it's more about how the games are designed and played—rather than how often. Casual games played on Facebook might be in small spurts, and the difficulty level associated with many of them might be lower—but players tend to play them quite frequently. At an International Game Developers Association – Los Angeles (IGDA-LA) event in 2010 focusing on the casual game "renaissance," Cynthia Woll of Cul de Sac Studios referred to *FarmVille* as a "stealth MMO"; this is not far from the truth! (MMOs will be discussed in more detail later in this chapter.)

Electronic Arts
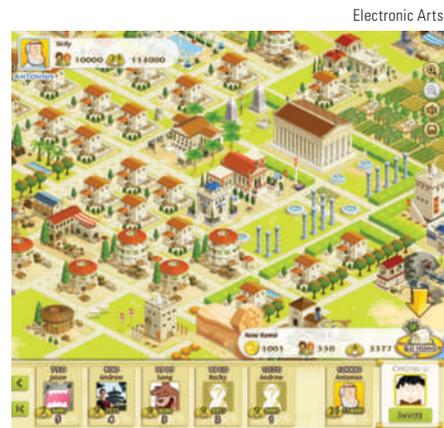
Social games such as *My Empire* require players to interact with Facebook friends in order to build resources necessary to progress in the game.

Emmy Jonassen on the Shift to Casual & Social Games :::::

Emmy Jonassen is responsible for all communication efforts sur-rounding the 3DVIA Studio game engine—including positioning, messaging, promotion, acquisition/retention programs, adver-tising, public relations, and the development of demo/learning materials. From its collaboration with its community of game developers, 3DVIA has gained valuable insight into the state of game development, the hurdles faced by studios of various sizes, and how to develop tools to fit these needs.

David Laubner

Emmy Jonassen
(Marketing Manager,
3DVIA/Dassault
Systemes)

Through our interaction with various developers, we have seen quite a dramatic shift from the need for console devel-opment solutions to tools for building mobile, casual/social, and online applications. This most certainly stems from a consumer demand, since many studios have changed their entire workflow and business strategy to adapt and capitalize on this ever expanding market. The casual/social game community cannot be ignored; it's massive and viable. This has been proven by the enormous success of such companies such as Zynga, Playdom, and Playfish—along with our own community of developers.

Educational

Educational games are those created to teach while they entertain. In Chapter 1, you learned about the *edutainment* era in CD-ROM game development. These games were specifically developed for educational purposes, and they were all aimed at children. Examples include *Oregon Trail, Reader Rabbit,* and *Math Blaster* (from Sierra On-Line, The Learning Company, and Davidson & Associates, respectively). These games feature in-game knowledge acquisition—where knowledge of certain topics (such as geography, math, and reading) is taught or accessed within the game itself. In most edutainment games, the topics are taught overtly. All types of simulation games discussed later in this chapter allow players to acquire in-game knowledge about real-world objects (such as the controls in the cockpit of a jet) and to apply knowledge they have learned outside the game (such as how an economic system works).

Why were *edutainment* games designed mainly for children? There is a large market of adults in colleges, universities, research institutions, vocational schools—even in corporations—who would benefit from games that serve an educational purpose. As you will learn in Chapter 4, players are not just kids! An interesting educational application might be online distance learning. Most online classrooms consist of discussion threads—which enhances social interaction (as it does in online multiplayer games). Instead of posting only discussion threads—which greatly enhances lateral learning but does not involve constructivism (learning by doing)—students could be playing online multiplayer games that incorporate real-world simulations, such as economics, archaeology, auto mechanics, music, marketing…even surgery!

Houghton Mifflin Harcourt
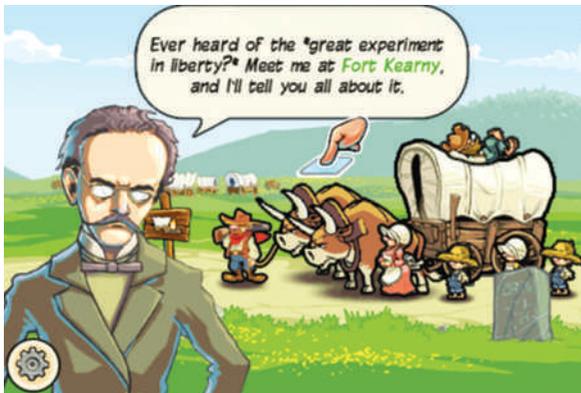
Oregon Trail teaches American history as players journey into the West.

Even though education can be a specific goal when designing a game, it could be argued that all games are educational "by accident." Several motivating factors discussed in Chapter 4 have a lot to do with learning. In addition to gaining and applying knowledge about real-world events (the traditional definition of an educational game), there are other forms of learning that occur in most (if not all) games.

Recent "puzzle games" have started to deviate from the genre and, to the surprise of many, these games might be inconspicuously realizing the promise of edutainment. Puzzle games can be thought of as workouts for the brain. Nintendo's *Brain Age* and *Big Brain Academy* take this concept to the next level. Each of these games is loaded with math, logic, and visual exercises that score players based on their brain age and brain weight, respectively, making it clear whether the player's brain skills are up to par. (If not, some "brain-training" sessions can correct this!) While each title focuses on different sets of skills, both are based on research conducted by Professor Ryūta Kawashima and have been a huge success for the Nintendo DS.

For example, *mastering* the game is tied into a learning process. Players are not usually satisfied with investing time into playing a game, only to lose. Most people play to win. The game accommodates this by allowing the player to save the game at different intervals (discussed in more detail in Chapter 8), so that players can go back to a point in the game *before* they made decisions that might have resulted in losing the game. Winning is also accommodated by providing the player with feedback—which sometimes appears in the form of a score or even a letter grade! For example, Nintendo's *Advance Wars* involves a series of missions that a player must complete to eventually finish the game. At the end of each mission, the player receives a numerical score and letter grade

Brain Age 2: More Training in Minutes a Day challenges players in a wide variety of ways, including playing a piece on the piano.

("S" for "Superior," followed by A, B, C, etc.). If the player made a few mistakes while playing the mission and wants to start over, the player can exit out of the mission and start again at any time before completing it. The letter grades assigned to the missions provide a form of assessment for the player, who now has an idea of how well he or she is playing. It's like getting feedback from an instructor every time a student finishes a homework assignment! *Advance Wars* also offers a field training section—a tutorial that helps teach new players how to play the game, which can be a more entertaining alternative to reading the instruction manual for some players.

Serious Games

Games created for non-entertainment purposes are also known as serious games—used by business, medicine, education, and the government to educate, inform, recruit, persuade, or market to players. Serious games have captured the interest of a large portion of the developer market—as evidenced in events such as the Serious Games Summit, Games for Health, Games for Change, and Games, Learning & Society. The "serious games" category is considered by some as a specific game genre. Although genres are discussed later in this chapter, games created for non-entertainment purposes will be discussed here in the Goals section. Some categories discussed (including social and advergames) are not always included under the "serious" umbrella, but it could be argued that they belong in this category because the primary goals of these games are not entertainment-related.

Active Learning

Students tend to take more ownership of knowledge when they acquire it through a dynamic interactive experience. In a game setting, students receive immediate feedback on their performance in a problem-solving activity. This is an environment that inherently encourages active learning.

—*Jan McWilliams (artist & Director of Interactive Design, Art Institute of California, Los Angeles)*

Karl Kapp, James Paul Gee & Bill Shribman on Educational Games :::::

KK

Karl Kapp, Ed.D.
(Professor of Instructional Technology &
Assistant Director
of the Institute for
Interactive Technologies,
Bloomsburg University)

JPG

James Paul Gee, PhD
(Mary Lou Fulton
Presidential Professor
of Literacy Studies,
Arizona State
University).

Karl Kapp has been researching and studying 3D virtual immersive environments for a number of years, and the culmination of his efforts is the book he co-authored with Tony O'Driscoll titled *Learning in 3D: Adding a New Dimension to Enterprise Learning & Collaboration* published by Pfeiffer. A noted writer and expert on the convergence of learning, technology and education, Karl is author of four additional books—including the widely-read *Gadgets, Games & Gizmos for Learning*. Karl earned his doctoral degree at the University of Pittsburgh and has been a professor of instructional technology for over 12 years.

The serious games movement is significant and can have a real impact on education. Schools are just now opening up to the concept that students can learn through games if they are designed from an instructional perspective and focused on education as well as entertainment. These games require a balance between pedagogy and gameplay between learning and instruction. If done well, serious games can provide learning opportunities well beyond the classroom.

James Paul Gee is a theoretical linguist by training, but he has worked on issues in education for the last two decades. He has served as Professor of Linguistics at the University of Southern California (USC), Jacob Hiatt Professor of Urban Education at Clark University, Tashia Morgridge Professor of Reading in the School of Education at the University of Wisconsin-Madison, and Mary Lou Fulton Presidential Professor of Literacy Studies at Arizona State University. James was a founding member of the New London Group, an international group of scholars who have stressed the importance of design and design thinking for students in the modern world. He has been published widely on issues dealing with cross-cultural communication, literacy learning, and learning inside and outside schools and workplaces. Inspired by his then six-year-old son, he began playing and eventually researching computer and video games and has written short pieces for *Wired* and *Game Developer*, as well as several additional academic papers. His books include *The Social Mind*, *The New Work Order*, *What Video Games Have to Teach Us About Learning and Literacy*, and *Why Video Games Are Good for Your Soul*.

Real learning is not about "facts"—but about having such deep experiences of the world … that the facts become part of what it takes to "play the game" or take on the identity. Real learning means learners cannot just talk about what they have learned, but must actually do things with it. Real learning should be assessed by asking how the current experience has prepared learners for future learning. If the experience makes them do better on a later—perhaps even more important—learning task, who cares how many "facts" they get right or wrong today?

When adapting games for learning, developers should create:

■ Strong identities that learners can create or inhabit (e.g., being a certain type of scientist).

■ Immersive experiences that naturally cause people to learn important things by living through and actively thinking about the experience. Make the meanings of words,
concepts, and symbols concrete through experiences and actions.

■ Well-ordered problem spaces, which give meaningful practice that eventually makes skills routine, and then challenges that routinization with a new higher-level problem. Give learners plenty of opportunity to interact both within and outside the game.

Encourage learners to talk and think about their experiences outside the game (e.g., debrief them about their strategies).

Bill Shribman is responsible for all interactive media for kids within the WGBH Educational Foundation, including national PBS sites for *Arthur*, *Between the Lions*, *Zoom*, *Postcards from Buster*, *Curious George*, *Design Squad*, *Martha Speaks*, and *Fetch*—which have won several awards, including the first Prix Jeunesse given to a web site. Bill is the creator of several original broadband projects including the *Fin, Fur and Feather Bureau of Investigation*, *The Greens*, and a photographic news service for PBS KIDS called Beeswax. He has written and produced content for web, audio podcast, CD-ROM, interactive television, kiosk, radio, and television— and he is currently working on interactive content for emerging platforms including PSP, iPhone, interactive whiteboard, Wii, and surface tables. Bill has received Emmy nominations for his television and online work.

My team's work focuses almost exclusively on educational games for kids ages 4-12. Each project may involve creating games and supporting narrative on multiple platforms. Working in this age group requires a very keen focus on age-appropriate skills, and we'll narrow our target to within a year or two. Fine motor skills with a mouse or an iPhone will vary between a four- and five-year old, for example. We factor in typical cognitive skills such as reading level and prior knowledge. Generally speaking—whether we're trying to teach math, science, literacy, engineering, art history or nutrition—we'll always try to create compelling, "repeat-play" games to deliver our advisor-led curricula. Repeat-play is the key to building an investment in content and characters. Wherever possible, we will level up a game based on players' demonstrated progress, keeping them comfortably challenged. With a national footprint for our games, we also create, manage, and maintain massive communities of kids. They can share and publish their work, always in safe, pre-moderated ways: this is a huge editorial undertaking but one well worth the effort, since the investment in a brand is strengthened by including players not simply as consumers but as active producers of engaging and meaningful content.

BS

Bill Shribman
(Senior Executive Producer, WGBH Educational Foundation)

::::: *Second Life* as an Educational Tool

Author Jeannie Novak's research at the University of Southern California showed that massively multiplayer online games (MMOs) incorporate many elements associated with *constructivist* theory that provide a perfect framework for learning—including *active learning* (character customization and game world modification); *social interaction* (communication and interaction with other players); and *problem solving* (observing processes and applying real-world knowledge to simulations in the artificial game world). This led Jeannie to theorize that MMOs would be perfect online distance learning applications. Instead of joining an online class, students would join a game! Jeannie was producer and lead designer on a project that utilized *Second Life* (*http://www.secondlife.com*) as a learning system. (Although *Second Life* might be described

more appropriately as a multi-user virtual environment, it has the capacity to exhibit features of an MMO.) The course behaved like a game; instead of logging into an online classroom (using a learning management system [LMS]), students would appear to be joining a game in progress. Jeannie first presented this concept at the Teaching, Learning & Technology Conference at the University of Southern California (USC) in 2003. "Now Loading: Classroom, Game … One & the Same," an updated version of this concept, was presented at the Game Education Summit, coincidentally also held at USC seven years later in 2010.

Surveying construction of a "serious game" in *Second Life*.

Economic Missteps During the "Edutainment" Era

Over 10 years ago, the best educational games had similar budgets and quality to what you found on the game shelf. Then some of the educational game marketers set out on a campaign to "increase market share by cutting prices." Rival publishers struck back by combining what had been three to six different titles in one box for the same price. In the short term, consumers saved lots of money on software for their children. Then the chain reaction started. You could no longer charge full price for educational software, so budgets for innovative new titles shrank, often to 10% of their prior levels. The warring software publishers, drained by the loss of profitability on these titles, were often acquired or parted out through bankruptcy. Broderbund, one of the highest quality publishers, was acquired three times, then subdivided and sold again to different buyers. Parents and kids have joined the publishing company shareholders as the losers in this MBA-driven scheme. Only a broken publishing model separates us from a new generation of inspiring and impressive educational games.

—Don Daglow (Chief Executive Officer & Creative Director, Daglow Entertainment LLC)

Recruitment & Training

Games have also been used by the military, government, and even for-profit corporations for recruitment and training purposes. Simulation games (discussed later in this chapter), which replicate processes, environments, and objects that exist in the real world, have been used by government and military institutions such as NASA and the Air Force to train astronauts and pilots to adjust to changes in atmosphere and to navigate vehicles. *America's Army* (*www.americasarmy.com*)—the first online simulation game used as a military recruitment tool—was so popular when it was launched that the web-site was jammed with requests. Corporations have developed games to help build their employees' leadership and management skills.

In *HumanSim*, textbooks and lectures are replaced with interactivity and serious fun.

Health & Fitness

Games created for health and fitness include those used for psychological therapy, physical rehabilitation, and even exergames—a sub-category specifically related to fitness. Many exergames are commercial products such as *EA Sports Active* and *Wii Fit*; even some music and rhythm games such as *Dance Dance Revolution* and *Dance Central* (discussed later in this chapter) could be considered exergames. Medical games include *Re-Mission*, which gives children with cancer a sense of power and control over their disease by battling cancer cells.

EA Sports Active 2 uses motion-sensing to track a player's exercise progress.

Playing games has been known to improve the link between physical and mental skills ("mind-body connection")—providing unexpected training for the medical profession. A recent study found that surgeons who played games for three or more hours a week made 37% fewer mistakes than doctors who did not play games. Conducted by Boston's Beth Israel Medical Center and Iowa State University's National Institute on Media and the Family, the study also found that the surgeons who played games were also 27% faster than their counterparts. The next step? Surgery simulations! The realm of accessibility games—designed for players with physical and cognitive impairments (discussed in Chapter 8)—often falls into this category.

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Consciousness & Change

Games created for social consciousness and change (sometimes termed "games for change") might be created by non-profit, political, and/or religious groups to raise awareness of certain beliefs, attitudes, values, lifestyles, and causes. Examples of social issues covered by these games include poverty, human rights, global conflict, and climate change. Titles include *Darfur is Dying*, *The ReDistricting Game*, and *September 12: A Toy World*.

Newsgaming

Sony Computer Entertainment America
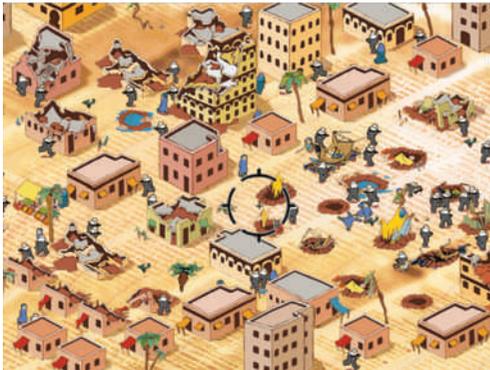
September 12: A Toy World focuses on the civilian casualties of terror attacks.
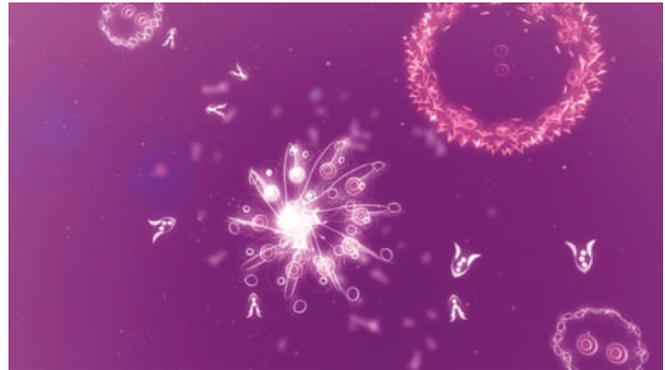
flOw was clearly developed with aesthetics and artistic expression in mind.

Aesthetics & Creativity

Some games are created to elicit creative expression or aesthetic appreciation from players or are developed to express or share artistic ideas. *WarioWare D.I.Y.* for the DSi XL allows players to make their own games, music, and comics. In *The Movies*, players are able to create animated sequences with special effects and custom camera angles. *Guitar Hero World Tour* allows players to create and share instrumentals via its GHTunes Service. Games such as thatgamecompany's *flOw* and *Flower* have often been considered works of art—and were clearly developed with aesthetics and artistic expression in mind.

Marketing & Advertising

Some games are created for the purpose of marketing a product or service to consumers. *Advergames* are specifically designed as advertising tools. Many of these games exist online and are created in Flash or Java—tools that are efficient for developers and players due to quick downloads and short development cycles; these tools will be discussed further in Chapter 10. Advergames are used as alternatives to other web-based advertising, such as banners. Advertisers pay sites to host these games, which usually feature the advertiser's brand. Another online form of game-related marketing is *advertainment*—in which sites developed for the purpose of showcasing a brand contain games and discussion forums, becoming a fun hangout for customers. An early example of advertainment is the *Joe Boxer* site (*http://www.joeboxer.*

com), which invited customers to download a virtual pair of underwear before entering a circus-themed site—complete with carnival games and a chat room.

Movie sites containing games, screensavers, and trailers focus on creating a fun experience for site visitors while marketing the film series. It could be argued that games based on movies and other forms of media are really types of advergames—but some of these games, such as *The Chronicles of Riddick*, *The Lord of the Rings: The Two Towers*, and the award-winning *Batman: Arkham Asylum* (based on the Batman comic franchise) stand on their own as rich playing experiences. More obvious examples of advergames are short, often Flash-based online games that appear on web sites created to help raise brand awareness or directly sell a product—such as movies (Disney's *Toy Story Mania*, distinct from the standalone *Toy Story* computer and console games), food (McDonald's *Hot Shot Pinball*), and even office supplies (Post-it's *Draw It*).

Many film and television shows have been used as vehicles for advertising products. For example, *Seinfeld* was notorious for its blatant advertising of Diet Coke—a supply of which was always available in Jerry Seinfeld's refrigerator. This form of advertising is known as *product placement*—and advertisers pay large sums of money for this. In-game product placement is becoming just as common. As you'll learn in Chapter 4, falling television ratings in the United States have caused some advertisers to turn to games to promote their products. Activision and the research organization Nielsen Entertainment reported that television viewing among men ages 18–34 in the United States has steadily decreased. In a study of 1,000 men, Nielsen found that 75% of the subjects owned a game console and watched less television. In 2010, Nielsen Games (a division focusing exclusively on video game research) found that nearly 25% of all Xbox 360 usage occurs during the prime time television block (7:00pm - 11:00pm).

Major corporations regularly utilize product placement in games as a significant part of their advertising budgets. Sports franchises such as *NBA Street* and *Tony Hawk* feature popular clothing labels and sports accessories. In *The Sims* franchise, players experience a wide range of product placement "activities"—including the use of Intel-branded computers in their virtual homes and offices and the ability to become McDonald's franchisees. The fast food giant was also added as a friend for one day in *FarmVille*; players who visited the McDonalds farm were given a free McDonalds blimp and a McCafe, which caused players to move very quickly (as in "caffeine buzz") for one session. Other companies have provided similar promotions within the game: Farmer's Insurance offered crop insurance, which yielded a blimp that players could fly over their farms to avoid crop wilting for weeks (until the promotion ended). Finally, the movie *Megamind* was added as everyone's friend the day of its theatrical launch. Players who visited the movie's farm would receive a *Megamind* blimp and a spray bottle of "mega grow," which made all crops immediately ready for harvesting.

Muskedunder Interactive

Pepsi Music Challenge is a Flash-based game with musical challenges that promotes the company's products.

Genres

Game *genres* are categories based on a combination of subject matter, setting, screen presentation/format, player perspective, and game-playing strategies. In looking at your target market, consider what genre these people play. In Chapter 4 you'll learn that some people focus on playing one particular genre. Certain genres are more playable on particular platforms. If you were to choose a mobile phone as your primary development platform, do you think a puzzle game or a role-playing game would be most appropriate? Which genres would be more appropriate for an MMO using a high-end, multiple server platform? As you learn more about game genres in this section, apply what you know about platforms, intervals, and player modes. What genres work best in single-player mode? Would it be better to develop a real-time game for a particular platform or genre? If you were developing a game for a handheld device, which genres might you choose?

Setting or Style?

Unlike genres in books and movies, current game-industry genres are not necessarily related to story, plot, and setting. Instead, they focus on how the game is played—its *style.* The traditional definition of genre relates more to what is known as the *setting* of a game. Some examples of setting include fantasy, sci-fi, horror, and crime. Setting will be discussed in more detail in Chapter 5.

Genre: A Double-Edged Sword

I tend to de-emphasize genre in my designing and thinking. I feel that genre is a bit of a double-edged sword for designers. On one hand, genres give designers and publishers a common language for describing styles of play. They form a shorthand for understanding what market a game is intended for, what platform the game will be best suited to, and who should be developing a particular title. On the other hand, genres tend to restrict the creative process and lead designers toward tried-and-true gameplay solutions. I encourage students to consider genre when thinking about their games from a business perspective, but not to allow it to stifle their imagination during the design process.

—*Tracy Fullerton (Associate Professor, USC School of Cinematic Arts; Director, Game Innovation Lab)*

Action

The *action* genre has been around since the arcade craze. In fact, almost every arcade game (such as *Pac-Man, Asteroids,* and even the comparatively slow-moving *Pong*) is an action game. The goal of most action games involves quickly destroying your enemies, while avoiding being destroyed yourself. These games tend to be simpler because they focus on player reaction time. Simplicity is necessary in action games because the average brain cannot process much additional information in a fast-paced environment. Eye-hand-coordination is necessary to excel in action games—also known as "twitch" games (a term that comes from the quick hand movements associated with using joysticks and pressing buttons repeatedly).

:::::Music & Rhythm Games

Through its "Bemani" (music video game) division, Japan's Konami launched a series of games where players perform in some way (by either dancing, singing, or playing instrument-style controllers) to create music or rhythm patterns. The goal of play involves either completing a song, dance, drum pattern, guitar solo, or hand wave. Examples of Bemani games include *Dance Dance Revolution*, *Beatmania*, *Drummania*, *Guitar Freaks*, *Dance Maniax*, and *Karaoke Revolution*. These games have become so popular that they are quickly defining a new genre, especially with games such as Sony's *Singstar*, Activision's *Guitar Hero*, Electronic Arts' *Rock Band*, Ubisoft's *Just Dance*, and Microsoft's *Dance Central*.

HillsDan (Photobucket) brattle (Photobucket) DL

SingStar (left), *Rock Band 3* (center), and *Dance Dance Revolution Hottest Party 2* (right) in action.

The relentless fast-paced nature of these games means that they are always played in a real-time interval. People are motivated to play action games for the adrenaline rush involving quick reflexes and snap judgments—focusing on reflexive actions rather than reflective thought—while sometimes a much-needed reflective break can appear in the form of mini games (games within the larger meta game) that involve puzzle-solving or turn-based strategy. When the player solves the puzzle or finishes the game, it's back to the action of the larger game experience! The following are a few sub-genres in the action category that have taken on styles of their own.

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Nintendo

From *Donkey Kong* to *Super Mario Galaxy 2* (shown), Nintendo's mascot—Mario—has been the star of countless platformers.

Activision

Call of Duty: Modern Warfare 2 is a popular first-person shooter.

Reprinted with permission from Microsoft Corporation

Gears of War 3 is an award-winning third-person shooter.

Platformers

The *platformer* action sub-genre focuses on players moving quickly through an environment—often jumping and dodging to avoid obstacles, and sometimes collecting items along the way. Examples of platformers include early arcade games such as *Donkey Kong* and *Sonic the Hedgehog,* and newer 3D console games such as *Ratchet & Clank* and *Jak & Daxter.* These games have clearly identifiable and memorable characters (such as Mario and Sonic) that often act as mascots for the companies that develop these games.

Shooters

The shooter action sub-genre focuses on combat between a player and the other characters in the game world—usually in the form of shooting with guns and other weapons controlled by the character's hands.

In *first-person shooters (FPSs)*, the player has a first-person perspective and cannot see his or her character onscreen. The player can see the character's weapons, as well as the other characters in the game (usually a mix of team members and opponents). The action in an FPS is sometimes thought to seem more immediate because the perspective can provide the feeling of being thrown into the game world. Perspective is discussed in more detail in Chapter 7.

Third-person shooters allow players to see their characters, along with the rest of the game world. If you develop a third-person shooter, it's important to ensure that the player's character can be easily differentiated from the others on screen. An advantage of third-person shooters is that the player has a much wider perspective than in an FPS—which is limited to straight-ahead vision (without even the normal peripheral vision experienced in a real-life, first-person perspective).

Racing

Games in the *racing* sub-genre also use first-person or third-person perspective. The standard scenario involves the player's vehicle (usually a racecar) racing one or more opponents on a variety of roads or terrains. The player attempts to make the vehicle move as quickly as possible without losing control of it. Racing games in the action genre are often considered arcade racing games, while racing games that are part of the simulation genre are known as vehicle simulations (discussed later in this chapter). New console systems always launch with a racing game because it's one of the best genres to show off any advances in movement, response, graphics, and general performance.

Reprinted with permission from Microsoft Corporation

Forza Motorsport 3 is an innovative multiplayer racing game.

Fighting

Many *fighting* games are two-person games in which each player controls a figure on screen and uses a combination of moves to attack the opponent and to defend against the opponent's attacks. These games are often viewed from a side perspective, and each session lasts only an average of 90 seconds. The combination moves that have been a focus of the fighting sub-genre have been incorporated into larger action games.

THQ

UFC 2009 Undisputed is a recent installment in the popular fighting game franchise.

Adventure

In Chapter 1, you learned about the first text-adventure game known as *Adventure* (or *Colossal Cave*). In this game, the player was an explorer, wandering around an enormous cave filled with treasures and dangers. The goal of the game was to gather the treasures and bring them out of the cave. To find all the treasures, the player had to use objects to unlock areas that allowed deeper access to the cave. This game might have been the first to give the player an illusion of freedom of choice, which is still an important quality of adventure games. The game also gave feedback to the player in the form of human-like sentences, such as "I don't know how to do that" (instead of the "value too high" error messages exhibited by other mainframe games). The *adventure* genre was named after this game.

Replayability in Adventure Games

The idea of being able to replay a game is appealing to most players. Not only does this often more than double the hours of play, but it also provides a different perspective of the game's story (e.g., whether it involves playing the game from a different character's perspective, a different location, or a different time period). Unfortunately, most adventure games intrinsically are not replayable because they often consist of puzzles with a single solution. When the game is over, the player has solved the game's mystery—and there isn't an opportunity to "re-solve" the game in a different way. How can adventure games be modified so that they can be replayable?

Telltale Games

Sam & Max: The Devil's Playhouse is one in a series of episodic adventure games.

Colossal Cave spawned a series of text adventures that went beyond puzzle-solving and exploration—adding strong story elements. As graphics capabilities on game platforms increased, text adventures gave way to graphic-adventures—leading to titles such as *Myst,* a point-and-click graphic adventure that was the best-selling computer game of all time (until *The Sims* came along).

Currently, only a handful of adventure games are released each year—but there is still a niche group of adventure fans out there. Characteristics of adventure games include exploration, collecting, puzzle-solving, navigating mazes, and decoding messages. Unlike action games, adventure games are usually *turn-based*—allowing the player time for reflective thought. This key difference in the way the game is played is most likely the primary reason adventure gamers are not into action-adventures.

::::: Survival-Horror: A New Trend in Story Genres?

A group of games with a dark, menacing theme—such as *Resident Evil, Silent Hill, Clock Tower, Fatal Frame* and *Alone in the Dark*—are known as survival-horror games. This trend in game classification incorporates story and content genres, rather than focusing on how games are played (e.g., first-person shooters), or gameplay (the focus of Chapter 6).

In *Left4Dead2*, players have horrific fun—assuming they survive.

Action-Adventure

The *action-adventure* genre is the only hybrid genre that has distinguished itself as an accepted genre in its own right. The action component allows for quick, reflexive movements as the character dodges and hunts down enemies—while the adventure component adds conceptual puzzles and story elements to the game. Pure adventure gamers aren't usually interested in action-adventures because they are used to the slower pace of adventure games. The action-adventure hybrid has attracted a new audience as well as some pure action players.
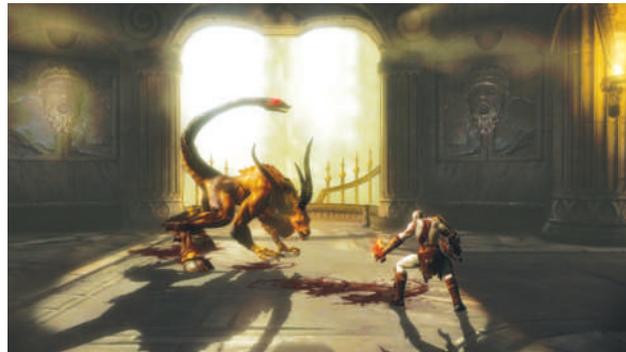
God of War III is the third installment in the popular franchise, which has helped push the envelope of the third-person shooter genre by incorporating rich story elements.

Casino

In Chapter 4, you'll learn that addiction can be a motivation to play games. This is particularly apparent in *casino* games, which are often electronic versions of popular games—such as roulette, craps, poker, blackjack, and slot machines—found in on-ground casinos. The addiction motivation is closely tied to gambling, and many online versions of this genre are run by online gambling sites.

Microsoft Casino: Mirage Resorts Edition duplicates the gambling experience—right down to the slot machine visuals.

Goals & Genres: what are the possibilities

chapter 3

Puzzle

Although puzzle elements appear in many game genres, a pure *puzzle* game focuses on the player solving a puzzle or series of puzzles without controlling a character. There is little or no story surrounding puzzle games, which can be either real-time

Q Entertainment

Lumines helped open the puzzle genre to a wider marketplace by being arguably the first "killer app" for the PSP.

or turn-based. The pattern-based puzzle game *Tetris*—one of the most popular puzzle games of all time—is played in real-time, involving a fast-paced game-playing experience. Many puzzle games (such as *Rocket Mania*) are timed—falling between real-time and turn-based intervals. Others, such as the *Scrabble*-esque *Bookworm,* are turn-based—giving the player all the time needed to form words out of adjacent scrambled letters. Handheld platforms—which can be played while standing in line or waiting in doctor's offices—are ideal for these games.

Rarely, puzzle games involve more than one player or a non-player opponent. One example of a multiplayer puzzle game is *Puzzle Fighter,* in which players simultaneously solve puzzles. This game goes beyond just solving a puzzle and brings in elements characteristic of the *strategy* genre (see next section) because each player must also pay attention to what the other is doing.

:::::Puzzles Everywhere

A great site for online puzzle games is PopCap Games (*www.popcap.com*), a Java-based game collection that includes all types of puzzle games—from the maze-like *Rocket Mania* to word-scrambling *Bookworm* to the color/pattern-matching *Alchemy*. Some games, such as *Insane Aquarium,* are fast-paced and incorporate reflex skills specific to action games.

PopCap Games

PopCap Games

Bejeweled (left) and *Peggle* (right) are just two of the many puzzle games that can be played at PopCap Games.

Role-Playing Games

Role-playing games (RPGs) originate from the tradition of the *Dungeons & Dragons* paper-and-pencil fantasy role-playing games that originated in the 1970s. In these games, players take on roles such as fighters, wizards, priests, elves, or thieves. Players also explore dungeons, kill monsters (such as dragons and ogres), and gather treasure. One player, the Dungeon Master (later known as a Game Master), sets up the game world and takes on the roles of the other (non-player) characters in the game.

The Game Master

The term *Game Master (GM),* which originated from paper-and-pencil role-playing games, is currently used in online multiplayer games to refer to those who play an important role in supporting players online.

Like adventure games, RPGs are characterized by containing strong storylines—but RPGs also contain player-characters that improve throughout the course of the game. Due to the strong emotional character development—and because winning is tied in with this character advancement—RPG players usually experience close emotional involvement with their characters. The genre's presentation is diverse, ranging from simpler arcade-style games such as *Dungeon Siege* to the graphically rich environments in *Final Fantasy.* Themes in RPGs are usually variations on "save the world"—such as finding the person responsible for a murder, rescuing someone who's been kidnapped, destroying a dangerous object, or killing monsters.

Electronic Arts

Dragon Age 2 is a huge role-playing game with a rich environment and in-depth characters.

The characters in RPGs are often termed heroes because they engage in heroic quests—usually in a team, known as a guild in online multiplayer versions of this genre. Combat is one way in which the heroes advance—gaining strength, experience, and money to buy new equipment. Chapter 5 goes into more depth on character development in all genres.

Is an RPG Always Fantasy?

Why do most RPGs take place in fantasy worlds—and involve killing monsters, embarking on quests, and saving someone or something (usually the world)? Many RPGs such as *Star Wars Galaxies* allow for other goals (fame, wealth, and power) and roles (musician, smuggler, doctor, bounty hunter, storm trooper). What about creating a modern-day RPG? If you were to create an RPG, where would it take place—and what roles would exist?

Simulations

Simulations (sometimes referred to as *sims*) attempt to replicate systems, machines, and experiences using real-world rules. Earlier in this chapter, you learned that some simulations are used in military and government institutions for training and recruiting. Many simulations also have been created for sheer entertainment purposes. Types of simulation games include vehicle, participatory, and process sims. Rules associated with all simulation games are based on real-world situations and objects. Players familiar with the subject matter associated with a simulation game often enjoy applying these real-world rules to the game-playing experience.

Vehicle Simulations

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Flight Simulator X: Acceleration is a descendent of the first widely popular vehicle sim.

In *vehicle simulations,* the player usually operates complicated machinery (often vehicles such as jet fighters, ships, or tanks). Microsoft's *Flight Simulator* (discussed in Chapter 1) was the first widely popular vehicle simulator. Most of these games are highly accurate, right down to the equipment controls and user manual—which is often thick with text describing the intricate details of the machine. In addition to being developed for entertainment purposes, adaptations of these simulators have been used widely by the military for training and recruiting purposes. (Non-entertainment goals such as education, training, and recruitment are discussed earlier in this chapter.) Flight and racing simulators (both military and civilian) are popular applications of machine simulators.

Sports & Participatory Simulations

Take-Two Interactive
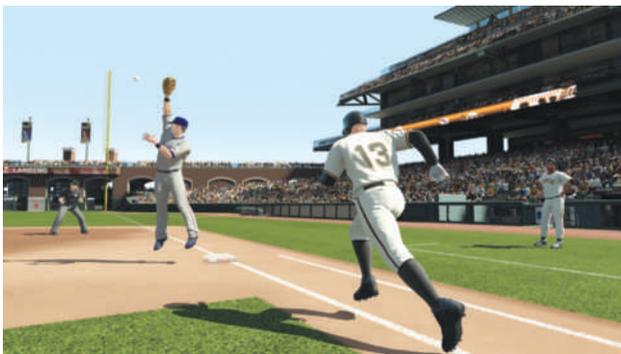
Sports games such as *MLB 2K11* rely on players' knowledge of real-world rules so they can master the game.

Participatory simulations engage the player to experience the simulation as a participant within it. The *sports* genre is a type of participatory sim because—like other sims—sports games often accurately reproduce real-world rules and strategies associated with the sport. Players vicariously participate in their favorite sport—as a player *and* often a coach. Why is the U.S. game-buying public so fascinated with this genre? Perhaps because it allows players to experience "wish fulfillment"—to become extraordinary athletes, and to accomplish things they

might not be able to in real life. Wish fulfillment can apply to many other real-world experiences. What about the ability to play a musical instrument, become a master chef, or create a work of fine art? In *Project Rockstar*—where the player manages a rock band—it's a rock band instead of a football team. Perhaps other participatory simulations will begin surfacing as the game industry continues to mature.

Process Simulations (Construction & Management)

Process simulations involve real-world systems or processes. These games are also known as *construction and management sims (CMS), god*, or *toy* games. Examples of these games include *Rollercoaster Tycoon, Sim City,* and *Black & White.* Instead of focusing on operating machinery and understanding how to use controls, this type

of sim focuses on the ongoing maintenance of a system, which could include anything from social to economic constructs involving people, creatures, objects, or whole worlds. Although some of these games are set in fantasy worlds complete with unusual creatures and rituals, all duplicate the rules of real-world socioeconomic systems. The goal in process sims is not to defeat an enemy or opponent, but to build something within a process. These games are considered *constructive*—involving building and creating—rather than destructive. To win these games, players need to understand and control these processes. The success of *Sim City* proved that games don't need high-speed action or violence to be popular. The game also appealed to a broad audience.

Electronic Arts

The goal of *SimCity Deluxe* is to develop and maintain a successful metropolis.

Playing in the Sandbox: Games Without Goals?

Many process sims have often been referred to as "sandbox" or "god" games in which there is no goal involved and players can do no wrong. However, the process of building and maintaining systems incorporates the ongoing goals of system balance—whether it's ensuring that your roller coaster does not malfunction, that your city does not go into deficit, or that your creature does not (or *does*) "misbehave." Peter Molyneux and Will Wright are considered the "gods of god games," with their innovative *Black & White* and *Sim City* franchises, respectively. Molyneux's *The Movies* (where players must successfully release films to maintain their movie mogul status) and Wright's *Spore* (where players evolve a single-celled organism into a space-faring race that explores the galaxy) continue in this trend.

Richard Wainess on Education Through Simulation:::::

RW

Richard Wainess, PhD (Senior Research Associate, UCLA/CRESST)

Richard Wainess came to the game arena from a circuitous route—as a musician, graphic designer, programmer, 3D animator, interactive multimedia developer, video writer, producer, and director. Richard has also taught a wide range of media-related courses, including multimedia authoring, 3D modeling, character animation, digital media design, and media management. Along the way, he created board games and programmed arcade-style games. For eight years, Richard was on the faculty of the University of Southern California (USC), where he taught game design, level design, and 3D animation. He was involved in the development of two of the university's cross-disciplinary video game minors and the university's cross-disciplinary 3D animation minor. Now, with a Ph.D. in Educational Psychology and Technology from USC, Richard is a senior research associate at the National Center for Research on Evaluation, Standards, and Student Testing (CRESST) in the University of California, Los Angeles (UCLA) Graduate School of Education. His research centers around the use of games and simulations for training and assessment. Richard's most recent work focuses primarily on the assessment of problem-solving and decision-making using computer-based interactive tools. He has authored and co-authored numerous reports, articles, and book chapters and has presented at many conferences on the topic of games and simulations for learning—with a particular emphasis on instructional methods, cognitive load theory, metacognitive processes, motivation, and learning outcomes.

Games and simulations provide players with an opportunity for exposure beyond what is available in real life. They can visit inaccessible environments --those that are dangerous (inside an active volcano), microscopic (inside a molecule), or remote (visiting the surface of Mars). Through the combination of a game environment (goals, rewards, and realistic 3D visualization) and simulation (i.e., scientifically-based experimentation), students are given the opportunity to virtually visit unique locations to experience scientific concepts and conduct experiments *first-hand*—and to feel as if they are really there, all within the comfort and safety of the classroom.

Strategy

Strategy games have their origin in classic board games such as chess, where players are required to manage a limited set of resources to achieve a particular goal. Most strategy games take place in a military setting. Unlike RPGs, the player's character is relatively unimportant. (In fact, sometimes the player has no character.) Instead, the player's resources (e.g., troops, weapons) become central to the game experience. *Resource management* typically includes constructing a variety of buildings or units, and deciding how and when to put them into action. The strategy in these games is based on comparative resources and decisions between opponents. A sub-category of the strategy genre known as *grand strategy* resembles tabletop wargames; examples include *Axis & Allies*, *Making History*, *Storm Over the Pacific*, and *Romance of the Three Kingdoms*.

What's Wrong with a Detective Strategy Game?

Most strategy games take place in a military setting and involve traditional warfare. Of course, the elements of building units and expending resources can be applied to a variety of situations that don't involve warfare. How about criminal investigations? *Emergency Fire Response* is an example of a unique strategy game where players are firefighters who must defeat a natural enemy and put out fires. See if you can think of some other innovative ideas!

Turn-Based Strategy (TBS)

Until the early 1990s, almost all strategy games were turn-based. This interval lends itself nicely to strategy games because it encourages players to take time to think strategically before making decisions. In *turn-based strategy* (*TBS*) games, resource management involves discrete decisions such as what types of resources to create, when to deploy them, and how to use them to the best advantage. The player's ability to take the time to make these decisions is part of the game's appeal.

Take-Two Interactive

Sid Meier's Civilization V is a popular turn-based strategy game.

Real-Time Strategy

Real-time strategy (*RTS*) games incorporate a real-time interval. Although strategic thinking doesn't lend itself well to real-time action, it's surprising how popular RTS games have become. RTS players are under such constant time pressure that they don't have the opportunity to truly ponder a move. Multiplayer RTS games have to be played in one sitting. Another issue in RTS games is *micromanagement*—the process of rapidly balancing sets of resources (e.g., troops) containing a number of features. Since the game moves quickly in real-time, one set of resources might flourish while others fail because the player can't feasibly focus on all sets at once. A player might decide to concentrate on managing one set of troops, who might be engaging in combat to defend the player's territory. In the meantime, another set of the player's troops—left "helpless" without the player to control them—is defeated. (The player must employ a certain level of *multitasking* to avoid some of these disasters.) These games involve such a great deal of action and reaction time that the genre should really be referred to as an Action-Strategy hybrid!

Reprinted with permission from Microsoft Corporation

Halo Wars, part of the *Halo* franchise, is an Xbox 360 exclusive.

RTS Challenges

RTS games need a lot of time for two types of game balance—for the single-player campaign, and for the multiplayer experience. This isn't easy—and it occupies a lot of effort throughout the middle and end of development. RTS titles have borrowed bits and pieces of other game genres. This is a useful experiment…but some don't fit well.

—*Frank Gilson (Senior Producer, Kabam)*

Massively Multiplayer Online Games

Blizzard Entertainment

In Chapter 2, you learned about technology issues related to *massively multiplayer online games* (MMOs). Now let's look at the content and genre characteristics of these games. Under the MMO umbrella, there are several variations on some genres we've already discussed—known as massively multiplayer online role-playing games (MMORPGs), massively multiplayer first-person shooters (MMOFPSs), and massively multiplayer real-time strategy games (MMORTSs).

One of the biggest issues in MMO development is balancing social interaction with *immersion.* This poses a problem for MMORPGs in particular.

With millions of subscribers, *World of Warcraft* is the most popular MMO on the market.

Traditional RPG players want to escape into a fantasy world and become involved in rich storylines and character development. If MMORPG players discuss real-world topics during the game or don't stay in character, other more traditional players might not enjoy the experience of playing. Does a developer try to enforce role-play, or do the players have to accept that the game cannot be fully immersive? Issues related to story and immersion are discussed further in Chapter 5.

::::: *Yohoho! Puzzle Pirates*:
The First MMOPG?

Three Rings Design

I created *Puzzle Pirates* because of my love of pirates—both as a concept and pretending to be a pirate—combined with the realization that puzzle games made the ideal gameplay backbone to an MMOG. My girlfriend at the time becoming pathologically addicted to *Bejeweled* was a tip-off. [Author's Note: Although *Puzzle Pirates* contains elements associated with MMORPGs, its incorporation of puzzles into the game could make it the first of its kind—an MMOPG (puzzle game)!]

—Daniel James (Chief Executive Officer, Three Rings Design)

Another related issue involves player misbehavior. Some players are simply rude—while others harass, cheat, or even commit fraud … providing a more serious threat to others' enjoyment of the game. The anonymity provided by the Internet is a primary reason this type of behavior is so prevalent. This could pose a threat to the trend in which parents and children play online games together (discussed in Chapter 4). Fortunately for young children, there are now some interesting MMORPGs created just for them—such as Nickelodeon's *Neopets* and *Monkey Quest*, Sony's *Wizard101* and *Clone Wars Adventures*—and Disney's *Club Penguin* and *Toontown Online*.

::::: *Shattered Galaxy*:
A Rewarding MMORTS

KRU Interactive

Unlike most other MMOs, *Shattered Galaxy* is based completely upon player vs. player combat. Every player belongs to a team, or faction, that competes with other factions for game resources. Since we wanted players to actively support their team, we made several changes to traditional RTS gameplay. For example, penalties for death are negligible, and we reward players for participating in battles whether they win or lose. When you're not afraid of dying, you're able to sacrifice yourself for teammates without hesitation.

—*Kevin D. Saunders (Creative Director, Alelo)*

Multiplayer Games: "Splashing in the Shallow End of the Communication Pool"

What hasn't been done yet in multiplayer games? Enabling people to communicate and connect on a deeper level. Why? Because life is about connecting with others, sharing ideas, and coming away richer for the experience. So far, we've been splashing in the shallow end of the communication pool. There's so much lost through a simple text chat. Still, I find this to be the single most compelling challenge in game design: How do you capture and convey the energy of a group playing together in a room when the people are spread out all over the globe?

—*Patricia A. Pizer (Creative Director, ZeeGee Games)*

Text not available due to copyright restrictions

Image not available due to copyright restrictions

MMOs are sometimes referred to as *persistent-state worlds* (*PSWs*) because they are available 24-hours per day and do not end when a player logs out of the game—allowing the player's character to "persist" in time. This persistence can pose some interesting challenges. Since an MMO doesn't have a final endpoint, content for the game is produced on an ongoing basis—and it is expected to change periodically to keep players interested in the game.

Game Elements: The Significance of Goals & Genres

This chapter continued where the previous one left off—covering additional game elements that form the foundation of game development. Once you've determined the goal of your game, identify a subset of genres that might best address that goal. For example, if you're creating a game that is intended to educate players about a real-world process such as fixing a car, an obvious genre match would be a process simulation game—but is this the only possibility? A game that's developed to encourage consumers to purchase a product or service might not utilize the same genre as one designed to allow the players (or developers) to express themselves creatively—or perhaps both of these games could share the same genre. Think about it!

Next, let's look at the players—who they are, where they are, and why they play. Although often overlooked by game developers, the player market must be understood to develop successful games. As you read Chapter 4, apply what you've learned about genres and goals to different player markets. You'll notice that there's often a direct relationship between players and the types of games they play!

:::CHAPTER REVIEW EXERCISES:::

1. In this chapter, you learned about several non-entertainment game goals. Choose five genres introduced in this chapter and discuss which particular goal might be a good match for each. Can you think of a goal not mentioned in this chapter that might inspire you to create a game?

2. How do game platforms influence game goals and genres? Web-based Facebook games—accessed initially through the computer platform, but now also through mobile devices—are often considered to be "social games." Although multiplayer online console games have always had a social component, the console platform did not give rise to the "social game" moniker. Why do you think this is the case? Choose two distinct platforms and discuss which game genres would be particularly relevant for them—as opposed to other platforms.

3. The ESRB has used a "T" rating on some MMOs. This rating is not necessarily accurate. Why is this? What do you feel motivates people to play MMOs? How does the structure of an MMO differ from LAN-based multiplayer and single-player games?

4. Choose one of your favorite games and change its genre. For example, what would *Halo* be like if it was a puzzle, simulation or RTS game instead of an FPS? Now, create a brand new game genre that is distinct from those discussed in this chapter. Tie this genre to what you learned about platforms in Chapter 2. What type of platform would be most appropriate for this genre, and why?

5. Combine two genres discussed in this chapter to create a new hybrid (mixed) genre. What type of game would you create for this new genre? List five unique features of the game.

6. Adventure games have declined in popularity in the last 15 years. Why do you think this is the case? What would you change about the content or structure in adventure games to incite new interest in this genre?

7. Strategy games don't always need a military backdrop. Discuss three settings or scenarios *not* related to the military that could be incorporated successfully into a strategy game.

8. Do you feel that all games are educational by accident? Why or why not? The "edutainment" movement of the 1980s and early 1990s focused on the early childhood market and players in the K-12 grades. What about games created specifically to educate beyond K-12 (post-secondary)? Create an idea for an educational game geared toward adults who are taking a college course. Now choose another type of "serious" (non-entertainment) game goal—such as corporate training, military recruitment, or health. How would you ensure that your game was still fun and engaging while retaining its purpose?

Player
Elements

who plays and why?

Key Chapter Questions

- What *motivates* people to play games, and how does this affect the types of games that are developed?

- What is the difference between *geographics*, *demographics*, and *psychographics*?

- How has the *player market* changed over time?

- What is the difference between the United States and other *geographic markets* such as South Korea, Japan, China, and Germany?

- What are the different *generations* of players in the United States?

Now that you understand how the game industry has evolved throughout history and all the basic elements that should be considered before developing a game, it is time to look at the players. There was a time when the profile of a "gamer" was a teenage boy—but that profile is now wildly inaccurate. The market for players has changed dramatically since the mid-1990s, due to the advent of the Web as a commercial medium. As the multimedia interface to the Internet, the Web fueled the growth of a new communications industry. Now, we've gone beyond just having our own personal web sites to creating personal blogs on Tumblr and Word Press; microblogging to our followers through Twitter; updating our status through Foursquare; and sharing our opinions (and photos of our family and pets) with our Facebook friends. Taking up where the Web left off, social networking has dramatically expanded the player market.

Game Market

If you plan to develop games, you need to understand the game *market*—the people who play games. Which portion of this market do you want to target? The answer to this question is *not* "everyone." You need to understand who *your* market is to create a compelling game that suits your market's needs.

With over half of all Americans playing electronic games, interactive entertainment is the entertainment choice of the 21st century. The Entertainment Software Association (ESA) conducts an annual market survey on Essential Facts of sales, demographics, and usage in the computer and video game industry. In 2010, the ESA poll found that 67% of United States households play games on a regular basis; adult gamers have been playing for approximately 12 years; just under half (49%) of all players are adults between 18 and 49 years of age; and 64% of gamers play games with others in the same room. Parental beliefs and involvement have undergone significant change: ESA results show that 64% of parents believe that games are a positive part of their children's lives, and 48% of parents play computer and video games with their children at least once a week.

Player Motivation

Why do people play games? Understanding this can help you develop games that will fulfill these needs. Some developers create games without considering why their audience would want to play them—and components of games that are most attractive to the players are not utilized enough by game developers to keep the players interested. Following are just a few factors that motivate players to keep on playing.

::::: Player Suits

In 1996, Richard Bartle published "Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs" (*Journal of MUD Research*), a paper in which he proposed that multi-user dungeon (MUD) players fall into four categories, depending on whether they enjoy acting on (manipulating, exploiting, controlling) or interacting with (learning, communicating, examining) the game world or players. Bartle originally came up with four player types, corresponding to the four suits in a deck of cards:

Hearts: These players are *socializers*—those who enjoy learning about or communicating with other players.

Clubs: These players are *killers*—those who enjoy manipulating other players.

Diamonds: These players are *achievers*—those who enjoy interacting with the game world.

Spades: These players are *explorers*—those who enjoy manipulating the game world.

Bartle theorized that a healthy MUD community requires a certain proportion of each type of player to sustain itself.

Diagram by Per Olin
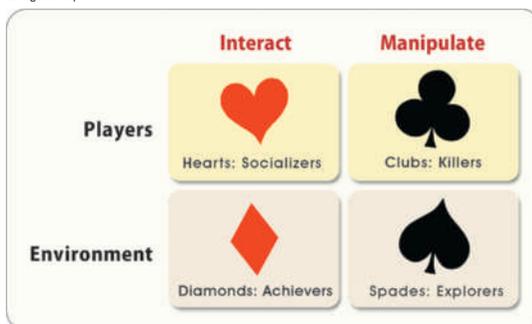
Hearts, clubs, diamonds, spades— types of players that "suit" MUDs.

chapter 4   Player Elements: who plays and why?

Richard Bartle on Player Types : : : : :

Dr. Richard Bartle co-wrote the first virtual world, *MUD* (multi-user dungeon), in 1978 and has thus been at the forefront of the online game industry from its inception. A former lecturer in artificial intelligence and current Visiting Professor in Computer Game Design at the University of Essex (U.K.), he is an influential writer on all aspects of virtual world design, development, and management. As an independent consultant, Richard has worked with most of the major online game companies in the United Kingdom and the United States for more than 20 years. His book, *Designing Virtual Worlds*, has established itself as a foundation text for researchers and developers of virtual worlds. Richard was the inaugural recipient of the Game Developers Choice Online Legend Award in 2010.

RB

Dr. Richard Bartle
(Visiting Professor
in Computer Game
Design, University
of Essex)

My theory has developed since I first proposed it. As it stood originally, it had four problematical elements to it:

1. There were two types of killer.

2. It didn't explain how players gradually changed type over time.

3. It didn't account for one of the oft-cited reasons that players give when asked to explain "fun," namely "I like immersion."

4. It was all observational, with no connection to existing theoretical works.

The two types of killer were "griefers" and "politicians": one who tries to dominate others slyly and selfishly, and the other who tries to do so openly and selflessly. I could also see, though, that there were subtle differences in other types, too. For example, explorers who explored to expand the breadth of their knowledge did so in a scientific fashion, yet those who explored to expand the depth of their knowledge were more like computer gurus who "just knew" how things should work. I added an extra dimension to capture this distinction, which I called implicit/explicit: implicit actions were not reasoned out in advance but were done unthinkingly; explicit actions were considered and thought through. Griefers do not think about why they do what they do (although they may think about how they do it); politicians do give thought to their motivations and rationalize them in terms of helping the game. Explorers working scientifically will consider what they're doing as if it were an experiment, testing the boundaries of their theories; gurus wouldn't bother, since they already know the world so well that they understand it implicitly.

Player Elements: who plays and why?

chapter 4

Adding the extra dimension gave me eight types instead of four and solved one of the problems. I was then able to use the new 3D model to trace how players changed behavior over time. The most common development path I observed was evident in the four-type, 2D graph: killer to explorer to achiever to socializer. Some other paths seemed to oscillate between two types, though—for example, killer to socializer to killer to socializer. With the new model, I could place them in particular subtypes of killer or socializer or whatever and, as a result, I found that all four of the paths I'd observed empirically followed the same basic course of action: implicit to explicit to explicit to implicit, along a track the shape of a reversed Alpha.

With this, I was able to account for immersion—which is how far you are along the track at any one moment. The farther you are along, the more you understand the virtual world; therefore, the more a part of it you are able to feel, and (crucially) the closer you are to being yourself. Immersion is basically a reflection of how close to self-understanding you are playing in the world. Virtual worlds were always about freedom and identity (MUD1 was specifically designed for both), and a sense of immersion is how progress in this regard manifests itself.

Finally, I could link the theory to other, existing theories from other disciplines. The player development tracks that players of virtual worlds follow the "hero's journey" narrative that was discovered by Joseph Campbell in the 1940s. His theory was that all myths and folk tales followed the same basic pattern, because in understanding that pattern people were able to understand themselves and their place in the world. Players of virtual worlds follow the same journey, but instead of experiencing it secondhand through the eyes of a protagonist, they can undertake it themselves. This is why virtual worlds are so compelling: they enable people to be, and to become, themselves. The "hero's journey" links to many other areas of academic study, in particular psychology, so at last my player types model could be anchored in other work supported by other tried-and-trusted theories. *[Author Note: The hero's journey will be discussed in more detail in Chapter 5.]*

Basically, you play a virtual world to have "fun"—which is whatever you can do now that will advance you along your hero's journey. You can have a virtual world that can be relatively stable, attracting mainly players who are socializers or achievers —but they need a continuous stream of newbies to keep them going. Balanced worlds don't shed players as much, so they don't suffer so much if the newbie flow is reduced.

Social Interaction

When more than one person is playing a game, the players might be motivated to interact socially with their opponents or team members. This *social interaction* could exist in simple two-person games at an arcade or in massively multiplayer online games (MMOs), with thousands of people playing simultaneously. Players in MMOs are often allowed to communicate through the game itself—often discussing non game-related topics rather than "staying in character." Sometimes players who meet through games arrange to meet each other in real life at game conventions. Marriage ceremonies have even taken place in games!

Social interaction can be a motivating factor for some players. Although social interaction can take place in the immediate environment (shown), it can also occur in-game—especially in social games and MMOs.

Physical Seclusion

The idea of *seclusion* might seem to be the opposite of social interaction. However, players who want to be secluded are still interacting socially with people—but in the privacy of their own physical environments. This challenges the definition of "being social." Some would argue that people who prefer to stay home and play an MMO must be antisocial. Others would argue that these same people must be highly social, because they are most likely interacting with many more people than would be possible at a dinner party. Is email considered anti-social? Before it was accepted by the masses as a viable way to communicate, it certainly was viewed in this way. Now it is accepted as a way to broaden one's social network and now has the capacity to transcend geographical boundaries, becoming global. Players motivated by physical seclusion would probably prefer to play games in a private place—such as their homes. Other players could easily play games in public places, such as arcades—or almost anywhere, with their handhelds in tow!

Physical seclusion can be a motivating factor for some players. Although physical seclusion can take place in the immediate environment (shown), it can also be part of the game experience—common in single-player puzzle games.

Midway Games

Competition is the motivation behind playing many fighting games such as *Mortal Kombat vs. DC Universe*.

Competition

Some players enjoy the thrill of *competing* with other players. The competitive spirit has been associated with games throughout history—and it forms the basis of the tremendously successful sports industry. In Chapter 6, you will learn that competition can be combined with cooperation to make games more compelling and challenging.

3 Blokes Studios

Educational games such as *Brainiversity 2* focus on providing knowledge.

Knowledge

Players can be motivated to gain *knowledge* of particular concepts, processes, and strategies by playing games—although this motivation often is unconscious. If players made it clear that they truly wanted to learn while playing, game developers might market their games as educational tools—providing "fun learning" for everyone. In Chapter 3, you saw that most games allow players to learn "by accident"! In Chapter 6, you will also learn that players apply knowledge within and outside of games to play them successfully.

Midway Games

Score summaries, shown in this "magazine article" from *Guitar Hero III*, are necessary for players who are motivated by mastery.

Mastery

Some players are motivated to *master* the game itself—demonstrating their ability to dominate the game world and figure out how to become advanced players. Mastery is most obvious during games that depend on increasing character skills to "win." Players motivated by mastery focus on assessing their status in the game by attaining high scores and rankings.

Escapism

Players often indicate that they are motivated to play to *escape* from the ongoing stresses and challenges of real life. An imaginary game world follows its own rules, some of which are less restrictive than those in real life. Although people can escape into the "worlds" of other media such as books and movies, they do not directly participate in those worlds like they do in games. The next chapter introduces the concept of *immersion* and how it is particularly effective in games. Players' participation in games can even involve close bonds with characters within the games—especially if a character is "inhabited" by the player!

Game worlds such as the vast landscape in *Borderlands* provide escape for some players.

:::::Player Empowerment in *Ultima Online*

My most memorable experience working on a title was right after we shipped *Ultima Online*. We were having a terrifically hard time stabilizing and optimizing the game (i.e., it was crashing and lagging all the time). Despite our success in attracting the largest number of subscribers ever to an online game, we were a bit down on ourselves for the lack of quality in our product. About that time, we got a letter from a player who described what a wonderful time he was having in the game. In the somewhat lengthy letter, he talked about how *UO* allowed him to experience things he never had a chance to experience in real life. In *UO*, he was a strong leader with lots of friends—and he was able to explore the vastness of the land and destroy evil. At the end of the letter, he said how much he appreciated us for giving him a chance to run—which, since he was confined to a wheelchair, he could not do in his real life. That letter made all the pain and effort worth it. More importantly, it taught me that these games can be more than money-making entertainment. They can have real meaning and impact for our customers. I have never forgotten this lesson, and I still cherish that letter today.

—*Starr Long (Executive Producer, The Walt Disney Company)*

Addiction

Some players indicate that they are motivated by *addiction*—the tendency to focus on one activity at the expense of all others. A recent panel conducted by the International Game Developers Association (IGDA) indicated that one of the best compliments game developers receive is that their games are addictive. Unlike the comparatively "passive" entertainment of television and film, games offer players the opportunity to take active roles in the entertainment experience—including making decisions and getting feedback. This can be highly rewarding for players, but it can also make them crave and indulge in continuous play to the point of ignoring other more important areas of their lives. Gambling has been shown to be addictive, and some game developers are considering incorporating gambling into more sophisticated electronic games. However, it can be argued that many worthwhile hobbies might be addictive—and that it is the player's responsibility to maintain some balance!

505 Games

Casino games such as Texas Hold 'em in *Playwize Poker & Casino* can be very addictive.

In addition to the motivating factors already discussed—social interaction, physical seclusion, competition, knowledge, mastery, escapism, and addiction—there are many other reasons people play. Some feel it is a form of *therapy*—a chance to work out troubling issues in a "safe" environment separate from (but sometimes eerily similar to) the real world. Konami's *Dance Dance Revolution* launched a new type of fan base that played to *exercise* and work on new dance moves. *DDR*'s popularity influenced the release of several other dance-oriented franchises—including *Dance Central* and *Just Dance*. With the advent of motion control and motion sensing devices (Nintendo Wii, Sony Move, Microsoft Kinect), physical/rhythm games have taken on a life of their own. The immensely popular *Guitar Hero* and *Rock Band* franchises take onscreen pattern matching to another level through singing and "playing" controllers that resemble musical instruments. A game's *playability* (discussed in more detail in Chapters 10 and 11) is related to player motivation. If the game satisfies a player's particular motivation, it is more likely to be fun, engrossing, and worthwhile to that player.

A game is often the key that sets my imagination free. I can't put on a cape and go flying around the city for obvious reasons. Playing games gives me a chance to do the things I dream of, to a certain extent.

—*Chris Lenhart*
(game art and design graduate)

Geographics

Geographics relate to the players' geographic locations—which could include various countries or even regions within those countries. The U.S. game industry alone does over $10.5 billion worth of business annually (NPD Group), and the industry's value added to the U.S. GDP (gross national product) was $4.95 billion in 2009.

When NCsoft, now the largest game developer in South Korea, launched the *Lineage* MMO in September 1998, the country was experiencing an economic crisis that had resulted in a dramatic devaluation of Korean currency and an unprecedented increase in unemployment. "Refugees" from the high-tech industry, mostly middle managers, became entrepreneurs overnight—starting PC game rooms (Baangs) in their living rooms. A profitable industry had begun, with hourly fees of $1 (U.S. equivalent) paid by the unemployed gamers—a low price to pay to conquer foes in "virtual worlds" and escape the real economic catastrophes in the offline world, without having to own a personal computer.

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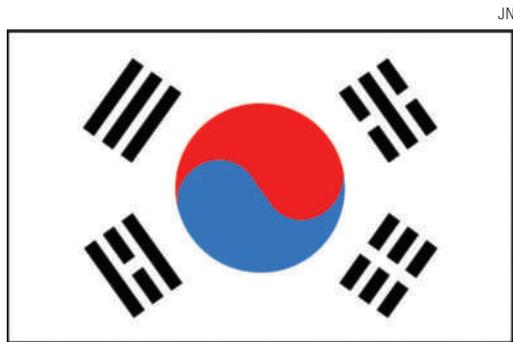
South Korea—still a world leader in household broadband penetration —boasts the largest subscriber base to online multiplayer games.

As South Korea's financial situation began to improve, and the total households with broadband service increased rapidly, the number of personal accounts on home PCs also rose. In addition to playing at PC Baangs, gamers can now download game software onto their home PCs and pay using micro-transactions rather than paying monthly subscription fees. Baangs have also grown in popularity—making a dramatic transformation from entrepreneurs' living rooms to full-blown entertainment centers, some of which are as ritzy as Las Vegas casinos. It is commonplace to see men and women gamers in Baangs—which often provide "his" and "hers" chairs so that couples can play online games together. Online gaming has also grown beyond being just a pastime into a competitive national sport—with many game competitions now being televised regularly. Currently, South Korea's online game market is expected to reach $2 billion during 2011 (Pearl Research/Gamasutra). South Korea represents the world's most developed online game market.

> I play games to escape the life that most of us live and live the life that most of us want.
>
> —*Arash John Sammander*
> *(Game Art & Design student)*

Mark Terrano on the South Korean Market:::::

Cyrus Kanga

Mark Terrano (Design Director, Hidden Path Entertainment)

Mark Terrano is the Design Director at Hidden Path Entertainment—an indie game development company founded with friends who were former members of the Xbox Advanced Technology Group. His focus is on social, character, and storytelling games that "feel different." At Xbox, he consulted with developers around the world to help them launch best-in-class titles on the Xbox and Xbox 360. At Ensemble Studios, he worked on the *Age of Empires* series as a designer and programmer. His free time is spent enjoying Seattle's natural beauty, photography, playing music, and, of course, playing all kinds of games.

When people ask where I think games are going in the near future, I always refer to South Korea. Game parlors are on every block and apartment complex, the professional gamers are on billboards and television, and everyone you meet has a favorite *StarCraft* story. Games are not just accepted in popular culture; they are integrated, and nearly everyone plays.

"Professional gamer" is a recognized career, and it is well-respected; tournament competition is fierce and followed in the media on par with any other sport. The government is a strong proponent of game developers in Korea as well—providing services, resources, information, and tools to start-ups. The students just moving into their first jobs now have grown up with games, and they understand games as an interactive medium. Even a little-known new game can easily attract 100,000 beta players—and the rate of introduction and evolution of multiplayer titles is staggering.

Mark Terrano

Arcade (Seoul)

Competition and tournament play are also important in popularizing gameplay. The World Cyber Games started in South Korea; this is an Olympics-style event with players competing from all over the world and converging for the world finals, which lasts a week in the host country. Professional gamers work their way up through the competitive ranks and represent their neighborhoods, schools, and companies. Large tournaments and local heroes create media attention that follows the professionals and builds a fan base. The commercial sponsorships and endorsements follow the fans, which leads to more competition and tournament play. Full-color weekly magazines are thick with strategies, tactics, and interviews with the pro gamers and developers. Fashion, gadgets, accessories, and other media are also influenced by games.

Korean developers are bringing new perspectives, stories, mythologies, and even completely new social structures to online game design. In the game *Lineage*, players gather to defend their castle from a siege which has been scheduled to take place. A group of players actually commandeer a game room for the siege; it transforms into a base of operations, and defenders quickly organize and change strategies as orders are shouted around the room. This completely new kind of game and social experience has not been available before in any medium. While the physical and social properties of the PC game room don't always translate worldwide, the use of voice, command structure, team tactics, group balance, and shared risks and rewards are powerful gameplay devices that will shape the next generation of games.

WCG Competition (Seoul)

Initially, Japan did not even appear on the list of most wired countries due to being dominated by NTT DoCoMo, a wireless service that has a telecommunications monopoly in the country. NTT's presence was so strong that it was financially prohibitive for Japanese citizens—who were charged by the minute for Internet use—to order broadband service. The game industry has thus revolved more around video game consoles—and not online games. The wireless network was primary, while the Internet was secondary.

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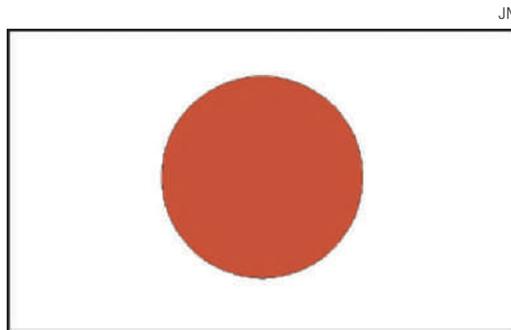
Japan's game industry has historically revolved around video consoles and wireless games, but broadband penetration is now growing.

It is interesting that Japan and Korea—countries that traditionally led the way in mobile gaming—have been somewhat eclipsed by the United States and European markets, which now account for over 50% of mobile game revenues (*Screen Digest*). By 2010, the worldwide mobile gaming market could grow to over $6 billion in revenue, with 134 million average users per month (a threefold increase from 2005).

Troy Dunniway on the Chinese Market :::::

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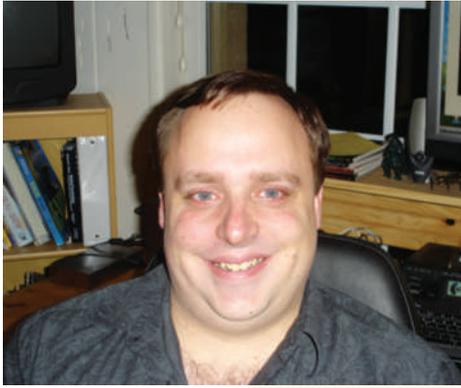
Troy Dunniway
(Vice President &
General Manager;
Globex Studios)

Troy Dunniway's time at Globex Studios China is creating and publishing massively multiplayer online role-playing games for worldwide release—with a strong emphasis on the Chinese market. Prior to Globex, Troy held senior management roles at Electronic Arts, Microsoft, Ubisoft, and many other top companies for the last 20 years. He is also primary author of Gameplay Mechanics (part of the Game Development Essentials series) and is a regular columnist on Gamasutra.

Building games for each market can affect the direction of the game in a major or minor way. Many games only localize the text and voiceover for a game for foreign markets -- but in some large markets such as China, this is usually not enough. For example, in China, there is no console game market—and everyone only plays massively multiplayer online role-playing games (MMORPGs) and online casual games that cannot be pirated. All MMORPGs in China are also free to play, and not subscription-based like many in the US (and in much of the rest of the world). This changes the core of many games. China also has a very dif-

littlebig (Photobucket)

Internet cafe (Shanghai)

ferent cultural history, many elements that might be found in a story or game in the US may not be understood by most of the Chinese market. As an example, the science fiction genre is not really liked or understood in China, and it isn't popular at all. Even major movies such as Star Wars were not well received in China. The direction of a game for some markets can be very challenging, to say the least. The Chinese market is beginning to be more interested in new types of games, and new features within the MMO space—but developers must very slowly introduce these new features. For example, action MMORPGs are starting to become popu-

lar in China—but all of the features of most traditional MMOs are there, but pace of the combat is increased. However, this is dangerous in China – since the average player here actually sees games as a way to socialize. If you increase the rate of play, thinking you will make it more fun minute to minute, you can actually turn off the average player who likes a slower-paced game that allows them to chat while they play.

However, largely because of Softbank, Japan is catching up in the broadband arena with ADSL technology in its fixed-line telephone networks. Once an extremely expensive alternative, Japan's broadband service is now one of the most affordable and most advanced, according to its Ministry of Internal Affairs and Communications (MIC). Consoles (a major Japanese export) have not been as popular in South Korea. Historical conflicts between Korea and Japan—especially related to the World War II occupation—also affect online gameplay. Korean players, who have more experience playing in the online arena and can easily organize into powerful teams, often seek retribution for past grievances through *player kill (PK)* targeted toward Japanese players. ("Player kill" refers to characters who are killed in a game by other characters—where both characters are controlled by players. The term "offline PK" became used by South Korean authorities when PK was taken out of the game and into the PC Baang—resulting in some real-world violence between players.)

JN

China boasts a growing market for MMORPGs and online casual games—but there is no console market.

JN

Germany is the second largest market for computer–based games.

Using licensed properties has become a content issue in Japan (also in France and the Scandinavian countries)—where properties such as *Star Trek* are not nearly as popular as they are in the United States, Germany, and the United Kingdom. Another content issue in market geographics includes the depiction of violence in games. *Quake II* did not have a retail launch in Germany—the second largest computer game market in the world—due to the game's level of violence. In order to sell *Command & Conquer: Generals – Zero Hour* in the German market, the game's graphics had to be modified so that all military units were robots—not people—ensuring that no humans were killed in the game. In Germany, games must avoid showing blood, shooting humans, and anything that glorifies Hitler, the Nazis, or the Third Reich. Other countries, including Australia and Korea, have also banned titles that are identified as being too violent.

Markets can differ widely—even on a national level. In the United States, certain pastimes such as hunting and fishing are popular in certain regions—such as the Midwest. This might affect the sales of a game such as *Bass Fishing* or the *Deer Hunter* series. Similarly, games associated with sports that are particularly popular on the East Coast (such as squash, lacrosse, and fencing) might have a much larger market there than on the West Coast.

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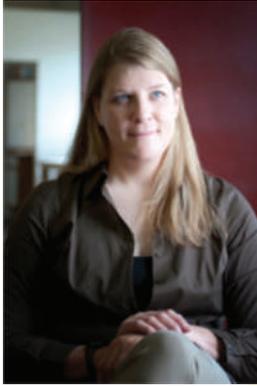
Kate Edwards
(Principal Consultant,
Englobe Inc.)

Kate Edwards on the Importance of Localization :::::

As the founder and principal consultant of Englobe Inc., a Seattle-based niche consultancy for cultural content management, Kate is a gamer who is also a unique hybrid of an academic geographer, writer, and geocultural content strategist—all coexisting with a passion for cultures, technology, and games. Formerly as Microsoft's senior geopolitical strategist in the Geopolitical Strategy team (a position and team she created and managed), Kate was responsible for protecting against political and cultural content errors across all MS products and locales. She implemented a geopolitical quality review process at Microsoft Game Studios and was personally responsible for review-ing potential sensitivities in all first-party games. Since leaving Microsoft, she has worked on numerous titles—including *Dragon Age 1* and *2*, *Star Wars: The Old Republic*, *Ninja Gaiden II*, and *Dance Central*. Kate is also the founder of the IGDA Game Localization SIG and is a regular columnist for MultiLingual Computing.

My function is to help game designers and developers create content that won't be considered offensive, sensitive, or otherwise problematic in over-seas locales. I do this by advising them early in the game development cycle on potential issues with their concepts and then help review specific pieces of content as they're developed throughout the cycle. In short, my job is to maximize the number of players across as many locales as possible by ensuring there won't be problems that obstruct sales in a specific market or region.

The game industry needs to embrace the concept of global game develop-ment. Localization, which accounts for about 50% of the industry's total revenue, is still an afterthought in many game development cycles. Yet localization and culturalization are just as important as other considerations that occur during the inception of the game idea (e.g., dev, audio, writing). Instead of making a game for one market and then localizing, game develop-ers need to think of it as developing one title for the world—and then con-sider how this changes their assumptions.

Psychographics

Psychographics consist of people's values, attitudes, and lifestyles. How do they like to spend their time? How do they see the world? Are they social people? Are they ambitious? How do they feel about money, religion, culture—themselves? Are they cynical or optimistic? Do they participate in social and environmental causes?

The Gamer Brain

Rob Beeson—a biologist and learning scientist whose fascination with how *info-graphics* (visual representations of information, data or knowledge) can help aid in learning—pieced together pre-existing research on the brain's reward centers and came up with a graphic showing how these centers map to different areas of the brain. Calling his infographic *The Gamer Brain: The Science & Stories Behind a Gamer's Brain*, Beeson came up with seven types of players: conqueror, socializer, mastermind, seeker, daredevil, survivor, and achiever.

Text not available due to copyright restrictions

Image not available due to copyright restrictions

One of the primary ways the game development community has segmented the player market has been by frequency. Traditionally, a "casual" player was one who played only occasionally—focusing on games that took a relatively short amount of time to play (or that could be stopped and started at any time) such as Web and cell phone games. These games are designed with the casual player in mind—they are short, easy-to-learn, entertaining ways to pass the time. Today, the word "casual" usually describes the game rather than the player demographic. "Hardcore" (some-times referred to as "core") players are still more likely to immerse themselves in a game that might last weeks or months (rather than hours or minutes). Games that might require a lot of social interaction or detailed storylines with complex character development are often ideal for these players. These definitions, however, are just extremes that focus on frequency of play. The game development community should consider much more than this when researching their target audience.

Myers-Briggs Type Indicator (MBTI)

In 1943, Isabel Briggs Myers and her mother, Katharine Briggs, developed a model to measure personality types. The model, known as the Myers-Briggs Type Indicator (MBTI®), is based on the work of psychologist Carl Jung—whose character arche-types will be discussed further in Chapter 5. The Myers-Briggs personality types contain four letters, each corresponding to one of two opposing personality charac-teristics:

Diagram by Per Olin
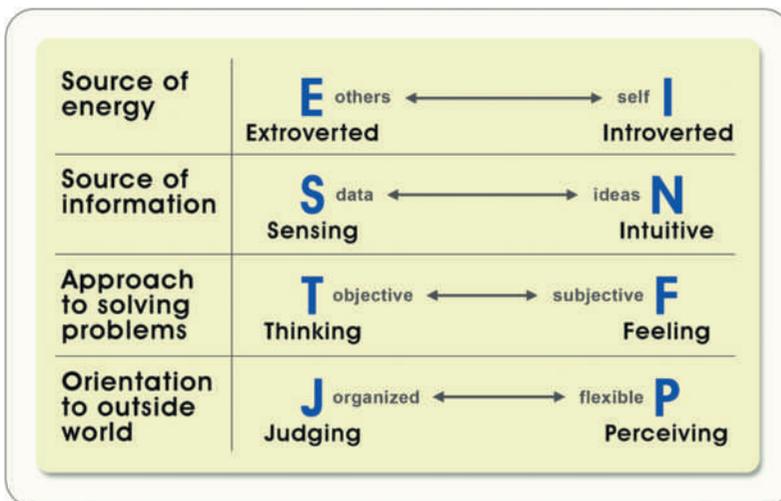
Preferences on each scale of the MBTI instrument combine to yield a four-letter psychological type [e.g., ISFJ, ENTP]. (Source: Myers & Briggs Foundation, Inc.)

- **Extrovert (E) vs. Introvert (I):** Energy is more outer- or inner-directed.

- **Sensing (S) vs. Intuitive (N):** Perception is more present- or future-oriented.

- **Thinking (T) vs. Feeling (F):** Judgment-formation is more objective or subjective.

- **Judging (J) vs. Perceiving (P):** Approach to world is more structured or spontaneous.

Linking Players to the Experience

During the early years of the computer game industry, developers paid little attention to who its customers were. Most game concepts were based upon the personal preferences and opinions of the developers. In more recent years, some game companies have employed demographics to consider our target populations. Most game industry efforts to profile customers and potential customers are limited to the demographics of age, gender, and gaming preference (hardcore vs. casual). These parameters are of limited usefulness because they do not directly tell us how to best entertain these players. The more directly any demographic information can be linked to how the game is played, the more readily we can apply it to our design. Studying player personalities and motivations brings us one step closer to the real question: What makes a game fun for a certain type of person?

—Kevin D. Saunders (Creative Director, Alelo)

Beyond Demographics

Knowing your target player market isn't just an issue of pure marketing; it has huge significance to the design of a game. Knowing your audience means more than simply knowing age, gender, and spending habits; it means understanding the way your game fits into your players' lives. Do your players think of gaming as a time waster or a dedicated hobby? Do your players view games as a medium for self-expression, personal growth, socializing, escapism, or something else entirely? Knowing the answers to these questions should fundamentally shape the way your games are designed.

Brandii Grace (Game Designer, Engaging Designs)

Some members of the game industry have taken notice of psychographics such as MBTI®. International Hobo—a company founded by game developer and author Ernest Adams—developed a research study that applies the Myers-Briggs personality test to the player population.

Behavior patterns can also be seen as part of psychographics. As U.S. citizens continue to play more games, they are clearly spending less time on other activities. According to the Entertainment Software Association (ESA), 52% of players who spend more time playing games report watching less television as a result. In addition, 47% of gamers are going to fewer movies—and 41% watch movies at home less often. The decline in television viewing is becoming such an issue that advertisers are now considering in-game advertising as a more viable way of reaching much of their market. The ESA also reported in 2010 that 72% of U.S. homes own a console and/or PC used to play games; this might have further contributed to the decline of other traditional entertainment pastimes.