The Strange and Not So Strange About Disney's Strange World: A Visceral and Social Semiotic Analysis

Edgar Nunes Quintero[1(✉)] , Catarina Lelis[1] , and Bernardo Meza Guzman[2]

[1] University of Aveiro, Aveiro, Portugal
edgar.quintero@ua.pt
[2] University Antonio Ruiz de Montoya, Lima, Peru

Abstract. Disney is well-known for producing entertainment contents that engage equally children and adults. However, some of the messages conveyed in many of Disney's productions involve a sense-making that young children cannot attain due to a lack of pre-existing knowledge-based structures.

This paper presents a semiotic analysis through a brief and synthetic deconstruction of animated film by Disney, *Strange World*. Social Semiotics is used to speculate on the possible strategies the creators had when having to communicate through a digital medium grounded on moving images. Using concrete examples, it is possible to observe how the content created follows a series of good practices to better communicate through an engaging and attractive narrative with the target audience, both children and adults. However, there is much information at different layers within the movie that children cannot reach, which leads to a discussion on what may prevail and what may be left out in a message that ought to be passed out to the younger generations.

Keywords: Social Semiotics · Multimodality · Emotional Design · Sense-Making · Disney Animation · Audiences

1 Contextualisation

One of the most important variables in developing effective digital content relates to how we communicate that content. Hence, it is primordial to know who we are talking to, which may be simple when we aim at one persona, but it becomes a challenge when more than one is part of the strategy and mission of the product or service to be delivered.

American mass media multinational The Walt Disney Company is known worldwide as a large business that develops products for families, namely series, films, and many other entertainment solutions. Despite the generalised idea that Disney productions target mainly children, Walt Disney knew well who he was trying to reach with his films and, later, his theme parks. Some of his famous quotes are "Animation offers a medium of storytelling and visual entertainment which can bring pleasure and information to people of all ages everywhere in the world" and "You're dead if you aim only for kids. Adults are only kids grown up, anyway". Hence, Disney's cartoons and movies have historically

targeted not only children but also adults. According to Statista (2022) the wide range of movies, TV content, merchandise, and experiences under the Disney brand, are clear manifestations that Disney targets all age groups and genders. Moreover, as for Disney+, 45% of its users are aged 18 or under, and a further 49% are aged between 18 and 54 (DemandSage, 2023).

Hence, the expansion of Disney by acquiring the rights to products such as Marvel among others, is another expression of Disney's intentions to include within its target public, besides children, the adults who are already familiar with these brands and for many years have followed and accompanied their evolution. Consequently, Disney inevitably has been having to consider that when creating a product that is appealing, entertaining and promotes the engagement of those who watch and which, it will have to use a code that communicates with both children and adults. In many cases, one or the other is not fully aware of this. This trend of double and often hidden meanings (Booker, 2010) has been widely used for 100 years in developing Disney products.

Approaches such as User-Centered Design help to easily enrich possible solutions that address the needs of the target audience (Lowdermilk, 2013) but they do not tell us how the different audiences interpret the same message. Thus, by acknowledging this, it is relevant to research to what extent this practice leads to success in the sense making processes of both children and adults, since interpretation and meanings formulated will be necessarily different.

2   Emotional Design

There are many studies and theories on how our brain and mind articulate and process external stimuli. Daniel Kahneman (2011), awarded the 2002 Nobel Memorial Prize in Economic Sciences, states the existence of two types of response to these stimuli: the first (System 1) entails a subconscious response, where our brain functions in a quick, automatic, effortless way, and the other (System 2), where our thinking acts in a slow, thoughtful way, assessing consequences and possible outcomes, referred to as conscious thinking.

Regarding the types of processing done by our brain to generate the respective responses, there are three levels to be considered, according to Norman (2004). A Visceral one, linked to our muscular system, where decisions are quickly made about our surroundings, almost automatically, also called the "reptilian" brain, and often referred to as a defence mechanism. The second level, the Behavioural, is where in a way we turn on the auto-pilot, and specific tasks can be performed without us being aware of the details, usually because of experience gained over a long period of time, which trains our brain to provide a specific response to a specific stimulus. These two levels of processing are subconscious responses to external stimuli, hence corresponding to the thinking fast System 1 proposed by Kahneman. The third and final level is the Reflective one, the conscious response to a stimulus which happens slowly and deeply, in some cases a few moments after the stimulus, as a way of evaluating the experience, pondering the effect it had on us and its influence in future decisions (Norman, 2004).

Animated movies are particularly effective at spreading meaningful messages to both youngsters and adults. In these visually attractive means of communication, emotion

is influenced by the colour scheme, character design, imagery, narration, music, and environment design. Also, it can be observed that animated characters' emotionally depicted behaviour resembles that of real-life individuals.

According to Norman (2004), the three levels interact with one another, each modulating the others. When activity is initiated from the lowest visceral level, the process is called "bottom-up". Animated movies resort to this process by stimulating "bottom up" reactions in the viewers, through inputs such as colour and sound, which trigger the rawest of our sensory receptors, mostly effective to engage and entertain the younger audiences. For that reason, in this paper we shall focus on the Visceral level of emotional design, since we are interested in analysing the scope of meaning that this slice of Disney's audience can potentially reach.

3   Method: Social Semiotics and Multimodalities

Whilst, according to Sless and Shrensky (2023) *semiotics* is the application of stand-for relations created by signs that represent something other than themselves, semiotics is known as "the study of all manifestations of semiosis" (ibidem, p. 59). Hence, semiotics is crucial for analysing that messages are correctly understood by the recipient. Ambiguities can be clarified, and context consistency provided with the use of semiotics. Recently, semiotics has been used as a method to examine and research end-user behaviour and branded communications (Signsalad, 2023).

In this paper, semiotic data from the animated movie *Strange World* is analysed. The semiotic information and its contribution to the storytelling are demonstrated in certain scenes that were carefully chosen. Semiotic resources are supposed to enhance the creative substance of the film and, in these cases, draw the audiences in with relevant ideas. Also, the reason why we resort to a few specific scenes is based on Barthes' analysis of frames (1978), which contends that the still has a special gift that allows it to resist the imposing rules of narrative time and best relate to cultural practices.

The analysis of the animation was done from the perspective of social semiotics (Kress, 1997, 2003, 2010), which views text as the materialisation of semiotic modes and resources. Social Semiotics (SS) is an extensive and dynamic theory, and, therefore, we do not intend to scrutinise it here. Inspired by the studies of Michael Halliday, Gunther Kress and Robert Hodge publish the work Social Semiotics (1988), in which they discuss social issues related to meaning, through texts whose materialisation may include the verbal (speech and writing), but not limited to it. Thus, Social Semiotics is configured as a proposal to understand communication processes, considering the diversity of semiotic modes that may be present in texts, which, in the context of this article, and as proposed by Sless and Shrenski (2023), are all kinds of messages composed by signs (images extracted from a film). The main foundation of the SS theory is the notion of a *motivated sign*. Refuting the view of traditional semiotics that the sign is arbitrary, SS defends the argument that every sign is the result of the interest of the text producer/author, who makes the choices they believe to be most appropriate for their purpose. Social semiotics is, therefore, focused on how people create content and the meaning attributed to that content (Bezemer & Jewitt, 2009). Hence, to materialise signs, people use semiotic modes, which are material and socially constituted forms to produce meaning.

Halliday's theoretical concept of "metafunction" is cited by Kress and van Leeuwen (2006), who propose three metafunctions in their Visual Grammar: compositional meaning, interactive meaning, and representational meaning. According to Kress and van Leeuwen (2006), the representational metafunction regulates how represented participants relate to one another to depict the world around us when applied to visual systems which leads to analysing how we make an interpretation of the world around us depending on the stimuli we are exposed to.

The Representational metafunction includes two dimensions of analysis which are, usually, not coincidental: Narrative involves ongoing activities or occurrences in which individuals are represented by explicit or imaginary vectors; Conceptual images are related to the classification or analysis of participants in terms of their stable and timeless essence (Kress & van Leeuwen, 2006). For the analysis of this movie, we shall resort to Narrative since the nature of the chosen media is that of moving image. The Interpersonal metafunction regulates the relationship between the represented participants and viewers, hence the analysis focuses on the specific relationship created between the content and who is viewing it. Special interest is given to ways of Contact (between the characters and the audience), Distance (visual approaches to proxemics) and Perspective (camera position and angles, indicating structures of power). The Compositional metafunction assembles the parts of the image into a complete work from the relationship between the previous two metafunctions. This means the analysis focuses on the way the interpretations are possibly made from a given stimulus (such as framing, colour, lighting, focus, salience, set design, etc.) and how the context leads to sense making and meaning creation (Burn, 2013).

By proposing an analysis based on SS, we intend to reach conclusions that refer to broader issues related to the social, such as interests, power relations, identity, stereotypes, representations, etc., but also the pictorial and narrative choices that are purposeful design creations SS helps analyse the visual elements used in design, such as colours, shapes, typography, and icons. By understanding the meaning attributed to these visual elements within a specific context (such as demographics), animation designers can ensure that their works convey the intended message clearly and effectively. Given that Disney movies target both adults and children, it is appropriate to ask: What aspects are mainly suggested? What semiotic strategies and tools are common and expectedly effective in both audiences? How are these strategies and tools put together, and what possible interpretations are generated?

Although the film has been considered in its entirety, the cut made on this article includes scenes in which the characters face moments of crisis and tension, expectedly those when the audiences' levels of arousal increase, namely where conflicting power dynamics (due to the three featured family generations of insecure men), and fights for species survival (because of a mysterious ecological crisis) are clearly depicted. In that sense, the following moments were chosen:

- Figure 2 - Presentation of Searcher's world (0:06:41–0:06:47).
- Figure 3 - Disagreement between Searcher and his father Jaeger (0:05:10–0:05:53).
- Figure 4 - Searcher and his father Jaeger reunited (0:29:10–0:29:55).
- Figure 5 - Searcher and his father Jaeger as equals (0:58:50–1:01:00).
- Figure 6 - Searcher finds Pando's energy source (0:03:26–0:03:48).

- Figure 7 - The expedition leader attacking a red flying creature (0:22:50–0:23:01).
- Figure 8 - Plot twist, the known world is actually a giant creature (1:28:47–1:29:16).

4   Analysis of Strange World

Strange World is the 61st film produced by Walt Disney Animation Studios. Directed by Don Hall in his solo directorial debut, the film had its premiere on November 24th, 2022. It has a run time of 89 min and seven seconds. It is composed of more than 40 sequences, and each of those can be from 11 s up to four minutes long (Walt Disney Animation Studios, 2023).

Fig. 1. From left to right, Jaeger Claude, Searcher Claude e Ethan Claude (screen captured by the authors).

The film's central idea depicts a story of divergence, separation, and reunion of three generations of explorers, where the main characters are Jaeger Claude (grandfather), Searcher Claude (father) and Ethan Claude (son) (Fig. 1). The father is presented as the central figure. The narrative is mostly focused on the dynamic between the father and grandfather, which is deteriorated by differences between them and leads them to distancing from each other, ending up taking opposite paths. Then the narrative shifts focus to the father and son relationship, where Searcher faces again the bitterness of disagreement, just like with his father, now with his own son, refusing to see Ethan for who he is. As a backdrop to this family affair, the film presents us with an element that threatens the ecosystem that Searcher has helped to build, so he is called upon to find a solution that will allow him to maintain his lifestyle and prevent the end of civilisation as it is known to all.

From early in the movie, we are invited to follow the journey of Searcher, as he is expected to be the centre of our attention. By following his gaze (implicit vectors), he offers his point of view of the world, and the several close-ups or shots where he is visible from the waist up make the audience feel close(r) to him (Fig. 2).

Worth of note are the shots where Searcher is with his father Jaeger, which communicate the dynamic that exists between the two and how it evolves throughout the story. At

Fig. 2. Searcher looks at his farm of green plants (Pando) (screen captured by the authors).

first, they are on opposite sides, and this divergence of ideas eventually separates them. It is also observable how Jaeger's figure overlaps Searcher's, in a superior angle from top to bottom, being Searcher dominated with a constrained posture looking upwards. In such moments, close-ups help the viewer focus on the emotions of the characters, clear on their facial expressions. Their gazes towards outside the frame create an intense connection between the two (Fig. 3).
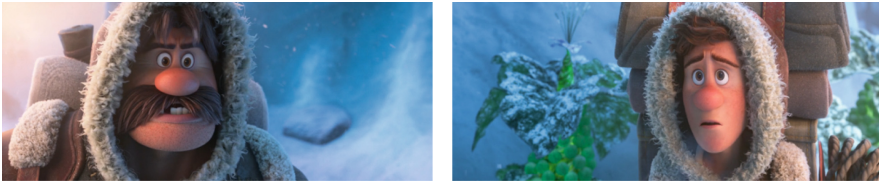

Fig. 3. On the left frame, Jaeger looks down at his son; on the right frame, Searcher watches his father go (screen captured by the authors).

A few years later, when Searcher and Jaeger reunite, the dynamic between them is quickly established as having not changed, with Searcher being portrayed in the shadow of Jaeger (Fig. 4).

Towards the end of the story—when the two characters understand their similarities such as the adversities and shared experiences—that make them conclude they are in a similar situation—they are featured on an equivalent level (medium angle), where a dominating relationship between the two is no longer present (Fig. 5). The close-ups in all these emotional moments lead the viewer to feel they are part of the action, allowing a greater involvement, facilitating the engagement with the events and the feelings of the characters.

Other pictorial decisions were made to create and to strengthen our connection with the narrative. The use of colour to communicate certain ideas is worthy of analysis regarding both salience and modality. At some point in the movie, Searcher finds Pando, a plant of intense, bright, saturated, and vibrant shades of green, and which is depicted

Fig. 4. Power dynamics between Searcher and Jaeger (screen captured by the authors).
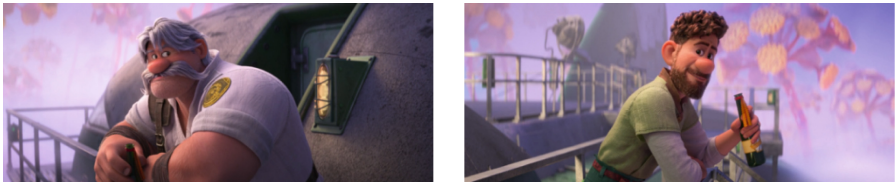

Fig. 5. Two frames where both Jaeger and Searcher's eye lines are at the same level (screen captured by the authors).

as a solution to the problems of civilisation (Fig. 6). Viewers naturally associate this element to something alive, full of chlorophyll, positive and beneficial to the characters and to the story, since green is associated with luck and growth (Clarke & Costall, 2008).

Fig. 6. Searcher finds Pando, the green plant (screen captured by the authors).

As the story unfolds, we become aware that the green plant, which is a source of energy and believed to sustain the society in which the characters live, is in danger. As we

ponder and reflect on the information we have received, it is only natural that we share the concern visible in the characters, feel empathy for their cause and hope that they can solve this problem to maintain the quality of life and status quo of their civilisation. We later understand that the main source of threat to Pando is a species of birds of prey that attack the plant. These birds, depicted in bright and intense red and resembling a flying reptile in all similar to Cretaceous pterosaurs, become quickly associated to the enemy and therefore, it is not strange to the viewer the efforts of the main characters to get these creatures destroyed, which are presented in wide shots and from high angles, positioning the fighting humanised characters in a situation of power (Fig. 7).

Fig. 7. The expedition leader, Calisto Mal, attacking a red flying creature (screen captured by the authors).

In Western societies, we are culturally oriented to associate colour with certain emotions or states of mind, being green usually associated with positive connotations, with something being right, permitted, and moving forward towards the future, and red with danger, threat, incorrection, and fixed states of inertia. The film uses these assumptions in high modality for a plot twist near the end of the narrative: the characters are no more than microscopic beings living inside another organism, a turtle of giant proportions (Fig. 8), whereas the birds, that menacingly attack the plant and fight the story's heroes, are no more than defence mechanisms of this giant, comparable to white blood cells and their deterrence toward an invader in our circulatory system. It becomes then clear that Pando the green plant is the villain of the story, a parasite that is consuming and destroying the giant being in which the characters' world exist. Hence, Pando is a source of energy that represents the oil industry in our relatable world.

5   Discussion

Since humans use semiotic modes to materialise signs, Strange World, as much as any other Disney production, does that too. However, we argue that these signs (socially constituted forms to produce meaning) convey much more than what is actually being interpreted by, not only children, but also adults. Assuming that, from the perspective

Fig. 8. The salience of the organism in which the movie's action takes place (screen captured by the authors).

of emotional design, the strategy is a bottom-up one, the visceral level will lead to some possible dead ends or bottlenecks, even for adults, with a lifetime of experience gathering knowledge, in conscious and unconscious ways, developing everlasting memories. In fact, if we focus on the crises around Pando:

- Colour associations have been widely researched. According to Whitfield & Wiltshire (1990), the individual perceiving colour automatically evaluates such colour, a process that leads to interpretation and behaviour. To most of us, as mentioned before, green has positive connotations and, when used in opposition, red will assume the negative side of the sign. However, in Chinese culture, vivid red has a positive connotation: it is associated with strength, vigour and confidence. Is it the case that the Chinese audience experience the plot twist less than the Western ones? Or is it possible that far east viewers allocate some characteristics to the birds that the western ones cannot?—such as a strong character, an inclination to progress, and an intention towards establishing a better world?
- Still on the birds, their shape invites some reptilian reactions as well—being drawn to resemble pterosaurs, which were carnivores and scavengers, it triggers our innate fear of reptiles, an inherited state of anxiety that most humans experience when facing reptiles. Such response leads to a normal reaction of scare, viewing them as potentially harmful or dangerous.
- The main idea of finding out the truth about Pando is a clear message that human beings cannot trust appearances. This indeed means that we cannot trust our senses, and therefore we cannot trust our emotions. And this is a lesson given by someone (in this case, Disney) who is reaching audiences emotionally. Moreover, according to the US Forest Service of the Department of Agriculture (2023), Pando means "I spread out" in Latin and, beyond "Strange World", it actually exists. It is an aspen clone that is thought to have begun at the end of the last ice age, developing thereafter from a single seed, expanding by putting up new shoots from a massive root system. It can be found in central Utah, weighs nearly 6000 tonnes, and it is the biggest and densest organism ever discovered. It has more than 40,000 distinct trees and covers 106 acres. However, as in the movie, the real Pando is showing signs of

decline. Hence, it can be said that the whole situation around Pando in Strange World represents our own world, struggling with survival and sustainability. It is a call to action regarding the fossil fuel industry in which we still very much depend (The Guardian, 2022). The construction of meaning around Pando certainly relies on the visceral and behavioural levels supporting each other, namely during the plot twist; but these kinds of associations are mostly reflective, since they happen at a much deeper level of reasoning, most likely after the contact with the stimulus, at a moment of pondering the effect it had on us and its influence in our future decisions.

6 Final Thoughts

One of the situations that was not covered by this analysis is the one around Ethan, Searcher's son. He refuses to follow his father's footsteps as a farmer of Pando whilst finding support in a male friend, which leads to their disagreement. The interesting thing about Ethan is that he is one of the first LGBTQIA+ characters in a Disney film, and that is made overtly and positively clear, easy to grasp, even by the very young.

In fact, much of the interpretation required in these movies is subject to the audience's ability to draw inferences, something that adults are better equipped to do compared to children. There certainly is a trend in animated movies (Disney, Pixar and Dreamworks's) to include hidden messages that most children will not fully grasp: the sexualised and domestic female maturity of Wendy (Peter Pan), the need of becoming something other than what a being (a fish) is naturally meant to be (Finding Nemo), the clichés around

Fig. 9. Official movie posters of both Strange World (left) and Indiana Jones and the Last Crusade (right) (screen captured by the authors).

America as the land of opportunities in sayings such as "Everyone's special" (The Incredibles), among many others (Booker, 2010). This level of complexity is particularly interesting in Disney's contents in the sense that children's cognitive and emotional structures may not be complete, which means they will only understand part of what is being conveyed.

Finally, the style and tone presented throughout the animation evoke the culture of the 30s to 50s of last century, where stories of exploration and adventure were very popular, meeting the theme that underpins Strange World. That is another association and level of meaning that will probably be attained by adults but hardly by children. In fact, one could argue that to some extent the movie shares the style and tone of Indiana Jones's saga, where the main characters are explorers as well, and which graphic title (skewed, written in perspective, resorting to all capitals in a gradient from yellow to orange and a hard drop shadow) was most likely inspirational to Strange World's designers (Fig. 9). Again, it is not probable that youngsters can establish such a relation, whereas their parents count Indiana Jones as a popular character of their VHS/Beta times.

We suggest that System 2 of the younger audience of Disney's movies is not sufficiently developed so they can fully experience these productions, which are filled with meaning. The feast of wonderful graphics of Strange World, with its beautiful colours, and myriad of delightful textures, will undoubtedly please both audiences, but those who have already begun thinking about the environment, the planet, and its sustainability may be left wishing there was more to help consolidate the frameworks of those still very young. This is where SS and design principles can significantly improve strategies in the field of animated movies targeting heterogeneous audiences, since both provide deeper understanding of how signs and meaning-making processes influence human perception and communication. And since signs are artificial designed creations, social semiotics provides the underpinning material for communication designers and script writers to better understand the cultural context to be represented, helping them recognise the environments in which their designs and stories will be situated. In fact, SS can aid them in crafting powerful narratives through design. By understanding how signs and symbols construct meaning, designers can develop compelling visual stories that engage and captivate the audience, with influence in matters such as those related with inclusivity and diversity.

Consequently, SS helps in creating persuasive messages, by assisting these professionals in the creation of contents that influence the audience's attitudes and behaviours particularly relevant for building a strong brand identity for the movie, ensuring that visual elements consistently convey the intended message and values while increasing the production's brand recognition.

References

Barthes R (1978) Image-music-text. Hill and Wang, New York

Bezemer J, Jewitt C (2009) Social semiotics, pp 1255–1268. John Benjamins Publishing Company, Philadelphia. https://doi.org/10.1075/hop.13.soc5

Booker MK (2010) Disney, Pixar, and the hidden messages of children's films. ABC-CLIO, Santa Barbara

Burn A (2013) The Kineikonic mode: towards a multimodal theory of the moving image. MODE working papers. NCRM/MODE/IOE, London

Clarke T, Costall A (2008) The emotional connotations of color: a qualitative investigation. Color Res Appl 33(5):406–410. https://doi.org/10.1002/col.20435

DemandSage (2023) Disney Users (2023) – Global Data, Facts & Figures. Retrieved from https://www.demandsage.com/disney-users/. Accessed 23 Mar 2023

Hodge B, Kress G (1988) Social semiotics. Polity Press in Association with Basil Blackwell, Cambridge, Oxford

Kahneman D (2011) Thinking, fast and slow. Farrar, Straus and Giroux, New York

Kress G, van Leeuwen T (2006) Reading images: a grammar of visual design. Routledge, London

Kress G (2003) Literacy in the new media age. Routledge, London

Kress G (2010) Multimodality: a social semiotic approach to contemporary communication. Routledge, London

Kress G (2015) Semiotic work. applied linguistics and a social semiotic account of multimodality. Aila Rev 28:49–71

Lowdermilk T (2013) User-centered design. O'Reilly Media, Sebastopol

Norman D (2004) Emotional design: why we love (or hate) everyday things. Basic Books, New York

Signsalad (2023) Our Thoughts—What is Semiotics? Sign Salad. Retrieved from https://signsalad.com/our-thoughts/what-is-semiotics/. Accessed 23 Mar 2023

Sless D, Shrensky R (2023) A new semiotics: an introductory guide for students, 1st edn. Routledge, London. https://doi.org/10.4324/9780367809393

Statista (2022) The Walt Disney Company - statistics & facts. Retrieved from https://www.statista.com/topics/1824/disney/#topicOverview. Accessed 23 Mar 2023

The Guardian (2022) Strange World review – Disney's tangled alt-family eco-drama means well. Retrieved from https://www.theguardian.com/film/2022/nov/21/strange-world-review-disneys-tangled-alt-family-eco-drama-means-well. Accessed 31 Mar 2023

USDA Forest Service (2023) Pando—(I Spread). Retrieved from https://www.fs.usda.gov/detail/fishlake/home/?cid=STELPRDB5393641. Accessed 30 Mar 2023

Walt Disney Animation Studios (2023) What we do: filmmaking process. Retrieved from https://www.disneyanimation.com/process/. Accessed 27 Mar 2023

Whitfield TW, Wiltshire TJ (1990) Color psychology: a critical review. Genet Soc Gen Psychol Monogr 116(4):385–411