

Analysis of Fundamental Aspects in Game Character Design

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ABSTRACT

The creation of a commercially successful game comes with many different considerations, such as its variety of content, overall cohesion, capacity of social interactions to name a few of the most important features. They are also well-packaged in a visual format, character designs being the highlight. The researchers have proposed to further understand the strategies employed by commercially successful games on the creative process of character design. Using a discussion-based-qualitative approach, the research will be composed of interviews with experienced concept artists from different sociocultural backgrounds, as well as literary sources to be complementary materials. This research will focus on the comparison between the general thought process and workflow that different concept artists have in creating a compelling character design to try to generate a general foundation for up and coming game concept artists. Further studies can be done to explore more perspectives on the topic to create a more compelling guideline overall.

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1. INTRODUCTION

Character design is the process of visually defining a character's physical appearance. The significance of character design is heavily tied to the success of the games it inhabits, therefore understanding the importance of games itself becomes necessary. As of 2024, video games provide direct and indirect economic benefits, such as in the case of *Dungeon Fighter Online* (Neople, 2005) which has grossed \$22 billion worldwide as of 2023 and *Assassin's Creed* (Ubisoft, 2007), being an alleged catalyst in the tourism industry, albeit with the basis of assumption (Dubois and Gibbs, 2018, as cited by Nicolas Paul, 2021). Furthermore, Video games provide societal benefits, with *Undertale* (Toby Fox, 2015) and *Detroit: Become Human* (Quantic Dream, 2019) providing great representations for marginalized communities. These benefits are not only beneficial to the individual, but also to humanity as a whole.

Considering the benefits of a game, it becomes important to know how to cultivate its advantages effectively and efficiently. One of them being through the ways of creating a compelling character design that is well-loved by the player. According to a study done by Shi-Lingxi Tian and Tack Woo (2019), around 65 percent of experienced gamers are motivated to play the game from the character design in comparison to the mechanics and the narrative. A good character design takes into account the gameplay and the story, but having well-defined characters deliver that aspect in a more digestible demeanor, an essential role in conveying their backstory and personality to the players (Chapple, 2022). In addition, A compelling character design provides a more immersive experience for the player, allowing them to feel safer when approaching the message of the game.

Character design also plays a pivotal role in marketing the game to the public (Kuntjara & Almanfaluthi, 2017). a lot of games use their characters as promotional tools, being in the icon of the download link in the app store or serving as merchandise in an official store, so

having a distinctive and representative character design is a must to provide that entry point to playing the game.

From the multiple studies that have been done, it can be seen that character design contributes to a large part of the game development process. A good character design provides a lot for the player in terms of immersion and information. Not to mention, game characters tend to become a marketing/promotional tool. Therefore, it becomes important to understand the factors that need to be taken into account when creating a character. The creative process of designing a character may differ depending on the genre or the narrative of the game, so the research will be focusing on the general aspects of the creative process of character design. Hence, the research aims to answer the following questions:

1. What non-visual factors determine a great character?
2. How to compose a character in a visual design?

2. METHODS

To grasp the ideas that lead to a greater immersion and perception of the game, as well as to understand the importance of both non-visual and visual aspects of a character in great detail, The researcher decided on a discussion-based-qualitative approach. The data collected were in the form of an interview of two experienced concept artists of different national backgrounds. One of them being Dimas Novan Delfiano, an illustrator and concept artist who is currently working at Mojiken Studio based in Indonesia and the other, Maria Shirko, an illustrator and concept artist who is based in Siberia, Germany. There will also be additional secondary information derived from summaries and citations from different literary sources to further examine the aspects that both artists highlighted.

The research method was intentionally chosen to allow the researcher to gather foundational information as well as the different perspectives regarding concept art from Indonesia and abroad, ranging from what they focus on to their general experience in terms of working with other people. This is done to understand if there are any key differences or similarities in the character design process between people of vastly different cultural backgrounds. The findings will then be bolstered and verified using further research from other literary sources to ensure an in-depth understanding of the materials. Ensuring that the data gathered can be discussed in great detail, providing a comprehensive look on the topic.

2.1. Interview Questions

The interview aims to further understand the visual and non-visual aspects that a professional would take into account in making a good character design. Therefore, the researcher have employed the following questions:

1. Before starting a character design, what non-visual factors of the character are taken into consideration?
2. Are the considerations different between the roles a game character plays?
3. What makes a character more popular than the others in the playerbase?
4. What visual-related factors do you take into consideration when composing the character in a design?

2.2. The Indonesian Concept Artist

Dimas Novan Delfiano is an Indonesian illustrator who worked as a concept artist in a game called Elventales: A Path Foreseen (Elven Games, 2015) as well as a production artist in the game Divination (Mojiken, 2019). Most recently, Dimas worked on the Incredibly well-received adventure game, A Space for The Unbound (Mojiken, 2022). He stated that as the art director for the project, it allows him to manage the visuals pretty well since he knows the

direction of where the art is going - even some of the concept art is directly translated into production art.

On the 6th of April 2024, the Interview with Dimas Novan Delfiano was carried out as seen in Fig.1. In the interview, Dimas dove deep into understanding the target audience and how the visuals can correlate with it. Moreover he also brings up how he usually composes a world to bolster the identities of the important as well as the side characters.

Figure 1
Proof of interview with Dimas Novan

Pewawancara: Clive Anderson
Narasumber: Dimas Novan

1) Sebelumnya mungkin, kakak pernah buat konsep art buat game apa aja ya kak?

Tidak banyak sebenarnya, saya pernah terlibat untuk pembuatan concept art game berjudul Elventales: A Path Foreseen dan production art untuk Divination. Project paling besar yang pernah saya tangani adalah A Space for the Unbound. Namun karena saya sudah menjadi art director sekaligus directornya di project tersebut dan beberapa pilihan estetika memudahkan eksekusi dan saya sudah cukup tahu apa yang ingin saya buat untuk art-nya sebagian concept art langsung menjadi production art.

2) Sebelum memulai karakter desain biasanya faktor apa aja yg bersifat non-visual yg kakak perhatikan?

- Target Audiens: Menggambar karakter untuk anak-anak tentu berbeda dengan menggambar karakter untuk remaja ataupun dewasa awal. Demografi audiens sangat membantu untuk mengerucutkan pilihan estetika mulai dari proporsi, fashion dan juga atribut lainnya.
- Premis dan kepribadian karakter: Memahami latar belakang karakter terlebih dahulu, asal mana, bagaimana latar belakang sosial dan ekonominya dan apa kira-kira motivasi karakter dan perannya dalam dunia yang akan ditinggali olehnya, apa kekurangan dan kelebihanannya.

Faktor-faktor ini akan sangat mempengaruhi pemilihan mimik wajah, fashion, proporsi badan,

Visually Dimas focuses mainly on the silhouette and the color palette which is all complemented by the character archetype, their premise and backstory, along with the narrative the game is trying to convey, all of which will be further elaborated at the 'result' section.

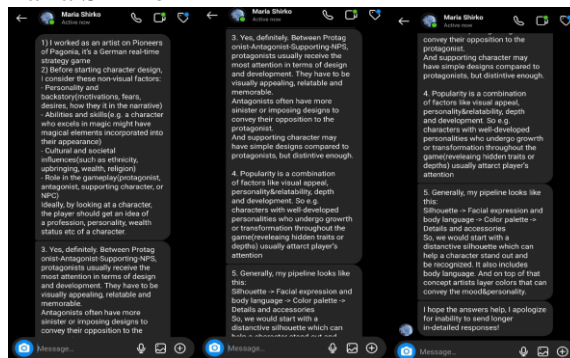
2.3. The Concept Artist from Abroad

Maria Shirko, Also known as Kantakerro in the online space, is a well-known illustrator who worked as a concept artist here and then. Most prominently she worked on a highly-rated strategy game called Pioneers of Pagonia (Envision Entertainment, 2023)

The interview with Maria Shirko was carried out on the 17th of March 2024 which can be seen on Fig.2. She provided insights on the general factors encompassing both non-visual and visual aspects that are essential to a character design. Non-visually, she highlighted the importance of personality and backstory, abilities and skills, cultural and societal influences, and the role of the character.

Figure
Proof of interview with Maria Shirko

2



All of which can then be composed visually, by shifting the focus on a creative process that involves defining their silhouette, facial expression and body language, color

palette, and details and accessories in that order. all of which will be discussed further at the 'result' section.

3. RESULTS AND DISCUSSION

In this section, the researcher presents the findings of the study and discusses the results in the context of the research question or problem. They should also compare and contrast the findings with the existing literature and provide interpretations and explanations for the results.

3.1. Results

In this section the researcher will be elaborating further on the answers given by each concept artist separately. The discussion will be broken down into two parts, the fundamental aspects that need to be considered before and after designing, starting with the answers given by Dimas Novan Delfiano and ending with Maria Shirko's.

3.1.1. Dimas Novan Delfiano

a) Non-visual Aspects of a Character

Discussing the first question of the interview, Dimas highlighted the importance of understanding the target audience, character premise and personality, along with the comparison and association of the character to others before diving into exploring the visual needs of a character.

According to Dimas, the target audience heavily influences the proportions, fashion and other attributes owned by the character. Research done by Bradley S. Greenberg, John L. Sherry, Kenneth A. Lachlan, and Kristen Lucas (2010) found that age and gender plays a key role in identifying the player's interest towards a certain motivation and genre the game provides, which is then correlated to the tone the game has to bring. A horror game with a cute art style would not be desirable, and vice versa. Deciding on the target audience is a crucial step in concept art.

Secondly, understanding the character's socioeconomic background as well as their role in the world of the game can also be a big factor to a design. Grasping the strengths and weaknesses of a character will allow you to highlight them which will make choosing their facial features, fashion, proportions, color palette and other aesthetic factors a lot more cohesive and straightforward.

Lastly, Dimas highlighted the importance of comparing and associating characters to each other. Knowing the role that characters play in the narrative of the game allows the developer to make clear distinctions between them. This will also allow the player to get a general idea of the personality of a character and grow attachment to their uniqueness, making it easier to identify between different characters.

b) Character Role and Design Priorities

Exploring the second question, Dimas believes that the main character or the player character should represent the premise of the narrative. The main character can either be used to show the uniqueness that the world brings or an archetypal parody.

In *Arcane: Bridging the Rift* (League of Legends, 2022), Amanda, one of the writers for the show, brought up a point where openings should emphasize the premise of the story, which the researchers believe to also be applicable in this scenario. A main character opens the game to the audience and having them designed clearly to communicate what the game is about will allow the player to invest themselves further in the experience.

On the other hand, Dimas writes side characters on the basis of the ability to support the main narrative. These characters can be an antithesis, a complement or both

to the main character. An example of this could be seen near the beginning of *A Space for The Unbound* (Mojiken, 2022), where they show the protagonist, Atma along with his girlfriend Raya being okay with not attending classes to watch movies together, a complementary trait that pushes the story forward. Contrastingly, Atma's visual design can be seen as more brash and reckless, while Raya is more put together, giving an added layer of contrast to the characters. The scene discussed can be seen presented on Figure 3.

Figure 3

A Scene with Atma and Raya near the beginning of *A Space for The Unbound*. (Mojiken, 2022)



c) Character popularity

The mindset Dimas puts on character popularity is that it is an external factor that is difficult to control. Personally, he correlates popularity with memorability of a character. Understanding it can be useful when designing the primary group of characters within the game.

A character's memorability can be conveyed through the silhouette and personality. An example of this being done could be seen in Fig. 4 showing Raya from *A Space for The Unbound* (Mojiken, 2022). Dimas designed the character purposefully with simple features and a few distinctive traits that shows her personality, implying a narrative. The little tuft of hair sticking out to show her outgoing attitude and how she usually hides her hand in her back to imply that she is hiding a secret are purposeful design decisions. Visually Raya lacks features that make her stand out so that the character is easily digestible by the playerbase, on top of supporting the narrative of her being a simple girl.

Figure 4

Raya character sheet from *A Space for The Unbound*. (Mojiken, 2022)



A good narrative can also be a contributing factor to a character's memorability. This narrative can be in the form of visual narrative that can be seen through a character's design, or in the form of contextual narrative, seeing the character through the lens of the overarching story. For example a character with a neat visual design can

be contrasted with their dangerous and apocalyptic living space to give a strong narrative on the character.

d) Visual Aspects of a character

Visually, there are four major factors that contribute to a good character design according to DImas. These factors include their archetype, silhouette, color palette, and character details.

The target audience plays a crucial role in identifying the archetypal design of the character. Identifying whether to design a 1950's rubber hose character for kids or a 2020's anime-look for teens is a good first step to character conceptualization. As stated, there are clear correlations between player's age with the motivation and genre of the game they play (Bradley S. Greenberg, John L. Sherry, Kenneth A. Lachlan, and Kristen Lucas, 2010), so identifying the tone the game has to offer through the environment and character design becomes necessary.

Secondly, a clear silhouette allows the player to capture the essence of the character rather quickly. The unique shape of the character makes them more memorable and more distinct from one another.

On top of that, the character's personality can also be accentuated through the color palette. A study done by Vojislava Bugarski Ignjatović (2010) shows that color preferences do have a significant correlation to the personality of the person. As an example the people who prefer darker colors such as black, gray and brown tend to score higher on the negative pole of the study's predetermined sociability scale in comparison to those who prefer brighter colors such as the color red and yellow.

3.1.2. Maria Shirko (Kantakerro)

a) Non-visual Aspects of a Character

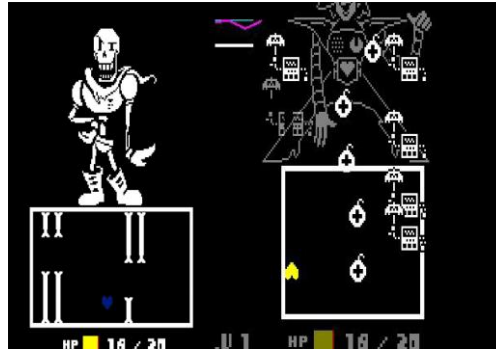
Going into the first question, Miss Shirko identified four main factors that she considers before diving into the visual design of the character. These factors include identifying the character's personality and backstory, abilities and skills, cultural and societal influences and the role that they serve in the gameplay.

Personality and backstory can be broken down into a few more aspects, such as their motivations, fears, desires, and how they fit in the narrative. Understanding a character's personality is essential in creating a compelling character, providing cohesion between the character's visual design and their abstract personality traits that serves to forward the narrative.

Abilities and skills tend to be a niche aspect of character design, since not all games have them in the forefront, however when the narrative of the game demands it, abilities and skills should be taken into account. An example Maria gave was that if a character excels in magic, the visual design should incorporate magical elements to bolster that aspect of the character. Another good example can be seen from the world of Undertale (Fox, 2015), where a skeleton uses bone-based attack and a robot uses robotic-based attack as seen in Figure 5.

Figure 5

Undertale fight scenes with Papyrus the skeleton, and Mettaton the robot respectively. (Fox, 2015)



Cultural and societal influences is another factor that Maria took into account. Ethnicity, upbringing, wealth and religion influences a character's fashion and appearance drastically. In an american based world, a character with blonde hair will not be seen as strange, however if placed in an indonesian setting where blonde hair is a biologically and socially rare trait, the character might give a sense of rebellious nature.

Last but not least, Maria highlighted the importance of the character's role in the narrative. Having contrasting designs between the protagonist, the antagonist, and the supporting characters will allow certain characters to shine brighter than the others, giving a sense of comparison.

Maria added that ideally, by looking at the character, the player should get an idea of the profession, personality, and wealth status of the character.

b) Character Role and Design Priorities

Jumping into the second question, Maria thinks that character roles matter a lot in design priorities. Between protagonist, antagonist, and supporting characters, protagonists usually receive the most attention in terms of design and development. The protagonist is created to represent the eyes of the player, hence properly designing the character to fit both the narrative and the player-base becomes a necessity. Protagonists have to be visually appealing, relatable and memorable.

The antagonists often have a more sinister or imposing design to convey their opposition to the protagonist. This can be shown through their silhouette, facial expression, body language, color palette or a mixture of everything all at once to show their opposition to the main character.

c) Character popularity

Maria Shirko's understanding of character popularity can be broken down into a combination of factors like visual appeal, personality, relatability, depth and development. Characters with well-developed personalities who undergo growth or transformation throughout the game usually attract the player's attention. This can be done by slowly revealing hidden traits and narratives that slowly changes the outlook of the characters appeal to the player, giving a sense of mystery and investment in what the character can or will be. One of the best examples of this trope can be found in the game Undertale (Fox, 2015). The character Sans has a lazy personality, with hints sprinkled throughout the game that Sans might be more knowledgeable than he seems to be letting on, accentuating the relatability and mystery aspect of the character.

d) Visual Aspects of a character

In determining the visual aspects of the character, Maria Shirko provides a list of priorities. The list is composed of silhouette; facial expression and body language; Color palette; Details and accessories. A distinctive silhouette will help the character stand out, and be recognized. It also includes body language. And on top of that concept artists layer colors that can convey the mood and personality. Ideally the character can be recognized through silhouette alone, however, the help of color palettes, details and accessories will help make the design feel richer. An example of this can be seen in Figure 6 and Figure 7.

Figure 6

Mickey Mouse Silhouette. (Disney, 1928)



Figure 7

Mickey Mouse. (Disney, 1928)



3.2. Discussion

The researcher approaches this research under the basis of qualitative methodology. Even though the research employs the interview of two experienced concept artists from two different backgrounds, it does not guarantee the effectiveness of the result, however the fact that there are notable similarities provided by two different concept artists who are in no contact with each other shows the strong possibility of a general foundation of game character design existing. Through further research with more empirical data, a clear guideline could be formed for people to use in forming a compelling character design. With the rise of the gaming industry, this type of research hopes to develop a clear foundation for future designers to create compelling game characters.

One of the key findings of this research is the emergence of consistent principles shared across diverse artistic perspectives. This suggests that, despite cultural, educational, and experiential differences, there are universal elements that underpin effective character design. Such elements may include the use of clear silhouettes, color theory, and emotional readability, which are frequently emphasized in design literature (Isbister, 2006). The universal nature of these principles could reflect the shared psychological and aesthetic preferences of human

beings, offering a fertile area for cognitive and psychological studies to support game character design.

A major area of agreement between the interviewed artists was the role of storytelling as a critical component of character design. Taylor (2018) highlights that a well-crafted backstory not only enriches the character's visual design but also facilitates a deeper connection between players and the game world. Characters with strong narrative ties evoke empathy, making players more invested in their journey. For example, iconic characters like Lara Croft or Geralt of Rivia resonate with players due to their complex personal histories. This highlights the interdisciplinary nature of character design, which integrates art, writing, and psychology.

Interestingly, the findings also touch upon the importance of iterative design processes. Both artists emphasized how characters often evolve over time through collaboration and testing. This iterative approach aligns with the practices of major game studios, which frequently employ feedback loops involving playtesting and audience engagement. As noted by Jørgensen et al. (2022), such practices ensure that designs are not only visually appealing but also align with the intended player experience. Future research could explore how iterative workflows differ across studios of varying sizes, providing practical insights for indie developers and major game publishers alike.

Another compelling insight is the role of cultural representation in character design. Gray (2020) argues that authentic representation is crucial in today's globalized gaming landscape, where players come from diverse cultural and ethnic backgrounds. The interviewed artists noted that avoiding stereotypes while maintaining cultural authenticity is a significant challenge. For instance, the inclusion of characters from non-Western cultures often demands deep research to avoid perpetuating harmful clichés. This finding underscores the necessity for cross-cultural collaboration and consultation during the design process.

Additionally, the aesthetic and functional balance in character design emerged as a critical theme. Characters must be visually distinctive while fitting seamlessly into the game world's art style and mechanics. This balance is particularly evident in games like *Overwatch*, where characters are designed to be instantly recognizable yet harmonious within the game's colorful and stylized universe. Future studies could explore how this balance shifts in different genres, such as hyper-realistic RPGs versus minimalist indie games.

The rapid evolution of technology is also reshaping the landscape of character design. Tools like Unreal Engine's MetaHuman Creator are democratizing the design process by enabling artists to create highly realistic characters with minimal technical expertise. However, as Jørgensen et al. (2022) caution, over-reliance on such tools risks homogenizing artistic styles and diminishing cultural specificity. Researchers and designers must therefore strike a balance between leveraging technological advancements and preserving creative diversity.

Player psychology further deepens the understanding of what makes a character compelling. Studies in game design suggest that players gravitate toward characters that reflect their aspirations, fears, or identities. This psychological resonance is why customizable characters, such as those in *The Sims* or *Mass Effect*, are so popular. By giving players agency in shaping their characters, designers can cater to a broader range of player preferences. Future research might explore how psychological profiling could inform character design, leading to more personalized gaming experiences.

The social dimension of gaming also influences character design. Multiplayer games often require characters to serve as social avatars, representing players in shared virtual spaces. This has led to the rise of "skin culture," where players invest in cosmetic customizations for their characters. The economic implications of this trend are significant, as skins and character customizations often drive revenue in free-to-play games like *Fortnite* and *Valorant*. Examining this aspect from a business perspective could provide additional insights into how character design impacts player engagement and monetization.

Finally, the ethical implications of character design warrant attention. Issues such as gender representation, body diversity, and age inclusion remain contentious. Both artists in the study acknowledged the industry's historical biases, where female characters were often over-sexualized, and older or differently-abled characters were underrepresented. Addressing these biases requires intentional design choices that challenge traditional norms and embrace inclusivity. Ethical design practices not only enhance the social value of games but also expand their appeal to wider audiences.

This study highlights the multidimensional nature of game character design, encompassing artistic, narrative, technological, psychological, and ethical considerations. While the findings provide a promising foundation, future research should adopt mixed-method approaches, integrating qualitative insights with quantitative data to build comprehensive guidelines. As the gaming industry continues to grow, such research will be instrumental in shaping characters that are not only visually stunning but also culturally resonant and emotionally impactful.

4. Conclusions and Suggestions

Games in general are quickly rising in popularity and one of the ways to cultivate its success as a media is to understand how to design a character that is compelling and believable for the players as proven by the many studies that backs up this claim, ranging from its capability to provide connection, to represent the player, and to act as a promotional tool for the game. However, currently the specific branch of video game character design is not broadly talked about, and the existence of a general foundation in creating a good game character is very difficult to come across. This research aims to explore that specific branch.

The main research method that the study has organized is understanding game character design through understanding the mindset of experienced concept artists. Dimas Novan Delfiano and Maria Shirko have separately agreed to discuss this topic. Though their answers have major differences, they also share similar perspectives on certain aspects of their respective design process.

Before designing a character, it seems both concept artists value developing the character's personality and the role they serve in the narrative first, among other things. Ideally a character's personality would show in the design. Understanding the character's personality before designing, would allow the designer to highlight their strengths and weaknesses as well as providing further basis to create a cohesive character design and writing. On top of that, understanding their role in the narrative allows the designer to highlight the unique role of that character, allowing the player to easily differentiate between the characters through visual cues alone. Furthermore, they also individually added the importance of understanding the target market and their abilities.

Going into their priorities in character design, it seems both concept artists value the main character more than that of other roles. The understanding of the main character they provided is that the protagonists should provide the general premise of the narrative that the game is trying to bring. This allows the player to get themselves invested in the narrative and the game itself. This is then supported or challenged by the side characters of the game, including the antagonist, creating the challenge that the player needs to resolve.

When discussing character popularity, both concept artists have different views. Dimas thinks that character popularity is difficult to control, however personally Dimas developed character popularity through paying attention to their silhouette and character narrative. On the other hand, Maria Shirko sees character development as the biggest determiner to character popularity. This can be done through the game narrative and through the changes in their visual design as things progress through the game.

Lastly, both concept artists have similar views on the visual aspects of game characters. Both concept artists really value the importance of silhouette, color palette and design details.

Silhouette is the most important one in character design since it is the most noticeable visual when the player first looks at the character, however it is important to accentuate that aspect through the addition of proper color palette and design details to allow the player to keep their mind busy after their first glance at the character.

The researcher acknowledges that this study is limited due to the fact that there might be other perspectives from other concept artists not interviewed for this study that the paper has not been able to explore yet. The researcher suggests exploring the thought process of more concept artists working on different game genres or premises with the hopes of providing other perspectives on the general foundation of game character design.

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