Chapter 8
Visual Aesthetics in Games and Gamification

Abstract Gamification brings the possibility of novel form and expression via visual aesthetics of interactive nature. Gamification can be seen as the communication form that results in active user engagement and participation through the visual aesthetics and the game-like experiences it accommodates. While current interactive designs expand a number of digital technologies genres, the use of gamification excels the process of taking audience as the subject matter and visually engage. Thus, the audience can react to the aesthetics the goal of behavioral change comes into play due to the application of game aesthetics, game design, and gamification elements. However, in doing so, most of the users are not always able to see the complete design in the user experience or interface that could be misleading or just involved around certain commercial purposes. We call it dark patterns; a modern tactic used by user experience designers and gamification designers to make the interface visually misleading to serve their own interests and not the users. It presents the two diverse perspectives of the use of visual aesthetics in games and gamification; one is positive and another is negative. This chapter highlights the visual aesthetics and related elements of these genres, associated principles, and notions on important implications for the gamification designers to be considered in their practices and future projects.

Keywords Game aesthetics · Visual elements · Color · Tone · Mood · User interface · Juicy interface feedback · Implications · Dark patterns · Visible examples · Invisible examples

8.1 Introduction

The analysis of visual aesthetics provides structure aimed at showing how games attribute aesthetical value to gameplay and how elements of visual design and game design combine their inherent qualities to form a game. By expanding our idea of what makes an engaging game, we can create more interesting, diverse, and effective experiences.

8.2   Game Aesthetics

Game aesthetics refers to the sensory phenomena that the player encounters in the game (visual, aural, haptic, and embodied). Game aesthetics refers to those aspects of games that are shared with other art forms (and thus provides a means of generalizing about art). Game aesthetics is an expression of the game experienced as pleasure, emotion, sociability, forgiving, etc. (with reference to "the aesthetic experience").

Aesthetic experiences are a huge part of the gameplay experience. A game that may be "just okay" from a gameplay perspective can be elevated by strong aesthetics. This fact can be a plus in learning games where content might be a bit dry, but a great theme and aesthetics can help create an enjoyable experience. Aesthetics do several things for you in a game (any game—including serious games).

For example:

- Set a mood and reinforce a theme or a concept.
- Immerse the player into the game experience and help them suspend reality so they can play the game.
- Offer cues that can guide performance and communicate a player's status and progress.
- Facilitate understanding of gameplay, making it easier for a player to figure out what to do.

The key here is to use elements of game design (fun, motivation, and reward) to get users to do something that is in their benefit (and deepens your business goals). Whether the games themselves are art or not can be debated (Pratt 2010), but in terms of visual aesthetics, games surely borrow from both applied and art. The pleasure of the visual representation of a virtual world is found exclusively in its aesthetic beauty. Such aesthetics don't have functionality in the game itself, or the decision of whether to apply complex real-time algorithms, will not alter the rules of the game. So, it can be inferred that one of the reasons the hugely complex and accurate visuals are there, just because they are nice to look at.

8.3   Visual Elements in a Game

- **Color**

The visual element of color has the strongest effect on our emotions and thus gamified experiences. It is the element we use to create the mood or atmosphere of the game.

There are many different approaches to the use of color in games and gamification experiences:
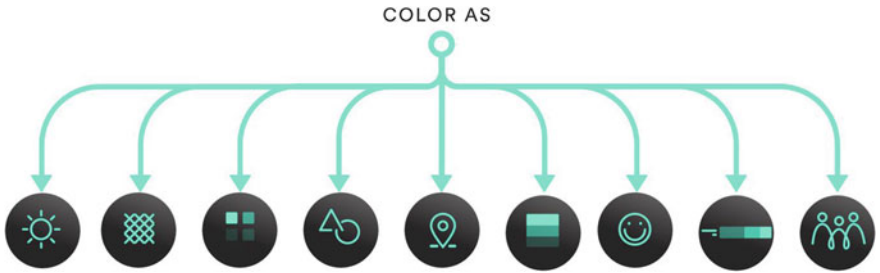
COLOR AS

- Color as light,
- Color as tone,
- Color as pattern,
- Color as form,
- Color as symbol,
- Color as movement,
- Color as harmony,
- Color as contrast, and
- Color as mood.

- **Tone**

In some designs, light tones of black hue are dominated while in some designs dark tones of black hue are dominated. Moreover, in some designs the overall environment gets darker or lighter. So, while controlling the gray scale, instead of real reflective control, incident control and exposure are used. Tone shows the designer's feelings toward the theme.

In games, tone can

TONES

Object Representation   Emotional Design   Practical Cases
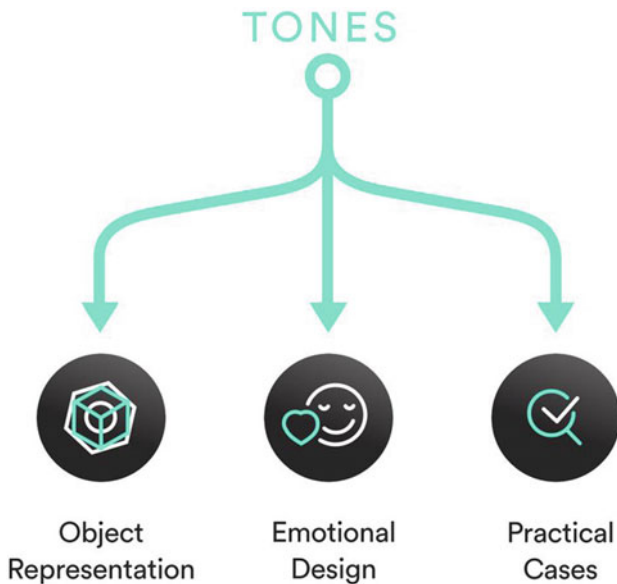
- be used to represent things, objects, people, or places in descriptive or symbolic ways,
- communicate emotions, feelings, or ideas and appeal to our senses, and
- be used for practical purposes.

- **Mood**

Mood is the resulting emotional atmosphere produced by the tone. Mood is typically described in terms of emotions, all of which may fade in and out of focus at various points in the game. The choice comes down to mood. Let's say our mood is "shallow, disappointing, and lonely; the struggle up the ladder will not bring happiness." In this case, having bleak, desaturated colors are the way to go, but if the mood was actually "persistent, victorious, and powerful: you'll fight a hard fight, but the spoils will be yours!" and vibrant colors would better illustrate the triumph and colorfulness of the experience. Mood can be used in game design to direct the player and in storytelling to elicit emotions. Using immersive methods can increase the effect that storytelling has on the player's mood. Emotions, anticipation, and stakes can be utilized to enhance the storytelling (Nordian and Burns 2003).

Theories and methods that harness psychological approach in guiding or manipulating the behavior of the player can be helpful in creating immersive games. Player manipulation can include guiding the player through the game environment, using a reinforcement schedule to reward the player or creating a certain mood within a scene.

8.4   Game Feel

Juicy feedback is usually termed as balanced, inviting, tactile, continuous, emergent, coherent, repeatable, and fresh. It is the kind of feedback that is recurring always, and the player feels it and doesn't have to do much to activate it. It is surprising and always brings something new. These keywords are valuable to keep in mind throughout the design process, for focusing what exactly you want your feedback to do.

Feedback is an important element in any type of content gamification because feedback informs the learner of the level of correctness of his or her actions while simultaneously providing interest, immersion, and guidance. Juicy feedback is the idea of designing for visceral reactions in the users, so they experience emotions. A juicy experience is engaging from the moment you begin until the moment you end.

Game juice is a pretty wide yet specific concept. As the term suggests, juicing is about taking a game that works and adding layers of satisfaction to improve game feel. Satisfaction is created by the senses; every visual and auditory input has the ability to make something that is virtual work in a way that is more believable. It's not the art of realism, but more the art of illusion that leads a game to become juicy. As a designer, it's as if you squeezed the juice out of an already appetizing fruit.

You can probably sense that beneath that catchy word lies a powerful game design concept. It is a specific lens designer can use to push our games' feel further.

Game juicing is often presented as a collection of tricks you can use to better the sensations of your player. It is not a matter of using prebuilt formulas though. Your game's juice should always echo your core gameplay. We cannot improve our game's feel randomly. Screen shake, squash and stretch, bounciness, and other fast-paced animations are only relevant in specific situations! They make sense in dynamic games.

8.5   Game Interfaces

User interface design in games is different from other designs as it involves an added element, fiction. Physical interaction methods and immersive technology such as Virtual Reality (VR) headsets promise to challenge game UI design, allowing for a stronger connection between the avatar and character as both engage in similar actions at the same time. Technology provides an opportunity for deeper levels of interaction with the addition of audio and haptic elements (Bardzell et al. 2010). The fiction is based on an avatar of the actual user or player. The player is invisible, but main element to the story, much like a narrator in a novel or film.

Game UI holds a key advantage (or disadvantage from some perspectives) in that players are often engaged with the narrative and/or game mechanic enough for them to learn new interaction patterns or forgive bad ones. This is likely the reason so many games have bad UI, as testing needs to encompass the core game mechanic while UI is seen as secondary.

We don't want to transform all our products into game-like experiences. Instead, we try to learn from an industry for gaining an extremely engaged audience. Gamification designers shouldn't blindly use the mentioned visual aesthetic concepts; rather, they should adapt them to their needs and to the platforms on which they deliver their products, without compromising with the quality of the products. Gamification is not something to be applied after designing and developing your product. Gamification is a part of a design process itself.

8.6   Implications for Designers

A better understanding of aspects of visual techniques that are shared with game interfaces will lead to richer experiences, and may require a rethinking of established design structures and the roles of designers, because, as we'll see, making bridges between art, tech, and ethics has implications for gamification designers too.

Worth mentioning is the dark patterns in user experience designs and the importance to think beyond providing aesthetics and usability to our users. Dark patterns are deceptive interactions, designed to mislead or trick users to make them

do something they don't want to do. The patterns are productive only for one party, exploits human weaknesses, and are difficult to identify and not always visible. Businesses and designers use dark patterns for commercial purposes including generating more leads, get subscriptions, hitting targeted number of transactions, etc. To grow their businesses, they create deceiving user interfaces and gamification settings to manipulate users.

Dark patterns have been around for as long as we can remember; they aren't limited to applications. For example, some credit card statements boast a 0% balance transfer but don't make it clear that the percentage will shoot up to a much higher number unless the user navigates a long-term agreement in tiny print "In terms", and dark patterns are much more complex and sneakier in nature. Brownlee (2015) illustrates a key example of that through LinkedIn and its automated follow-up email reminders on a new user's behalf to any contacts harvested from his or her mail accounts, which are presented in such a way that they appear as if they came directly from the user.

Harry Brignull (2010) listed 11 types of dark patterns:

- Bait and Switch,
- Disguised Ads,
- Forced Continuity,
- Friend Spam,
- Hidden Costs,
- Misdirection,
- Price Comparison Prevention,
- Privacy Zuckering,
- Roach Motel,
- Sneak into Basket, and
- Trick Questions.

Brignull says that when you use an application, you don't read every word on every page, you skim read and make assumptions. If a company wants to trick you into doing something, they can take advantage of it by making a page aesthetically look like it is saying one thing when in fact it is saying another.

Dark design patterns use all of the powers of visual design with the flair of a magician's misdirection, and the language of a shady sideshow barker (dare you to say "shady sideshow barker" eight times in a row). These patterns are in direct opposition to concepts we celebrate in design, such as empathy, human or user centered, and inclusivity. Dark patterns rob customers of their agency.

What are the consequences of our actions? What ethical considerations should designers weigh when they develop a new product? Many of us are in conflict with executive strategies we are asked to implement on the job that we feel we cannot influence or change. With whom does the burden lie for what we create and how it is used? While experts are unanimous about dark patterns—they don't like them and can point to countless examples of how they poison customer loyalty—no one believes they are going anywhere just yet.

Critics recommend that designers take time to define a personal manifesto that outlines their values. What matters most to you? How is your work reflective of these values? We believe that making a commitment to understanding the nature of change (hint: it's incremental, and facts don't persuade people), practicing active listening skills, and building communication skills can help professionals reframe the conversations around them.

- **Visible and invisible examples of dark patterns**

Manipulative timing is a core feature of dark pattern design. Interruptions usually pile on the cognitive overload—and misleading design deploys them to make it more difficult for a user to be in control of their abilities during an important moment of decision (Andrade et al. 2016). Dark patterns get consent to gather users' personal data often with unwelcomed interruption with a built-in escape route —leading to a way to get rid of the dull (desaturated) looking menu getting in the way of what you're actually trying to do. Brightly colored "I agree and continue" buttons are a recurrent feature of dark pattern design. These striking signposts appear universally across consent flows—to inspire users not to read or anticipate a service's terms and conditions, and so not to understand what they're agreeing to (Challco et al. 2015).

- **The future of the dark patterns—Is it actually going to be "light pattern design"?**

What is "light pattern design?" The way forward, at least where consent and privacy are concerned is likely to more user centric. This implies genuinely asking for consent and by using honesty to win trust by enabling instead of disabling user agency (Huotari and Hamari 2012).

UX and gamification designs must champion usability and clarity in the use of aesthetics, presenting a genuine, good faith choice. Which means no privacy-hostile defaults: so, opt ins, not opt outs, and consent that is freely given because it's based on genuine information not self-serving deception, and because it can also always be revoked at will (Jeong and Lee 2015). Design must also be empathetic. It must understand and be sensitive to diversity, offering clear options without being intentionally overwhelming. The goal is to close the perception gap between what's being offered and what the customer thinks they're getting.

8.7   Conclusion

The design approaches used in games serve secondary purposes and in their application in the game design leads to emergence of aesthetic value and visual narratives. The visuals and aesthetics in games not only form the structure that shows how games consider aesthetic value for the gameplay but also how these combine the games' inherent qualities to create interesting, engaging, and

immersive experiences. The opposite of the same is also present. The rising dark patterns in user experience design and gamification in terms of visual aesthetics are deceptive UX/UI interactions that designers create to trick players or users to persuade them to do something that is not in their interest. Aesthetic experiences including visual elements like color, mood, tone, and user interfaces, game feel, etc. make a huge part of the gameplay and gamification design. However, the dark design patterns use all these visual elements in direct opposition to concepts we embrace in design, like empathy, inclusivity, or being human/user centered. This brings serious implications not only for the games and game-based experiences but also for the UX/UI designers as well. The dark UX patterns are no more hidden; they are visible and poison customer loyalty. It is the time for the designers to have a clear line in between visual aesthetics and dark patterns and develop a personal manifesto that outlines the desired values, empathy, and sensitivity to diversity.

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