

# The Art of Game Design

## A Book of Lenses

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# CHAPTER TWENTY-FIVE

## Good Games Are Created Through *Playtesting*

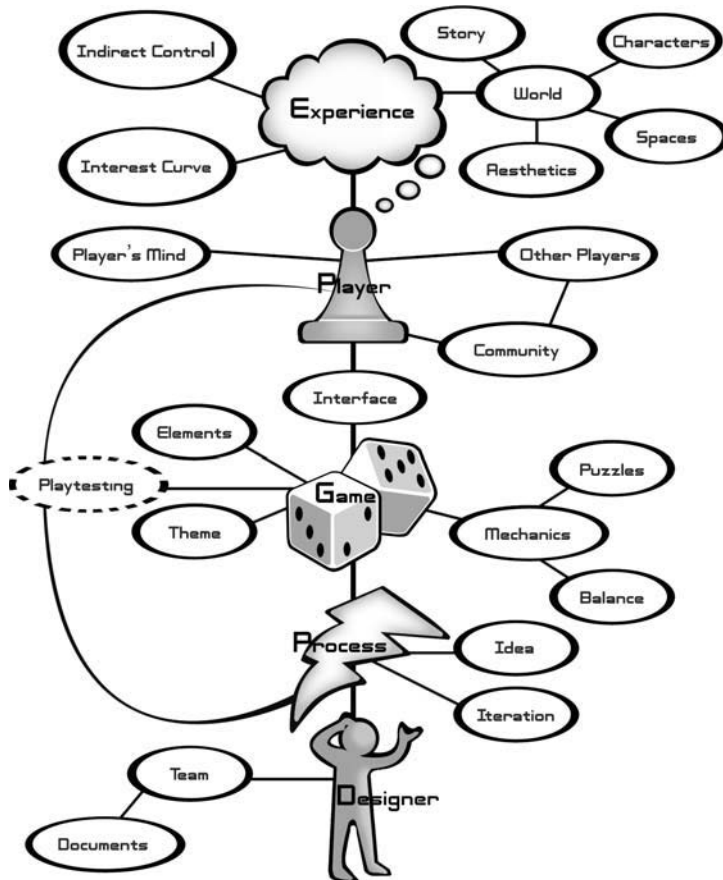


FIGURE  
25.1

## Playtesting

FIGURE  
25.2



It is easy, when developing a game, to fantasize about the player experience and to imagine how great it will be. Playtesting is necessary to serve as a wakeup call and force you to solve the ugly problems you've been putting off. Before we get too deep into this discussion, I want to draw the distinction between four different types of testing: focus groups, QA testing, usability testing, and playtesting.

- **Focus Groups:** This is a term that often causes professional designers to wince. It refers to sessions where potential players are interviewed about their likes and dislikes, often in an attempt to determine whether they like a game idea that a company is considering. Focus groups can be quite useful in the right context (particularly when deciding the relative priority of well-defined features), but they have a bad name because they are so often poorly run and manipulated to kill ideas that management is afraid of.
- **QA Testing:** QA is “Quality Assurance.” This testing has *nothing* to do with how enjoyable the game is, and everything to do with looking for bugs.
- **Usability Testing:** This is all about determining whether your interface and systems are intuitive and easy to use. Both of these are necessary for an enjoyable game, but they are not enough. Keep this in mind when someone suggests bringing in a usability expert to make your game more fun.
- **Playtesting:** Separate from the previous three, playtesting is all about getting people to come play your game to see if it engenders the experience for which it was designed. And while the other three types of testing are useful and important,

in this chapter we will focus only on the type of testing designers care about the most, playtesting.

## My Terrible Secret

I'm going to admit something now that is profoundly embarrassing. For years I have tried to pretend that it isn't the case, but there is no getting around it. I don't like talking about it, because it makes me a hypocrite, and calls my qualifications as a game designer into serious question.

However, my goal with this book is to help lay out how game design really is, not some idyllic dream version of how it should be. So, here goes. Please try not to judge me too harshly.

I *hate* playtesting.

Does playtesting find problems early, while there is still time to fix them? Yes. Does playtesting build the team's confidence that they are making the right game for the right audience? Yes. Is playtesting essential to making a good game? Yes. Does playtesting fill me with a terror so intense that I can't even think straight? Yes, yes, yes!

It's completely humiliating. I *know* that playtesting is good for my game. Not just good, *necessary*. But when it comes to actually *doing* the playtesting, I find every excuse possible to avoid it. First I delay getting the playtesting organized. When it eventually gets organized, I make excuses why I can't be there. When I actually am there, I find reasons not to observe it directly, getting distracted with anything else that might be nearby. I'm well aware of these tendencies, and I fight them tooth and nail, but still, my fear of playtesting remains.

Why? What am I so afraid of? It's simple. I'm afraid that people won't like my game. I should be above that, I know. But I'm not. When you make a game, you try to put everything you can into it: heart, soul, dreams, blood, sweat, and tears. A game you work hard on becomes a little piece of yourself. To have people engage with that, and then reject it, well, it hurts. A lot. And don't kid yourself — *it is going to happen*.

Having people hate your work is probably one of the most painful parts of being a game designer. And playtesting is like an engraved invitation that reads:

*You are cordially invited  
to tell me why I suck  
Bring a friend — Refreshments Served*

Does playtesting have to be so uncomfortable? It does. The whole point of playtesting is to make clear to you that some of the decisions you were completely comfortable with are completely wrong. You need to find these things out as soon as possible, while there is still time to do something about them.

Maybe playtesting comes naturally to you. Maybe you have no fear of people ridiculing your work. If so, congratulations! Your objective viewpoint will be a great boon to you during playtesting sessions. But if you fear and loathe these sessions, like I do, there is only one thing to do: Get over it. People are either going to like your game, or they aren't. If they do, great. If they don't, also great! You have a chance to ask them why they don't like it, so you can fix it. Let go of your fears, and embrace playtesting for what it is: a wonderful opportunity to make your game better.

Every playtest is defined by five key questions: Why, Who, Where, What, and How?

## Playtest Question the First: Why?

Do you remember how, in Chapter 7, we discussed how every prototype is designed to answer a question? A playtest is a kind of prototype — not a prototype of the game, but a prototype of the *game experience* (which is what we care about the most!). If you don't enter into your playtest with specific goals in mind, you stand a good chance of wasting your time. The more specific the questions you have when you organize the playtest, the more you will get out of it.

There are millions of questions you might want your playtest to answer. The most obvious one — “Is my game fun?” — is not enough. Generally, you want your questions to be as specific as possible. Examples follow — some general, some specific.

- Do men and women play my game differently?
- Do kids like my game better than adults?
- Do players understand how to play?
- Do players want to play a second time? A third time? A twentieth time? Why?
- Do players feel the game is fair?
- Are players ever bored?
- Are players ever confused?
- Are players ever frustrated?
- Are there any dominant strategies or loopholes?
- Does the game have hidden bugs?
- What strategies do players find on their own?
- Which parts of the game are the most fun?
- Which parts of the game are the least fun?
- Should the “A” button or “B” button be used for jumping?
- Is level three too long?
- Is the asparagus puzzle too hard?

And many others. These are just a few ideas to get you thinking. I often find that using the lenses throughout this book is a great way to come up with good playtesting questions.

Preparing a list of the questions you would like the playtest to answer is a great first step to planning a playtest, because until you have determined the “why,” as in “why are we having this playtest?” there is no way to answer the who, where, what, and how.

## Playtest Question the Second: Who?

Once you know why you are having a playtest, you can decide who you should be testing. And who you pick is entirely determined by what you would like to learn. Most likely, you want to pick people who are in your target demographic. But even then, there are choices. Here are some common ones:

1. **Developers.** The first people who will get a chance to try your game are the developers, so I’m listing them first.
  - *Pros:* The developers are right there! They can play the game a lot, and for a long time, and give lots of meaningful, thoughtful feedback. Also, you don’t need to worry about them filling out non-disclosure agreements (NDAs), since they already know all the confidential information about the game.
  - *Cons:* The developers are too close to the game — closer than any real player ever will be, and this will distort their opinions about the game. Some “design experts” will tell you that it is dangerous to playtest with people who work on the game, and that you shouldn’t do it. This extreme position means, though, that you could miss out on some valuable insights. Better to playtest the developers but take what they say with a grain of salt.
2. **Friends.** The next people to try the game will most likely be friends and families of the developers.
  - *Pros:* Friends and families are highly available and comfortable talking to you. If they think of a good idea after the playtest is over, you’ll probably still get to hear it.
  - *Cons:* Your friends and family don’t want to hurt your feelings — after all, they have to deal with you on a regular basis. This might cause them to bend the truth when they don’t like something. Also, since they like you already, they are going to be predisposed to like the game — they will be *trying* to like it, which isn’t what will happen in the real world.
2. **Expert Gamers.** Every genre has its “experts” — hardcore players who have played every variety of the type of game you are making. These guys love coming to playtest games still in progress, because it gives their “expert” credentials a boost!

- *Pros*: Having played many, if not all, of the games that are similar to the one you are making, these expert gamers can give you a detailed account, using technical terminology and specific examples, of how your game compares to games that are like it.
  - *Cons*: Just as only a small percentage of the eating public are gourmands, only a small percentage of the gaming public are, uh, “ludophiles.” Expert gamers are often more jaded and demand more complex and difficult game-play challenges than the average gamer. Many a game has been spoiled by overtuning it for the elite tastes of a niche audience of hardcore enthusiasts.
3. **Tissue Testers.** Ideal testing conditions often include people who have never seen your game before. The industry likes to call them “fresh meat,” or “tissue testers” (a reference to the fact that, like a Kleenex tissue, they can only be used once).
- *Pros*: People who have never seen your game before see it with fresh eyes and will notice the things that you have gotten used to. For testing that tries to determine usability questions, communication questions, or questions of “initial appeal,” these testers can be very valuable.
  - *Cons*: Games are generally played multiple times, over many sessions. If you only test your game with “tissue testers,” you run the risk of making a game that has strong first-time appeal, but gets boring after multiple plays.

Again, who you test with will depend entirely on what you are trying to learn. Matching the testers to the questions you are trying to answer is the only way to get meaningful results. Nearly every game will test with some combination of the above testers sometime during the design process — the key is having the right testers at the right times to answer the most questions as thoroughly as possible.

## Playtest Question the Third: Where?

This question might seem innocuous, but a lot rests on exactly where you have your playtest. Some different options:

1. **In your studio:** (or whatever you call the place you actually make the games).
- *Pros*: The developers are all there. You are there. The game is there! So, testing in your studio can be super convenient for you. Also, it gives everyone on the team a chance to observe the game being played by real people.
  - *Cons*: The playtesters you bring in might not feel completely comfortable. They will be in strange surroundings, and unless they have some kind of private room, they are likely to be afraid to have fun while others are working.



If you host a playtest in your studio, you should go out of your way to make it as comfortable as possible. The last thing you want is playtesters who are afraid to make noise, have fun, and speak their minds. Asking the testers to bring friends helps.

2. **In a playtesting lab:** Some (though, actually, surprisingly few) large game companies have special labs set aside for playtesting. Also, some third-party companies will playtest your game for you in special labs designed for the purpose.
  - *Pros:* The lab is designed for playtesting! It probably has all the things you could wish for: one-way mirrors, cameras on the playtesters, playtesting experts to ask the right questions and take detailed notes, and maybe even a carefully selected group of the right testers!
  - *Cons:* This kind of thing is usually very expensive. But if you can afford it, it may well be worth the investment.
3. **At some public venue:** Could be a shopping mall, an event on a college campus, some kind of fair, or a table on a street corner.
  - *Pros:* It usually doesn't cost much, and you will get a chance to get many testers, if you find the right venue.
  - *Cons:* You may have a hard time finding the "right" testers; that is, ones in your demographic. Also, if there are other things going on in this venue, testers may be distracted, not giving you their full attention.
4. **At the playtester's home:** After people buy your game, they are going to play it in their homes — why not let them play it there now?
  - *Pros:* You have a good chance of seeing your game played in its natural habitat, under real conditions. Your testers are likely to have their friends over, and you stand a chance of seeing real social interaction through your game.
  - *Cons:* Your playtest might be kind of limited. Probably only one or two designers can be there to observe, and you may only be able to test with a small number of people during a given session. You may also need to lug special hardware with you, or at least spend time configuring machines to run your prototype software.
5. **On the Internet:** Why restrict your playtesting to the confines of metaspace?
  - *Pros:* Lots of people will be able to test your game on machines with many different configurations. If the questions you need to answer involve stress testing your game or learning about massively multiplayer play, this may be your best option.
  - *Cons:* Quantity of playtesting comes at the price of quality of playtesting. Though many people may be playing, you won't get the same level of insight when you aren't in the same room with the testers. Also, if you are trying to keep your game a secret, this may be hard to do when you make it available for download.

Where exactly you choose to test depends completely on the questions your test is trying to answer. Choose your test location with your important “why?” questions in mind.

## Playtest Question the Fourth: What?

By “What?” I mean “What will you look for in your playtest?” There are two types of things to look for.

### *The First What: Things You Know You Are Looking For*

These come from the questions in your “why?” list. Hopefully, you are going to design your playtest so that you can look for answers to these questions (that’s why you listed them!). As you plan your test, make sure that you have a way to get some kind of answer to every question on your list. If there are parts of your game that aren’t relevant to these questions, consider making a special version of the game that skips these parts to save time. If the questions can’t all be answered by a single test, consider making several mini-tests that will cover the span of things you need to find out.

### *The Second What: Things You Don’t Know You Are Looking For*

Anyone can find things they know they are looking for — but only a truly observant designer, who has learned to listen deeply to players, can find the things they don’t know they are looking for. The key is to keep your eyes open for *surprises*. To be surprised at a playtest, you must already have ideas about what will happen: players will attack level two a certain way, they will get excited at the start of level three, etc. Whenever anything out of the ordinary happens, good or bad, be ready to jump on it, and find a way to understand it. Do girls like your game more than boys, when you expected the opposite? Does your villain make people laugh when you thought he would be scary? Are players intrigued by something you thought was unimportant? Are they debating strategies you never considered? Find out why! Even if you weren’t testing for these things, take advantage of this opportunity to learn the truth about everything you thought you already understood. The insight that comes from understanding these surprises is the sweetest fruit that grows on the playtesting tree.

## Playtest Question the Fifth: How?

So — you’ve figured out why you want to have a playtest, who you will observe, where you will hold it, and even what you are going to look for. Those are great

preliminaries, but the rubber doesn't meet the road until you decide *how* you are going to go about it.

### *Should You Even Be There?*

There is a school of thought that believes it is dangerous to have the developers of a game present when it is tested. The danger is that their emotional investment in the game will cause them to encourage the players to overlook flaws and “infect” the players with an insider's viewpoint. And this danger is very real. If you cannot stay objective during the playtest, and properly police your behavior so that playtesters can remain “pure,” you definitely should not be there. If that is the case, it is a shame, because there is so much more you will learn by being present in person at a playtest than you can get from just reading survey data or watching recorded videos. So, though some design theorists might disagree, my advice is to find ways to restrain these corrupting impulses so you can be there in person.

### *What Do You Tell Them Up Front?*

For some tests, you won't tell the players anything at all — you'll let the game speak for itself, particularly if you want to see if they can figure it out by themselves. But for the majority of playtests, you will need to tell players something to get them started. Use extreme caution when you do so — a few misplaced words right before play begins can spoil the entire test. If for example, you tell players that their goal is to defeat the evil Chronos, some players might start looking for him right away, and in doing so, miss out on important details they would have found if you hadn't said that. For this reason, you should take careful note of what you say to testers at the beginning, in case it has unexpected consequences. It can be a good idea to write it down ahead of time, so you can be sure you have prepped all the testers the same way.

Of course, you may find, over the course of several tests, a need to change your introductory speech to clarify certain things. And here is one of the great side benefits of playtesting. When you run multiple playtest sessions in sequence, you will find yourself gradually tuning the instructions you give to the players, trimming a word here, adding a phrase there, until you have a speech that is very clear and very efficient. Write this down! This speech can become the foundation of your in-game tutorial. Many game tutorials are terrible — ones created by this method are likely to have an aura of excellence about them. Having an in-game tutorial that really makes players feel welcome and cared for is a great first impression for your game to make.

### *Where Do You Look?*

Most people who attend a playtest tend to look where the player looks. If it is a video game, this means at the screen. This makes sense, because this way you see what

the player sees. But it isn't where I look. I spend most of my time during a playtest looking at the players' faces. Sure, I steal quick glances at the screen for context, but mostly, I watch faces, because I don't just want to see what the players are doing, but *how they feel when they are doing it*. Their facial expressions give a wealth of data about the game that will never come out in post-game interviews or survey questions.

I learned to do this when I was a street performer. When you do street shows, the only money you get is what you collect by passing the hat at the end. So, if you want to have dinner that night, it becomes crucial to ensure the crowd you've scared up stays entertained. With practice, I soon found I could "read" the emotions of a crowd quickly, and would tune my performance appropriately — stretching out parts they enjoyed, and moving quickly through parts that bored them. I was quite surprised, when I started making videogames, to find myself reading the emotions of the players as they played and determining how the game should change to improve the quality of the players' emotional experiences. This is something that we are all equipped to do — it just has to be practiced.

Of course, it would be best if our eyes could be everywhere at once: on the game, on the players' faces, and even on their hands, to see if they are using the controls as we would expect. And with modern video technology, you can see it all! Getting a few different cameras set up to feed to a single split-screen image can be a great way to record the game, face, and hands at the same time, so you can go back later and see how all three of these things interrelate.

## *What Other Data Should You Collect During Play?*

Watching with your own eyes and recording video of a play session can give you a lot of useful information, but there is other information you can gather as well. With a little planning, you can find ways to keep logs of important game events during each play session. If your game is digital, you can log all this automatically, but if your game is not, you can just make careful notes when these important events occur. What constitutes an "important event" will vary from game to game of course. Some examples of data you might want to collect:

- How long did players spend in the character creator?
- How many hits did it take to defeat the villain?
- What was the average player score?
- Which weapons were used the most?

The more your game can collect this data automatically, the more useful the data will be to you. Some designers of massively multiplayer games are constantly "data mining" the event logs to look for problems and interesting patterns of gameplay. This new kind of "digital listening" is a subtle art that gives you new opportunities to understand player behavior.

## *Will I Disturb the Players Mid-Game?*

This is a delicate question. When you disturb players mid-game, perhaps to ask them a question about what they are doing, you run the risk of interfering with their natural play patterns. On the other hand, asking the right question at the right moment may give you an insight you would not have had any other way. You might argue that it is best to just make a note of the question you have in mind, and ask the player about it when the play session is over. But by that time, the player is in a different state of mind, and may have no recollection of what you are talking about. It is a difficult trade-off. Most designers seem to favor only interrupting when the player is doing something truly surprising that the designer does not understand.

Experts in human computer interaction often recommend the “think-aloud protocol” to learn the decision-making process of people interacting with software products. The idea is that you encourage the person using the software to verbalize all their internal thoughts into a kind of stream-of-consciousness ramble. With a game, this might sound something like: “Let’s see... I’m supposed to find bananas, but I don’t see any... I wonder what’s behind that log... Yow! Bad guys! Ouch! Take that! Okay... Hey, is that a banana up on that hill?” etc. With games, this can be tricky. For some people, the act of speaking their thoughts changes the way they behave — often their behavior becomes more thoughtful and careful, so the think-aloud protocol can taint play patterns. Other people become paralyzed trying to play and talk at the same time, and when the gameplay gets stressful, they often stop talking altogether, which is frustrating, because these stressful moments are often when a designer needs the most insight into what a player is thinking. However, for some players, thinking aloud comes very naturally, and can provide very useful information — the trick is identifying these players. I have seen well-meaning interaction experts completely ruin playtests by constantly peppering players with questions during play in an attempt to elicit think-aloud. When and whether to use this technique is something you will need to decide for yourself.

## *What Data Will I Collect After the Play Session?*

You will gain a tremendous amount of information just by observing players interacting with your game. But you can gain even more with meaningful follow-up questions with interviews and surveys. But which should you choose?

### **Surveys**

Surveys are a great way to have players answer straightforward questions about your game that are easily quantified. Some tips for getting the most out of surveys:

- **Use pictures whenever possible**, when asking about game elements or scenes, to help ensure the player knows what you mean.

- **Online surveys can save you (and your playtesters) a lot of time.** Systems like “Surveymonkey” are easy to set up and very inexpensive.
- **Don’t ask people to rate things on a scale from 1 to 10.** You will get more consistent results if you use a five-point scale, where each of the points is clearly labeled such as:
  1. Terrible
  2. Pretty bad
  3. So-so
  4. Good
  5. Excellent
- **Don’t put too many questions on your survey,** or people will start to tune out near the end, and your results won’t be worth much.
- **Give them the survey right after they have played,** while things are fresh in their mind.
- **Have someone on hand to answer clarifying questions** that the testers might have about the survey.
- **Note the age and gender of each playtester surveyed,** so you can see if these have a connection to player opinions.
- **Don’t take survey data as gospel.** It is unlikely that your survey is truly scientific, and playtesters tend to make things up when they aren’t sure.

## Interviews

A post-game interview is a great way to ask players questions too complex for a simple survey sheet. It’s also a way to get a sense of how they really felt about the game, since you can see emotion in their faces and hear it in their voices. Here are some interview tips:

- **Have a script of questions** ready when you interview people. Leave space so you can write down their responses. Also leave space for general notes when the conversation takes unexpected turns (in other words, be ready for surprises!).
- **Interview people privately,** when possible. People will speak more honestly in a one-on-one situation than in a case where others (particularly people they know) are listening in. If the tester has other friends who are testing, consider doing a group interview *only after* the private interview is done, to see if new information comes out when the close friends are talking to each other.
- **Playtesters will avoid hurting your feelings,** particularly if they know (or think) you helped make the game. Sometimes, staying objective is not enough.

I sometimes make a big show of saying “I need your help. This game has some real problems, but we’re not sure what they are. Please, if there is anything at all you don’t like about this game, it will be a great help to me if you let me know.” This gives a tester permission to speak honestly about their likes and dislikes.

- **Avoid memory tests.** Asking players questions like “On level three, when you got to the yellow butterflies, you flew left instead of right. Why?” will generally get you blank stares. Players are so busy playing the game, they don’t always form memories about things that are not immediately relevant to the goal of the game. If you need answers to questions like that, you should ask them while the game is being played.
- **Don’t expect playtesters to be game designers.** Questions like “Would the game have been better if level three was harder?” may not get the results you want. In general, players always think they want the game to be easier, so they are likely to say “no” to that question. Most playtesters are not skilled at thinking about and discussing game mechanics. A better way to ask the same thing would be “were any parts of level three boring?,” which will probably get you an honest answer and the information you are looking for.
- **Ask for more than you need.** Instead of asking “what was your least favorite part?” why not ask “what were your three least favorite parts?” You’ll get more data, and it will be sorted by priority... the thing that stands out most in a player’s mind will come first.
- **Set your ego aside.** It can be very hard to sit and listen to someone tell you how bad your game is. You will be sorely tempted to step in and defend your game and tell them how it is supposed to be. Resist this urge. No one cares how the game was supposed to be during this interview. Right now, all that matters is how this playtester feels about the game, and why. When you feel the temptation rise within you, steel yourself, and ask objective questions like “what don’t you like about it?” and “Can you tell me more about that?”

## *Lens #91: The Lens of Playtesting*

Playtesting is your chance to see your game in action. To ensure your playtests are as good as they can be, ask yourself these questions:

- **Why** are we doing a playtest?
- **Who** should be there?
- **Where** should we hold it?
- **What** will we look for?
- **How** will we get the information we need?