

## Player experience

We all have our favorite games. Each one of us remembers some games that captured our attention, games that fascinated and enthralled us, games that we binged on in short, intense episodes, or games that cast a spell that made us return to them over and over again.

This is our job as game designers, to create these kinds of experiences for the player. We want our players to be enthralled and intrigued, or perhaps challenged and inspired, or whatever the game brings to the table for them, such that they enjoy the gameplay and their experience.

But why would players want to play our game? What is it about the game that will be so entralling?

This question is key to the game designer's role. It is also surprisingly difficult to answer.

## Experience is relative

I can try to answer it for myself: why do I like what I like. If I think of my favorite games, I can easily rattle off a variety of reasons. For example, I love Civilization games, so why is that? Maybe it's because of the strategy challenge, because I can grow an empire from scratch, but also have to defend it against enemies from the outside, and economic collapse from the inside. Or the SimCity series, where I enjoy the process of building a huge sprawling city that gets more and more difficult to keep running as it gets bigger, and forces me to destroy what I have created in order to create more.

Everyone else can also come up with their own favorite games and a multitude of reasons why they enjoy them. At the same time, if I asked others whether they like Civilization or SimCity, they might tell me that they do not. Or if they do, they might have different reasons: maybe somebody enjoys the combat and warfare aspect of Civilization rather than empire-building and management, the opposite of my reasons for liking the game.

To paraphrase an old adage, enjoyment is in the mind of the player.

But even though the maxim is quotidian, when we unpack it, some interesting intuitions and implications fall out, as we examine below. These will not surprise those with prior exposure to arts, as contemporary art practice realizes there is no such thing as aesthetics without reference to the participants, where they are coming from, and how they interact with the piece. But for our purposes, we will leave the philosophy of aesthetics untouched beyond pointing out that it is relevant here.

So what can I say about how people experience games, just from the experience of being someone who plays games, and knowing other people who play games? Quite a few things:

1. **Players play games because they enjoy them.** This is a bit of an obvious truism. They clearly find *something* interesting about the game that captures their attention and fits their mindset. They feel motivated to play it. If they didn't, it wouldn't be play.

But why are they motivated? That is a hard question to answer, and we will examine some theories later on.

We could say that players are “having fun” or that a game is “fun”, but that word is dangerous to take literally: the everyday word “fun” implies that ebullient, cheerful feeling of joy, but a game does not have to be joyful in that sense to be enjoyable. Players often look forward to a difficult challenge, and persist in the face of frustration, hardship, and exhaustion, and they may also engage with a game about a painful subject such as death or disaster. So we cannot assume “fun” as the reason, and instead we will talk about people *enjoying* a game, as a shorthand for feeling motivated to play, whatever their reasons are.

2. **Different players find different kinds of games enjoyable.** For example, some people definitely enjoy strategy games, it tickles their mind in some way and they are motivated to spend their time on them. But clearly not everybody likes strategy games, and some dislike may them, perhaps intensely. Each of us have our own games that we like or dislike.

In short, there is no game, or genre, or style that everybody will enjoy. Similarly we are unlikely to meet a person who enjoys all games, genres, or styles.

3. **Different players may enjoy the same game for different reasons.** Going back to the Civilization example, I may enjoy historical aspects and economic management – but another player might prefer the combat and warfare aspects. There is nothing inherently more “correct” about what I enjoy about a game compared to how someone else enjoys it.

However, that does not mean that the game supports all of these equally. If I come in to Civilization expecting a deep story and character development, I will be disappointed, the game is definitely oriented towards strategy and management. However, successful large-scale games often try to be enjoyable in multiple ways, so that even different kinds of players will find something in the game that speaks to them.

4. **Whether or not a game is enjoyable is relative.** This conclusion follows directly from the previous points. If everyone’s experience is different, it makes no sense to ask whether a game is “enjoyable” by itself, objectively. The same game can be enjoyed or not enjoyed, by different players or for different reasons, so we can only ask whether it’s *enjoyable for some specific players*.

Later on we will try to generalize this, and ask whether a game can perhaps be enjoyable for some specific *types* of players. This generalization will be very useful, but the reference to the audience has to always be there.

These intuitions have direct consequences on game design:

1. We cannot make a game that will be objectively “enjoyable” or “fun”. We cannot even hope to make one that’s objectively “better” than another, without assumptions about the audience or some evaluation criteria.

2. We also cannot expect to make a game that everyone will like, or that nobody will dislike. Also, those who like it (or dislike it) will have varied reasons and motivations for how they feel.
3. But what we can make, is a game that is enjoyable in specific ways, for particular players. We can and should talk about how specific players will experience our game, and how we can guide them to have the kinds of experiences we want them to have.

In the end, we really need to consider who our audience is, and why our game might be enjoyed by them, from the very first moment in the design process.

## What do you enjoy?

We know that enjoying a game is highly subjective, and dependent on the player as well as the game. Now we can go one step deeper. Once I have identified a game that I find enjoyable, I can start asking myself: what specifically do I find enjoyable about it?

If I look at Civilization 5, for example, which is an intricate strategy game, I can start to rattle off a wide variety of personal reasons:

- I like the progression of starting out with a small empire and growing it into a superpower
- I enjoy building out big cities and managing them, making sure everybody is happy
- I dislike combat, but I enjoy having powerful armies and using them in negotiations
- I like the rush of having to react to unexpected situation, and strategizing future moves
- I really like science research, and developing new technologies and more powerful units
- I enjoy the visual style and that it looks a bit like a board game
- I like the historical context and playing against actual countries that existed
- It's fun to play as a real historical figure like Napoleon or Alexander the Great
- And so on, and so forth...

This is my personal motivation list – it describes what I find enjoyable and why I like (or dislike) the game. Any of us can come up with similarly varied lists, if we consider any of our favorite games, and we could also create similarly detailed reasons for not liking some games.

But a huge laundry list is not very useful, we would benefit from trying to express it in more general ways, so that we can see if it applies to other games, or other players.

## Building a naive taxonomy

For example, I can try to make a simple categorization of those points above. Forming groups or taxonomies can help bring out underlying structure.

I will group my reasons for playing Civilization into categories, and then try to figure out if something about those categories is particularly interesting. A naive grouping might look something like this:

- *Gameplay elements*: what I do in the game, what kinds of game nouns and verbs I have to work with, the systems built from them, and the challenges they present – especially those around strategy and economic management. If I re-skinched the game to have a different presentation, but kept the gameplay elements, they would still be enjoyable in the same way.

- *Fantasy elements*: the historical settings, the game characters, levels, units, weapons, and other elements. Our civilization and its history are very interesting, separately from the game rules and mechanics.
- *Presentation elements*: visual design, art style, how people and places look, how they're animated, the style of the place and time in history.
- *Story elements*: characters and their stories, what they do, their personalities and motivations can be intriguing, similarly as stories in movies and books pull us into their made-up worlds.

Assuming this naive taxonomy, I can then try to describe how well Civilization matches it:

- I quite enjoy *gameplay elements* in this game, and there is a rich variety of them
- I enjoy the *fantasy* of being a historical ruler, and the game supports it very well
- I'm ambivalent on *presentation elements*, although the game has very good presentation
- I would like to have *story elements* in this game, but the game does not have many

And just like that, we created our first *theory of player motivation*. We analyzed some player motivations, and we tried to group them into a more general theory, and from this taxonomy we can try to make predictions, and try to test them. For example, if I find other games that have strong gameplay and fantasy elements, I could try to predict that I might also like them based on this theory.

However, let's make no mistake – this naive taxonomy is *terrible*. It suffers from numerous defects, the worst of which is that it is based on just my own intuition from my own experience with just one game, and does not take other games or players' experience into account. Can I make any predictions about how others will enjoy Civilization based on this theory? Not really. So this is not going to be useful in figuring out how to make games for other players.

But this is a good starting point for looking at other, better theories of player experience.

## Player theories

We have seen that individual experience is not enough. My own motivation profile explains me, but it does not explain other people. We would prefer a motivation model that would help us understand whether and how *other people* might enjoy some particular games, and maybe even tell us *why* they enjoy them.

There have been numerous attempts to find such models, to divide up players into various player types, in order to better understand the connections between them, and to understand what motivates them. We will talk about three different approaches: designer theories, authored user personas, and empirical studies. In this section we discuss the first two, and then turn to empirical studies in the next section.

## Designer theories

All game designers observe players at play, and attempt to understand them. Some designers have distilled this experience into compact theories that can be tried by others. By sharing our experiences and comparing notes, designers strive to enrich everybody's shared understanding of how players experience our games.

Below we will cover two models which are perhaps the best known, while pointers to additional models are covered at the end of this chapter.

## The Koster model

Raph Koster's book *The Theory of Fun* postulates a player model that derives enjoyment from a single fundamental drive: learning and getting better. As long as we are encountering new challenges, overcoming them, and learning successfully as we go, we are going to be engaged with the game and enjoying it. But in order for this to work, the challenge has to be both intrinsically interesting to us (fortunately, humans are curious creatures and we find many things interesting), and "just right" in terms of difficulty (neither too easy nor too hard).

As we will see later in (REF TO CH5), this is very much related to the psychological *theory of flow* and personal motivation, which extends far outside of games and into all areas of human endeavor. As flow theory argues, being faced with a challenge at the right level of difficulty can lead people into deep fascination and engagement with whatever they are doing.

Since this kind of enjoyment is tied to both player skill and game challenge, it neatly explains why the same game might be very differently experienced by different players. For example, a complex strategy such as Civilization will be more enjoyable for experienced strategy players, rather than players who are inexperienced with the genre and its conventions, even if both groups are equally interested in it.

This understanding of "fun" is also linked to notions of action spaces and state spaces which we will touch on in (REF TO CH3?). The "fun" is connected to how well the player has learned how their actions affect the game's state space. The game is not fun if it is either too predictable or too unpredictable - and it is most fun when the player is actively learning how to affect the game state through their actions.

## The Bartle model

We should also take a look beyond a single player, and at how different players play with each other. Probably the most well-known intuition-based taxonomy of players in multiplayer games is the [Bartle Model](#). Based on his experience running multiplayer online text games ("MUDs"), Richard Bartle postulated categorizing multiplayer game players into four broad categories:

- Achievers (motivated by scores and achieving goals)
- Killers (motivated by competition and victory)
- Explorers (motivated by learning and exploring)
- Socializers (motivated by storytelling and player interactions)

The Bartle model suggests that these different kinds of players derive their enjoyment of the game unequally, from different sources. If I were an "achiever" kind of a player, I might enjoy parts of the game that focus more on goals and rankings, while a "socializer" might not care about those so much, and instead draw enjoyment from other elements.

This also implies that the groups behave very differently from one another, which could potentially get them into conflict: for example, achievers getting annoyed when teamed up with socializers, because the latter do not “play to win”. So in the context of multiplayer games, it becomes very important to make game worlds that provide something for each of them, and to keep them balanced.

Bartle’s taxonomy remains popular, and it gives readers a handy, immediately-useful guide for figuring out what motivates different kinds of players, and how to make the game better for them. However, as those categories are based on intuition and informal observation, a multiplayer game designer needs to supplant them with observations of their own player base interacting in their own particular game, as those populations may very well turn out differently.

More designer taxonomies exist, we will touch on them again in the Further Reading section.

## User personas

The creation of *user personas* is a technique related to player theories. It is not unique to game design, however, and quite different from the designer theories we have discussed so far. User personas are not theories of motivation *when playing* the game, but they try to imagine who the players are as people living their lives, and how games fit into it.

User personas are popular in the design and marketing of all types of products. They are typically written out as short vignettes of different kinds of users who would be using the product. Those vignettes may come either from conducting surveys of users of existing products, and seeing what patterns emerge, or by just imagining who the most relevant users would be.

In a user persona, we try to capture who the users are, in detail as people living their daily lives, and imagine why and how they would want to play the game. For example, if we were working on a game like *The Sims*, we might imagine a number of different types of players, maybe collapsed into three or four stereotyped personas. We could write them out as follows:

- Alice is a teenager who plays the game for a few hours after school. She enjoys building the house and the stories of the different families living in the neighborhood. She is also an avid fan of the different themed expansion packs.
- Bob is a young professional in his mid-twenties. He plays strategy and management games on a regular basis, and switches between them regularly. When playing he tends to be competitive and finds new ways to surpass his previous scores and achievements.
- Carol is a professional woman and a mother of two grade school-aged children. Even though she likes games, she can only play them occasionally, maybe an hour at a time. She enjoys the interior decoration aspect of the game, often re-decorates her houses, and creates new in-game items.
- ... And so on, and so forth.

These user stories may seem clunky and awfully stereotyped, and they often are. (For example, why is the male a competitive one, while the interior decorator is female and a mother of two? Is this a reflection of actual player types, or a reflection of the writer’s particular view of the world?)

But that is deliberate. The point is to put together these sketches of imagined stereotypes, faulty but interesting, in order to imagine their motivations and behavior. The user persona is an *imagination*

*pump*, not an explanatory model. This helps designers answer questions like: “Who are we making the product for?”, and “Why would they want to buy it?”

This makes them very useful in helping game designers focus the scope of the game. For example, if we conclude from this exercise that our players will be working adults who play our game after work, we probably want to make it easier to play it in shorter sessions, and if the game contains multiplayer events or competitions that take place during business hours, we should make them optional.

User personas are also different in that they make no claims about being general theories. Personas are written from scratch for each specific product, and for each specific audience, and they are not intended to make a point beyond that.

## Empirical models

Designer models, like those mentioned above, are primarily driven by the authors’ intuition and experience with a large number of players. They are distillations of their own internal models, based on first-hand interactions.

But we could approach these questions from a different angle, removing the designer from the loop. In particular, we could use data-driven categorizations, which are popular in the social sciences: by collecting a lot of data points, such as using surveys, and then using statistical analysis to find whether some of these answers are correlated and cluster together into groups.

We will describe two interesting and relevant empirical studies, which have direct impact on game development: first, the popular OCEAN model for describing personality types (independently of games), and second, some empirical studies of player types specifically in computer games.

## The OCEAN personality model

Models of personality and emotion try to answer these questions: if we wanted to categorize somebody’s personality, which independent dimensions should we categorize them on? If we find a good model that describes people well, we might be able to use it to understand how they will behave.

There have been many personality models proposed throughout history, from ancient theories of the four bodily humors, to more recent folk theories such as the Myers-Briggs model. But they share similar defects: they are models based on pre-conceived taxonomies, rather than based on evidence.

A more fruitful approach would be to do this the other way: start by collecting a lot of data about how people act or how they talk about their actions, and then see what kinds of personality clusters or dimensions best explain this data, without prior notions of what those clusters might be.

The OCEAN personality model (also known as the Five Factor model) is probably the most well-known and well-tested of these data-driven approaches. It is the culmination of many years of work trying to find independent dimensions of personality and behavior, based on a variety of data-driven techniques

such as questionnaires about how people describe themselves, or analyses of words people use to describe common reactions and emotional states.<sup>1</sup>

From this effort emerged a model which finds five principal personality factors, or dimensions:

-	Openness to experience	$\leftarrow$ vs $\rightarrow$	cautiousness
-	Conscientiousness	$\leftarrow$ vs $\rightarrow$	carelessness
-	Extraversion	$\leftarrow$ vs $\rightarrow$	introversion
-	Agreeableness	$\leftarrow$ vs $\rightarrow$	detachment
-	Neuroticism	$\leftarrow$ vs $\rightarrow$	confidence

OCEAN is probably the most replicated, and most studied, empirically-based personality model - the “gold standard” of personality research. For more information, see [this great introductory page](#) (TODO REF) by Sanjay Srivastava.

The practical applications of OCEAN are limited because it is descriptive rather than predictive model, although traits do seem to have some association with behaviors and life outcomes, depending on context. For example, in the context of jobs and employment, conscientiousness was found to generally correlate with job performance, while other traits can predict more specific outcomes, such as extraversion predicting success in sales and management positions. Other predictions have been tested in other contexts as well, such as healthy living or school performance.<sup>2</sup>

OCEAN is not commonly used in game design, although it can be inspirational when thinking about what might motivate different kinds of players. In the following section, however, we describe some new findings that connect personality types directly to gameplay preferences, and open up a promising direction for further study.

## Yee's gamer motivation profiles

Beyond personality studies, there is recent work that tries to answer the question of game playing motivations much more directly.

Nick Yee from Quantum Foundry has been organizing a long-running survey of game players, asking them to rate their preferences for various aspects of games, and how much they find them appealing on a 1-to-5 scale. Questions in the study were based on 12 types of in-game motivations, sourced from a variety of models, including psychological studies of motivation as well as more traditional designer theories. He then performed factor analysis on this data, and we describe some conclusions below.

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<sup>1</sup> See (TODO REF: <http://pages.uoregon.edu/sanjay/pubs/bigfive.pdf>) for historical overview

<sup>2</sup> Ibid.



Action "Boom!"	Social "Let's Play Together"	Mastery "Let Me Think"	Achievement "I Want More"	Immersion "Once Upon a Time"	Creativity "What If?"
Destruction Guns. Explosives. Chaos. Mayhem.	Competition Duels. Matches. High on Ranking.	Challenge Practice. High Difficulty. Challenges.	Completion Get All Collectibles. Complete All Missions.	Fantasy Being someone else, somewhere else.	Design Expression. Customization.
Excitement Fast-Paced. Action. Surprises. Thrills.	Community Being on Team. Chatting. Interacting.	Strategy Thinking Ahead. Making Decisions.	Power Powerful Character. Powerful Equipment.	Story Elaborate plots. Interesting characters.	Discovery Explore. Tinker. Experiment.

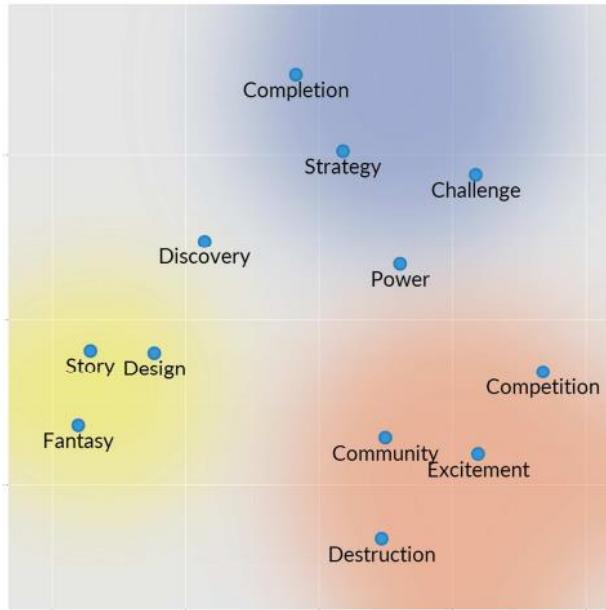
(TODO REF: [quanticfoundry.com/gdc](http://quanticfoundry.com/gdc))

In the study, players would be asked questions to determine how much they feel motivated by the following twelve aspects of gameplay:

1. Action aspects: Destruction or Excitement
2. Social aspects: Competition or Community
3. Mastery aspects: Challenge or Strategy
4. Achievement aspects: Completion or Power
5. Immersion aspects: Fantasy or Story
6. Creativity aspects: Design or Discovery

Yee found consistent correlations in players' reports of how much they liked the different aspects of games. For example, people who scored higher on strategy preference were much more likely to also prefer challenge, but they were less predictable along other dimensions such as community or fantasy. Second, the correlations seemed to be roughly consistent across players from different countries and cultures.

Here is a graph of the correlations, collapsed into a 2d graph that represents correlation strength as proximity between the points:



(TODO REF: <http://quanticfoundry.com/gdc/>)

Each of these dimensions correlates with some motivations more strongly than with others. Based on these correlations, authors proposed grouping them into three clusters:

1. Red: Action-Social cluster (Excitement, Destruction, Community, Competition)
2. Blue: Mastery-Achievement cluster (Completion, Strategy, Challenge)
3. Yellow: Immersion-Creativity cluster (Story, Design, Fantasy)
4. Additionally, the Discovery and Power motivations sit in-between, as “bridges” with a broader player appeal.

In this case, the proximity should be considered as likelihood that the same person will share those motivations together. For example, the proximity of strategy and challenge suggests that more players enjoy those two together, compared to the number of players who enjoy strategy and design or strategy and destruction.

The clusters also highlight some surprising proximities: for example, why would players' enjoyment of competition and community fall in the same group? However, authors suggest this makes sense if we consider community as a reflection of a person's extraversion / dominance personality trait, as we discuss below.

While the model is early in development, the overall approach is valuable: starting by collecting data about what players enjoy, and then trying to extract groupings from this empirically observed data.

## Yee meets OCEAN

In a more recent study, Yee (TODO REF GDC16) asked people to fill out both a player motivation survey, and a personality survey, and then found correlations between gamer motivations and their OCEAN personality profiles. The correlations were not strong, but some interesting patterns emerged.

The results found some possible correlations between three of the five personality types and some gamer motivation types, while the other two personality types did not match up:

- Higher openness correlated with higher preference for Fantasy, Story, Design, and Discovery
- Higher extraversion correlated with Excitement, Competition, and Community
- Higher consciousness correlated somewhat with Strategy
- Agreeableness and neuroticism did not seem to correlate strongly to gamer motivation types, but the reason was unknown, perhaps due to the kinds of questions being asked.

As mentioned above, these correlations between personality and gamer motivations help explain some of the unexpected clustering results. For example, competition and community are very different motivations, yet they both relate to extraversion and desire to interact with other people (whether by trying to cooperate or dominate).

Interestingly, these results go against the popular perception that games are escapist fantasies where we pretend to be someone we are not. Yee argues the data suggests the opposite: that the games we play reflect our personalities and what really appeals to us.

In other words, that *games let us more fully express ourselves as we already are*.

## Experience design

So, what is it that makes a game enjoyable?

We have covered a number of different ways of looking at this problem, and we have seen that “being enjoyable” is not a pure property of the game. Rather, enjoyment is a function of both the game, and the particular player who is playing the game. And so we can try to develop some ideas of why different things appeal to different people.

We can analyze what particular players like, by applying a number of player experience models. Designer theories are usually easy to apply, and function as great sources of ideas. Similarly, writing out user personas can help us as an imagination pump, to understand the player better and imagine their experience from a first-person perspective.

We can also use existing empirical studies to see how players can be classified using their self-reported preferences: to understand what players enjoy, and how their motivations cluster together and support (or not support) each other.

Ultimately, the main point of analyzing player experience is to help make better games. We use these tools to answer basic questions about the games we make:

- Who are we making the game for?
- What will they like about the game we have in mind?
- What does this tell us about how to add or remove ideas from the game?

## Questions to guide experience design

Suppose that we have a game in mind that we want to make, and we want to start analyzing player experience. We need to move from the general question of “what makes a game enjoyable” to “what will make *my game* enjoyable”, and then on to “what will make my game enjoyable *to my players*”.

In short: when we design a new game, we need to interrogate our game idea in the context of players:

1. **Who am I making the game for?** Is it a specific type or types of players, or is it a game that should have mass appeal to many, various types of people? How do I know who the players are?

We can look at it either through the lens of player motivations, or by assembling player personas to try to imagine who your stereotyped players are. But this is probably the first question that needs to be answered, as it will influence the others.

2. **What will they enjoy about this game?** This ties directly to our audience. Given our assumptions about who I make the game for, what is it about the game that they will enjoy? What aspects of the game speak to this audience, or to other audiences?

Game designers are often voracious game players of various types of games, and tend to answer this question from experience. We can also use something like the player motivations model to figure out what kinds of motivations will be satisfied by this game, this will give us some idea about whether the game matches what we expect from our players.

Answering this question is easier for games that are made for a specific player type, such as niche games or genre games. For mass market games, we still need to know why players will enjoy it, but we may have to divide players up into multiple subgroups based on the different things they will find appealing. This is when user personas become particularly useful.

3. **What else would they enjoy that's not in the game?** What would they not enjoy? For example, if our game is a wargame focused on competition and strategy, it might be beneficial to enhance community aspects by adding guilds or chat rooms. But if we considered adding a story element instead, we should consider whether this would enhance or dilute the enjoyment for our target players.

In other words: given what we know about the audience for this game, can we extend the game in interesting ways, to satisfy a related player need? And conversely, what might be some unrelated player motivations that we should be careful about, so that our game does not end up unfocused, trying to be too many things to too many people.

These questions are just starting points for exploration. But they will force us to address the main questions, of who our audience is, and how we *think* they will experience the game we make.

## Experience Archetypes and Genres

In the discussion so far, we have already hinted many times at the existence of genres. We have used terms like *wargame*, *strategy game*, *management game*, etc. These are popular labels, and they are legion: *real-time strategy*, *first-person shooter*, *arena shooter*, *role playing game*, *open world sandbox*, and so on and so forth. The precise definitions can be fuzzy, but both players and makers usually know what we mean by them.

Genres are shortcuts for talking about what kinds of mechanics are being used, and what kinds of player experiences will be supported. For example, if I hear about a new *tycoon game*, just saying the name of the genre conjures up some expectations about what mechanics will be used, and what I should expect out of playing the game – namely, lots of management and number crunching, economic simulation, strategic and competitive elements, probably a single-player game without a social component, and so on. Similarly I can understand someone says if they call something an *open-world RPG*, or a *squad-based tactical first-person shooter*, and so on.

Genres are also convenient in the process of *making* a game, because they help us quickly resolve a large number of design decisions, which otherwise might need to be tested out and prototyped. For example, if we are making an open-world sandbox game, we know a lot about who the player is, what they will do, what nouns and verbs we might need to implement, and so on. We do not need to answer these basic questions. Since the foundations are settled, we can move on to building an interesting and novel variation on top of them.

On the other hand, cross-genre or genre-bending games can also be very interesting, because they merge different families of solutions into a novel shape that defies expectation. They are also tricky, since cross-genre designs bundle together different sets of design solutions, and it can be hard to take apart mechanics from different genres, and then put them together in a way that works together well. But when it works, it has the potential of building something quite novel, and reaching different groups of players who have very different motivations.

## Further Reading

On the topic of “enjoyment” and “fun” the jury is still out what is the most precise terminology. Early on, designers used to abuse the word “fun” to describe player experience, with assumptions about how the player *should* feel.

This was counteracted by a wave of critiques, the best-known ones by Doug Church (TODO REF) and Greg Costikyan (TODO REF), opposing the use of the word “fun” as too specific, and too limiting. This document uses the term “enjoyment” as perhaps less loaded, but still highlighting that the subject commands interest, attention, and voluntary engagement. Things we enjoy feel to us like play, not work.

Beyond the topic of “fun”, there have been numerous player theories over the years. In addition to Bartle’s and Koster’s, we can point out a number of other ones that are worth taking a look:

1. Lazarro’s [Four Factors](#) (TODO REF) model which splits up gameplay into four quadrants:
  - a. Hard fun (“fiero”) which relates to challenges and fun of overcoming them
  - b. Easy fun which relates to curiosity and joy of exploration
  - c. Serious fun which relates to excitement and intense focus

- d. People fun which corresponds to social bonding and taking care of people
- Unlike Bartle's model, this is primarily a taxonomy of types of experience, rather than types of motivations.
- 2. LeBlanc's [Eight Kinds of Fun](#) (TODO REF) which splits up player motivation into eight aspects: Sensation (having an enjoyable sensory experience of visuals or "game feel"), Fantasy (the joy of pretend-play as somebody else), Narrative (interest in the story, characters, and development over time), Challenge (having obstacles and overcoming them), Fellowship (playing the game with or against your friends), Discovery (exploration and learning new aspects of the game), Expression (creative self-expression in the game), Submission (joy of repetitively engaging with the same thing, like a hobby).