How Can a Character's Personality be Conveyed Visually, through Shape

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Abstract

The aim with this study was to further understand the art of character design, in order to get a better understanding of how visual attributes - especially shape - can be purposely used in order to communicate aspects of a character's personality.

The first step was to investigate the subject of character design through relevant material and literature. From this investigation, a total of four character designs have been developed - two "good" and two "evil" - within two different game titles of different graphical styles: One that is more cartoony/stylized and one that is more realistic.

Prior to the production a number of work processes - production pipelines - used by artists in the game and movie industry were investigated. From this, the pipeline for the study was compiled.

To end the study a survey was conducted, in order to obtain outside feedback for the character designs regarding their style and what personality traits they were associated with. The results show that the majority of the participants perceived the characters in the way that was intended, while the perception of graphical style was a lot more varied.

Keywords

Character design, shape, digital graphics, personality traits, concept art, visual attributes and personality.
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1 Introduction

When I immerse into a video game I do not want to enter it as myself but rather become one of the characters who exist within that universe; a character that I can get to know, identify with and most of all share an experience with. The immersion into another world, whether it is a video game or a movie, is all about characters for me.

When I was young I annually visited the local cinema to enjoy the movies of the Disney Renaissance, an era during which Walt Disney Animation Studios returned to making successful animated films (Hahn 2009). Whenever the credits began to roll I would always linger in a state in which I felt like I still was the character that I had become just by watching the movie, no matter how different they were from me and my own reality. It was a feeling that I enjoyed and somewhat still experience today when I play video games, which allows for an even greater immersion given their interactivity. Whether I enjoy a movie or a video game tend to depend on character depiction.

My study focuses on the production of a number of character designs within two existing game worlds, but it also involves a lot of investigation prior to the actual production. I have read literature on the subject of character design and looked at other relevant material in order to get a better understanding of how video games and animated movies communicate different characters. I have also looked at a number of different production pipelines used by artists in the industry, to get a better understanding of how the work process can be approached. Finally, I have picked two games that I have designed a number of characters for: One being more semi-realistic and the other more stylized.

For the more stylized game I have chosen to work with Team Fortress 2 (2007), developed by Valve Corporation. The style is cartoony and focuses heavily on character shape and silhouette, which is something that I would like to explore more in my work. The semi-realistic game that I have chosen to work with is The Walking Dead (2012), developed by Telltale Games. I chose this game because it has an overall realistic look but takes a lot of inspiration from the original comic book series by Robert Kirkman: The characters' proportions are realistic but their heads and faces have been somewhat exaggerated, which opens up for a little more artistic freedom in the design.
1.1 Objective and Questions

The purpose of this study is to further explore the art of character design for e.g. video games. More specifically by examining how visual attributes, shapes in particular, can be used to effectively communicate a character's personality. The aim is to develop a number of characters that communicate the intended personalities and fit within a similar style.

Preliminary Question
- How can a character's personality be conveyed visually, through shape?

Additional Questions
- What visual attributes could be considered for the character to fit in the style?
- How does the use of shape help to convey the intended personality?
- How does the silhouette help to convey the intended personality?

1.2 Limitations and Sources

Character design revolves around a combination of many different elements of art, but I have delimited my study to looking more specifically at shape. The resources I have used are literature, videos and online sources that are relevant to the subject.

To produce the characters within pre-existing game worlds is also a limitation that I have used in order to have a clearer goal for my character designs. The intention is not to mimic the exact style of the games, but rather to use them as a visual guide to take inspiration from. The idea is to produce one "good" and one "evil" character that could fit the overall style of the different games. This means that I will only focus on the visuals and, most of all, whether my character design communicates the intended personality traits, the actual gameplay is irrelevant.
1.3 Method

The study investigates the topic of character design and its process. It is consequently divided into three parts:

The first part revolves around investigation during which I have read literature on the subject of character design and looked into other material that is relevant to my study, e.g. an analysis of how various video games and animated movies use visual attributes, specifically shapes, to communicate different personality traits.

In the second part of the study I have looked at a number of production pipelines that artists in the industry use, to learn more about how different artists approach the character design process, and compiled my own process on this basis, which is explained in this section.

The final part is the production itself, during which I have applied my knowledge from the first two parts into the development of four character designs: One "good" and one "evil" character within two different styles.

My work ends with an external survey, which was available online, for the participants to evaluate my character designs from a number of questions regarding style and personality traits. This was done in order to obtain outside feedback for the analysis and conclusion section of this reflective report, which concludes the study.

Because art in general is not very objective, and one image will probably influence how a second image is perceived, it was difficult to formulate a survey, especially the questions regarding graphical style, because my characters will be a bit different from the characters in the chosen game. The questions considering style might be interpreted differently and finding suiting images may be difficult. It is also important to try to formulate the questions in a way that the participants will not understand which answers I am striving for.

1.4 Previous Research

There has been a lot of research made on the subject of how individuals are perceived based upon their visual cues: Solomon Asch has studied how the impression of a human being and their personality traits are influenced by former impressions of their physical appearance in the paper Forming Impressions of Personality (1946); and Karen K. Dion, Ellen Berscheid, and Elaine Walster investigated how physical attractiveness influences the impressions of a person's personality in What is beautiful is good (1972). This is something that recur in how artists work with visual traits in order to convey personality in a character design. Even though they do not discuss the subject of character design and shape, I would say that this kind of cognitive bias is very basic in character design.
2 Character Design

"We look at a person and immediately a certain impression of his character forms itself in us" (Asch 1946). The idea that specific traits can be attributed to an individual only by their appearance has been made clear in previous studies. Whether we like it or not, a person's physical appearance activates expectations of other qualities in that person: How they are likely to behave or not behave, what attitudes and opinions they are likely to have etc. (Haake, Gulz 2008). This kind of cognitive bias may not be fair but it becomes a great asset for a character designer.

2.1 What is Character Design?

Character designer David Colman talks about the who versus the what in his DVD *The Art of Character Design Vol. 1*. This refers to that a character designer should not only focus on what the character is; to focus on the actual design of the subject, e.g. a tiger. Nor should they only focus on who the character is, which would mean that the character depicts a lot of personality but looks like any other tiger that has been seen before. It is essential to combine the physical traits with the narrative - and vice versa - to show the viewer who the character is. The who and the what are both equally important traits in character design. The key is to first get to know and understand who the character is and then bring that out in the design.

The face is the primary channel to express the emotion of a person, but a lot can be said in the posture and body language. The facial expression is really secondary to the body expression and should primarily re-enforce what is going on in the rest of the body (Colman 2010). A clear silhouette of a character can communicate both personality and emotion even without a face. Hands are also an effective way of communicating a personality through body language, because they can be very expressive and allow for a clear way to show certain personality traits in a silhouette (Solarski 2012:127).

How a character carries their physical weight can distinguish them as individuals and also tell us something about their personality, which part of their body they lead with is especially useful: Thinkers with their heads, heroes with their chests, lazy types with the pelvis, cowards with their knees, and so on. A person with a small point of contact with the ground will also appear lighter than a person with more contact with the ground (Solarski 2012:64).
Body language affects how others see us and there are many non-verbal expressions that can be considered when developing a character. Power and dominance revolves around expanding: To take up space and open up, while the feeling of powerlessness is often shown by doing the opposite: To close up and make ourselves small. This is a very natural behaviour that can be seen across the animal kingdom (Cuddy 2012).

![Image 1](image1.jpg)

*Image 1*. A comparison of body language between two gorillas.

### 2.1.1 What is Beautiful is Good

A study by Karen K. Dion et al. concluded that physically attractive individuals are assigned more favourable qualities, including personality traits, overall happiness and career success, compared to an unattractive person (Dion et al. 1972). This is often referred to as the "what is beautiful is good stereotype" or "the halo effect" and is something that is used recurrently in character design. *Uncharted 2* (2009), developed by Naughty Dog, uses the concept of "what is beautiful is good", as does the evil twins of Mario and Luigi, developed by Nintendo.

![Image 2](image2.jpg)

*Image 2*. The protagonist and antagonist in Naughty Dog's *Uncharted 2*.

![Image 3](image3.jpg)

*Image 3*. Nintendo's Luigi and Mario and their evil twins Waluigi and Wario.
2.1.2 Shape

The visual language can vary between cultures, especially the meaning of colour (Sable, Akcay 2010). However, shape has a way of communicating universally, because the concept of circular versus triangular shapes originate very much from nature. Rounded shapes tend to be safe, while angular shapes make us cautious. These instinctive reactions are based on the sense of touch and, while this sense is not present in visual art, the viewers tend to apply their real-life experiences onto similar shapes (Solarski 2012:177-179). Any form from life can be translated into a shape and the abstraction of shapes all imply different character.

Image 4. A cotton plant, a steady rock and a thorny cactus.

2.1.2.1 The Primary Shapes

A visual message has to be clear to be effective and exploring a character's silhouette in an early stage of the design phase makes it easier to validate that character's readability early in the process, the overall shape will speak for a character's personality.

Image 5. Mario, Wreck-it Ralph and Don Paolo.

Circles
Curved and circular shapes are considered the friendliest as they have no sharp or dangerous corners. Circular shapes in nature has a tendency of being soft and harmless and evoke likable characters. Many of the most well-known protagonists are designed around circular concepts (Solarski 2012:180).

Squares
Square-like shapes relate to straight vertical and horizontal lines that communicate strength, stability and confidence. Squares can both be large and daunting or comforting and clumsy. They often depict steadfast characters who are dependable and are commonly used for superheroes or the heavy (Bancroft 2006:34).
Triangles
Triangles relate to diagonal and strong, angular lines and are the most dynamic of the three shapes. Bad guys and villains are often based upon dominant triangular concepts, as they appear malicious, sinister and communicate with the most aggression (Bancroft 2006:35). It is the circle's most opposing shape and often used for antagonists.

The shape of one single character has the ability to visually communicate on its own, but the visual communication becomes even stronger when placed in relation to another character: A small character that is juxtaposed with a big character will make them seem even bigger and smaller. When creating opposing characters, or a team, it is important that they look good together; by creating a contrast in proportions and body shape it is possible to create visual interest while also revealing something about the character's personality (Bancroft 2006:132).

Image 6. A pointy shape seems very aggressive when placed next to a circle, which in turn seems very tranquil.

The instinctive communication of shapes make them a very powerful tool, especially in the visual feedback of video games. Contrast in shape and proportion will create easily distinguishable characters and shape seems to be the key to communicating a basic idea. Most famous characters have very distinct silhouettes that are easy to read and also prevent them from being mistaken for someone else, just like the letter A would not be mistaken for B or vice versa. This underlines how important it is to design characters around major shapes rather than small details (Solarski 2012:180).

The Law of Thirds
Symmetry in character design is something that should be avoided most of the time, because it pulls down the visual intensity. Contrast creates interest and is applicable in all elements of art. Even numbers tend to create symmetry, which is why the number three is powerful to consider in character design and for shape especially; the human body can actually be divided into three parts: The head, the torso and the legs. It is possible to create a whole variety of characters with only different proportions and the law of thirds in mind. It can be done in any area of the body, not just the whole body (Mattesi 2008:81-83).
2.1.3 Realism Versus Idealization

Character design stretches from realism to idealization and the abstract, and the silhouette of a human character will vary depending on how stylized a game is. A stylized game will generally allow for more creativity, exaggerated shapes and proportions when it comes to defining a character through a distinguished silhouette. Proportions can be altered in infinite ways and they are especially useful to create many various human-based characters: A character with a small head and a large body will communicate in an entirely different way compared to a character with a small body and a large head (Tsai 2007:81).


Scott McCloud introduced a pictorial vocabulary in his book *Understanding Comics: The Invisible Art* (1993). With the help of a big triangle, he mapped comic art in relation to reality (realism), meaning (language, or idealization) and the picture plane (abstraction) - in essence: Different styles. This triangle can be used to consider the concept of style in video games and animated movies too.

![Image 8](image8.png) "Pictorial Vocabulary" by Scott McCloud (1993)
2.1.4 Shape in Various Video Games and Animated Movies

I have made a brief analysis of a number of video games and animated movies to form a general idea of how they have used shape in order to communicate good and evil characters, particularly by looking at some of the characters’ silhouettes.

**Tales of Monkey Island (2009)**
The contrast between the protagonist and the antagonist in *Tales of Monkey Island* (developed by Telltale Games) becomes very clear when juxtaposed: The triangular shape of LeChuck’s large pirate hat almost makes it look like he has horns. The jacket cuffs, boots and finger tips all contribute to his malicious look and his body language suggests a loud and confident personality. Guybrush appears to have a much more relaxed and laid-back attitude, his major shape is like a slinky rectangle. The concept of “what is beautiful is good” is also present.

![Image 9](image9.png)

*Image 9*. Guybrush Threepwood and LeChuck in *Tales of Monkey Island*.

**Mini Ninjas (2009)**
*Mini Ninjas*, developed by IO Interactive, is very much designed around shape: The protagonists are all based on circular concepts, while the enemies are based on a concept of much more angular shapes. The visual style of the game is generally cute and friendly and many of the enemy characters even share the protagonists’ cuddly proportions (short bodies and big heads), but the pervading shapes communicate in an entirely different way.

![Image 10](image10.png)

*Image 10*. One of the heroes and one of the enemies in *Mini Ninjas*.

Most of the playable hero characters share the same proportions and it is mostly their different skills and accessories that tell them apart. One of the characters stands out from the others however: Being the strongest and most loyal, Futo naturally has a big square-like body.

![Image 11](image11.png)

*Image 11*. Futo, one of the protagonists in *Mini Ninjas*. 
**Megamind (2010)**
The main characters in *Megamind*, produced by DreamWorks Animation, are easily distinguished by their silhouettes. Not only do the shapes make each of the characters unique, but their personalities are also communicated through the exaggeration of important areas. This, along with posing, clearly reveals who the genius, the hero and the villain is.

![Image 12. Silhouettes of some of the characters in Megamind.](image)

**Red Dead Redemption (2010)**
Being a realistic game in a believable setting, *Red Dead Redemption* (developed by Rockstar San Diego) does not make use of any exaggerated shapes or proportions. It is a story that revolves around many different characters that often cannot be categorized as good nor evil, and it would seem like the game does not make use of many visual cues to communicate a character's personality, it is rather revealed through their actions, which makes it a difficult game to analyze for this purpose. What can be noticed is that bad guys tend to be either more rough or more polished than the lead protagonist and the concept of "what is beautiful is good" is also somewhat present, but not used consequently. The most notable use of visual communication in shapes are the outfits and hats especially: Different hats are used to distinguish characters and is commonly used to show gang affiliation.

![Image 13. The lead protagonist of Red Dead Redemption in the middle, with two of many seemingly evil characters on each side.](image)
Up (2009)
One of the main characters of *Up*, produced by Pixar Animation Studios, is the grouchy Carl: A stubborn old man who just wants to stay put and has a generally solid and static manner that is much revealed in his square-like shape. Charles Muntz - the antagonist - has a much more angular concept as seen for example in his head, shoes and cane. The jacket also gives him a very triangular major shape. Muntz’ leader dog, Alpha, also has a much more malicious appearance compared to Dug's friendly countenance - a triangle versus a circle. This is something that we can relate to reality as well: Aggressive dogs tend to have more angular concepts than the general, more circular-based, family dogs.

![Image 14. Dug, Carl, Charles Muntz and Alpha from *Up*.](image)

Lilo & Stitch (2002)
Stitch, the main protagonist of *Lilo & Stitch* (produced by Walt Disney Feature Animation), is clearly based on a circular concept and also a very likable character. His proportions are commonly used for cute characters, with a large head and a small body. However, in the beginning of the movie, when Stitch shows his most evil side, he has a different appearance: He is more insect-like and reveals more of his sharp features. His eyes are more narrow and the use of a triangular shape on his suit speaks for itself. His main color is also a fierce red instead of the more calm blue.

![Image 15. A comparison of Stitch's two different appearances.](image)
2.1.5 Visual Stereotypes

The above explains a quite stereotypical character design approach that have worked well in many video games and movies. To take this conception of the hero versus the villain to its extremes, it could be described in a very abstract way with the use of shapes: A ball versus a triangle.

Visual stereotypes exist in all elements of art, because many people share a similar visual vocabulary when it comes to references and ideas: The sky is blue, red means blood, a cranium is a sign of death, green is associated with nature and so on. Sometimes it can be very effective for an artist to rely on these kind of ideas that already exist when creating a new design, either over explicitly or by the use of subtle clues, given the setting. However, as long as an idea is properly established for the audience, it is possible to give any visual cue any meaning (Block 2008:4). By creating interesting plays on common conceptions it is possible to create a character design that is more unique and interesting, which may result in an even more memorable character that leaves a greater impression on the audience.

Just like in reality, not everything is always what it appears to be: In Toy Story 3 (2010), produced by Pixar Animation Studios, the main villain is a soft and cuddly bear - a friendly circle - and another visual element is used to reveal something about his personality: Colour. Purple is a tricky colour that has often been used to show evil and this is a great example of how a combination of visual elements together help in communicating a character's personality.

![Image 16. The main antagonist Lotso, from Toy Story 3.](image_url)
2.2 The Character Design Pipeline

This section covers the work process that I have used when working with my production (the case studies) and explain how I have approached the task in each step of the production pipeline. The section is followed by the case studies and ends with the results of the survey.

2.2.1 Work Process

There are many ways to create a character design and there is no set formula. It is essentially up to the artist how they decide to approach the task, but it is sometimes constrained to the nature of the project: If you are designing characters for a smartphone screen it is important to focus on creating characters that are able to read on a small screen; or if the character is very stubborn and constantly crosses their arms, it is important that the design makes that action possible.

The character design process basically consists of three steps: Research, concept and final design. These steps vary in how they are branched out and approached. After looking at different artists' work processes, by viewing various instructional videos (e.g. Davis 2010) and reading literature (e.g. Solaris 2012) on the subject, I have developed my own pipeline for this study (Image 17). Each of my steps are summarized below.

**Image 17.** The production pipeline used for the production part of this study.

**Research**

The research stage of character design refers to getting to know the character that is going to be developed; because it is important to understand who the character is before putting the pencil to paper. For this study I consider some of the following questions: Why is this character good/evil? What is the character's emotional mood? How old are they? What are their strengths and/or limitations? What pose does the character strike and what does this say about them? There are plenty of questions that could be asked about the character in order to get to know them, and it is important to keep the "why" in mind throughout the development process (Mattesi 2008:96).

From this, appropriate keywords are assigned to the character and adjectives are preferred over nouns as they return a larger variety of results (Solaris 2012:190). These keywords are then used to find references: Images that are categorized as either a personality trait or a visual cue, most of all images that inspire me. It took approximately two hours for me to search for references, but in the end I decided to pick a maximum of four pictures for each character, that I felt represented the personality in general.

** Thumbnails**

Depending on what visual cues the character is based upon, it might be useful to begin the development process with expanding the visual vocabulary by studying and drawing the gathered references (Davis 2010). For this study I specifically studied existing characters in each of the games in order to get a feeling for the style and use of shapes.
Based on the references I think about the major shape of the character and get some initial ideas out prior to doing any thumbnails. Once I have some ideas on paper I switch between exploring the design in thumbnails, with focus on shape and proportion, and sketching out further ideas. I look for ways to work tilts and opposing angles into the pose, in order to create more visual interest (Bancroft 1996:71). I regularly cast an eye on the silhouettes of the original game characters and strive towards designing a character that maintains the overall style. I also take some time to explore the character’s face, as it is an important aspect of the character. I lay out previous design ideas in front of me in order to make sure that I am on the right path and that I am not neglecting any good ideas (Davis 2010).

Concept
Once I feel that I have explored the character enough (or that time is running out) I pick my favourite ideas and combine them in a final rough concept. This step focuses on pushing the design and exaggerating important areas in order to enhance the character’s traits. More details may be added and a clear silhouette is sought. I try not to be arbitrary with any of my design decisions, and keep in mind to not just draw the various elements that shape the character but actually designing them (Colman 2010).

Value and colour studies could be done in this step of the process, but since my focus is on the element of shape and how it conveys specific personality traits, I will not be doing it for this study.

Final Design
I create a clean version of the final design in Adobe Photoshop, a digital image manipulator and drawing software. I do not trace the final rough, but try to keep it loose in order to avoid that the drawing becomes too stiff. The idea is not to copy the final rough but always keep working on the design; to refine and further enhance it.

This step would preferably also involve creating a final coloured version of the character design, but as stated before: This study focuses on shapes and I have limited myself to only creating the final line art.
2.3 Case Studies

2.3.1 Case Study A

Background
*Team Fortress 2* (2007), developed by Valve Corporation, is a team-based first-person shooter (FPS) with a vintage setting. The opposing teams consist of the same characters but in different colours, there are no protagonists or antagonists. They have different skills, which are communicated clearly in the visuals. Being a team-based FPS it is important for the players to be able to quickly identify a character in order to determine whether to run or attack, and the distinguished silhouettes make that possible. Angles between elements such as shoes, hats and clothing folds are very sharp and adds to visual clarity. Above all, the character design emphasizes shapes and silhouettes rather than details and texture.

![Image 18. Three different characters - a soldier, scout and heavy - from *Team Fortress 2.*](image)

The graphics are cartoon-like and shape, posing and proportions are used to communicate personality, attitude and skill: The heavy weapons guy is part of the defence and slow but powerful; his stability is shown in his major shape of a big square - he will not fall over in the first place. The scout has a more slick appearance and is part of the offense. His small feet communicate speed but also make him seem more susceptible to damage. The pose of the soldier (weight in his torso) compared to the sniper (weight in his pelvis) also shows that he is more head-on in combat. The characters are based on quite rectangular shapes and their big hands and feet give them a strong sense of weight. The most sinister-looking character appears to be the spy, who is somewhat based on a triangular concept compared to the others.

![Image 19. Silhouettes of the nine player classes in *Team Fortress 2.*](image)

To summarize: *Team Fortress 2* is a militaristic game in a cartoon-like and vintage style. The characters have distinct, generally rectangular-based shapes, and angles between different elements are very acute. Hands and feet are generally big to create a sense of weight. Large shapes are emphasized over details. I have assembled a moodboard to reference this style in appendix A.
2.3.1.1 Character 1A - the Soldier

Summary:
Character 1A is a British youngster with no worries; a generally easygoing and laid-back character, but a lazy soldier who often spends his time snoozing in a foxhole instead of engaging in combat.

Keywords:
Personality: Cheerful, clumsy, lazy, afraid of conflict. Visually: Rectangular, vintage, tall.

The references I have gathered are: A British soldier outfit, the youngster Marty McFly from Back to the Future, a laid-back dopey in a relaxed pose and the ever-lazy private Bailey from Mort Walker's comic strip Beetle Bailey.

Work process:
My main impression of character 1A is that he is lazy, lanky and laid-back, so I focus much on expressing this in his pose and silhouette. I take a lot of inspiration from the soldier class in Team Fortress 2, but in order to create a distinguished look I make use of an overall different shape and attitude. The British helm is also unique for my character and a shape that stands out well. To keep with the visual style of the game I try to maintain the concept of big hands and feet and acute angles between elements. However, to reveal the character's friendly nature I make use of circular shapes whenever possible, most prominent are his shoes, hat and nose.
Final:

Image 21. The final result of character 1A - the soldier.
2.3.1.2 Character 2A - the General

Summary:
Character 2A is an imperious general, characterized by his aggressive and domineering social behaviour. He is a perfectionist who takes pride in his job and commands his men like dogs.

Keywords:

The references I have gathered are: A cartoon version of Napoleon, the angular Arnold Schwarzenegger, a military officer outfit and a corporal with a seemingly loud and bossy personality.

Work process:
When visualizing Character 2A I see a short but very loud man of proud stature, which makes the Napoleon-complex a natural reference for me and something which I try to work into the design. I make him the shortest of the characters to express this, but I also make use of the characteristic hand gesture for a more immediate reference to this trait. His main shape is a box, like a sturdy brick that will not fall over, but I strive to work in an altogether triangular look and make constant use of angular shapes throughout the visual cues, in order to communicate his aggressive nature. His dominance and pride is something that I try to reveal in his pose, to make it noticeable in his silhouette.
Final:

Image 23. The final result of character 2A - the general.
2.3.2 Case study B

Background

The Walking Dead (2012), developed by Telltale Games, is set in a contemporary world and takes place shortly after the onset of a zombie apocalypse, which make the zombies the obvious enemies. With their limp posture and decaying bodies, their silhouettes are easily recognizable. However, this game does not focus on fighting enemies but rather revolves around story and character development within a group of survivors.

It is a semi-realistic game that is based on a comic book and imitates a similar style. There is no use of exaggerated shapes in the characters' bodies; they are of realistic proportions and anatomy, but their faces are somewhat exaggerated.

![Image 24](image24.png)

Image 24. Some of the character faces from The Walking Dead.

There are some visual cues that hint about personality: Larry appears early in the game and is generally very blunt and constantly distrusts and antagonizes the playable character - Lee. We look at Larry's face and we expect trouble - "what is beautiful is good". His body is that of a large, sturdy square and his rigorous physique, exaggerated jaw and restrictive body language all support his personality.

![Image 25](image25.png)

Image 25. The silhouettes of a zombie and the main character; Lee and Larry from The Walking Dead.

To summarize: The Walking Dead is a semi-realistic game that is set in contemporary time. It imitates the graphics of the original comic book. The bodies are of realistic proportions but faces are somewhat exaggerated. I have assembled a moodboard to reference the style in appendix B.
2.3.2.1 Character 1B - the Biker

Summary:
Character 1B is a large biker, but in spite of his rough appearance his personality is gentle and almost shy. He is not comfortable being in the centre and is happiest alone with his bike. He prefers solitude, or the company of cuddly animals, over human beings.

Keywords:
Personality: Gentle, passive, quiet, soft. Visually: Biker, large square.

The references I have gathered are: Drawing of a biker with a cuddly animal, a common biker outfit, Ferdinand the bull and the gentleman Edward Blom.

![Image 26. References for character 1B - the biker.](image)

Work process:
My main idea for character 1B is that he has a rough appearance, a quite classical biker. The major shape is instinctively a large, sturdy square, but in order to reveal his friendly nature I have worked to make his appearance soft and circular and have consistently avoided sharp angles in his silhouette. His headgear, sloping shoulders, belly and shoes all have deliberately rounded shapes. Given the semi-realistic style, I avoid exaggerated proportions except for in the face which has a more cartoony feel. I try to reveal his introvert personality in his pose and keep a closed up body language in mind. Santa Claus has been recurring in my thoughts when working with this character, but I have strived to make him seem large and intimidating at first glance, instead of jolly and open.
Final:

Image 27. The final result of character 1B - the biker.
2.3.2.2 Character 2B - the Cowboy

Summary:
Character 2B is a stubborn and intransigent guy who is relatively young for his grumpy old man-manners. He has an authoritarian way and is generally difficult to reason with, but it is not impossible.

Keywords:

The references I have gathered are: The grumpy Dr. House, a modern cowboy outfit, the steel-eyed Lee van Cleef and an authoritarian police officer.

![Image 28. References for character 2B - the cowboy.](image)

Work process:
At first I thought of this character as a grumpy old man, but I wanted to make him a little different and decided to make him relatively young. I see him as skinny and angular, almost insect-like in appearance. These are thoughts I keep in mind even though his overall appearance is realistic. I look for ways to work sharp shapes and strong angles into his features and silhouette: He has a quite triangular head and face, and the cowboy hat, shoulders and shoes all have deliberately angular shapes in contrast to Character 1B. Lee van Cleef (who is known for playing villains in many Westerns) is a great inspiration with his hawk-like nose, thin, sinister leer and generally sharp features. The bunch of keys hanging from his waist are also consciously put in to mediate his sense of authority and add to his sharp silhouette. I also try to communicate power in his pose: He takes up space and uses his hands to express his attitude.
Final:

Image 29. The final result of character 2B - the cowboy.
2.4 The Survey

In order to evaluate my character designs and how they are interpreted, I conducted a survey in which I asked the participants to rate the graphical style of images showing original characters from the two games in my case studies, as well as the style of my own character designs. The participants consisted of mixed individuals and the majority are not artists or very inveterate gamers, but still not strangers to these subjects. I used the online app Eval & Go, found at www.evalandgo.com, to put my survey together and the details of its content and execution can be seen in appendix C.

I made a mistake when asking the participants to grade the graphical style: I informed the participants that grade 1 equalled very realistic and 5 very cartoony/stylized, but the survey tool actually started the grading at 0. However, in the end none of the participants graded any of the styles with a 0, which would mean that I could still originate from a grading of 1-5.

The majority of the 38 participants were from Sweden and primarily in the age range of 21-30. The difference between female and male participants was minimal, almost equal. According to the site www.sciencebuddies.org, the margin of error for a sample size of 20 participants will be approximately 22%.
2.4.1 Case Study A

The grading for the style of *Team Fortress 2* was very varied, stretching from 1 to 5 with the majority grading a 3, as in semi-realistic. The average rating was 3.11.

The grading for my own character designs within a similar style was a lot more unified, ranging from 3 to 5, with over half of the participants grading it with a 4. Most of the participants thought that my two characters were more cartoony/stylized than the image of the characters from *Team Fortress 2*. The average rating was 4.37.
2.4.1.1 Character 1A - the Soldier

Overall impression of the silhouette

- **Good**
- **Evil**
A clear majority of the participants answered that their overall impression of the character’s silhouette was that he was good, and the five most abundant personality traits associated with the character were: Clumsy, lazy, good, cheerful and passive. Eight of the participants also associated the character with being dumb and two thought that he seemed laid-back, none of which were among the options. No one maintained that he was evil.

Almost everyone of the participants associated the character with his personality traits from the pose, while the face came second.
2.4.1.2 Character 2A - the General

Overall impression of the silhouette

- Good
- Evil
Most participants answered that they perceived the character's silhouette as being evil, but it was a little less predominant than with the soldier. The personality traits abundantly associated with the character were: Dominant, authoritarian, loud, proud and selfish. Fewer than before answered that their impression was that he was good. Other traits associated with the character, that were not among the options, were: Strong, dictator, organized and arrogant.

The answers to why the participants associated the character with these personality traits varied a lot more than with the soldier. More than half of the participants answered "pose", "the face" and "the details". "Shape" was also a significantly more frequent answer to this question, in comparison to the soldier.
2.4.2 Case Study B

The grading for the image with characters from *The Walking Dead* stretched from 1 to 4, with the majority grading it with a 1. It is clear that a majority of the participants think that the characters from *The Walking Dead* is of a more realistic style than of those in *Team Fortress 2*, even though the answers varied a lot. The average rating was 1.92.

The grading for my character designs within this setting was a lot less unified than the previous, ranging all the way from 1 to 5. The majority rated it with 2, which leans towards "very realistic", but immediately after came 4, which does the opposite. The average rating was 2.87, which - again - make my character designs appear more cartoony/stylized than the original characters in the game.
2.4.2.1 Character 1B - the Biker

Overall impression of the silhouette

- Good
- Evil
The majority of the participants said that their overall impression of the character's silhouette was that he is good, but about one third conceived him as being evil. However, when the inside of the silhouette was revealed, a vast majority associated the character with being good, while no one maintained the impression of him being evil. The five most commonly associated personality traits perceived were: Good, passive, gentle, clumsy and quiet. Other personality traits were: Kind, timid and a bit stupid.

The participants most commonly answered that the character's pose and face were the reasons for their association with the personality traits.
2.4.2.2 Character 2B - the Cowboy

Overall impression of the silhouette

Good
Evil
The overall impression of whether the cowboy is good or evil was very diverse and most of the participants actually perceived the silhouette as being good. The participants reaction to the more detailed image of the character gave a similar reaction as with the biker: A clear majority associated the character with being evil, while only a few associated him with being good. The five most abundant personality traits perceived were: Authoritarian, evil, selfish, dominant and proud. Some traits that were also perceived, but not among the options, were: Treacherous, wiseacre, sly and suspicious of others.

Almost everyone of the participants associated the character with the personality traits from looking at the face, while the pose came second.
3 Analysis and Conclusion

The objective of this study was to further understand the art of character design, specifically the use of shape. To do this, the first step was to explore the subject through relevant literature and analyzing the character designs in a number of video games and animated movies. The second step was to look at some production pipelines used by artists in the industry, and from this the pipeline that was used for the production part of this study was formed.

The final part of the study was the actual production in which my aim was to create four characters (two "good" and two "evil") who communicate the intended personalities through their visual attributes, with focus on shape, while also matching a similar style of an existing game title; one being more realistic and the other more stylized.

A lot was learned from the investigation that was conducted during the first part of the study and I am glad that I decided to focus much of the time on this part instead of rushing to the actual production. Reading literature by artists in the industry, who explained their procedures of character designing, definitely equipped me with new ideas and views on how to approach the task prior to the actual production.

I worked mostly with a stereotypical approach of character design: Circles are good and triangles bad, as well as the concept of "what is beautiful is good", but with the biker I wanted to develop a more unexpected "good" character, because bikers are commonly known as rough "bad" guys. In the future it would definitely be interesting to try this approach even further, to see how far from the unexpected a character designer can go without losing the audience.

The common conceptions of the basic shapes - circles, squares and triangles - and how they communicate in different ways was not entirely new to me, but I have definitely not used it as deliberately as I did with this study: I consistently made use of circular shapes for the good characters and triangular shapes for the evil characters. I also strived to work the personality into the character's pose and tried to re-enforce it in the face. Looking at the results of my survey I would say that I have used these concepts quite successfully.

The results of the survey show the personality traits associated with the characters matched the keywords that had been picked for them very well. Some participants even perceived some of the personality traits found in the character description that was not among the options, such as the soldier being laid-back and the biker being timid. "Authoritarian" and "dominant" were strong associations with the evil characters, as expected. These traits were almost equally common for the general while "authoritarian" was clearly more prevalent for the cowboy, which I personally think is because of his expressive hands.

"Lazy" was a quite common answer from the participants for the biker and while this was not a keyword that had been put down for the character, it definitely matched his general personality and square-like shape. The only personality trait that was missed was "sleepless" for the cowboy. Looking back at him now I think that this trait could have been exaggerated more, especially in his face.
The most common answers as to why the participants associated the characters with their traits were "the face" and "the pose". I would think that this is because body language and especially facial expression are the most common attributes in which we conceive a person in real life and they were also intentionally prominent, posing especially. "Shape" was a less common answer, but more occurring for the general and the biker. I would think that this is because shapes for the general are more distinguished than his pose, compared to the soldier. As for the biker, I am not sure why this character's shapes are more prominent than the cowboy. Perhaps it is his contradictory stereotype that made his circular and soft shapes become more apparent.

On the whole, I think that the shapes for the characters in my case studies re-enforce their personalities in more of a subtle way, but they definitely worked well in communicating the personalities of the more stylized silhouettes. The more diverse impressions of the silhouettes for the biker and the cowboy indicate that it is more difficult to perceive a character as good or evil in a more realistic style.

While the personality traits question had successful results, I definitely need more practice on working in different styles, especially realistic. Still, the very varied answers regarding graphical style in the survey proves that people interpret style very differently, which makes it a difficult subject to evaluate. Many of the participants perceived both The Walking Dead and Team Fortress 2 to be similarly realistic and vice versa while some thought that Team Fortress 2 appeared to be more realistic than The Walking Dead.

The graphical style of the characters in the case studies always seemed to lean more towards the cartoony/stylized side compared to the style that they were developed in. The varied answers may also be a result of a somewhat unclear question that can be interpreted differently. Perhaps the options for this question could have been minimized to three: Realistic, semi-realistic and cartoony/stylized, which might have made it easier for the participants to grade the image. To use the style triangle of Scott McCloud was also considered, but I feared that it would cause more confusion than clarity. Perhaps the survey could also have ended with a more straightforward question such as: Would my characters fit in a similar graphical style?

It was interesting to investigate the different approaches in character design: There were many similarities but also many variations on how to do things. The methods that made most sense to me were combined into my own production pipeline. The main difference from my previous work process was that I have never been as thorough with the research stage of character design before putting my pencil to paper. Working with this study I have understood the importance of getting to know the character that is being developed - if only a little - before beginning to actually draw them, and also to collect references for them. Knowing the character makes it easier to work a personality into the design deliberately, rather than arbitrarily adding attributes without a clear reason. I will continue to develop my work process and try to become more effective, but the pipeline that I used definitely served its purpose for this study.
The limitations that were made, e.g. to only work with "good" and "evil" characters, were good decisions. While I originally would have wanted to do more case studies and try to translate one or two of the characters into the opposing style, I am glad that I decided to keep the production part of the study small. The focus was on the thinking and creative process behind character design; striving for quality over quantity seemed a natural decision.

Looking back at the character designs now I think that I could have exaggerated their features even more, especially when comparing the different styles that I tried to work in; to really push for more realistic proportions versus more exaggerated shapes and also pay more attention to the facial features. It feels like both styles pulled toward each other rather than apart from one another. It might have helped if I had actually compared the characters from both case studies while working with them, instead of focusing on one case study at the time.

Character design is a challenging and exciting process; how a character is perceived may vary from person to person, but there are many common conceptions and tools that character designers have used successfully for a long time. However, the participants' varied interpretations of my character designs show that a character can be very deceiving when judged only by their appearance. Adding further information such as value, colour and light can definitely re-enforce characteristics too. After all, it is only once a character begin to act that their personality is fully revealed, because - just like with Lotso in Toy Story 3 - not everything is always what it appears to be.
4 References

Articles


Books


Video

Hahn, Don 2009. *Waking Sleeping Beauty*. Walt Disney Studios Motion Pictures, USA.

Internet


Images

I 1 - The image is a comparison of two gorillas showing different body languages. Assembled by the author.
I 2 - Images of the protagonist and antagonist of *Uncharted 2*, developed by Naughty Dog. Assembled by the author.
I 3 - Images of Luigi and Mario and their evil twins Waluigi and Wario, developed by Nintendo. Assembled by the author.
I 4 - An assembly of images depicting a cotton plant, a steady rock and a thorny cactus. Assembled by the author.

I 5 - An assembly of characters that are based on a circular, square and triangular concept. Mario from Super Mario Bros (1985), Wreck-it Ralph from Wreck-it Ralph (2012) and Don Paolo from Professor Layton and the Curious Village (2007). Assembled by the author.

I 6 - A comparison of a pointy shape and a circle. Made by the author.

I 7 - A silhouette comparison of John Marston (Red Dead Redemption) and Woody (Toy Story). Assembled by the author.


I 9 - An assembly of pictures showing the silhouette of Guybrush Threepwood and LeChuck from Tales of Monkey Island developed by Telltale Games. Assembled by the author.

I 10 - An assembly of pictures showing the silhouettes of a playable and enemy character in Mini Ninjas developed by IO Interactive. Assembled by the author.


I 12 - An image depicting the silhouettes of characters from the animated movie Megamind produced by DreamWorks Animation. Assembled by the author.

I 13 - An assembly of images showing three of many characters in Red Dead Redemption, developed by Rockstar San Diego. Assembled by the author.

I 14 - An assembly of pictures showing the silhouettes of a number of characters in the animated movie Up, produced by Pixar Animation Studios. Assembled by the author.

I 15 - A comparison of Stitch's (the main protagonist in the animated movie Lilo & Stitch produced by Walt Disney Feature Animation) two different appearances


I 17 - Overview of a character design process pipeline. Created by the author.

I 18 - An assembly of three different characters from Team Fortress 2, developed by Valve Corporation. Assembled by the author.


I 20 - Gathered references for character 1A: A British soldier, the youngster Marty McFly from Back to the Future, a laid back dopey and Beetle Bailey. Assembled by the author.

I 21 - The final result of character 1A. Created by the author.
I 22 - Gathered references for character 2A: Napoleon, Arnold Schwarzenegger, a military officer outfit and a yelling corporal. Assembled by the author.

I 23 - The final result of character 2A. Created by the author.

I 24 - An assembly of different character faces from *The Walking Dead*, developed by TellTale Games. Assembled by the author.

I 25 - An assembly of different characters from *The Walking Dead*, developed by TellTale Games. Assembled by the author.

I 26 - Gathered references for character 1B: A gentle rough guy, a biker, Ferdinand the Bull and Edward Blom. Assembled by the author.

I 27 - The final result of character 1B. Created by the author.

I 28 - References for character 2B: Dr. House, a modern cowboy, Lee van Cleef and an authoritarian police officer. Assembled by the author.

I 29 - The final result of character 2B. Created by the author.
5 Glossary

Antagonist - The principal character in opposition to the protagonist or hero of a narrative or drama.

Character designer - A character designer design and develop characters for e.g. video games and animated movies.

Clean-up - A clean version of the drawing.

Concept art - Conceptual art.

FPS - First-Person Shooter. A game genre that puts the player in a first-person perspective and usually involves shooting down opponents.

Gameplay - The combination of features in a game which sum up the user input experience.

Idealization - The representation of something as ideal.

Immersion - To engage wholly or deeply; absorb.

Juxtapose - To place close together or side by side, especially for comparison or contrast.

Line art - A drawing made with lines only. It emphasizes form and outline over colour, shading and texture.

Moodboard - A collage or collation of images and text expressing a certain topic or subject, often used to generate ideas or for project work.

Napoleon-complex - An informal term describing a personality complex that consists of power trips and false machismo to make up for short height and feelings of inferiority.

Narrative - Story. A connection of events.

Pipeline - Work process. A system through which something is conducted.

Protagonist - The main character or hero in a drama or other literary.

Semi-realistic - Partly realistic.

Stylize - To restrict or make conform to a particular style.

 Thumbnails - Sketches that are small and rough; concise.

References:
www.urbandictionary.com 2013-06-03
www.thefreedictionary.com  2013-06-03
Appendix A - Moodboard for Team Fortress 2
Appendix B - Moodboard for *The Walking Dead*
Appendix C - The Survey

Welcome to my Character Design survey and thank you for participating!

What?
You will be asked to grade images of four different characters, in regards to your initial impression of their personality. You will also be asked to grade the style of a number of images, in regards to how realistic or cartoony they appear to you.

How?
Most of the questions are based on multiple choice (some allow multiple answers).

Why?
I am conducting this survey as part of a character design project on Gotland University, in order to obtain objective feedback for my reflective project report.

---

Which country are you from?

What is your gender?
Female or Male

Which age group are you in?
0-12, 13-20, 21-30, 31-40, 41-50, 51-60, 61-70, 70+
How would you rate the graphical style of the above image? 1 = very realistic and 5 = very cartoony/stylized

How would you rate the graphical style of the above image? 1 = very realistic and 5 = very cartoony/stylized
What is your overall impression of the above character: Is he good or evil?
Good or Evil

What personality traits would you associate the above character with? (Multiple answers are allowed)

- Authoritarian
- Cheerful
- Clumsy
- Dominant
- Evil
- Gentle
- Good
- Lazy
- Loud
- Passive
- Proud
- Quiet
- Selfish
- Sleepless

Is there any personality trait that you associate with the character, that is not among the options?

Why do you associate the character with these personality traits? (Multiple answers are allowed)

- Shape
- Pose
- Overall silhouette
- The details
- The face
What is your overall impression of the above character: Is he good or evil?
Good or Evil

What personality traits would you associate the above character with? (Multiple answers are allowed)

- Authoritarian
- Cheerful
- Clumsy
- Dominant
- Evil
- Gentle
- Good
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Is there any personality trait that you associate with the character, that is not among the options?

Why do you associate the character with these personality traits? (Multiple answers are allowed)

- Shape
- Pose
- Overall silhouette
- The details
- The face
How would you rate the graphical style of the above image? 1 = very realistic and 5 = very cartoony/stylized

0 1 2 3 4 5

How would you rate the graphical style of the above image? 1 = very realistic and 5 = very cartoony/stylized

0 1 2 3 4 5
What is your overall impression of the above character: Is he good or evil?
Good or Evil

What personality traits would you associate the above character with? (Multiple answers are allowed)

- Authoritarian
- Cheerful
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- Gentle
- Good
- Lazy
- Loud
- Passive
- Proud
- Quiet
- Selfish
- Sleepless

Is there any personality trait that you associate with the character, that is not among the options?

Why do you associate the character with these personality traits? (Multiple answers are allowed)

- Shape
- Pose
- Overall silhouette
- The details
- The face
What is your overall impression of the above character: Is he good or evil?
Good or Evil

What personality traits would you associate the above character with? (Multiple answers are allowed)

- Authoritarian
- Cheerful
- Clumsy
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- Shape
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- The face