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PSYCHOLOGY IN CHARACTER DESIGN

Creation of a Character Design Tool

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Tiivistelmä

Hahmosuunnittelussa usein unohdetaan hahmojen psykologisen puolen huomioonottaminen sen tärkeydestä huolimatta. Tämän opinnäytetyön tavoitteena oli tutkia ja todistaa psykologian konkreettiset hyödyt hahmosuunnittelutilanteissa. Tämän tutkimuksen pohjalta luotiin suunnittelu työkalu, joka edesauttaisi hahmojen mielensisäisten näkökulman huomioon ottamista.

Opinnäytetyö tutki olemassa olevia psykoanalyysiin sekä sosiaalipsykologiaan liittyviä teorioita sekä ilmiöitä. Nämä teoriat yhdistettiin hahmosuunnittelu tilanteisiin. Tutkimuksen pääteemoja olivat tietoinen ja tiedostamaton mieli, motivaatio, sisäinen konflikti sekä taustatarina. Opinnäytetyö myös esitti psykologian hyötyjä visuaaliseen suunnitteluun todistaakseen sen hyödyn sekä välttäen visuaalisen suunnittelun vähättelyä.

Opinnäytetyön tuote oli *Characterize* nimiset hahmosuunnittelu kortit, joiden tarkoitus oli antaa inspiraatiota sekä apua suunnitellessa hahmon psykologista profiilia. Korttien sisältö perustui psykologisen tutkimuksen pääteemoihin. Korttien ulkoasu oli onnistunut, ja sisältö viittasi oleellisempiin hahmosuunniteluun liittyviin psykologisiin aihesisiin. Testaustilanteessa kortit edesauttoivat käyttäjiään toimintakeskeisempään hahmosuunniteluun ja olivat helposti käytettäviä ilman laajaa psykologista tietämystä.

Resurssien ja ajan rajoitteet estivät kattavamman tutkimuksen hahmosuunnittelun eri osa-alueisiin. Lisäksi, kortit olisivat vaatineet enemmän tarkennettuja testaustilanteita, jotta korttien yleispätevä käyttö kaikilla hahmosuunnittelun osa-alueilla olisi todistettu paremmin. Tästä huolimatta, opinnäytetyön tuote sekä tutkimus onnistuivat generoimaan tärkeää tietoa psykologian ja hahmosuunnittelun yhteydestä.

Asiasanat

Hahmosuunnittelu, psykologia, design työkalu



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Abstract

The internal aspects of a character are often left with little attention despite of their importance in character design. The objective of this Thesis was to prove the relevance and benefits of psychology in character design. After presenting the proof of the relevance of psychology while creating characters, the result of the research was to produce a design tool that would enhance the consideration and understanding of internal aspects of a character.

The Thesis researched existing psychological theories from the fields of psychoanalysis and social psychology. Theories from these psychological areas were discussed and then connected to character design. The main themes discussed were the theory of unconscious, motivation, conflict and backstory. The Thesis also presented connections of psychology and appearance. This was to prove the benefit of psychology in the visual design and avoid discrediting the importance of visual elements of the character design process.

Thesis product design result was Characterize, a deck of cards meant to design aid and give inspiration in character design. The content of the cards was intended to be based on the most relevant psychological themes compiled in the research phase. The overall appearance of the product was successful and the content related to most relevant areas of psychology in character design. Characterize cards promoted more internally centered character design and proven when tested easily usable without extensive knowledge of psychology.

More time and resources would have been needed to conduct more inclusive discussion of all the areas of character design. In addition, the functionality of the cards needed more specific testing in order to ensure a proven successful usage in all areas of character design. Despite this, the final product and research managed to generate valuable information about the connection between psychology and character design.

Keywords

Character design, psychology, design tool

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1 INTRODUCTION

Character design is a very inclusive term and covers multiple instances of character making both in visual and written media. However, when thinking of character design, the common focus is usually the visual aspect. While making visually appealing characters is important, there is a risk of overlooking the other equally important half of character design; the mental world and story. There are moments when a character designer might show a beautiful picture of a character, but is unable to tell the observer who this character is.

A character might be pleasing to look at, but it is a fading trait. In order for the audience to feel a connection with the character, there must be something they can relate to. This thesis concentrates on finding and designing a solution to assist creatives in overcoming the lack of thought often given to a characters' internal design. The goal is to research and develop a design tool, which would aid in the process of creating a character's psychological profile and story. Specifically, the design tool is a deck of cards used as an inspiration and creative help, possible to use in all areas of character design.

The thesis strives to answer the main question, what are the benefits of a design tool that emphasizes the importance of psychology in character design? Subsidiary questions are, how does knowledge of psychology relate to successful character design and how does concentrating on the internal aspect of personality result in creating believable characters. The primary goal of this project is to determine if there is truly a need for such a design tool.

The thesis will first shortly present the theoretical lessons that any student of character design would learn. This covers an understanding of the basic processes involved in designing the visual appearance of a character and how to decern what the target demographic group of the product would understand by its appearance. The follow-up research will delve into psychological theories and inspect how they relate to the field of character design, if at all. In order to successfully argument the relation of psychology to character design and create a design tool that contributes in building the mental profile of a character, studying psychological theories is necessary. Since the research

and its conclusions are not meant to demean the importance of visual elements, research is done to find relations between them, along with the advantages that understanding and defining the internal aspects of a character can bring to visual design.

Once the background research is completed it is necessary to compile this theoretical knowledge of psychology in order to decide on the cards contents. Based on everything learned during the research phase the author expects to have the basic substance of the cards. In order to aid in the design of a product specifically targeted towards educational use, questionnaires and testing of prototypes were carried out on the demographic group (students). The testing of the cards happens in the last part of the research, at a point when most of the theoretical research is completed.

The greatest risk to this research and its documentation is the size of the character design field. The field spans through multiple Medias and is very situation based, so accurately representing all the fields in the research will be a challenge. There is a danger that the design tool will be difficult to prove functional in all areas of character design. There is also the possibility that the research might prove the need for the design tool obsolete. Whatever the case, the results will provide valuable knowledge on the possible importance of psychology within the field of character design.

2 BASICS OF CHARACTER DESIGN

At its core, character design is a process where an original, new character is created for the purpose of book, film, television, animation, video game, comic book or other media. Stories are perceived through the characters as they act as a window for the audience to experience countless worlds and events. In other words, characters need to have a connection with the audience, in order to evoke emotion and investment in the story. An unpleasing character can be alienating to the audience. To truly create stories that will stick with the audience, a writer or designer must have the knowledge to design believable and pleasing characters (Ballon 2009, 2). This is why good character design is essential in both written and visual media.

To develop a character design tool for educational purpose, it is important to understand what character design is and what methods of approach are often taught to students. There are key concepts routinely applied in order to help give both the visual and internal sides of a character depth. The same guidelines and tips have been repeated in countless books, school lessons and online blogs. They are very basic but important things to keep in mind.

2.1 Demographic and application

The first thing to ascertain in the character design process is *whom* is the character for. It is very important to have a clear understanding of the audience based on one's work. For example, a video game with themes of gore and horror is not suitable for children who are learning to read. A demographic group can be determined by different criteria such as age, gender, faith, interests or socioeconomic status. A product aimed at children is very different from a product meant for adults, or a product aimed for people who enjoy football rather than ballet. The demographic gives a designer a direction and context on how to work when making a character.

Characters designed for small children are often colorful, made from basic shapes and make use of exaggerated facial expressions, showing clear changes in their mood, behavior and social interaction (Tillman 2011, 104–109.) This is because children are unable to process complex visual or linguistic information. Simple character design optimizes the information necessary at the processing ability of a small child, thus making the character enjoyable for the demographic. However, these kinds of characters and interactions are not necessarily the most fulfilling experience for adults. The older the demographic, the more information can be processed about a character.

Since adults are often able to understand elaborate relationships, discern large amounts of dialogue and interpret nonverbal cues, their characters can be visually and behaviorally more complex. This is not often a black and white principle however for example animations targeting across wide demographics often use the so called *12 principles of animation* introduced by Disney animators Ollie Johnston and Frank Thomas in 1981 (Appendix 1). The

principles are ways of enhancing the exaggeration of movement, visuals and expressions in order to appear pleasing and lifelike to viewers of all ages. Character design is very bound to the situation it is produced for and it is important to understand the context of the design, not only the demographic.

A vital consideration is the medium the character is going to appear, or really what is it made for; the application or target media. Each project has its own style and purpose, and it is important that character designs are optimized for their intended purpose (Bancroft 2006, 154). In an interview with animated film director graduate and character designer Simo Ruotsalainen (2017), when asked about his working methods, he stated that "The restrictions define the outline in which you start your iterations."

In the case of computer games for example, this includes knowing which platform the character is going to be used and which genre the character belongs to. Platforms give restrictions to visual traits, since a heavily detailed character would be confusing on small phone screens but would look fine on a large computer screen. The reason the character is made also guides the complexity of a character's internal aspects. A character in a simple mobile game which is mostly stationary, only reacting occasionally to give feedback to the player does not need the most complex of backstory. In contrast a story following characters in a sprawling drama requires internal depth.

2.2 Silhouette and shape

Aesthetics or the appearance of the character often comes into play very early in the character design process. Appearance has a heavy impact on how the character is perceived by the audience in all products were visuals are an integral part. For example in novels illustrating a characters appearance is not of significance since they do not usually represent this information through visual elements. Instead the author will use words to describe the characters outward appearance and personality to the reader and so creating a visual image within their mind. In this way, it is necessary for the writer to think about the character's appearance but not to render it in image form. The thesis will return to discuss the relationship of visual and internal aspects in depth in the fourth chapter.

Even more important than the visual look of the character, a designer needs to think how the character will *stand out* in a world filled with a great deal of existing characters. Designing recognizable characters often starts with the process of silhouetting as demonstrated in figure 1. In the silhouetting process an artist will make flat, black shadows or silhouettes of the characters to see how distinct they are from other companion characters without any details or color (Tillman 2011, 75). This is a helpful tool to use very early on in the design process, when a designer has to make many variations of a design fast. A successful character should be recognizable from their silhouette alone. The silhouette will also help to determine how interesting a character is to look at. If the basic shape itself draws attention, chances are so will the finished character.



Figure 1. Character silhouettes (Nieminen 2017)

Shapes contribute in a large part to the overall feel of a character. It is important to know the underlying symbolism associated with different basic shapes (Figure 2). Circles for example are perceived as being friendly and non-threatening, due to their lack of sharp edges. They also project a feeling of completion and unity. Squares are considered stable and solid shapes. They have wide sides, are symmetrical and are hard to push over. This is why squares evoke the feeling of security, trust and order. Triangles by comparison are sharp and active shapes, and can easily be unstable. Triangles are often connected to action, aggression and energy. (Tillman 2011, 68).

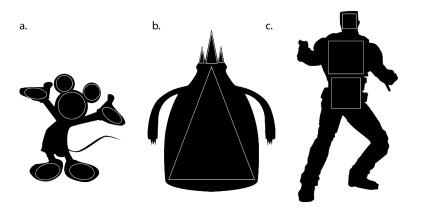


Figure 2. Silhouette and shape relation study of existing characters (Nieminen 2017)

Shapes can also overturn their initial impression. For example, a triangle can appear stable while laying on one of its sides, but then become unstable if it then balances on one of its points (Figure 3). In the same way the position and stance of a shape can have a great impact on the impression drawn from a character. In addition, contrast in the sizes of shapes used can bring forth very interesting designs. It is common and logical to stack smaller shapes on top of larger ones, to create balance and stability. Changing this order can make the design more dynamic and therefore a character more interesting, as shown in Figure 3 (Bancroft 2006, 36).

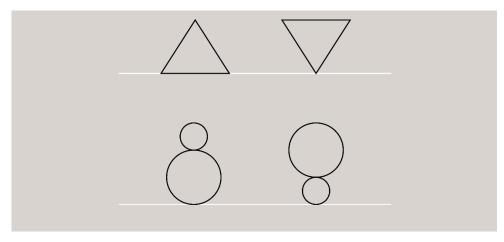


Figure 3. Example of different stances and positions of shapes (Nieminen 2017)

The fact that humans make almost automatic first impression based on something as simple as shapes, can be exploited in character design. This is why it is so important to *subvert conventions*, a term used by Chris Solarski (2012) in the book *Drawing Basics and Video Game Art*. A character's appearance can form one expectation and then breaking it in realty. A character constructed with friendly round shapes that is revealed as a villain goes against the expectation. This subversion makes the character

memorable because it is undermining the first impression. An example of this phenomenon is the enemy character in the game Portal, a terrifying and ruthless artificial intelligence named GLaDOS depicted in Figure 4. Rather than having sharp, mechanical and aggressive shapes in her design, her form has many smoothly running curves and round shapes. These soft and feminine shapes accentuate the contrast with her terrifying and sociopathic personality. (Solarski 2012, 184–186).



Figure 4. GLaDOS from Portal 2 (Valve Corporation 2011)

There are also some concrete technical advantages to using basic geometric shapes in the design process. Defining the basic underlying shapes of a character help a designer to keep the character visually consistent (Figure 5). Sometimes multiple people have to draw the same character within a production pipeline, with each person having to make it identical every time. Being able to break a design into smaller parts and rearrange them enables usage of different angles and poses without going off model (Bancroft 2006, 28). In a complex character drawing environment, like an animation production, it is vital that the character can be drawn quickly even in complex positions.

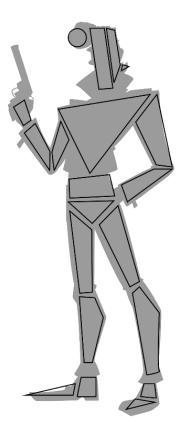


Figure 5. Character design broken into simple shapes (Nieminen 2017)

2.3 Grayscaling and colour

Before adding colours to the character model, some designers prefer to visualize the character first only in grayscale (Figure 6). It is a way of defining the tonal values and contrast levels before using colours. Grayscaling is a key to combat problems with colour vision abnormalities, or those who have difficulty differentiating between characters or versions of a character solely based on colour. In this early stage it is easy to also see faults in the design and change them. If the only contrast within a character design is based on colour, this may lead to issues in reading character traits or abilities.



Figure 6. Character grayscale example (Nieminen 2017)

Grayscaling is also a reassurance when trying to assure the successfulness of a design. The fewer elements used to make a character distinctive, the more likely it is to achieve a pleasing and coherent end result. Simplicity of form is often a sign of a successful character model. This does not however mean a designer can get lazy, as simplicity is often very difficult to achieve, regardless of the demographic or genre. There is a fine line between knowing when to stop adding things to you character and not adding enough, ultimately the designer aims to achieve the perfect balance (Tillman 2011, 120).

Colour is a very interesting element in design due to its varying nature. Colour is usually described by three dimensions; hue, chroma and value. The colour name is called a hue. The value is the lightness or darkness of the colour. The lighter values are called tints and darker values are called shades (Figure 7). Chroma, is the intensity of the colour, often referred to in terms of saturation or its level of colourfulness in comparison to its monochromatic tonal value. (Herman & Punekar.)



Figure 7. Colour wheel with lighter tints and darker shades (Nieminen 2017)

Colours are very important in projecting a character's personality; primarily based on the cultural symbolisms associated with them and secondly on aesthetic reasons. By changing the saturation, shade or tint of a hue, the perception of a colour can have drastic changes (Chapman 2010). The process of picking the right colour scheme for a character is done through the use of colour models (Figure 8). A colour model consist of a basic model or inked outlines of the character, which have clear areas to fill with different flat colours without shading. (Bancroft 2006, 142). This model provides a foundation allowing for the fast process of swapping colours to find the perfect match for the desired projected personality.



Figure 8. Different character colour schemes (Nieminen 2017)

When making colour models it is important to remember the underlying associated meanings of colours. Colour interpretations can differ between individual to individual and across cultures, however, there are common colour connections associated with certain colour symbolism. Colours like red, orange and yellow are seen universally as warm, passionate, energetic and aggressive. On the other side of the spectrum blue, green and turquoise are viewed as cool, calming and melancholic colours (Bear 2017). A colour scheme alone can have a dramatic effect on the look and feel of a character (Figure 8). In addition, the selected colours have to harmonise to make an aesthetically pleasing whole for the viewer to look at. Small details of strong colours are good visual focal points and can give hints on the character as a person. For example, in Figure 9, the dominant white colour would normally imply of purity and innocence, but the splashes of bright red amidst of the white depict a passionate and aggressive side, which makes them stand out as focal points from the design.



Figure 9. Finished character design (Nieminen 2017)

2.4 Personality

Ideally, a character's personality should be projected through their appearance. A timid character might stand in a closed off posture, were as a hero would appear to stand in a dynamic and strong stance next to them (Figure 10). Every visual element ties back to the personality of a character. All previously mentioned aesthetic elements, like colour and shapes, play a large part in forming the character's look and feel (Figure 9). By using brighter, more aggressive colours the viewer will form an opinion of a character before they have even spoken a single word. Appearance is sometimes vital to a design, especially in the case of video games, as it provides visual shorthand of vital information to the characters' role, distinguishing the villains and heroes.



Figure 10. Perceiving personality through appearance (Nieminen 2017)

A character should be a whole of visual appearance and internal aspects. Well-drawn visuals can have an important role in the initial impression of the audience, but if the character does not offer anything other than a pleasing exterior, the viewer's interest will fade. In order to keep the character likable and memorable, a designer must also consider how the character moves, speaks and interacts with other character. Body language, facial expressions and even voice all play a large part in conveying the social impressions of the

character (Isbister 2006, 135). To convey these impressions, it is important to understand the reasons for their actions through their psychology.

3 CHARACTER DESIGN AND PSYCHOLOGY

Characters are created for various different media, both visual and written. From the countless characters that exist, some are more memorable than others. There are characters that have resonated with us, who have made us feel their emotions and portrayed aspects of ourselves within themselves. This is because these characters display all the attributes of a real person.

Example of a character Joel from the game *The Last of Us* by Naughty Dog released in 2013 (Figure 11). He is a man who was years ago traumatized by his daughter's death. This leads him to becoming a distant and bad tempered man with nothing to lose, working dangerous jobs in the post-apocalyptic, disease ravaged world. He is tasked to escort an immune girl roughly his late daughter's age named Ellie, to rebels in order to find a cure for the disease. At first, Joel's motive is to protect Ellie as the means to save the world. But as the pair spends time together, Joel ultimately has the courage to open up and becomes a caring father figure to Ellie. Ultimately when faced with a threat of losing Ellie like his daughter, Joel is ready to sacrifice the whole of humanity just to spare Ellie. Joel behavior and actions all root to his past life's turning point. In order to prevent this trauma from repeating, his actions might not always be the right ones, but they are human.



Figure 11. Joel from The Last of Us. (Naughty Dog, 2013)

"Characters aren't created in a vacuum; they enter your story with a history, a personality, character traits, and excess baggage, just as you enter relationships with your own past life experiences and your personality traits", writes Rachel Ballon, Ph.D. of psychology in her book *Breathing life into your characters; how to give your characters emotional and psychological depth* (Ballon 2009, 26). Creating an internally complex character requires the designer to examine themselves and their own life and mind.

3.1 Defining research scope

To successfully produce a design product that helps in the creation of a character from the perspective of the inside out, a study of psychology was needed in order to know what the cards should contain. It is vital to discern the concepts that contribute to successfully creating strong characters. Without an internal world, a character is just an empty shell. There is nothing for the viewer to feel if there are no emotions and nothing to care about within a character, the viewer lacks motivation to empathise. Characters are the conduit of feelings and experiences for the audience. If the audience cannot relate to the character, they will not care for their story either. This is why it is important to get the audience to engage emotionally with the characters they follow, by invoking empathy and emotions.

Research into the field of psychology is important in order to understand the concepts on which the internal landscape of strong characters are created. However, the field of psychology is immensely vast and divided into many schools of thought, therefore in this study the author limited their research scope to the most prominent fields of psychology, psychoanalysis and social psychology (Figure 12). Psychoanalysis focuses on the individual as a character personality. Social psychology focuses on the interaction between characters, but also takes into consideration the audience's reactions to a group of characters.

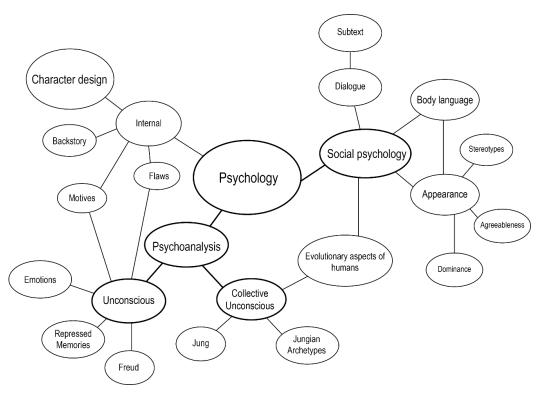


Figure 12. Mindmap defining the research scope (Nieminen 2017)

Many terms link the fields of psychology and character design, as visualized in Figure 12, furthermore many basic character design elements root themselves in psychological theories. By researching these theories, the author developed a deeper understanding of these areas in relation to character design and why they are important. As many psychological theories and researches have been considered valid for many years and are still widely agreed upon, the largest issue to the author was if their age brought their current relevance into question. This factor is why it is important to understand and mention any criticisms concerning them in current research.

3.2 The unconscious

According to the founder of psychoanalysis Sigmund Freud, the unconscious is a place where the sexual urges, emotions and repressed memories reside. Even though people are rarely aware of the unconscious mind, it affects their decision making and behaviour. Aspects of personality, such as fear of failure or bad habits, are protective measures acted out by the unconscious mind against negative experiences and memories. After experienced humiliating failure, the unconscious mind remembers this and effects limitations to one's actions so as to prevent the experience being repeated.

Character design springs from the creator. Emotions and personalities should come from an actual place, an expression of the real-life experiences of the creator. By utilizing tangible feelings and experiences, the overall story will feel more real to the audience. This is made possible by tapping into the unconscious mind, into the memories that hide inside the mind. By delving into this deeper region of the mind, a designer can bring forth rich and unique emotional material. Exploring the repressed side of the mind can be an intimidating thought for some, yet creators who can move past the dread often are ones who create the most multifaceted of characters. (Ballon 2009, 70.)

All characters live inside their own creator, the good and the bad. This is why a creator must learn to recognize the reasoning behind their behaviour. This understanding of the cause and effect and relating actions of a character, enables consistency and creates depth in a character's realistic behaviour. By being honest about their own self, a designer is able to use this well of emotional understanding to create deep and rich characters. When a character has this depth that sprang from its creator, the audience can relate with the character more deeply (Ballon 2009, 71).

3.2.1 Collective unconscious

Freud's student, a Swiss psychologist and psychoanalyst Carl Gustav Jung mostly agreed on his mentor's theory of the unconscious. He also believed that the psyche is made up with countless interactions of the ego and personal unconscious. The ego or conscious mind is comprised of the aspects a person is aware of, such as memories and emotions. It also plays the biggest part in our feeling of identity, or how we perceive ourselves. (McLeod 2014.) Ego in effect is the tangible elements of ourselves that we can describe and tell others about.

Jung divided the unconscious into two parts. The first is the personal unconscious, which is formed from repressed memories, experiences and forgotten thoughts, similar to Freud's theory. The elements of the personal unconscious form so called complexes, which are individually varying collections of thoughts, feelings and emotions that spark often-uncontrolled

reactions to certain stimuli. An unexplained negative reaction might stem from a childhood memory, which may not be actively remembered anymore. The more elements a complex has in itself, the more it affects an individual.

The second part of the unconscious, which separated Jung from Freud, is the collective unconscious. It houses the information and memories of evolution of the whole human species, which are present within the individual from birth. The collective unconscious contains the aspects of personalities and the human condition that reflect the nature of humanity as a species, those that are present across cultures and seen in our stories, literature, movies and art (Ballon 2009, 13). The collective unconscious explains how stories from across the world often have similarities in their characters, such as the villain or the hero. These similar character types are known as the *Jungian Archetypes*.

3.2.2 Jungian Archetypes

The Jungian archetypes originate from Jung's theory of the collective unconscious. The archetypes are generalized character roles that are recognized in stories across cultures. Even if Jung's other theories are now debated, the Archetypes have become an essential foundation when creating characters and stories. This is shown by its common inclusion in study material about character design, which can have a whole chapter dedicated to the study of archetypes (Tillman 2011, 11–23).

The four major archetypes of the psyche according to Jung are the self, the shadow, the anima or animus and the persona. The self is the person's conscious and unconscious mind unified; this serves as the hero of the story. The Shadow is a representation of our deepest desires and aggression, a side society has taught us to repress. Hiding the shadow part of us enables us to adapt to the rules and expectations of our own society. However, when the shadow overtakes a person, they will start acting against the rules and follow their deep and dark needs. The shadow in the story is often the villain embodying the evil and undesirable actions, which the hero tries to repress, resist and stop. Anima, the feminine and animus the masculine are the trueself, rather than the person we show to others. In stories they are often

recognized as the love interest, evoker of emotion or sexual desire. The last major archetype is the persona, which is the mask a person wears in different social situations, the change in behaviour according to the scene. (Frager & Fadiman 2005.)

Even though Jung defined these four as the major archetypes, he suggested the existence of countless more archetypes within his work (Cherry, 2006). There are multiple roles that have a defined set of behaviours and purposes associated with them, each of which are utilized whenever one is needed. Upon analysis it is easy to recognize characters from amongst the long lists of archetypes that exist, such as the wallflower, critic or rebel. These archetypes are in themselves a helpful guide when creating a character's personality.

A clear example of archetypal characters in action is the Ratchet and Clank movie. In the film *the hero* Ratchet (Figure 13b) must embark on a mission to stop *the shadow*, in this case the evil chairman Drek (Figure 13a). On his journey Ratchet meets Captain Qwark (Figure 13c), who is seduced to the shadow side and creates trouble for Ratchet, hampering his mission. In this example Qwark takes the archetypal role of *the fool*; an escalator of problematic situations and an inconvenience to the hero. This archetype plays a role in determining the personalities of other characters involved in the story, based on their behaviour towards them. In the end, Ratchet forgives Qwark, which speaks volumes about Ratchet's righteous personality. Chairman Drek however, in working with a mad scientist called Dr. Nefarious, is eventually betrayed when the Doctor misleads him for his own more destructive ends. Dr. Nefarious in this case represents the archetype of *the Trickster*; a character driven by selfish goals and a force for change in the story.



Figure 13.a. Drek, b. Ratchet and c. Qwark (Insomniac Games Inc 2017)

In modern media, archetypes do not necessarily need to fit the characters. Breaking the expectations of an archetype can create very unique creations. An example is the television series character Dexter, a hero, a shadow and on occasion a trickster (Figure 14). He demonstrates how a character can also have multiple archetypes. This can create a more complex and interesting internal world, but can also result in confusion if not used carefully. Problems arise in situations, where a character goes against their initial behaviour and past experiences without any sort of reasoning given for it. That is why it is important to always be aware of the character's final role within its intended use.



Figure 14. Dexter (Showtime Networks Inc., 2017)

3.3 Motivation

Humans have a reason for their actions. It can be something as simple as satisfying a hunger, or more complex as in the case of affecting one's future on a larger scale through studying or progressing in one's career. This reasoning is called *motive*. A motive is a need or desire that makes a person take action (Ballon 2009, 37). Motivation's roots can be found within the past of a character and is the reason for action. It is the driving force for putting the character in motion.

One of the most basic explanations for motivation is the need structure as described by the psychologist Abraham Maslow. In his studies, Maslow wanted to find the motive behind human behaviour and created the list of needs he believed controlled human behaviour. (McLeod 2016.) This became known as Maslow's hierarchy of needs. It shows how a person can move on to addressing the higher needs only when the lower ones have already been fulfilled. Maslow never visualized the needs in the form of a pyramid, a figure that has been added later to clearly demonstrate the order of progression (Figure 15).

On the bottom tier there are the physiological needs, the essentials of human survival, such as access to nutrition or oxygen. Next there is safety, the need for shelter and to feel safe in the environment; the first psychological imperative. The third tier is the need for love and belonging; the feeling of connecting with other people, of love and of finding social interaction. Once this need has been fulfilled, people move on to the esteem need, this manifests itself as a need to stand out from the group and to be respected by others. The final tier is that of the self-actualization need, where a person wants to maximize their potential and to feel like they are doing the things they were meant to do. (Maslow 1943.)

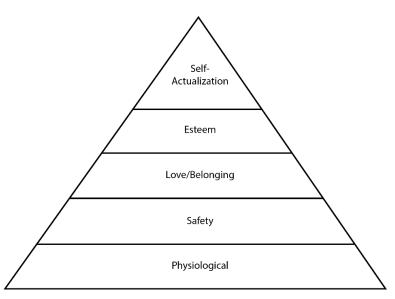


Figure 15. Maslow's hierarchy of needs visualized in a pyramid (Nieminen 2017)

Maslow's theory has been criticized for its lack of research into the general validity of the hierarchy of needs for all humans. However, Maslow's hierarchy can be a very useful starting point when thinking about the motive driving a character. It gives a foundation to use when considering the motivation of a character depending on their situation within a story. A lonely character would seek to access the belonging tier, whereas a survivor on a deserted island would seek for the most basics of essentials like food. A character's motivation is based on the desire to fulfil a need. It is easier to start delving deeper into a character's motivations and behaviour when their end point is defined leaving only how they will proceed to obtain it to be planned.

A character can have two types of motivation for their action, internal and external. Internal motivation is based on the person's own need for action, their feelings and emotions. It is what the character personally feels is necessary to achieve. This links to the external motivation, the tangible way the character will satisfy their internal need. Without the internal need, a character cannot have an external need. For example, a character who falls in love with another character wants to fulfil their internal motivation of finding love by obtaining the external motivation, the love interest (Ballon 2009, 39).

Motivation is the driving force behind a character's actions, it also dictates the actions and reactions the character will show in different situations. A character engages in an activity that would assist them in achieving their goals

and shun others that would obstruct them. This is how motivation keeps a character "in character". In understanding their motivation an audience also gains a glimpse into the character's personality, as portrayed by the methods the character employs in achieving their goals. Two characters that both wish to have more influence over a situation can have a drastically different approach to achieving that. One may make themselves liked by others and strive to be a better person in their community, the other may use force in order to gain respect and fear to control everyone else. The same motive can have completely opposite effects to the storyline depending on the character.

Motivation can create greater complexity in a character. A villain who has acted evilly throughout a story is generally regarded as a dislikable person. But if it turns out the villain has done all that they have in order to save or protect their loved ones for example, the initial feelings of the audience are bound to become conflicted. This makes the character not only multidimensional but also memorable, since they have evoked a large variety of emotions in the audience. Motive is a vital component to include when designing a character if a designer wishes to get the audience invested in the story. If a character does not appear to care about anything, the audience will not invest in caring about them.

3.4 Conflict and flaw

No memorable character is perfect by nature. Characters have their flaws, bad habits and conflicts that actively force them to change and grow. As much a character needs a motive to begin their journey, they also need conflict as it acts as the strongest force for change in a character; how does the character react to difficulty in their journey? How does the challenge change their values or motivation? The journey to resolve a conflict can have a significant effect on who the character is by the end of the story. This will involve the reader or viewer, and create feelings of empathy and concern for the character (Ballon 2009, 67).

There are three types of conflicts a character can battle with. Man against nature conflict is a situation where a person is confronted by a catastrophe they usually did not cause themselves. This can be a natural disaster or other

similar cataclysm. The second conflict is man against man. This ranges in severity from conflict between friends or family, to sides in war or the traditional fight of good versus evil. The third conflict is that of man against himself. It is a battle a character fights against addiction, change in themselves or societal response to an external conflict. (Ballon 2009, 132–137.) These are broad categories that house multiple possibilities, the kind of challenges a character must go against and who they must try to contest.

The reaction a character displays in the face of conflict also portrays their mental world very effectively. There are countless different ways to deal with conflict. The mechanisms might be learned from past experiences or forced upon an individual in order to make sense of a traumatic event. People might deny things that have negatively affected them, blame others by projecting their own negative traits on to them, compensate for their mistakes with perfectionism or try to undo them through reimbursement. Sometimes people turn to addiction as an escape or try to find solace in menial activities, which might eventually make the situation worse. Regardless of the mechanism we use, it is in human nature to try to find a way to understand things that happen in our lives and find order in chaos.

These mechanisms apply to characters too. When presented by an obstacle, it is important to consider how the character would respond to it. What mechanism would they use to restore balance to their life? A mechanism is not necessarily the solution to a conflict, since some mechanisms can be harmful in a long run. Responses shown as a result of a negative situation are another method of providing depth to a character and showing who they are.

A flaw in a character is what makes them feel believable to the audience. It is impossible to relate to a person who is perfect. Inventing a flaw for a character is often even encouraged. In the Dungeons & Dragons Player's Handbook by Wizards of the Coast (2014), there is a dedicated sections for inventing a flaw for the character a player is creating (Wizards of the Coast 2014, 127–141). A flaw in a character is a personal aspect that can have substantial consequences to their self-image and to the world they reside in. It is something that stands in the way of a character finding resolution. Only when

a character can come to terms with their negative side, can they fulfill their motivation.

A flaw can create conflict in a story without external forces, by requiring characters to fight against their own fatal flaws. Tragedies often end in a character failing and succumbing to their fate, however the conflict of man against himself does not necessarily have to end badly. A character's fight against their own demons can also end in victory. In any case, there always needs to be visible change apparent in the character, to show how they either better themselves or destroy themselves. Removing a character's flaw without showing the journey they went through to get rid of it can appear lazy and rushed to the audience.

3.5 Backstory

Character's motives, flaws and behavioural models can be traced to their past, or their backstory. Backstory is a collection of events preceding the plot of the story, affecting the characters as the story unfolds. The experiences of the past sculpt the human behaviour in the future, in both a good and bad sense. For example, a character that was bitten by an animal as a child, will be scared of that animal in the future. Their behaviour changes drastically in response to the situation they are put in due to the experience in their past. They act nervous and avoid being close to the animal. However, there has to be a cause and effect on character's behaviour. If the audience is aware of a character's trauma, and the character does not react any differently regardless, the character becomes unconvincing. If it is told that the character was helped to get over said fear, then their lack of fear becomes understandable.

Past events can also affect a character subconsciously, for example, a character might be unable to hold a steady relationship. In truth, this can be due to their low self-esteem and defensive nature. Like people, characters might not always be aware of the true reason for their problems, until they reflect on past events. Delving into the backstory will enable the understanding of a character's behaviour. (Ballon 2006, 27.) If a villainous character is revealed to have a tragic backstory that shaped their current

personality, the audience will feel sympathy for them. The character has thus gained depth and become more memorable.

Mystery in a character's backstory keeps the audience invested in the story. Through a character's story, the audience can recognize the same experiences they have had in their lives. This causes the character to seem more believable. The audience will follow the character's adventures in the hope of getting to know more about them. (Tillman 2011, 28.) This need to follow a story is due to the completion principle or need for cognitive closure. People want to gain resolution in the world in order to feel in control. The need for cognitive closure was researched by Arie W. Kruglanski and Donna M. Webster in 1996. According to them "The need for cognitive closure refers to individuals' desire for a firm answer to a question and an aversion toward ambiguity." (A.W. Kruglanski, D.M. Webster 1996, 264).

The same phenomenon was investigated by the psychologist Bluma Zeigarnik in a research paper published in 1927. Zeigarnik observed that waiters seemed to remember customers whose orders were unfinished better than ones who had paid and gone. Her research showed, that starting a task creates tension that leads to the will to resolve (Zeigarnik 1927, 7). This became known as the Zeigarnik effect; people remember unfinished tasks better than ones completed. This effect can also be applied to characters, since the audience will actively think about a character with an unfinished story rather than one that has already been resolved.

These psychological effects of cognitive closure and the Zeigarnik effect explain the benefits of slowly revealing the secrets and past stories of your character. The audience will feel compelled to complete the puzzle of the character and thus remember them better than a character with no backstory at all. However, the designer also needs to maintain a balance in how much and how fast information about the character is revealed. Keeping the audience yearning for answers too long can create frustration. Furthermore, too much of mystery and ambiguity can also fail to give a fulfilling resolve to expectations which have grown within the audiences in the absence of constraints.

A good example of this is the indie game series Five Nights at Freddy's, first instalment published in 2014 by Scott Cawthon, where the player acts as the night guard of a children's pizza restaurant. During the night, the animatronic puppets meant for entertainment, spontaneously come to life and the player must stop them from getting into their office and survive the night, five times in a row. This simple game with a very basic premise quickly grew into an internet phenomenon, with every new instalment of the game giving more and more hints to the story behind the pizza restaurant's hidden secrets, filled with murder, paranormal entities and conspiracies. The Internet quickly swarmed with people trying to put these small story pieces together in order to figure out the secrets, since the creator Cawthon never gave too much away. The game explicitly states only a few selected facts, and the rest are revealed as the player moves through levels filled with hidden cryptic messages. The clues opened doors leading towards one conclusion, yet never closed the door on others possibilities. The desire in people to find out the truth, or reach a satisfying conclusion, kept the game in people's minds and relevant with every new sequel for two years.

There is a flip side to the mystery of *Five Nights at Freddy's*. In 2015, a book called *Five Nights at Freddy's*: *Silver Eyes* written by Cawthon and Kira Breed-Wrisley was released as a re-imaging of the story, answering many of the questions the games had left open. The book received a poor reception, partially because fans of the games were disappointed when confronted with the true story in the form the book presented it. With all the theories and different stories each player had identified as their version of "the truth", the first intended canonical story that the creator had in mind was unable to live up to the expectations of the audience.

4 CONNECTION BETWEEN VISUALS AND PSYCHOLOGY

Theories about psychology in character design might seem to better apply to written characters, since it is easier to delve into a character's internal world in literature through the use of internal dialogue and narration. Nevertheless, there are visual ways of utilizing psychological profiling in character design. The viewer's first impression of a character is made in seven to twelve

seconds (Ballon 2009, XX). This is why it is important that a character's appearance signals their personality and role from the outset, or at least the personality that the designer wants to be initially perceived.

The design tool cards are meant to be multifunctional in usage, for both visual and written media. For this reason it is important to research how inner psychology can affect the outward appearance of a character and whether it is possible to give a character depth, even if their internal world is not explicitly examined. Appearance alone can visualize a character's personality and mental state. This chapter will take a look at psychological research and theories, which demonstrate the connection between our internal world and our appearance.

4.1 Colour psychology

It is beneficial for a designer to delve deeper into some of the research and tests that have been made on the psychological effects of colour. Choosing a colour palette when creating a character is vital, not only in order to produce a pleasing aesthetic, but also how it will influence the viewing audience. Jung himself was quoted as saying "colours are the mother tongue of the subconscious." Since colours can evoke an instant reaction in an audience, it is useful for a designer to understand colour theory and symbolism (Gloth 2012).

The research of colour is a science in itself and psychologists are constantly involved in researching the effects of colour. However, the absolute validity of all published results in the field of colour psychology is extremely hard to prove. Nevertheless, many theories have recurring conclusions, which provides a level of validity to the two theories presented here. These examples of colour research investigating the unconscious effect colour has on us are the Lüscher colour test by Dr. Max Lüscher (1969) and the research done by Andrew J. Elliot (2008).

Lücher suggests that our perception of colour is objective but our preference is subjective. In the test subjects were asked to pick colours they prefer and from this their colour choices used to predict what kind of a person they are.

This would mean that people reveal themselves unconsciously thought colour, without interference from conscious choices. The Lücher test showed a correlation between the test subject's personality and the generally received meanings of colours. However, the test is criticized for its generalization and its actual ability to measure personality as an outcome of preference in test subjects, as they might have selected colours due to unrelated reasons, such as the colours of their favourite sports team. (Sircus 2015).

Andrew J. Elliot researched the effect the colour red has on humans. In a test, men were asked to compare two women, one wearing red clothes and another wearing different colours like blue or green. In his research, Elliot found that women who wore red were perceived as being more attractive by heterosexual men (Elliot & Niesta, 2008, 1160). Regardless of criticisms of the validity of the research done by Lücher and Elliot, it is notable that the results of these tests correlate with the general meanings associated with colours, as red corresponds to a passionate and warm personality. In the end, colours do have an effect on people, even if the effect can vary from individual to individual.

It is also important to always keep in mind the cultural differences in the symbolism of colour. For example white is a colour associated with purity, peace and innocence in the west, however in many Asian cultures white is the colour of death and mourning (Colour Psychology, 2017). A study by Ralph Hupka in 1997 examined colour associations and moods involving participants from Germany, Mexico, Poland, Russia, and the United States. The researchers did find some consistencies, including the fact that all nations associated red and black with anger. However, only Polish people associated purple with both anger and jealousy and only Germans associated jealousy with yellow. (Hupka, Zaleski, Otto, Reidl, Tarabrina 1997, 165.)

4.2 First impression and stereotypes

Humans draw conclusions within very first seconds of seeing a person. Based on the initial impression, humans will describe another person's personality even before they have spoken to them. For this reason it is important to examine what impressions are drawn from the first moments of observing a

person. With the small window of time given to drawing a first impression, we use our experiences and previously learned opinions to draw an impression of a person in order to rule our behaviour towards them. People draw these cues from gender, race, clothing, body language. These conclusions are also done through the behaviour patterns of a society and also through stereotypes.

Stereotypes are specific thoughts and expectations drawn from individuals or actions. Stereotype as a word has a negative connotation to itself. It is often used in relation to hateful or bigoted incidents. However, as a psychological concept stereotypes have a purpose. At their core, they are psychological tools enabling the quick assessment of other people, so that there is no need to assess each person from scratch every time we meet a new individual. It reduces the amount of mental effort required but also makes social situations more predictable. It also makes it easier for us to control what others will most likely think about us personally, and answer accordingly.

The negativity associated with stereotypes comes from what first thoughts we have adopted. (Isbister 2006, 12.) If a situation is remembered as negative from past experience, this causes negative behaviour in the future if the situation repeats itself. Some stereotypes have also created to degrade different groups of people by age, nationalities or gender. It is never acceptable to use negative stereotypes in character design and it is vital to break demeaning or insulting stereotypes.

Making a character that has some traits that go against the initial impressions is a powerful way of creating memorable characters through subverting expectations. In these cases it is important to think what would be expected from them and *why* this characters actions do not reflect their appearance and expected behaviour. (Isbister 2006, 15.) For this reason it is valuable to understand the impression certain aesthetic traits can give, in order to successfully go against them.

4.3 Nonverbal communication

The physical appearance and behaviour of a character mirror their inner world. There are always connections between physical appearance, internal

perception and psychological behaviour. The way a character carries themselves, how they dress and visibly react to different stimuli gives the audience valuable hints to the character's personality without it being explicitly stated. These external clues are a way to communicate emotions and thoughts with others and people adjust their behaviour to these non-verbal cues accordingly.

Humans are very perceptive at reading these cues based on other people's external appearance. This is derived from the evolutionary need to determine someone by their *agreeableness* and *dominance*. Agreeableness represents the level of social receptiveness a person portrays or how friendly they are toward us. Low agreeableness insinuates that the person is a threat. It is important to remember that agreeableness is culturally dependant. However, common signs humans interpret as agreeable, and by that approachable, are the smile, an energetic voice and a relaxed presence. Low agreeableness is often interpreted from an angry expression and stiff stance.

Dominance tells how much higher a person is in the social hierarchy. This can be portrayed by permanent and controllable cues. Permanent cues are things like age, family, health or wealth. Controllable cues are most of the physical traits like body, face or voice. (Isbister 2006, 27-34.)

4.3.1 Body language

The external impressions we project determine how those around us perceive our personality. If a person often stands in a closed posture and glances around them constantly, this person may be seen as being insecure. In contrast a person who stands up straight, taking up space around themselves gives an impression of a confident and dominant personality. (Figure 16). Small ticks like shrugging, tapping fingers or whistling speak volumes about a character's personality but also can project a temporary mood.

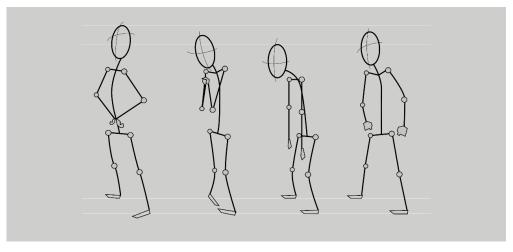


Figure 16. Example of body language relating to the perceived personality and mood (Nieminen 2017)

Physical reactions and changes in different situations also enable the character to feel more lifelike. Therefore knowing a character's personality aids in accurately predicting what their reaction to a situation would be. What would make a confident character insecure or what would cause a smiling and happy character to be gloomy. In Media where it is not an option to internally reflect characters' emotional states through writing, the audience needs to see how the characters are feeling. Since we as a species have developed ways to interpret social situations by visual cues, a character must give the audience something to read from.

Body language and nonverbal clues are also important in written media. A character's mood can be stated, as plainly as "she was feeling happy/angry/sad. However this is a rather unimaginative approach. Instead it is advisable to describe the character's nonverbal behaviour, for example writing how a character is glaring, smiling or has their look directed to the ground, as these are behaviours that express a character's mood without blatantly stating it. (Ballon 2009, 221.)

4.3.2 Appearance

External appearance relates to nonverbal communication in many ways. Age, clothes, hair and body type work as effective ways to portray a character. The appearance serves a character's personality but also the story they are in, their role should be visible. Appearance should also reflect their choice of actions, on how they obtain their goals in life, or as to what motivates them.

When appearance serves this purpose it relates to the rule of *form following function*. It is the rule of thumb by which aspects of the character's appearance have a reason to exist. The form of a character serves a purpose.

The psychologist and physician Dr. William H. Shelldon described how personality could be linked to a person's body type. Shelldon divided body types in to three groups; endomorph, mesomorph and ectomorph (Figure 17). (Ballon 2009, 219.) The endomorph is a round and soft body type, often perceived as pleasing and approachable. A person of the endomorph type might be seen as fun loving, pleasant and life-loving. A mesomorph is a muscular body type, angular and strong, perceived as heroic and powerful. Lastly, the ectomorph is defined by a delicate body type; thin and fragile. This body type can invoke sympathy and protective feelings. The morphs have a lot in common with the symbolism associated with shapes. A round body type is a circle, which is perceived as a non-threatening. A muscular and angular mesomorph body translates to squares, which are seen as stable, trustworthy and strong. This parallel offers proof of how the basic design of a character can have deeper connections to the overall personality.

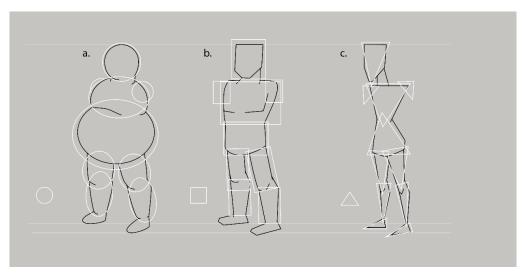


Figure 17. Relation of shapes and body types (Nieminen 2017)

The appearance of a character not only informs the observer about their personality and place in the world, but it can be used to affect the audience. External looks alone are enough to lead a viewer to conclusions. An example of how appearance can affect the impressions of others is demonstrated by the halo effect first described by psychologist Edvard Thorndike in 1920. People tend to attribute attractive people with positive traits based on their

look alone (Isbister 2006, 7). This leads to describing individuals we perceive as attractive as being more social, intelligent or kinder. On the other hand displeasing looks drive us to draw negative traits to the person. Therefore it is important for a designer to consider this when it will affect the first impression the character gives to an audience.

Appearance can also be a root to creating complex characters, by creating a contradiction between the physical appearance and character's emotional world. Does the character show emotions outside but feels something else inside? Like people, characters have two sides to their personality, a personal self and a public self. The public self is what we chose to show to the outside world. It is also how we want people to see us. We often alter our public self-depending on the social situation we are in, for example we might act differently with close friends than in a serious work meeting. On the other hand, the private self is the emotional world that reveals itself only to the outer world through our behaviour, sometimes unconsciously. (Ballon 2009, 220.) Making these two sides clash with one and other, can create a powerful tension in a character.

4.4 Dialogue and subtext

Visible reactions and nonverbal clues are important to reveal a character's personality without need for written words or exposition. However, it is important to remember that not all communication is nonverbal. Dialogue can be delivered in various ways and can have multiple hidden meanings; spoken words contribute to the external character development as much as body language and appearance. Regardless of this fact nonverbal communication is often given much more attention than verbal.

This is evident by the often misinterpreted 55% - 38% - 7% rule. This rule derives from a study conducted by the professor emeritus of psychology Albert Mehrabian in 1981, where he researched the inconsistency of communication. In his research, he observed that in a situation, where someone says one thing but mean something else we tend to take clues of the actual message, 55 percent comes from the body language and 38

percent from the tone of voice. Only 7 percent of the full message is received from words.

The 7% rule is one of the most misinterpreted theories, since Mehrabian himself has stated, how this equation only applies accurately when someone is talking about their *likings or feelings*. In other cases, this equation does not have any proof of applying (Mehrabian 1981). So, even if a large amount of communication can happen nonverbally, it is important not to dismiss the importance of spoken words. It is more appropriate to think of nonverbal and verbal communication contributing equally to the messages delivered.

Words and voice work together to deliver messages that inform us of feelings, thoughts and opinions. Different tones, speeds, pitches and ranges of voice can express a lot about a person's emotional state, even if the words are not understood. These are the *paralinguistic cues*, information conveyed not by words but by voice and vocal patterns. (Isbister 2006, 184.) A good example of the power of paralinguistic cues is *The Sims* games. In these games the playable characters or Sims speak an incomprehensible "language" Simlish, but the player is still able to understand their changing emotional states just by the vocal patterns.

The combination of words and voice are needed to receive a complete message with understandable meaning and enabling conversation or actions to occur. Even with the understanding that a person is sad or happy by their tone, it is their words that tell *why* they are feeling these things. Combining words and voice is vital when reflecting the personality of a character. An arrogant character would use words that are confident and dominant, in contrast a timid character would use self-demeaning words, or have a quiet or stuttering voice.

Subtext in dialogue is another way to see a person's internal world through speech. Subtext refers to the hidden meaning of spoken words. Meaning can sometimes be obvious to recognize, however words can contradict the tone of voice they are spoken in, signaling that the words do not portray the actual message being sent. This is a very clear way of depicting an internal struggle. Subtext can also be subtler, for example by telling a person that one prefers

being single, they might conclude that they are being warned not to get too serious about the informer. An important rule of creating dialogue is that it should only be used to further the story or reveal some aspect of the character. (Ballon 2009, 225.)

5 PRODUCTION OF DESIGN TOOL

At the start of the research and production process it was vital for the author to establish the areas that required close study. The author then set out to visualize how these different areas were interconnected to each other. By understanding these connections, it was easier to define a limit to the research, confining the author's work only to relevant topics.

The contextual study of the production and research concentrated on three theoretical areas. The theoretical scope focused on research and study of psychology, character design and design tools. Having established the scope the author could conduct the research by targeting the intersecting areas. These defined how the theoretical areas related to one and other and gave a framework for developing and testing the content for the product. (Figure 18.)

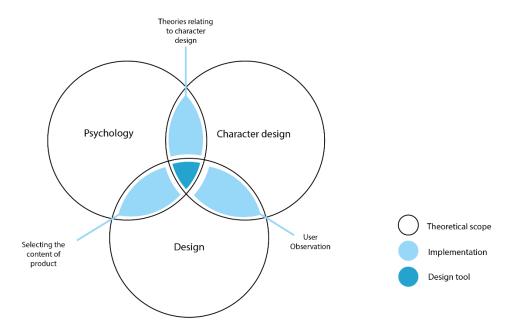


Figure 18. Framework of research and production (Nieminen 2017)

The framework limited the design and implementation to three categories. The function of the product, the content and the appearance. The content was gathered by doing theoretical research in psychology and then limited by testing and working with the demographic group. The function would be relating to this, since with testing any faults or mistakes would be noticed and removed or replaced in later iterations. Since the cards rely heavily on the text content, the appearance of the cards would be last category to consider, yet very necessary in order to create a production ready proof of concept.

5.1 Inspiration and reference

The working title of the product was chosen to be *Characterize*, which was used when referring to the product. The inspiration for making a design tool based on a set of cards came from an inspiration tool called Oblique Strategies. Created by Brian Eno and Peter Schmidt in 1975, it is a deck of 7 x 9 cm cards that contain random sentences, questions and words (Appendix 2). The purpose of the deck is to help an artist to overcome creative blocks and find ways of thinking outside the box. In an interview with Jarvis Cocker on BBC Radio (2010), Eno told how he and Schmidt both had a habit of writing things down that they wanted to remember in a creative situation.

Eno and Schmidt had noticed that their notes apparently lacked the element of surprise. In response they tried writing things on cards, so that they would grab a random idea that did not necessary correspond with the least disruptive solution. (Eno, 2010.) The cards were developed from both a sonic and visual perspective, since Eno is a musician and Schmidt an artist, however they have proved helpful in every creative field. This is due to the cryptic nature of the phrases presented on each of the cards.

During the author's research for an initial artistic approach, *The Equinox Tarot* by artist Robin Scott (2015) provided a valuable inspiration representing the simple style the Characterize deck is looking for. *The Equinox Tarot* is a simple, black and white deck depicting the tarot cards stylishly through surreal images (Figure 19). The text and numbers associated with tarot cards are small and minimalistic. Since the Characterize cards strive to depict the trigger words on the cards in a discreet way while portraying their meaning, the

Equinox Tarot was an excellent reference of how this can be done successfully.

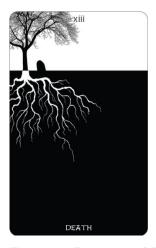






Figure 19. Examples of Equinox Tarot (Scott 2015)

Another influence was found in the video game *Reigns* (2016) by Devolver Digital. In this case the example related to the vector art style of the cards (Figure 20). In *Reigns*, the player progresses through generations of kings during gameplay, flipping through cards that provide different choices and opportunities to balance resources, so determining how many years each king reigns. While the game's mechanics and idea do not relate directly to the character design cards, their art style was a source of ideas for the finished design of the product, notably the obvious vectors and very minimalistic colour palette were very inspiring.



Figure 20. Screenshot from the game Reigns (GHI Media LLC, 2017)

5.2 Choosing the content

With the psychological research done, the content of the cards was chosen. This was the most vital part of the production, since the whole essence of the product is based on the words every card would have. This process relied heavily on the psychological research done prior to the physical production. From the start it was decided that the cards would be divided in to categories that would define different psychological parts of a character.

The methodology of category division was questioned in the initial design phase. When thinking of the multi-dimensional development of a character based upon Jungian archetypes, the attributes of a character would not be categorized at all. Having things labeled as weaknesses or strengths would have the possibility of being limiting and unimaginative, since anything can be perceived as a strength or a weakness. For example, a strong sense of responsibility can be a heroic characteristic or can lead to negative outcomes. However, it was considered that removing categories would only go against the design by making it too unfocused, and not teach anything. If a user had too much freedom, the focus on learning would disappear.

Three areas stood out prominently in the research of psychology and in its relation to character design. First was motivation, since it is the driving force behind getting characters into action. It creates a goal to achieve and forces the character to find methods of achieving their goal. The second area is that of the flaw. There is a need for an aspect that hinders a character's journey, but offers an obstacle to conquer and enables their growth. Finally the third area is the backstory. A character's past affects their future. It is important to know who a character is and where they have come from in order to understand their reactions and action. An additional fourth category of emotion was included after the first three. It was chosen based on the outcome of social psychology research. Emotions provide a basis for a character's appearance and behavioural patterns, and they contribute to what the audience perceive externally.

These became the four foundation categories of the Characterize cards. Each category was then designed to contain six individual cards depicting a word

and visuals that would relate to that category. Multiple words were generated from which six were selected, each clearly differing from the others, easy to understand but remaining unrestrictive enough that they could be used in any character design situation. The initial word list was used to generate the prototype, which was later tested with a group from the target demographic.

5.3 Testing and prototyping

To get a sense of how the cards would be used in context, user testing was carried out at different phases. The initial phase was to test an existing product, the Oblique Strategies, with the target users. As an inspiration for the product, it was important to see how a general inspirational tool was used and then see in what way a more specific form for use in character design, could be highlighted.

The next phase entailed creating a questionnaire for students to fill in. The questionnaire focused on the psychological side of character design and aimed to see what results and answers the sample group would give. Based on the answers, the categories and content of the cards could be modified based on recurring answers. This phase helped to create a prototype of the cards and test them, allowing the author to see how they functioned in use and what needed to be improved or changed.

After the third testing phase, the production could move on to the creation of artwork and the finalization of the card design resulting in a product fit for publication. This final phase would define the production method of the cards, the typographic style of text and art style of the images.

5.3.1 Testing the Oblique Strategies

Since the Oblique Strategies card deck played a large part in influencing the character design cards, it was important to first see how useful they would be in such a character design situation. A sketching club, formed by game design students was selected as the test group. Students were the ideal group to test with, since the final product is aimed at being used by them. The size of group at the club is not regular and on the occasion the testing was run there were

approximately six participants. During the session, they were tasked to design characters based on the sentences and words provided by the cards

There was no limit on how many cards a student could use during their process. The characters sketched could be humanoids or creatures. The students could work with whatever techniques they were most comfortable with, but were encouraged to take a creative approach in deciding what to draw. This testing was not heavily controlled, since it was more of an observational situation were a student group demonstrated how they utilized an inspirational tool. It was to be expected that the students would use the phrases on the cards literally, and apply them visually to the end design.

The results were as the author had expected, with cards taken as concrete guidance as to the appearance of the character sketched. For example a card with a phrase "gardening, not architecture" resulted in a student sketching a foliage monster destroying a building. Other students produced similar characters. However, there was an interesting deviation when one student did not implement the card to the look of the drawing, but used it as their reference to their way of working. Rather than designing a character to look different, they used a different way to approach working.

The vague phrases employed by the Oblique Strategies cards and minimal restrictions given to the user enabled multipurpose usage. The character design cards would strive to have a similar ability to work for different areas of Media, yet the purpose needs to be limited to the discipline of character design. Ultimately, the test situation showed that Oblique Strategies were too ambiguous to limit such a design situation. Oblique Strategies are there to encourage one to find creative solutions in art and stop people from being on autopilot, the Characterize cards however want to reinforce remembering important building blocks in character design. They can give inspiration, but their main function is to ensure that the internal elements of the character are considered in the design process. The need for clearer instructions strengthened the design choice for having the cards divided into categories.

5.3.2 Questionnaire

It was important to the author to map out the intended demographic group's understanding of the psychological development of a character. It was also necessary to find out how familiar they were with the concept of creating a profile encapsulating the internal aspects of their character. This data would provide justification for the necessity of offering students a product that would encourage the consideration of psychology in character design. For this reason a questionnaire was created to acquire the needed data from students.

The questionnaire was developed to cover the larger psychological themes, but simplified down to fit the specific needs of the character design student. The focus was concentrated on the larger themes of motive, internal and external personality, and flaw (Appendix 3). These themes were considered the most important puzzle pieces in creating a fully rounded character personality profile based on prelimanry research. At the same time the questionnaire was kept simple so the sample student group could understand it without an extensive understanding of psychology.

Students were asked to answer the questionnaire using their own already created character or a character from an existing product, such as a movie, a book or a game as reference. The first part was dedicated to describing a character by their external appearance and to write a short description of the character's past. The second part focused on the characters motivations, both internal and external based on Maslow's model of basic needs. The third part concentrated on Jungian archetypes and their character's public and personal self. The fourth asked about the flaws and conflict in the character's life. Finally questions were asked regarding whether the students had found the questions difficult and did they create a personality profile currently while designing their characters. This final group of questions was to establish how familiar students are with considering a character through psychology.

Analysis of the answers given showed that students intertwine their design work between considerations of personality and appearance of a character. This means that their characters portray personality predominately in a visual way. This is why for many participants the easiest parts of the questionnaire

were those relating to appearance and basic personality. The often hardest part according to the answers was to answer the question *why* a character does the things they do. Another difficult area was pinpointing the conflict in a character. This suggests that students only have a shallow knowledge of their characters, not yet knowing them at a deeper level. This is due to the fact that many personality aspects, like motivation and flaws are not things they have consider consciously. The brain processes large quantities of information about other people; more than the conscious mind could handle, due to this fact, humans act in a certain way towards people without necessarily being able to explain why they do it.

According to the data gathered from the questionnaire it appears that the use of a design tool would encourage greater consideration of cause and effect in designing a character's personality. There is also potential to make deeper psychological design a permanent part of the character design process through the habitual use of such cards. Therefore as a design criterion the cards must be simple enough to use but have the potential to deepen the character design process through repeated use. Ultimately a student would remember the usage of the cards even without physically having them.

5.3.3 Prototype testing

After selecting the content of the cards based on the outcomes of the questionnaire and earlier testing with the Oblique Strategies, a prototype was created (Appendix 4). The author then returned to the original test group of students to conduct more research. This test group had 10 participants. The purpose of this session was to investigate if the cards worked with a relatively small number of restrictions. It was also used to uncover any problems with the content of the cards.

In the prototype, different categories were divided into colour groups. Green symbolized emotion, blue motivation and red flaw. The category names were written on the back of the cards. Black cards contained questions used to answer unresolved aspects of the character's identity, thus encouraging narrative design for example asking *where* or *when*. One word questions would limit the issue of restriction, because a student could answer the

questions as freely as they perceived. For example, they could answer where a character is from originally or where they live currently.

Again the participants were given very few restrictions in terms of interpretation and execution, they could choose any style they felt comfortable with and create any kind of humanoid or creature. The cards are not meant to innovate new working methods or styles, rather to add thinking patterns to existing skills. Cards were chosen randomly from the known categories. Participants could also choose to take multiple cards, however all of what they took needed to be visible in the final design. Again the generated results were much as expected, with concrete visualization of the card words represented in the design. This meant that the cards did encourage the users to create characters that portray their inner personality.

The largest problem pointed out, was that a word such as *fear* was both in the emotion and flaw category. This resulted in having to find a replacement for the flaw card. Another issue that was considered was whether to change certain words that could have been too difficult to understand. However, it was reasoned that this problem would be resolved with the inclusion of visuals on the cards. The most interesting point made by the test group was that the cards drove them towards more action oriented design than character design. When asked to specify what they understood by character design; they primarily focused on the visual side. This comment made clear that the cards did force the users to think about a character's actions rather than just the appearance, which was a positive result.

The cards were modified according to the problems found during the prototype testing. Another issue was that while each student used an online picture of the prototype they lacked the ability to flip the cards around and chose them at random. To get around this issue they used a dice to introduce some level of randomness. This gave a design idea to the author, if each card was numbered from 1-6 in their category. It would allow the use of the cards online.

5.4 Appearance

The appearance of the cards was of low priority, since the substance of the cards is the key factor. The cards should work regardless of the images on them. This is why testing the very simplistic prototype was in higher priority in the research. However, designing appearance of the cards and finishing at least some of the cards as proof of concept was scheduled in the production. This is why as testing was ongoing, preliminary idealization was done at the same time.

Selecting the size of the cards needed some research into other playing card dimensions. During research the bridge playing card size, the most common card size at approximately 5, 8 x 8, 9 cm, was first considered. This size proved to be too small for the intended use of the product. The cards needed to hold both visuals and text, without feeling too cramped and retaining the simplistic style. Selecting too small a size would mean the perceived quality of the cards would suffer, so for this reason playing card size would not work.

The next size considered was that of the standard tarot card, which is 6, 9 x 12 cm. This size seemed more suitable for the intended use, since there are parallels with tarot cards being based on using often-intricate visuals with minimal to no text. This size was considered ideal for the project, especially with the use of abstract imagery common to both sets of cards. By using the template of a tarot card size, the final dimensions of the character design cards was set at 7.3×11.9 cm, with the image size fitting an area of 6.3×10.9 cm within a surrounding 0.5 cm frame (Figure 21). The size proved to be comfortable to handle by for users while allowing enough space for images and text.

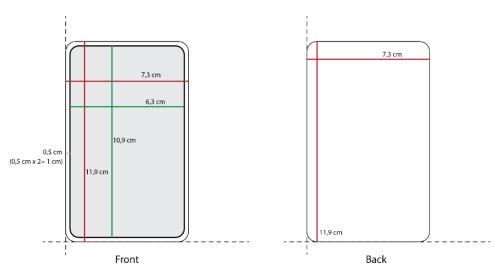


Figure 21. Card size template (Nieminen 2017)

Influenced by the tarot card size, the author researched the art styles common to this media in order to understand the use of layout, illustrative style and typography. Specifically attention was focused on occult tarot cards. Tarot cards have been produced by many different artists from the traditional 15th century style to modern minimalistic surrealistic interpretations. Research into possible inspirational works and art styles was made in order to have a clearer sense of the style that the author felt would fit the purpose of the cards.

Having decided that the cards needed a simplistic and clean art style, vector art was selected as the method of achieving this, since vector graphics enable very clean and symmetrical results. The author selected to work in Adobe Illustrator CC, as it is the industry standard vector art tool, and was the most familiar program to the author.

The backs of the cards have a unified design associating each with one of the four card categories; *motivation*, *flaw*, *emotion* and *question*. Each category having a unified look would be easily distinguishable from the other categories. The images on the front present individual content corresponding with the word prompt on each card, with a frame around the images implemented to prevent the face of the card from feeling too cramped. The frame also provided design continuity across the deck, as a unifying element on the front of all cards even if the images are different.

The first approach used emulated a cartoony asymmetrical style. The cards were intended to be black and white with one contrast colour. The style took

inspiration largely from the black and white theme of the Equinox tarot (Figure 22). However this style was rejected quickly as it was found unfocused and inconsistent. It did not meet the desired standards for a product aimed at publication. A review of working method was researched for a style that fitted the product and production methods better.

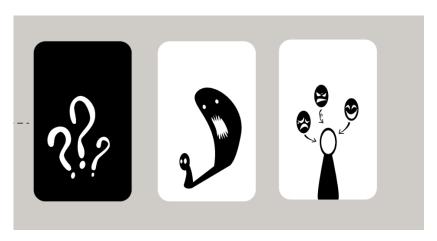


Figure 22. Examples of rejected first art style (Nieminen 2017)

The second approach and ultimately final style was inspired by information graphics. This style is intended to convey large quantities of complex information through simple images. The greatest inspiration to the author was found in the YouTube series *Kurzgesagt – In a Nutshell*, an informative show about science, space and world affairs. The show uses a similar infographic style to that desired for the product (Appendix 5), and proved to be a fitting and stylish influence for the cards, with its focus on symmetry and minimalistic images. Having established the style a very polished result was achieved quite easily and quickly due in part to the author's familiarity with the software and vector art in general.

5.5 Final product

The Characterize deck contains 24 cards, divided in four categories; motivation, flaw, question and emotion (Appendix 7). Each category has six cards. The front faces of the cards follow a restricted colour scheme, using a colour palette of white, black, blue, green, red and yellow, in different shades and tints. The text depicting the directional word takes approximately ¼ of the card face. The image on the card depicts the word written on the card. (Figure 23.) The image is created using vector graphics. There is a number either on

the top or the bottom of the front side of the card, depending on the illustration. This is for a situation, where the card are not possible to flip over as printouts. The number enables the using of randomization by using a single six-sided die. (Figure 23.)

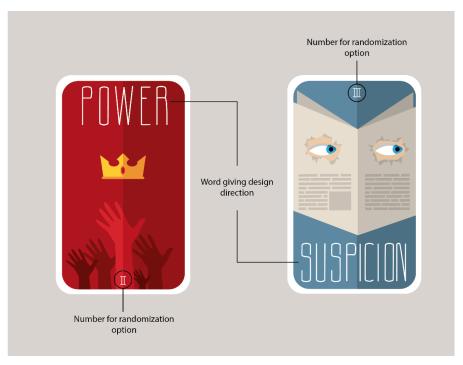


Figure 23. Front side example of the cards (Nieminen 2017)

The back face of the card has an image depicting the category. The name of the category is depicted at the top or bottom of the card in a smaller font size. (Figure 24.) The back face images enable clear differentiation between categories. The colour scheme of the back correlates with the selected brand colour scheme of the Characterize cards (Appendix 6).

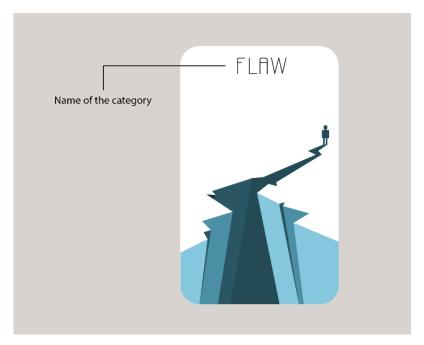


Figure 24. Back face example of the cards (Nieminen 2017)

The cards have multiple ways of being used as it was the designer's intent that they be utilized in various character design situations. The user can pick out a random card from the whole deck or specifically from categories. In this way the user can control the amount of randomization, use them as inspiration or use them to tackle specific problems. Further instructions are included along with the cards (Appendix 8).

6 CONCLUSION

The research of the Thesis and product development were successful within the constraints and the timeframe of the production. This Thesis did manage to address the relevant themes of character design and relating psychology. The Thesis also managed to present a connection between psychology and character design. The relevance of the product was proven based on testing and the data collected, as the users commented that the product encouraged them to think more about the actions of a character rather than only visual design.

Character design is an area that is a hard subject to cover in the length of this Thesis and was highlighted as a risk to the research. Examples and subject discussed were successfully kept generalized to be relevant in multiple areas of character design. However, there still was lacking an all-encompassing

representation of all areas of character design. More extensive research and documentation would be needed to create a comprehensive research of the subject.

Overall, the visual design of cards was successful and met the expectations of the author. All the cards were also finished in time, which exceeded the expectations of the production. Testing the product prototype had very small testing groups, which impacts the final products general functionality. However, all participants of testing were part of the intended demographic and product was tested on the relevant individuals. The testing could have been done on more specific areas of character design to prove the functionality of the product in all areas of character design. Despite this, the product and the research in this thesis managed to generate valuable information of psychology and character design, and establish a connection between them.

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12 principles of animation

Squash and Stretch: Sense of flex, substance and weight.

Timing and Motion: Speed of animation relating to amount of frames, fewer frames the faster the movement.

Anticipation: Preparing audience for action, preliminary action before the main action.

Staging: Directing audience's attention, present important points **Follow through and Overlapping action:** Smaller parts of character continue moving after initial movement has stopped. Body parts move at different times.

Straight ahead/Pose-to Pose Action: Drawing frame to frame to the end/drawing key frames and filling the gaps after.

Slow In and Out: Movement is slower in the end of action, faster while executing action.

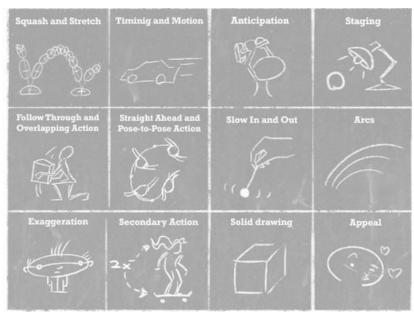
Arcs: Natural movement follows arcs, mechanical movement flows straight lines. The faster the movement, the straighter the arc.

Exaggeration: Used to prevent the static real life imitation. Bring real life movement to extremer forms.

Secondary action: Adding to main action, for example hair moves as a person walks.

Solid Drawing: Understanding volume, weight, shadows and three dimensional space of a drawing.

Appeal: Character's charisma, making the character real and interesting.



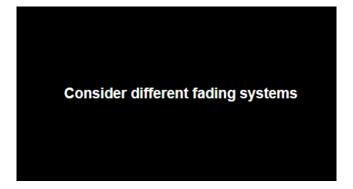
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Psychological Character Biography

"There is always a cause and effect in everything we do, dictated by our values, motives and flaws, shaped by our past experiences"

I'm making my bachelor's thesis about the research of prevalence and importance of psychology in character design.

For this questionnaire, think about your own character you've created on your free time or at school. If you don't have a character, think about your favorite character in any media you want (movie, book, comic, TV etc.). Answer then the following questions with your character of choice. Try to think about the character from the inside out. Is there something that happened in their past that rules their behavior today? How do they respond to conflict situations? What is their most damning flaw?

Use as much time as you need. There's no minimum or maximum length for your written answers.

NOTE

This questionnaire is meant as reference material only. People participating are not mentioned by name, none of the answers are published without permission and none of the character information is referred explicitly. The answers are used to generate data which is referred in broad terms as generalization to make a point and to help design the final product.

Only section 6 answers are mandatory to return! You are not obligated to show the other answers if you don't feel comfortable sharing this information about your character.

Thank you <3

- Marika

1. The Basics

1.	1.1. `	Your name	
2.	1.2. `	Your Character's Name	
3.	1.3.	Short Backstory (Memories, traumas, fam	ily ties, the turning point in their past)
4.	1.4.	Physical Appearance (Short description)	

22.3.2017		Psychological Character Biography
	5.	1.5. Social status (e.g. race, nationality, engagement on activities/other people)
	6.	1.6. Emotional world (Base personality, short description)
2	2.	Motivation & Need
	7.	2.1. Internal Motivation (e.g. Power, Happiness, Love)
	8.	2.2. External Motivation (e.g. A way to obtain happiness, a love interest)
	9.	2.3. Need (Choose one) Merkitse vain yksi soikio.
		Psychological Need (Sustain life itself; food, shelter, clothing)
		Safety and Security Needs (Obtaining and sustaining freedom from physical harm)
		Affiliation Needs (Belonging, part of a group, sharing physical closeness with others)
		Esteem Needs (Recognition, standing out from a group)
		Self-Actualization Needs (Maximizing potential, doing what you are meant for)

10.	2.4. Obtaining strategies (How does your character achieve their motiv
11.	2.5. What does your character hold in high regard? (What are their val
	, , , , , , , , , , , , , , , , , , , ,
3.	Personality
	-
12.	3.1. Archetypal roles (Choose 1 - 2) Valitse kaikki sopivat vaihtoehdot.
	Mentor
	Spoiled
	☐ Waliflower
	Rebel
	Rescuer (of others)
	Warrior (saves the day)
	Shadow (the evil side)
	Femme fatale
	Hunk
	Fool (escalator, mischievous)
	Perfectionist
	Critic (never satisfied)
	Judge (evaluating others)
	Vulnerable (easily harmed)
	Victim (needs protection)
	Dictator
	Martyr
	Pygmalion (changer of others)
	Witch (cold, aggressive)
	Madonna (pure, motherly figure)
13	3.2. Are they
	Merkitse vain yksi soikio.

e (Behaves according pe (Behaves according pe (Behaves according type (Behaves	g to logic and and g to instinct and g ng to senses and nat the character	gut feeling) d their own pleasu r hides from oth e	ers)
pe (Behaves according to the (Behaves according type (g to logic and and g to instinct and g ng to senses and nat the character	gut feeling) d their own pleasu r hides from oth e	ers)
pe (Behaves according type (Behaves according type (Behaves according Private self like? (WI	y to instinct and g	gut feeling) d their own pleasu r hides from oth e	ers)
type (Behaves according type (Behaves according type (WI)) Public self like? (Wheel) Conflicts e fitting ones)	ng to senses and	d their own pleasu	ers)
Private self like? (WI Public self like? (Wh Conflicts e fitting ones)	nat the character	r hides from othe	ers)
Public self like? (Wh			
Conflicts e fitting ones)	at the character	shows to others	;)
Conflicts e fitting ones)	at the character	shows to others	5)
Conflicts e fitting ones)	at the character	shows to others	5)
Conflicts e fitting ones)	at the character	shows to others	;)
Conflicts e fitting ones)	at the character	shows to others	5)
e fitting ones)			
n			
	(e.g. war socia	ıl isolation, natu	ral catast
flict of your character	,ga., 50010		
flict of your character	,gai, 500ia		
flict of your characte	,gai, 500ia		
ıí		(0.9, 0.0	

	Psychological Character Biography					
19	19. 4.3. Internal conflict of your character (e.g. fear of dying, addiction, survival)					
20	0. 4.4. When faced with conflict					
_	Merkitse vain yksi soikio.					
	Fight (Physical violence, verbal abuse)					
	Flight (Quit, leaving, ignoring, apathy, drugs, self-harm)					
21	4.5. Defense Mechanism in Conflict Merkitse vain yksi soikio.					
	Compensation (Hiding both real and imagined flaws with perfectionism)					
	Conversion (Conflict manifesting as a physical or mental disability)					
	Denial (Denying a conflict, concentrating in less stressful activities instead)					
	Identification (Loss of self, identification with more powerful individuals) Projection (Putting personal unaccepted and undesired traits into other people)					
	Repression (Excluding a memory or an event from consciousness)					
	Suppression (Consciously preventing acting upon feelings and impulses)					
	Undoing (Making things up with e.g. gifts and acts of kindness)					
	Sublimation (Channeling unacceptable feelings to socially acceptable activities)					
	Compulsive-obsessive behaviours (Coping mechanism through repetitive actions and behavior)					
	Rationalization (Making excuses for other people and self)					
	Addiction (Short relief from frustration, leading to self-destruction)					
22. 4.6. Why this Mechanism?						
	a. 4.0. Wily una mediamani:					
_	F: 10 (: (W) (: (-))					
Э.	Final Questions (Most important)					
23	3. 5.1. Was it easy or hard for you to think about these aspects of your character? Why?					

	Psychological Character Biography
24.	5.2. Which part or parts of this questionnaire were the easiest?
25.	5.3. Which part or parts were the most challenging?
26.	5.4. While designing characters, do you start with the appearance or writing your character's psychological profile and backstory? Why?
27	5.5. Do you think the mental world of a character is important?
21.	5.5. Do you think the mental world of a character is important?

Google Forms

Save	Survive	Sacrifice	Return
Acquire	Protect	Fear	Loneliness
Anger	Worry	Jealousy	Power
Sadness	Joy	Anger	Disgust
Fear	Surprise	How?	What?
Who?	Why?	When?	Where?

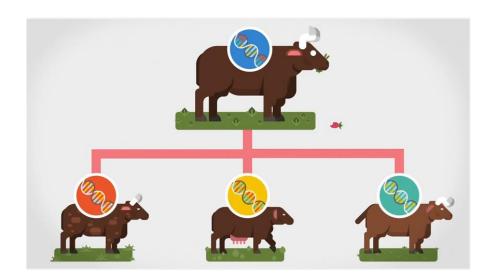


Figure 15. Art style inspiration example. What Is Life? Is Death Real? Kurzgesagt – In a Nutshell. Screenshot. 11 December 2014. Available at:

https://www.youtube.com/watch?v=QOCaacO8wus [Accessed 21.3.2017].

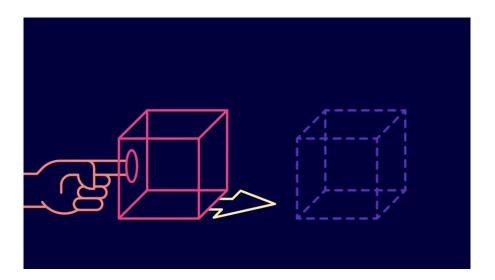


Figure 16. Art style inspiration example. Why Earth Is A Prison And How To Escape It? Kurzgesagt – In a Nutshell. Screenshot. 11 December 2014. Available at:

https://www.youtube.com/watch?v=RVMZxH1TIIQ [Accessed 21.3.2017].



Figure 17. Art style inspiration example. Safe and Sorry – Terrorism And Mass Surveillance. Kurzgesagt – In a Nutshell. Screenshot. 11 December 2014. Available at: https://www.youtube.com/watch?v=V9_PjdU3Mpo&t [Accessed 21.3.2017].



Figure 18. Art style inspiration example. Why Earth Is A Prison And How To Escape It? Kurzgesagt – In a Nutshell. Screenshot. 11 December 2014. Available at: https://www.youtube.com/watch?v=RVMZxH1TIIQ [Accessed 21.3.2017].

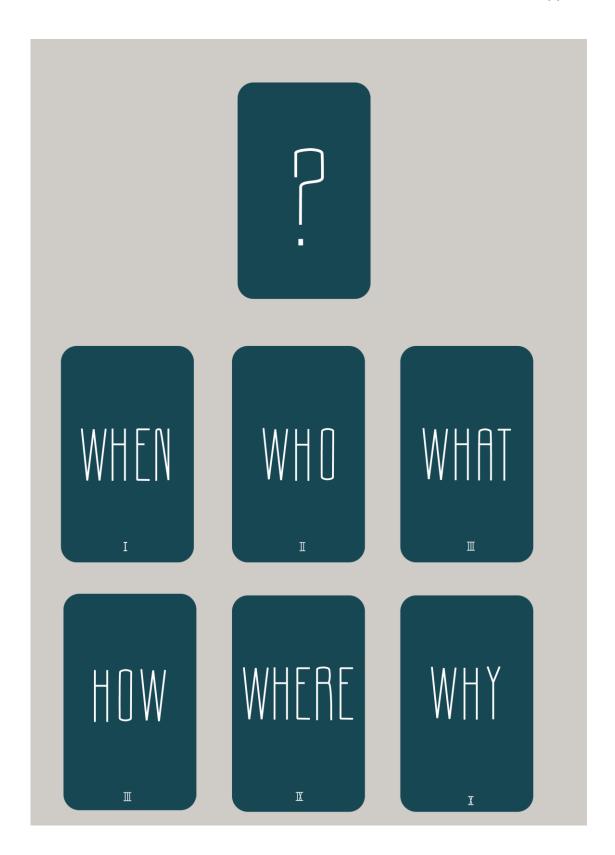














There is always a cause and effect in everything we do, dictated by our values, motives and flaws, shaped by our past experiences.

The Characterize cards are created as design tool to aid in creating a character from the inside. What has happened to them? What do they seek in life? What is their damning flaw?



Without an internal world, a character is an empty shell. There is nothing to feel if there are no emotions and nothing to care for without motivation. The Characterize cards can be used as inspiration to break creative blocks or as concrete direction on a design process. However you chose to use them is up to you.

The Characterize deck contains 24 cards

Cards are divided in four categories:









Each category contains different cards. Pull the cards out of the deck randomly or choose which ones to use. There is a number either on the top or the bottom of the front side of the card, depending on the image on the card. This is for a situation, where the card are not possible to flip over. You can also you wish to use six sided 6 with the numbers.





Apply the cards in you character psychology in order to understand their behaviour and responses to outside stimuli, situations and other characters.