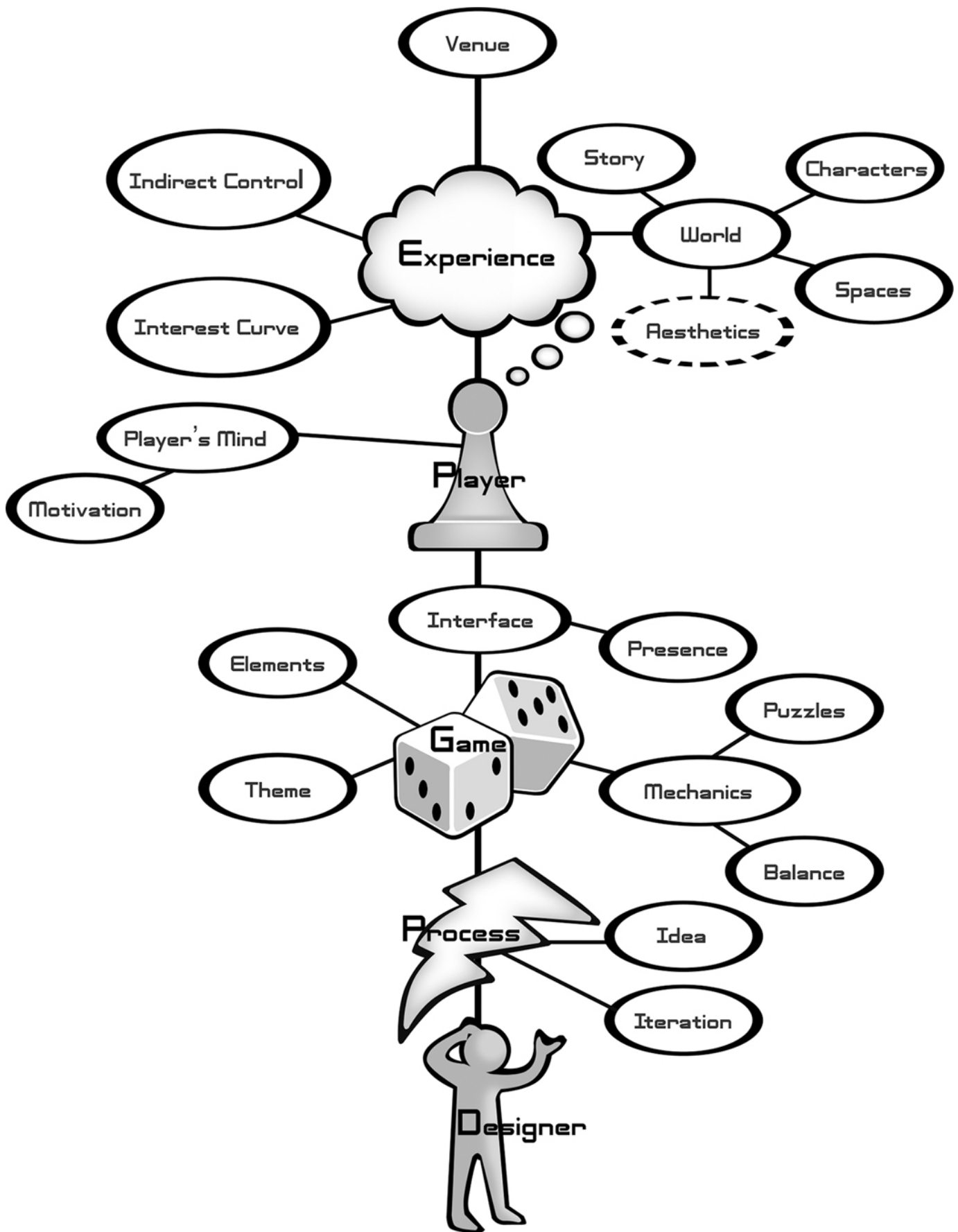


CHAPTER TWENTY-THREE

The Look and Feel of a World Is Defined by Its *Aesthetics*

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FIGURE
23.1



Monet Refuses the Operation

*Doctor, you say that there are no haloes
around the streetlights in Paris
and what I see is an aberration
caused by old age, an affliction.
I tell you it has taken me all my life
to arrive at the vision of gas lamps as angels,
to soften and blur and finally banish
the edges you regret I don't see,
to learn that the line I called the horizon
does not exist and sky and water,
so long apart, are the same state of being.
Fifty-four years before I could see
Rouen cathedral is built
of parallel shafts of sun,
and now you want to restore
my youthful errors: fixed
notions of top and bottom,
the illusion of three-dimensional space,
wisteria separate
from the bridge it covers.
What can I say to convince you
the Houses of Parliament dissolve
night after night to become
the fluid dream of the Thames?
I will not return to a universe
of objects that don't know each other,
as if islands were not the lost children
of one great continent. The world
is flux, and light becomes what it touches,
becomes water, lilies on water,
above and below water,
becomes lilac and mauve and yellow
and white and cerulean lamps,
small fists passing sunlight
so quickly to one another
that it would take long, streaming hair
inside my brush to catch it.
To paint the speed of light!
Our weighted shapes, these verticals,
burn to mix with air
and changes our bones, skin, clothes
to gases. Doctor,
if only you could see
how heaven pulls earth into its arms
and how infinitely the heart expands
to claim this world, blue vapor without end.*

—Lisel Mueller

The Value of Aesthetics

Aesthetics is the third quadrant of the elemental tetrad. Some game designers have disdain for aesthetic considerations in a game, calling them mere “surface details” that have nothing to do with what they consider important—the game mechanics. But we must always remember that we are not designing just game mechanics, but an entire experience. And aesthetic considerations are part of making any experience more enjoyable. Good artwork can do wondrous things for a game:

- It can draw the player into a game they might have passed over.
- It can make the game world feel solid, real, and magnificent, which makes the player take the game more seriously and increases endogenous value. Consider the axis and allies story in the “pleasure of sensation” section in [Chapter 9: Player](#).
- Aesthetic pleasure is no small thing. If your game is full of beautiful artwork, then every new thing that the player gets to see is a reward in itself.
- Powerful game worlds have a certain “atmosphere.” It can be hard to describe what that is, exactly, but it is created by the way the visuals, sounds, music, and game mechanics all work together.
- Just as the world often ignores character flaws in a beautiful woman or a handsome man, players are more likely to tolerate imperfections in your design if your game has a beautiful surface.

You already have many of the tools you need to evaluate aesthetics in your game. Obviously, [Lens #71: Beauty](#) is useful, but you can also improve and integrate your aesthetics by using these other lenses in a new way. Stop for a moment, and consider how you might use each of these lenses not to observe the mechanics of your game, but the artwork in your game.

- [Lens #1: Emotion](#)
- [Lens #2: Essential Experience](#)
- [Lens #4: Surprise](#)
- [Lens #6: Curiosity](#)
- [Lens #11: Unification](#)
- [Lens #12: Resonance](#)
- [Lens #13: Infinite Inspiration](#)
- [Lens #17: The Toy](#)
- [Lens #18: Passion](#)
- [Lens #19: The Player](#)
- [Lens #20: Pleasure](#)
- [Lens #27: Time](#)
- [Lens #38: Challenge](#)
- [Lens #46: Reward](#)
- [Lens #48: Simplicity/Complexity](#)
- [Lens #49: Elegance](#)
- [Lens #51: Imagination](#)
- [Lens #53: Balance](#)
- [Lens #54: Accessibility](#)
- [Lens #55: Visible Progress](#)
- [Lens #60: Physical Interface](#)
- [Lens #61: Virtual Interface](#)
- [Lens #66: Channels and Dimensions](#)
- [Lens #68: Moments](#)
- [Lens #72: Projection](#)
- [Lens #75: Simplicity and Transcendence](#)

- Lens #81: Indirect Control
- Lens #83: Fantasy
- Lens #84: The World
- Lens #85: The Avatar
- Lens #90: Status
- Lens #92: Inner Contradiction
- Lens #93: The Nameless Quality

And let us add one more.

#94 The Lens of Atmosphere

Atmosphere is invisible and intangible. But somehow it envelops us, permeates us, and makes us part of the world. To make sure the atmosphere of your world is properly intoxicating, ask yourself these questions:

- Without using words, how can I describe the atmosphere of my game?
- How can I use artistic content (both visual and audible) to deepen that atmosphere?



Illustration by Ryan Yee

Learning to See

It makes sense to view your game artwork through many lenses, because the key to creating great artwork is in your ability to see. Not just to see a salt shaker and say “that’s a salt shaker,” but to really see it—see

its shapes, colors, proportions, shadows, reflections, and textures—to see its relationship to its environment and to the people who use it, and to see its function, and to see its meaning. This kind of deep seeing is a visual equivalent of the deep listening we discussed at the beginning of the book.

FIGURE
23.2



It is amazing how difficult it can be to actually see things as they really are. The reason for this is efficiency—if we just stared in awe at everything we saw, taking in every little visual and audible detail, our minds would be so absorbed we would never get anything done. So, for efficiency, our brains, at a low level, categorize things before they enter our consciousness. We see a salt shaker or a dog, and our left brain just slaps a label on it, because it is easier to think about a label than to actually deeply see the thing

itself in all its detail and uniqueness. When you are looking at and thinking about artwork in your game, you must learn to get your left brain to take a little break and let your right brain come out and play, for the right brain is able to see details that the left brain cannot. Betty Edwards' excellent book, *Drawing on the Right Side of the Brain*, is a marvelous text on this subject that is designed to teach anyone to draw by teaching them how to see. This is a fascinating virtuous circle—really seeing helps you draw properly, and drawing helps you see properly.

How to Let Aesthetics Guide Your Design

Some people mistakenly believe that it doesn't make sense to get artists involved in a game project until the game design is near completion. But our minds are very visual, and it is often the case that an illustration or pencil sketch can completely change the course of a design, because the way a game looks in your mind's eye is often very different from the way it looks when it is drawn on paper. Sometimes, an inspiring piece of concept art can provide the unifying vision of the experience a game is trying to achieve. Other times, an illustration can make clear whether an interface idea is possible or not. And occasionally, a little doodle done as a joke to poke fun at a design suddenly proves to become the central theme of a game. Game designs are abstract—illustrations are concrete. In the painful process of converting your abstract design into a concrete game, illustrations can serve as a simple, effective way to ground your design in reality at the very start of a project.

If you have some artistic skill, it can be a great boon to you as a game designer—because you can sketch, people will think your creative vision is as clear in your mind as it is on the paper. More than that, it might make you famous. There are only two categories of famous game designers: first, ones who design “god games,” such as Will Wright, Peter Molyneux, and Sid Meier, presumably because it is easy to imagine a designer of a world as its god; and second, ones who have a very distinct visual style, such as Shigeru Miyamoto and American McGee. So, if you have a distinct and appealing art style, you should seriously consider basing your games around it.

But what if (like me) artistic talents do not come naturally to you? What if you have neither the major nor minor gift when it comes to drawing? In this case, the best thing you can do is to find an artistic partner. For if you can find a talented artist with whom you communicate well, your nebulous idea can become a concrete vision very quickly. Partnerships like this can be golden, for a pretty picture is nice for a moment and a good idea is nice in theory, but a well-rendered image of a good idea is compelling in a way that few people can resist. Strong game designs that have good concept art will

- Make your idea clear to everyone (you didn't think anyone would actually read your design document, did you?)
- Let people see, and imagine entering, your game world
- Get people excited about playing your game
- Get people excited about working on your game
- Allow you to secure funding and other resources to develop your game

Now, you might think that the idea of having some detailed art at the beginning of a project goes against the idea of rapid prototyping, where often the game elements are completely abstract. But it isn't so—an illustration is just another kind of prototype. It is almost like riding a seesaw—the abstract prototype gives you ideas for how the game should look, which drives you to make more concept art, and the concept art can give you ideas for how the game should play, which drives you to make new abstract prototypes. If you keep cycling this way, eventually you will arrive at a beautiful game that is fun to play and in which the artwork and gameplay complement each other perfectly, because they grew up together.

How Much Is Enough?

But this raises an important question—What is the right amount of detail for your concept art? Most artists want to make everything they do look absolutely gorgeous—but beautiful art takes time, and sometimes rough sketches or rough models are enough to do the job. Young artists, especially, are afraid of doing

rough sketches and showing them, for they fear that the rough quality will make people misjudge their talent. Creating sketches that are simple, rough, and useful is a valuable skill that must be practiced.

But of course, there are other times when only gorgeous full-color renderings will do to show the true feel of the game. One artist I used to work with had a great trick—he would create rough pencil sketches that were large and elaborate, then pick one key element of the picture, and render it with full color, clean lines, and nice shading. This was a marvelous balance—the viewer could see the scope and complexity of what he was presenting but also the quality of finished detail. The viewer could easily imagine what the whole image would look like if it were finished to the level of detail of that one key element.

Even in your finished product, you need to be judicious about where to put detail, for a few details in the right places can make your game world seem far larger and richer than it is. John Hench, one of the great Disney Imagineers, would often say that anyone can make things look good from far away—it’s making them also look good close up that is hard. An example is Cinderella’s castle at Disney World. People see it from a distance and are drawn to it because it is so beautiful. If, when they got close, they found it was crudely painted fiberglass, they would be filled with disappointment. Instead, they find that close up it has gorgeous mosaics and beautiful stone crafting, which exceeds their expectations, making it seem deep, beautiful, and real.

J.R.R. Tolkien’s worlds are famous for being deep and rich—one way he achieves this is through a trick he referred to as “distant mountains.” In each of his books, he gives names to distant places, people, and events that are never actually encountered in the book. The names and brief descriptions make it seem like the world is larger and richer than it is. When fans would ask him why he didn’t add more detail about these things, he would reply that he could tell them all about the distant mountains, but if he did that, he’d need to create more distant mountains for those distant mountains.

Use Audio

It is very easy to fall into the trap of only thinking of visual art when you think about the aesthetics of your game. But audio can be incredibly powerful. Audio feedback is much more visceral than visual feedback and more easily simulates touch. A study was once performed where two groups of players were asked to rate the graphics of a game and only the graphics. Both players played the same game but for one difference: the first group had low-quality audio, and the second group had high-quality audio. Surprisingly, though the graphics were identical for both games, the “high-quality audio” group rated the graphics of the game more highly than the “low-quality audio” group.

One serious error that game developers often fall into is to not add music or sound to their game until the very end. The Kyle Gabler technique mentioned in [Chapter 7: Idea](#), bears repeating here. Choose music for your game at the very beginning of your process, as early as possible—possibly before you even know what the game is! If you are able to choose a piece of music that feels the way you want your game to play, you have already efficiently made a great many subconscious decisions about what you want your game to feel like, or in other words, its atmosphere. Like a theme, the music can channel the design of your game—if you ever find that part of your game is conflicting with the music that you feel is so right, it is a good indication that part of the game should change.

Balancing Art and Technology

The tight integration of art and technology in modern videogames makes for some very challenging design problems. The artists are simultaneously empowered by and restrained by technology, and the engineers are similarly empowered and restrained by art. So much of the art in games seems high tech that it is tempting to just let the engineers loose to create the artistic vision of the game—something they are often all too ready to do. Don’t let this happen! Talented artists have trained for a lifetime to imagine and define glorious, integrated artistic visions. They see the world differently from the rest of us, as Lisel Mueller’s poem illustrated so vividly at the start of this chapter. Whenever possible, let them drive the aesthetic bus. Am I saying you should ignore the engineers’ aesthetic participation? By no means! Make the engineers the navigators and mechanics—let them recommend new routes and shortcuts and let them soup up the bus, but let the artists decide the destination and let their talented hands steer the way to a beautiful game.

Don't just let the engineers include whatever shadow algorithm is the flavor of the month—instead, let the artists draw and paint the kind of shadows and textures they would want to see and then challenge the engineers to match that vision.

One thing you should consider carefully is finding a technical artist for your team. This unusual individual has the eye of an artist and the mind of a computer programmer. A talented technical artist can build bridges between the art team and the engineering team by being able to fluently speak both of their languages and by helping to build tools that make the artists feel in command of the technology and the engineers feel in command of the art. This balance is not something to be taken lightly—when it is not right, it feels like your game is cracked down the middle, but when you achieve it, your game is gorgeous and powerful in ways your players will have never seen before.

Other Reading to Consider

***The Art of the Videogame* by Josh Jenisch.** A great history of games as well as an interesting examination of the layers of art needed to create a great game.

***The Art of Videogames: From Pac-Man to Mass Effect* by Chris Melissinos and Patrick O'Rourke.** This companion book to an exhibition of videogame art at the Smithsonian provides a thoughtful history of video game art.

***Drawing Basics and Videogame Art* by Brian Solarski.** Not just for artists, this book is an excellent bridge between classical and digital art.

***Drawing on the Right Side of the Brain* by Betty Edwards.** Can't draw? Everyone should be able to draw. Follow these instructions, and you will learn to draw.

CHAPTER TWENTY-FOUR

Some Games Are Played with *Other Players*

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FIGURE
24.1