What feels real

Impact of experimental animation on contemporary audiovisual experiences



Laura Magistrale in Digital and Interaction Design *Thesis* | *A.Y.* 2019-2020

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ABSTRACT

We are living in a commoditization process of animation that expands and deepens each of the individual concepts that compose the particular history of animation. An expressive medium that has been seeking distinction from the overwhelming success of live action footage and cinema can finally find its individual voice for either short commercial products (motion design) and means of performance¹ as a result of technology development, auteur animators, mediated practices and general acceptance.

Perhaps this clearly displays the tendency for small (and sometimes big) creative agencies to move from orthodox processes of animation to more expressive, reflective results that embrace the exposure of the medium from which the work was created. This is specially true for transmedia works that involve affordable technology that go beyond the 2D space to explore other means of interactive experiences. We will make a connection to the impact of avant-garde artists between the 1920s and 1960s that challenged audiovisual conventions of big firms like Hollywood and Disney and explore what could be the possible future scenarios for artists and design studios to exploit the capabilities of current and future technologies.

¹ "Performance" emerged as a major concept for linking popular aesthetics to social structures (economic, political , linguistic, kinship, etc)... the concept of performance has become so tied to the expression of self-identity.. (Teri, $\rm S.$, 2010, p. 243)

ABSTRACT

Stiamo vivendo un processo di mercificazione dell'animazione che espande e approfondisce ciascuno dei singoli concetti che compongono la particolare storia dell'animazione. Un mezzo espressivo che ha cercato di distinguersi dal travolgente successo dei filmati live action e del cinema può finalmente trovare la sua voce individuale sia per i prodotti commerciali brevi (motion design) che per i mezzi di performance¹ come risultato dello sviluppo tecnologico, degli animatori d'autore, delle pratiche mediate e accettazione generale.

Forse questo mostra chiaramente la tendenza delle piccole (e talvolta grandi) agenzie creative a passare da processi di animazione ortodossi a risultati più espressivi e riflessivi che abbracciano l'esposizione del mezzo da cui il lavoro è stato creato. Ciò è particolarmente vero per i lavori transmedia che implicano una tecnologia accessibile che va oltre lo spazio 2D per esplorare altri mezzi di esperienze interattive. Faremo un collegamento con l'impatto degli artisti d'avanguardia tra gli anni '20 e '60 che sfidarono le convenzioni audiovisive di grandi aziende come Hollywood e Disney ed esploreremo quali potrebbero essere i possibili scenari futuri per artisti e studi di design per sfruttare le capacità del presente e tecnologie future.

^{1 &}quot;Performance" è emerso come un concetto importante per collegare l'estetica popolare alle strutture sociali (economiche, politiche, linguistiche, parentele, ecc.) ... il concetto di performance è diventato così legato all'espressione dell'identità di sé... (Teri, S., 2010, p. 243)

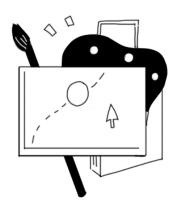
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INTRODUCTION



The increasing availability and efficiency of computers has been increasing at such a big rhythm among communication technologies that nowadays it is not strange to see small groups collaborating to create innovative forms of design instead of big companies investing on new technologies. 3D renders are being now used in the creation process instead of a final audiovisual work, meaning the interest does not always fall on explicitly showing 3D renders, but rather as a possible tool to simulate real life physical behaviours, where other layers with more "natural" or "traditional" feeling will simulate perhaps ink and paper, or any other plastic medium.

It is absolutely incredible how long we've come to simulate reality, on other words, so effective that there is an uncanny feeling of artificialness.

The realm of animation enters a huge variety of scenarios, in which a deeper understanding of the true nature that resides on the intentions and motivations might be suitable to start with. First of all, every piece of audiovisual work displayed by a computer is animation, being a transition from a UI element to another to a movie displayed on the screen. The "illusion of movement" is created when pixels are illuminated on a special arrange of values, perfectly sequenced so the eye understands the sequence as something natural (explained further on chapter 1. Defining animation).

This leads to the ability of traditional mediums¹ represented on a screen to be a translation of feelings, which could be listening to an orchestra, painting on a canvas, watching theatre and so on. This subject was taken by John Berger on "Ways of Seeing"² on a very interesting way, demystifying the sensation we have when looking at a real painting versus seeing a printed copy or a digital version of it. It is not the same, since the physical object of the original work carries unseen information.

¹ Traditional mediums are undesrstanded on this thesis as work created by a human displayed on a physical plastic medium.

² See Berger, J. (2012) for more information.

In the case of a painting it might involve a subtle smell, the detailed strokes of painting on it, the sensation of the size and texture of the canvas, the decaying material and colour pigments, among many other details that contribute to a feeling.

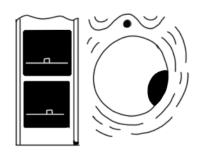
This leads to a perception, cognitive and emotional evaluation. It is specially true for the context in which the painting is displayed, facilitating an experience and eventual reflection. It would be impossible to think of the same experience for everyone, there is a game of abstraction and explicit communication. Most of the carried information of any good work continues to develop and represent new spaces for reflection, discoveries that most probably where not intended at all from the artist. This is where the motivation and life experiences enter in combination with mastering techniques. On this modern world where digital technology is almost everywhere we might question ourselves where is the human factor going to lead, Is the computer screen becoming the new canvas? Computer instructions the new strokes? If this is the case, Would exposing the medium result on "natural feeling"?

It is my intention throughout this thesis to investigate how a new vision for assisting media technologies on audiovisual current work can change a creative space not just considering mediums(traditional versus digital tools) but different profiles and mentalities as well, exposing all digital technologies as reachable for everyone and opening a discussion to where is the creativity deposited by the authors. This will be deeply connected with the public acceptance on audiovisual work and the uses of it.

Since the invention of mass communication media, we've seen a huge increase on audiovisual consumption, this has been carried on in a radical way by the expansion of social media and mobile technology. Leading us to analyse again what is the impact not just of the content we produce and how we produce it, but how as participants we consume this content and what calls our attention.

The following chapters will introduce a technical and concise vocabulary to develop as a base of analysis on further chapters, it is deeply connected with animation history, to later on expand the current situation on content consumption and modern examples. On the last chapter a small experiment was carried on to analyse communicational strategies with different forms of expression. Lastly, a chapter with a wrap-up and conclusions is presented, I hope you'll enjoy reading the journey as much as I enjoyed writing it.

DEFINING ANIMATION



On the scope of this analysis, *modern animation* is going to be used as an umbrella term to cover two main schools of knowledge and experimentation: *orthodox* and *experimental* (explained on section 1.2).

Merriam Webster dictionary defines animation as - possessing or characterized by life: ALIVE - . In this case we are interested on the **illusion of life**, which characterizes all forms in animation, created by subsequent images that convey movement. Jon Krasner relates this phenomena to *persistence of vision*:

"Animation cannot be achieved without understanding a fundamental principle of the human eye: persistence of vision. This phenomenon involves our eye's ability to retain an image for a fraction of a second after it disappears. Our brain is tricked into perceiving a rapid succession of different still images as a continuous picture. The brief period during which each image persists upon the retina allows it to blend smoothly with the subsequent image." (Krasner, 2013, p.5)

This perceiving of continuity is tied with the representation of **what feels real.** Animation is divided today as traditional and motion design to understand better their scopes and areas in which they develop, but in essence they come from the same experimentation methods and had the same roots:

The medium (to animate) as an unconventional way to express a subjective message.

Unconventional, because there is no such thing as a standard of "realness", it is purely subjective. There are methods in which, for instance, a fictional character can behave the most natural way possible, as in the case of Disney movies. Disney developed a form of hyper-realism (or over-illusion on other terms) in his movies by abstracting movement and presenting it in a way that was intrinsically understood. It was not intended to simulate the overall dimension of real life elements, just a portion of it, enough to support the narrative:

"Reality in animation, therefore, can only be a comparative and relative form, half-dedicated to representational authenticity, half dedicated to the narrational forms which heighten and exhibit the fluid conditions of the real world" (Wells, 2015, p.28)



Figure 1.1 - "Bambi" was an important hit on animation, a special care was taken to simulate real movements. It introduced a new standard to animation movies and short films yet to come.

It was just after avant-garde artists on 1950 started experimenting with basic shapes that a profound meaning was tied to primitive forms in animation:

"So, from a point where abstraction may seem alienating, it has been established that primal forms may be read as expression of their progress towards rational and associative forms" (Wells, 2015, p.34)

This is because persistence of vision is not our only tool to appropriate this abstraction concepts into the deepest of meanings. Just as in any kind of art, every individual associates audiovisual experiences with the sum of societal conventions, cultural and personal values, experiences and context.

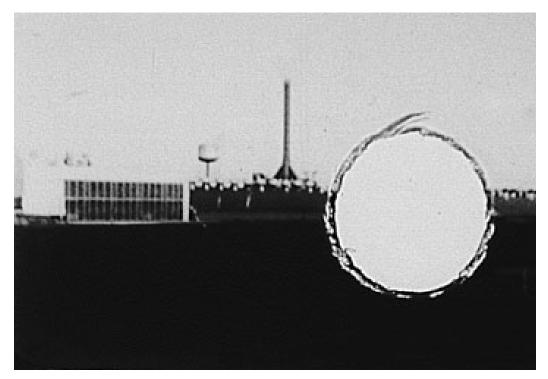


Figure 1.2 - Work by Len Lye, a New Zealander artist that used batik methods directly on film, he believed on the expression of primal feelings through lines and shapes.

Primal figures helped bring the illusion of movement into new realms, this is where on my point of view, traditional animation started diverging into a narrative form and motion design developed a new commercial aim of its own. A good example of this could be on typography, letters could now "talk" to us, giving a whole new dimension to audiovisual representations. As early as 1950, Saul Bass was already experimenting with film titles (we will see later on how the film industry heavily impacted animation experimentation), dancing silhouettes of letters and disjointed letters revolutionized the movie industry as opposed to static letters on early movies.

To build up an understanding on not just who and why a specific artists has impacted this industry, but also *how*, there is a need to specify basic elements on graphic language. It is important to mention that sound is as equally as important when speaking about animation, but taking on consideration the lack of tools to follow this discussion, we will have to stick to graphical language. Nevertheless the inclusion of sound will be mentioned on chapter 2, since actually, it was one of the motivations for artists to display.

For the scope of this analysis, three main aspects are defined: form, colour and texture. A mention on tools and methods felt just right, since at the end all of this variables play differently on the tools used. Colour might change when painting directly onto a 35mm camera film as opposed to paint over cells, texture of organic elements is different as a simulated one. Forms presented on a tiny computer screen have a different meaning as on a projector.

Of course, this overwhelming presentation of details is not all directly forseen by the artists, and it is absolutely amazing the way it is. This is where the unknown comes, where the playful experimentation and eager to exploit one's desire to overcome the flatness by incurring into the mind and having an intuition on where to use the language we have to craft a different meaning of reality, and hopefully to share it.

As spectators of this, the base is presented, a language defined by which later on we will deepen on the *how*.

ELEMENTS OF ANALYSIS

FORM

Commonly used to symbolize a real life element, it uses different levels of abstraction. A form is one of the most common visual principles preceded by the line, it defines an object situated in space.



Figure 1.3 - "Guernica" by Pablo Picasso(1937). This painting was a response to the bombing of a Basque town during the Spanish civil war. Pablo Picasso was one of the most influential artist of the first half of the 21th century, he represented form and space in a way that had not been done before, he was part of the cubist artist movement.

A form differs from a shape since it covers representation of three dimensional aspects of a composition (it includes depth, as opposed to a shape which defines an object in a 2D space). It can be analysed from two perspectives : the first one on the visual representation on what a human brain can relate to a real life object, our brain is "wired" to connect already known figures. The second one the way this elements are exposed, the straight lines being dynamic, artificial, harsh as opposed to curved lines that evoke a more natural flow movement, organic elements look more friendly.

Take a moment to see the painting above by Picasso; Even with a high level of abstraction and grayscale values we can *feel* the overall feeling of anguish as a result of the civil war.

COLOUR

"Colour is a power which directly influences the soul." - Kandinsky

As with form, colour is another important element already known and experimented by artists on paintings way before it was introduced into the animation world. Defined by the angle of reflection of light into our eyes.



Figure 1.4 - "The elephant" by Wassily Kandinsky (1908).

It is important to mention the term of value, which is also connected with light. It defines the amount of light on an object, which is used to represent levels of darkness and lightness, an important concept that conveys different messages and creates the sensation of depth.

As we will see later on, all this elements are connected to each other, there is always a natural flow of understanding that we are able to gasp within milliseconds of observing something, this is has been greatly taken on advantage by artists and designers. Take on account the red colour on Kandinsky's painting and how it ferociously places the smashing force of the elephant towards the human.

TEXTURE

Texture deeply connects with the touching sensation on our relation with real life objects and it affects digital media as well.

It is still an area under development, since the transition of physical based mediums to digital ones imposed a new re-thinking of ways to deliver messages. Take for instance seeing a famous painting on Google Images versus looking at it closely on a museum, not exactly the same.



Figure 1.5 - "Rain Steam and Speed, The Great Western Railway." by J.M.W. Turner (1844)

The rusty sensation on the corner top right of the painting, the steam on the center left by the train, feels almost real. Combined with other strategies the message can be particularly effective, you can almost feel the train coming out right out of the painting at full speed.

Nowadays different strategies are used to add textures, being this artificial or organic, 2D or 3D.

TOOLS AND METHODS

Now that we have seen three really important elements that compose a work of art, its time to take a deeper look on how they can be exploited. In art, there are no exact rules, perhaps the most important consideration might be to experiment, to develop personal understandings and be able to share.

Interestingly, in the animation history a lot of the experimentation done was not intended to have the impact it was going to have today, on other cases it was totally the intention. On the following chapters we will have a deeper look on special artists that innovated and impacted heavily on animation as we know it today.

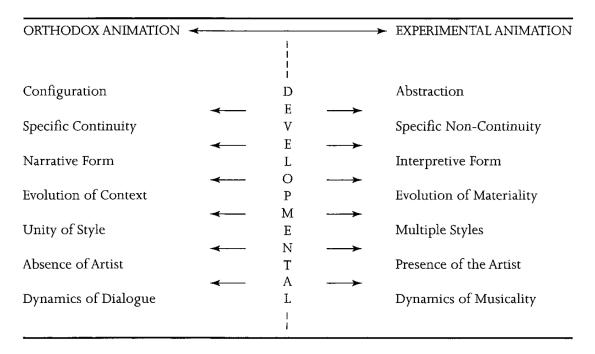


Figure 1.6 - Norman McLaren, a pioneer on motion design

ORTHODOX & EXPERIMENTAL

This separation of schools and practices is crucial to understand the impact today, explained by Paul Wells on his book "Understanding Animation". Wells perfectly defines a separation as in which orthodox animation , championed by Disney and Japanese *anime* defines a standard that is not followed by the artists of the Avant-Garde movement (experimental animation). Perhaps the term "experimental" may guide us to think that this kind of approach has lead to more impact nowadays, but it simply relates to the capability of the animator to stretch the conventions and go beyond.

The following chart (Wells, 2015, p.36) best summarizes the differences:



When thinking about *forms* we clearly see a distinction on the two areas by effects of standardization within the cel industry (orthodox animation). We see identifiable actors that easily relate to known elements (configuration),

"i.e. Donald was recognisable as a duck whether he wore a sailor's suit or khaki togs and a pith helmet!" (Wells, 2015, p.36)

This aimed the companies to create a narration (narrative form) that serves for a specific purpose and is aimed by characterization and the evolution of context. Big part of the animation principles created by Disney are used today to support the narrative in a hyper-realistic way. The processes were as straight-forward as any other company, since their primary objective was economical (resulting on a unity of style with hidden artists' names). "Key Drawings" represent important motion scenes that are key to the section, filled later by "in betweens" drawings which connect this main drawings. Several people working at the same time required a lot of organization. Perhaps one of the most used concepts today are the 12 principles of animation, which define the "best conceived" notions of how the eye perceive movement. For example a character anticipating a kick best prepares the audience to expect that impact by balancing to one side, a stretched ball falling clearly communicates more speed than a round ball ¹.



Figure 1.7 - Scene taken from Max Fleischer Stereoscopic Rotary Process, working on a recursor to Disney's Multiplane technique - Sailor Meets Sindbad the Sailor (1936)

¹ See Williams, R (2012) for more information.

On the opposite side, experimental animation intended a more abstract and less relatable experience. Less understood on the context of a world that translates utility to economical level.

Speaking about *texture*, authors exploited different methods of creation . The viewers' eye is guided to a series of different representations that in some cases even intend to evidence the raw materials whom which the piece was made (as opposed to orthodox animation) to evoke a certain mood or ideas (interpretative form). This "Evolution of materiality" diverged the messages contained in one animation, varying the concepts inherited in the selection of colours, materials, velocity and sound.

Since sound itself has many other self-contained representations, it serves as an inspiration and motivation for artists to graphically suggest a supportive meaning, or in many cases make the animation the supportive meaning.



Figure 1.8 - Oskar Fischinger, German-American abstract animator, filmmaker, and painter.

On the following chapters a guided analysis will be made to understand how each of this pieces of work has aided the modern animation world. In which the economical motivation is without doubt dominant, but the evolution of the medium and technology, as well as the maturation of more abstract experiments has led to interesting mixtures.

The audience for audiovisual interest has grown radically, and it will continue to grow up as the technology becomes more accessible as the mediums to produce it. We are indeed in a world that appreciates the audiovisual language on screens so much that it has radically changed education, social interaction, marketing, business and arts.

AUDIOVISUAL INNOVATION

Donald Preziosi writes about the assumptions taken when thinking about art history:

"The first is that not all objects are equal in the amount of information they might reveal about their sources or maker... The second is that all such objects are time-factored: that is, they contain legible marks of the artefact's historical genealogy, either formal or thematic nature". (Preziosi , 2009, p.21)

Animation is indeed an artwork itself, morphed and adapted into several variations throughout the years. Each of these time periods represent variations on techniques, style and intentions.

The sense of motion has been applied and studied on a huge variety of fields since the begging of humankind existence. It relates to the most basic and native instinct of being able to know if an object or living being has life or not.

When our ancestors were able to depict and represent life on the walls of Lascaux, France 17,000 years ago¹ something changed on the very way their group lived. The individual (and collective) mental representation of the various scenes taking place on the paintings, the meaning of the caves in which these ancestors painted and the role of this painters on their social group changed. Art has had an important role on how societies are formed, their decisions taken.

Art is involved with technology on a deep and profound way, on the exploitation of its capabilities in an innovative and meaningful way.

Animation works on a different level as other audiovisual representations (like live action films) in a way that it takes advantage of the subconscious elements. Even on the most basic and childish cartoon a significant amount of style is inherited on its abstraction.

Winsor McCay (cartoonist) introduced in 1914 a new animated character on *Gertie the Dinosaur* that first exploited the capabilities of human-like behaviours on a cartoon. The short film shows Winsor giving life to a drawing in-front of an audience, making her interact with the prehistoric environment and its creatures, while at the same time interacting with Winsor itself. This broke a barrier of what was conceived as "real", allowing people to empathize with a drawing. Nowadays, personification of abstract concepts allow people to understand what a brand offers, what an emotion would be like as a character, like on Pixar's movie *Inside Out* (2015)².

When speaking about this sense of magic, George Méliès was a true master. Interested more on the aesthetic sense of his creation. He pioneered several special effects that are still used today like dissolve transitions (discovered by accident), time lapse photography, substitution splices and hand painted colour.

¹ See "Lascaux"(n.d.) for more information.

² See "Inside Out" (n.d.) for more information

Early animators were motivated by the sense of creating something different that was being developed on the movie industry. The animation itself was still not a term and these pioneers found the medium to explore more dynamic approaches to bend reality, way before the narrative took an important place on the commercialization of audiovisual work.



Figure 1.9 - Scene taken from "A trip to the moon" (Méliès), an iconic image on cinematic history

Emile Cohl involved a more personal, psychological and surreal visual language. "Cohl's incoherent cinema was essentially the free flow of seemingly unrelated images in the stream-of-conscious style of the Modernist writers. Further inspection reveals an implied, and more significant, level of relatedness in the imagery, prefiguring later animated films which trust the elements intrinsic to animation, chiefly, the primacy of the image, and its ability to metamorphose in to a completely different image" (Wells , 2015, p.16).

Metamorphosis (morphing images) is a very strong concept that allows the spectator to connect two different shapes (normally aided by sound) that may convey a meaning within themselves, the fact of being mutated and the elements they interacting within.

The human mind is "wired" to use its resources to the maximum. Every time we encounter new information, we create synapses that carry out electrical signals and make associations so we can act with the cognitive information. It is specially interesting when this associations go beyond the common schemes of relation. For instance, it would be normal to see a dog in the park, but, What about a dog in space? Have you ever been to space? The solely evocation of what images convey can create an imaginary experience that is not limited to what is actually real (if there is such a thing). A considerable amount of people can imagine the experience of going to space, yet, we've never been there.

Having some familiar elements related to an abstraction can have very powerful effects. Not just as narrative or support to films, but as an experience itself. At the begging of the twentieth century avant- garde artists expressed their desire to go beyond commercial films and use more primitive shapes and colours.

Viking Eggeling mastered the visual representation of several orchestral instruments with basic figures, a deep kinetic abstraction that move through the terms of the music itself. Painter Wassily Kandisnky argues

"A painter [...] in his longing to express his inner life cannot but envy the ease with which music, the most non-material of the arts today, achieves this end. He naturally seeks to apply the methods of music to his own art. And from this results that modern desire for rhythm in painting, mathematical, abstract construction, for repeated notes of colour, for setting colour in motion" (Kandinksy ,1946).

Several other artists on the period experimented with music, each with their unique way to present it. Oskar Fischinger experimented with a wax-slicing machine and new colouring techniques. "Fischinger recognised animation as a form which could accomodate fluid, primal, expressions of thought and feeling.

His desire to synchronise music and movement was primarily driven by his view that few questioned the abstraction of sound. It was merely accepted for what it was, stimulating its own associations and reactions. Fischinger felt that this could also be achieved in purely visual terms. Shapes and forms need not represent anything at all and would provoke a variety of responses in the viewers who received them." (Wells, 2015, p.29)



Figure 1.10 - Scene from "An optical poem" (Fischinger)

So, as far as it has been exposed right now, experimental artists didn't have a fixed purpose, narrative or strategy. They were more concerned with the experience their viewers lived and each own individual interpretation the public had, it is even discussed how the meaning changed on a single individual through the course of his/her life.

As on many other counter culture modes of art, the word "provoking" carries a huge importance. Artists not just experimented with the medium, but experimented with the intention of drawing the attention of visual poems, of visual literacy that could be translated into broader aspects that concerned problems of society.

This visual literacy has been carried through and adopted on different ways which are not limited to visual representation of music. Jan Švankmajer went beyond the limits and created a surrealistic world using stop motion, the combination of live action footage and animation made it possible for him to translate known elements into the surreal and back into reality.

On his shortfilm "Food" on 1992 he criticized the effect of mechanical adaptation and conditioning in society by making the characters have a growing awkward behaviour that eventually led to an unfolding of destructive events.



Figure 1.11 - Scene from "Food" (Švankmajer)

The artist that emerged in the period between 1920s an 1960 used traditional mediums, most of them where already artists in static formats like paintings that discovered the motion world.

During the 1950s John Whitney built a mechanical analog computer based on antiaircraft guns that could calculate trajectories and could plot graphics. With this machine he was able to create the first series of animations "Catalogue". This consisted on a series of abstracted videos that showed the machine capabilities and pioneered the field of motion graphics: computer created figures that morph and transition to design patterns over time.

AUDIOVISUAL DIFFUSION

CONTEMPORARY CONTENT SPREADABILITY



Several aspects come to play when thinking about modern audiovisual language and its impact in society. This divergence of areas has affected the way in which the public perceives content. They include: the rate in which an audiovisual product is made, the rate in which it becomes available to the general public, the technology acceptance on multichannel mediums, economical profit and consumption rates.

Production costs have made it possible for different creative companies to develop their own digital content without investing too much on equipment. Personal computers are capable enough to render a commercial product very quickly.

This has led to more content and more consumption, it really becomes visible on multichannel transmission, changed from TV and Radio to internet based platforms on the last decade. Digital content consumed nowadays is exponentially growing, with a high demand that goes beyond cinematic media, artistic works or advertising. A good example for this is the new role of "bloggers" on internet, individuals that produce and share content with the goal of being "followed" on social media, meaning an instant producer to client relationship builds up in seconds, allowing person to "person" connection and sharing, that expands to more connections, creating a network. Ideally, this is the aim of this social media platforms such as Youtube, Face-

book, Instagram, Twitter, Twitch, Linkedin, Behance, Dribbble, Medium and much more.

According to the Digital 2020 Global Overview Report by Wearesocial:

"More than 4.5 billion people now use the internet, while social media users have passed the 3.8 billion mark. Nearly 60 percent of the world's population is already online, and the latest trends suggest that more than half of the world's total population will use social media by the middle of this year." (Wearesocial, 2020)

This does not only imply production costs will diminish, but also processes themselves have changed radically. Cultural barriers are being taken away by a dynamic interception of people from all over the world, interdisciplinary approach and intelligent accessible data.

Online video streaming platforms themselves occupy a great part of the digital content consumption :

"YouTube still commands the greatest share of the world's online video viewers, and our calculations indicate that roughly 3 billion people watch at least one YouTube video each month [note: YouTube itself reports 2 billion signed-in viewers each month].

However, the number of people streaming TV content via the internet also continues to rise. GlobalWebIndex's latest data show that two-thirds of internet users aged 16 to 64 now watch TV content via some form of subscription service (e.g. Netflix)." (Wearesocial, 2020)

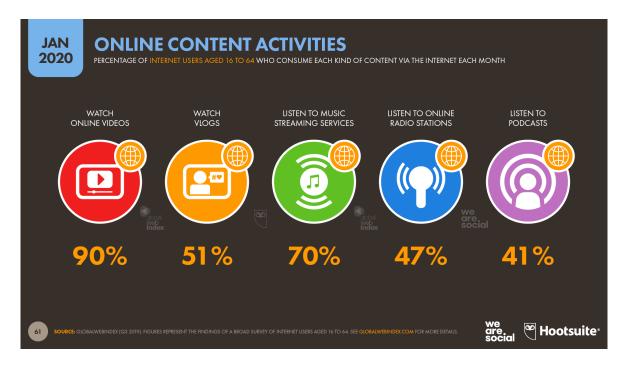


Figure 2.1 - Online content activities by Wearesocial studies.

Strategies are changing in such a fast rhythm to cope with this changes that it is essential for the role of the modern designers to go beyond the already established panoramas and use the tools we have on hand to create digital quality content that can move the society towards a better use of diffusion techniques. This is important for all the aspects that add quality to peoples' lives on a personal and shared context of society, which mean shaping the strategies for leisure and entertainment, information diffusion, advertising and educational purposes.

Consciousness and regulation have moved a big step forward on this matter. For instance on Europe the AudioVisual Media Services Directive (AVMSD) defines the set of core societal values applicable to all audiovisual media services:

"All audiovisual media services have to respect the basic tier of obligations in the following areas:

- identification of media service providers
- prohibition of incitement to hatred
- accessibility for people with disabilities
- $\hbox{-} \textit{qualitative requirements for commercial communications}$
- sponsoring
- product placement" (AVMSD, 2020)

When regulating online services, algorithm transparency and data management have come to play a very important role on obligations for service providers.

The problem of using massive media to arrive to a huge audience brings up the subject of authenticity, in a world where information is shared in such an extensive way, messages can be misunderstood, or worse, fall into manipulation. It is crucial to have a space for personal reflections and suggestions. Taking as an example the developing of advertising and the impact of audiovisual content we see a tendency to mistrust media, we have been exposed and bombarded to all sorts of data manipulation in the most subtle and unnoticeable ways.¹

¹ See "False Advertisement" (n.d.) for more information.

Since the role of the producer (as explained earlier) has changed from big broadcasting and specialized companies to also essentially any user that has access to internet, the mistrust shifts, questions arise to were we dispose or attention and how we change our lives with the big amount of digital we consume everyday. A great example of this is the surprisingly rise of *Deepfake* videos on internet.

"Deepfakes (i.e. synthetic media) is the umbrella term for visual and audio content that is manipulated or generated through the use of machine-learning (ML) – a subset of artificial intelligence (AI). Face re-enactment is a deepfake technique that has alarmed politicians ever since two videos of Barack Obama began circulating – one produced by synthetic media start-up Lyrebird, in which the former US President appeared to promote the company, or the subsequent video produced by Buzzfeed. Again, the output was far from perfect but it clearly showcased the technology's potential." (European Science Media Hub, 2019)





Figure 2.2 - Barack Obama deepfake video on the right (as compared an original video on the left), generated by artificial intelligence.

To summarize, we see nowadays a very important shift on information consumption. The quantity of leisure and entertainment consumption is not something new, but the generator of this content is. As technology has arisen to give opportunity to minor producers, the role of regulation and tools to create audiovisual content lies on hands of more people, and as the role of facilitators for this content we need to beware of the challenges we will encounter, the support we are thriving when creating of the main messages and its diffusion or the experience we want to empower.

MODERN APPROACHES

SUPPORTING CASE STUDIES



To understand the connection between experimental work, abstraction, technological and traditional mediums in animation, a base for comparison has been set. This research scenario, firstly acknowledges the commercial aspects and merging with design, to expose work that has been used by design studios or freelance groups of animators with a commercial outcome. As a part of design, this research is formed on the practical use of past influences of abstraction and use of technology to promote the function and aesthetics of a product, brand or service, which can be either tangible, or not, with a social or business agenda.

The specific points for analysis are explained further to reduce the subjective quality of each individual work. An extensive subjective analysis of each of the presented case studies might leads us to premature conclusions, lack of insight or biased opinions. We want to extract specific points from each of this works to understand a common audiovisual language. For this, a set of rules whom which the works were selected is presented:

Date of creation: The price of information technology (IT), computers and peripheral equipment, adjusted for quality and inflation, declined 16% per year on average over the five decades from 1959 to 2009. Meaning for the same price, the power of acquisition got 16% higher every year, on the later years the growth continued on a non-linear way (Private fixed investment, 2020), but still continue to make tech more accessible. Since technology changes on such a quick pace, a 10 year is defined to include low budget works as well (2010 to 2020).

Use of visual abstraction: This can be achieved by two means:

1) The heavy use of abstract shapes, not directly identifiable as a reference to a real life object or living being unless guided by the audio (voice over, sound effects).

2) Texture, which can be real or simulated by a computer. Adding a level of subjectivity that is more difficult to identify compared to abstract shapes, because of the varied use of it. In a subtle use, it could not be understood as abstracted, but in a more energetic, playful or radical way, it can separate the contour of an element with a direct distinctive meaning (normally used in motion).

It is important to mention that this analysis is being made taking on account the time context, meaning forms shaped by time are still difficult to understand immediately. This is important to mention since nowadays is very common to see morphing techniques, match cuts or other methods¹ of transitioning that might temporarily render the figure not understandable, but will eventually do.

In this analysis, as stated, there is an interest on figures that maintain this sense of abstraction throughout time, this helps support more abstracted intentions like feelings, movement, organic (natural) inspiration and so on.

The following example states the difference:





Figure 3.1 - (Image on the left) Taken from Giant Ant Studio "Fix Florida", the textured shapes on the scene can be identified with a flamingo near a the river as opposed to the second image (Image on the right) taken from Giant Ant Studio "Colorscope: Pink" which is more difficult to identify (and remains difficult to identify during the video unless connected with the audio).

Morphing: Seamless change from one image or shape to another .

Match cut: Match a compositional element of a scene to the next scene.

Space for experimentation: The selected videos most have shown an experimentation process on their creation. This is not limited with materials, since techniques for adding a "hand crafted" quality have evolved, reducing the amount of real materials by post processing a combination between computer drawings, real elements and 3D objects. Software packages like Adobe Photoshop¹ can easily merge different texture photos into 2D drawings, 3D

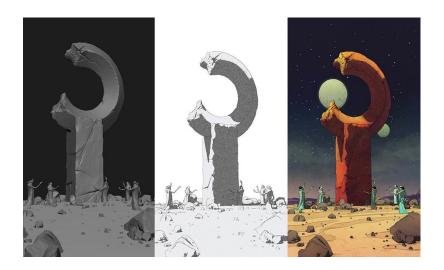


Figure 3.2 - NPR (Non Photorealistic Rendering) created by ZBrush 3D Software, showing the process from left to right.

"Non photorealistic rendering", as opposed to photorealism, is inspired by artistic modes like painting and illustration, rendering the 3d piece into a final result that resembles hand crafted mediums with a high level of similarity.

The experimentation process should be connected to a process of trial and error aimed at finding a visual language. It is not a trial and error process of solving technical difficulties, but more of a "search" for expression. This is normally clear when the main intention of the work is to induce a feeling, that can be for example "understand the sense of beauty hidden in the imperfection of nature " or "help kids empathize how bullied kids feel".

¹ Raster graphic editing tool made by Adobe

Modern work is normally done in teams of different professionals (3D animators, 2D animators, hand drawn animators, illustrators, sound specialists and so on), so, it is also valid for the scope of this analysis to include work that involves personal experimentation of a member within a team (hence a personal understanding and abstraction).

Use of technology is connected to this point of analysis, and as this thesis exposes, it is a crucial change on how we live this process nowadays, but is not necessarily limited to it.

CASE ANALYSIS "FORMS IN NATURE"

Creator: Chromosphere LA Studio

Year: 2016

This project, created by a team of four people on Chromosphere Studio is defined by the creators:

"Forms in Nature" is an audiovisual meditation on humankind's scientific achievements and the wonders of the natural world. The film celebrates how science deepens our connection to nature through study and curiosity, as well as the awe-inspiring beauty of our world." (Chromosphere LA, 2016)

Commissioned by the Science and Nature Fund, the intention of this project, as explained by a team member of the project in charge of the development (Kevin) was to join nature and scientific discoveries, to evoke the same sensation of wonder and interest that people had since, one could say, the beginning of humankind. Obsessed with understanding and being able to replicate natural phenomena, we've been always keen to the inspiration nature brings us.

This starting point already settles the high standards, being able to not just provoke a sense of interest, but wonder as well, to finally connect the beauty of nature related to scientific curiosity, ultimately arriving to the existence of the Science and Nature foundation.

It is a perfect example for a modern piece of animation that is able to communicate in ways beyond live action in an efficient way.

The journey started with introspection and visual inspiration:

"I had a lot of fragments of ideas bouncing around in my head regarding the importance of conserving our natural environment and also emphasizing the importance of careful scientific study for future generations." (Chromosphere LA, 2016)

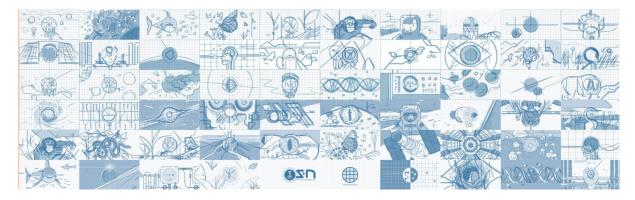


Figure 3.3 - Sketches by Kevin Dart when approaching the brief



Figure 3.4 - Visual inspiration

Allowing a space to understand the subject, to explore it graphically was critical to the project, since the base foundation of all the graphical representation was held around the idea of presence in nature around every scientific discovery, of beauty. In this case Kevin arrived to a composition of a circle in the middle of the frame, thinking of the movement evolving around the perfect shape of a circle.

The use of abstraction helped the viewers to identify the main objects playing around this composition: a leaf, rockets on space, insects, animals... but at the same time abstract enough to introduce a sensation, a context.



Figure 3.5 - Styleframes to understand composition and colour

Important to mention that the project acknowledges as well the power of animation, making it important to abstract movement so it can be "filled by the brain" between frames. Even if the animal movements, for example, do not replicate exactly the real movement, it indulges the viewer to contextualize the perfect form of the circle around the environment presented: the deep mysterious ocean, the calmness of a river, the immensity of space, etc.

CASE ANALYSIS "WHAT IS STRESS?"

Creator: Device Studio

Year: 2020

Device studio created this audiovisual campaign to promote an app focused on reducing stress on professional teams.

This project is interesting in the sense that a narrative was built around an abstract universe that represents a sensation, a state of mind. How can we understand stress? Moreover, once that viewers understand what stress is, How can they relate it to the benefits proposed by the application?

The concept of stress varies from one individual to another.

This relies on the fact that we have different stress reactors, but the feeling of stress could be "perceived" in a common way. Some might think of a knot in the stomach, blurry sight, a feeling of enclosure or many other physical manifestations regarding the amount of stress the person is experiencing. What ties all of this? We arrive to visual clues that give a hint. Perhaps using a literal knot, a closed room can help, but since not everyone experiences it the same way an analogy or metaphor requires more abstraction.

This case makes a heavy use of the experimental animation resources, conveying meanings through its more primary shapes (circles, squares, lines), but with the twist of the principles developed by orthodox animation: the ball has a personality and the story is unfolded around the ball's journey, movement follows the 12 basic principles of animation developed by Disney.

Texture is present on the whole video, changing according the voice over, helping the narrative to unfold towards a tangle sensation, whether it is intense or not, if it affects daily life or not, what is the healthy amount of stress necessary for daily life. This in combination with secondary figures and how the ball interacts with them makes a fluid narrative that communicates the benefits of taking care of the level of stress in your life and at the same time makes an important aesthetic and pleasant journey that will be easier to understand and remember.



Figure 3.6 - Frames from "What is stress?" app promotional video

CASE ANALYSIS "GOOGLE HOME APP"

Creator: Gunner Studio

Year: 2018

Gunner studio developed a concept with Google as an experience for users to interact with their Google home app. Different from the other projects, this case study was developed for users to use in a regular basis, and not just as a one time consumption.

The purpose of the project is presented by Gunner as:

"We partnered with Google to create a fun and informative onboarding experience within their Home app. We designed a modular visual system that could be scaled across hundreds of devices." (Gunner, 2018)

It is interesting since the design process had to embody this animations on a small format (smartphone app), intended for daily use and it had to cover usability concerns as well. Nevertheless, there is an interesting position for abstraction when speaking about code, and in my personal opinion Gunner did an outstanding job combining both informational aspects and abstracted sensations on their animations.

Colours in this special case are more related to the brand perception that to the work itself, but what I found most interesting about this project is the extremely graphical abstraction of the different uses the app has. It carries a lesser level of profoundness as compared to the previous cases, and this is mostly related to the fact of not having a voice over, but there is still a level of contextual sensations the mini-animations of the Google home app carry.

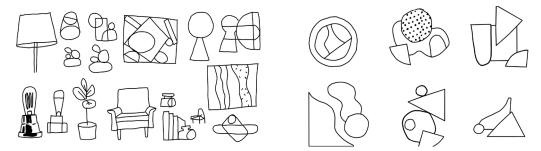


Figure 3.7 - Experimentation process to find the right forms, composition and move -ment

One of the carried message of this simplified forms and movements is deeply correlated to the easiness, simpleness. A friendly and perhaps even comical approach to this animations invite the user to use the app.

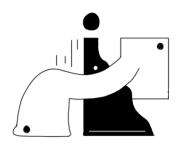


Figure 3.8 - Final animation designs

We see on this project influences of Disney principles related to the movement, abstraction of shapes connected to an experimentation process and an interactive, new panorama that introduces the importance of delivering the right message with the right level of abstraction. Without texture, voice over and even taking aside a deep colour analysis, Gunner was able to develop personality and use on every animation.

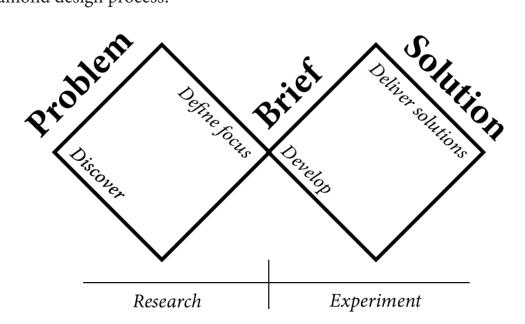
A BRIEF EXPERIMENT

ON AUDIOVISUAL IMPACT



So far, a base of analysis has been settled for the different animation approaches through history to arrive to modern projects, which have influence from both Orthodox and Experimental animation, contextual situations and technology used.

To connect and understand how animation today has the expressive impact possibilities that forms part of the hypothesis presented at the beginning of this research, a brief experiment was conducted to find differences on styles, mainly defined by the level of abstraction and exposure of the medium (making it feel "handmade" in this case). The development followed the double diamond design process:



During the Research phase, a problematic related to the intention of this thesis (considering the actual modern animation panorama) was defined and expanded to then focus on a specific area that could bring value, a tangible and concrete base for a concise evaluation and use of results for conclusions. The Experimentation phase involved thinking of strategies to deliver the audiovisual messages, then narrowed down to real practical solutions that could be developed on high fidelity for this experiment.

PROBLEM

Animation, as exposed on previous chapters, has been present for a long time on humankind. We are naturally dragged by movement, and of course, we started mimicking it and finding ways to express through motion. What could be concluded from this thesis is not ground breaking knowledge, it is not something that haven't been asked before rather than a re-proposal in time, a check-up as a society to see where we are at, the context in which we make use of our expression abilities as both means of aesthetic and performance, shaping the way we understand ourselves, the culture and the society in a holistic way. To base this in a more pragmatic area, the experiment evolves on the design context of building a communicational strategy:

How can experimental animation aid design solutions that involve audiovisual content?

"To aid" is left as an open point depending on the objective of the fictional design focused project, it is, naturally a support for a more ambitious objective, in other words, what we are trying to communicate.

The next step consisted on broadening up the possible animation scenarios and design solutions as a whole.

DISCOVER

At this point, I did a brainstorming session and investigation to understand how animation was used on design nowadays. During the development of the thesis I was able to gather many resources, but most of them where academic resources, so I took a deep dive on internet and keep an open eye to anything that involved design. This was actually the process that took the most time, since it could not be solved from one day to another. I followed niche design-focused studios, festivals, social media accounts, magazines, movies, ads and marketing, websites, games, applications, artists, popular design studios, animation focus studios, collectives and museums.

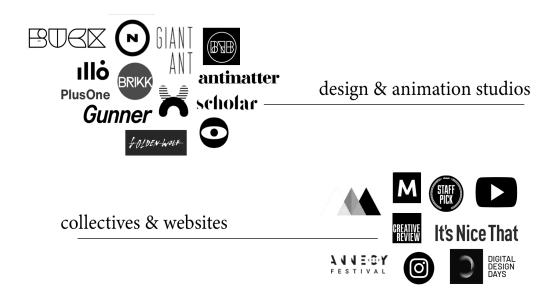


Figure 4.1 - Main inspirational sources.

The main goal of this exercise was to understand some basic contextual questions like:

- Are there purely aesthetic "trends" on motion?
- What are the type of content consumers for more complex animation projects?
- Do all successful content producers follow an experimentation phase?
- How much time do they invest on finding the right visual language?
- What is considered bold? Until what point is an experimental/abstract animation too abstract to be understood?
- How do people use colour and textures?
- How do people engage with profound and complex messages on animations?

DEFINE FOCUS

Content creators usually work at an amazing level of balance between creativity and purpose. This is achieved normally by different approaches shared with many other design disciplines. Innovation is key when approaching new client briefs, after several ideas come to the table there is undoubtedly a phase of graphic experimentation, varying on the level of refinement and boldness. One of the most basic experimental phases can be accounted to just "sketching", storyboarding or brainstorming. In the case of a communicational scenario, since the objective is important, the experimentation phase has to arrive to a certain point of acceptance to move to next phases, and here is the interesting part that proposed a challenge for this experiment.

In the modern and commercial world, experimentation arrives to a certain level of acceptance before going public. It is intended sometimes, as an act of boldness, revel and strong deviance to propose a radically new audiovisual scenario, but is rarely unplanned, at least at a certain point.

For this experimentation, a certain level of "public acceptability" had to be present. For instance, a truly abstract, silent scenario of primary figures, however deep and thoughtful every movement was, could not arrive to the analytical point required for this experiment. It could be interesting as well to experiment with different technology, a transmedia narrative that folds within different interaction scenarios, but due to the level of fidelity this experiment requires, it was a risk to test both the interaction and the communicational objective.

When thinking on the level of abstraction, I decided to make two variations of content, since abstraction could have the risk of being to subjective due to my personal interpretation. Both pieces of content would be tied to the same communicational strategy and tone, but differ on the visual qualities: one of them abstracted, inspired by experimental animation, and the other more literal, using more influence on Orthodox animation and filming techniques.

I decided to build all the visual content myself, to have the flexibility of deciding how and when to abstract, the movement, colours, texture and style. Because of this, I had the constrain of building short content, in which the result of a deep feeling was clearly difficult. For this, I took advantage of a current strong situation happening worldwide: coronavirus.

A virus that affected the entire population and has caused great damage to all society, it is widespread and a really common, actual and important topic. Having a well-known subject by the participants would allow me to exploit the visual capabilities without having to focus to much on introducing it. It would have the risk of being attached to emotional responses created previous to this test and tied to personal experiences of participants, but I chose this subject as a base since that could be also information of interest: knowing "triggering" clues for different emotions, and strong they where.

A structure was settled upon the following insights:

- Two content variations, experimental and orthodox, based on the same communicational objective
- The presented audiovisual content should have a certain level of abstraction, but not too much to make it difficult to understand
- The subject chosen: coronavirus
- Style doesn't need to necessarily be radical or bold, just abstract enough to understand, not just the direct feelings from the content, but cascading/trigger emotions
- As an extra objective, arrive to insights applicable for transmedia content

BRIEF

Develop two animations, experimental and orthodox based, to trigger emotions as a response to the same coronavirus message.

DEVELOP

The first task to tie both animations together was finding the right voice to animate, this would be the foundation for a clear message. I searched for the right tone, voice and duration of various coronavirus campaigns. I was also searching for the right approach, which could allow to animate and experiment more. This, generally speaking, involved high level concepts which are already abstract by nature, like love, caring, trust, frustration, fear, belonging, unity, respect among others.

The tone for most campaigns was based either on fear, commitment and respect or trust, respect and civil duty. Most of them were convincing campaigns to inform about the current situation and/or persuade people to do something specific that helped diminish the spread of the coronavirus. This could be either wear a mask, social distancing, stay at home or have the right hygiene. I found the perfect campaign audio from coronavirus.gov (Ad Council,2020), which is part of the U.S. Department of Health & Human services (HHS, n.d.). This campaign's audio was very informative and direct, with a touch of persuasion.

00"-03": Why should young people care about the spread of corona virus?

03"- 10": Well, we know that people with underlying medical conditions over the age of 60 are at highest risk, but they've got to get it from somebody.

10"- 17": So, we're asking everyone to be selfless for others so that we can protect those who are most susceptible.

17" - 26": Not going to bars, not going to restaurants- it just means physical separation, so that you have a space between you and others.

26": For more information on how you can social distance please go to coronavirus.gov

Voiceover fetched from U.S. Department of Health and Human services

The main intention of this ad was to communicate to young people about their impact on most susceptible people, which are people over the age of 60, specially ones with underlying medical condition. It is really practical, telling young people to be selfless for others to protect, having physical separation.

Experimenting: First version

I started sketching and investigating from an abstract point of view, thinking of the orthodox animation to come later since the abstract part would define the limit. I jumped directly into a white canvas to start sketching out different "sensations" I felt when I listened to the audio, it was, actually a really experimental approach. The main thrive was "How does a disease spread would look like? An unstoppable force to fear of? A sticky gooey substance?".

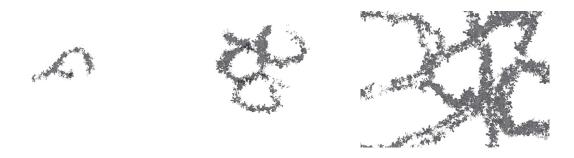


Figure 4.2 - Stills from my first Experimental animation, first trial

I felt there was still a mission to fulfil for this animation, even at an experimental level to go beyond just looking like a disease, it had a communicational message, so I tried developing a storyboarding with some general concepts of this sensation:

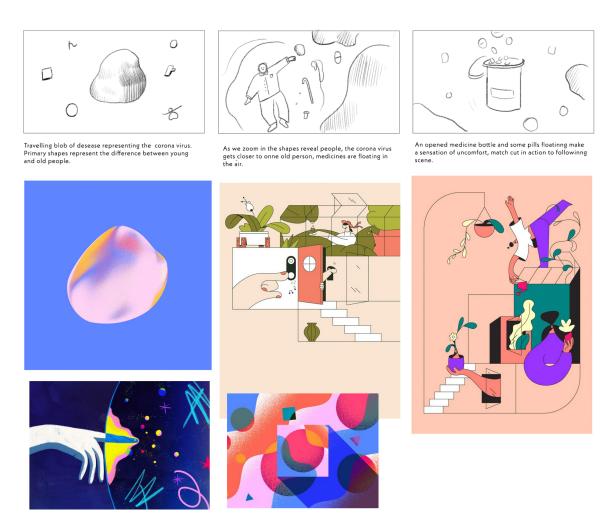


Figure 4.3 - First part of storyboard and moodboard, second trial

Even though it was already starting to look interesting, I realized the blobs themselves and the general strategy was based on fear. The strangeness of a massive blobs that encapsulates and consumes people. It was too much for this campaign and a poor strategy to test.

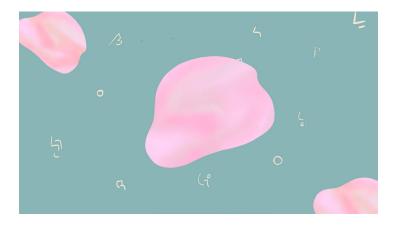


Figure 4.4 - Styleframe from first experiment: a blob travelling representing coronavirus, a threat approaching

Experimenting: Second version

After my first approach, I realized that even for experimental animation a storyboard was needed, not just for the sake of being able to organize my thoughts, however abstract they were, but it would somehow tie the concepts together, to exploit more the contextual elements.

In other words, the animation was meant to support the narrative, not the other way around.

Experimental storyboard



Moving figures, representing youthful, energic routines.

VO _ 00"-03": Why should young people care about the spread of corona virus?



A black expanding mass expands from the inside, separating each individual figure.

VO_ 03"- 6": We're asking everyone to be selfless for others



Figures move more calmly without overlapping.



From the middle a protected circle encloses the elderly (figures moving super slowly).

VO_ 06"- 10":so that we can protect those who are most susceptible.

Experimental storyboard

In this second and final iteration for the experimental animation I was mainly focused on using a very simple colour palette to add personality to the figures through movement. I simplified the narrative to support the most important message: social distancing. In this version with a more light and subtle tone, trying to convey a sensation of protection to people that are susceptible.

The voiceover was reduced to remove 7 seconds (second line) for two main reasons: the first one, as an opportunity to abstract and suggest elder people just by movement, having an open panorama to how can relate being exposed to elder people, and secondly as a way to reduce the animation production time and focus more deeply on the details.

The result is a smooth animation, with dynamic transition that was a "rough feeling" of texture, as if the animation was made by hand. "Young" figures are very playful, they interact in an energetic way the first part of the animation, to latter being separated by the black mass, having more control and relax movements, respecting the distance opened up to show the "elder" represented figure.

The experimental animation was developed on a frame by frame technique, meaning all the figures were hand drawn, having first a reference for movement, and a styleframe to base upon.

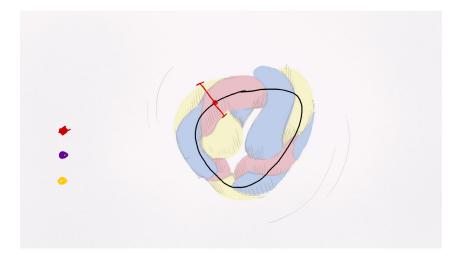
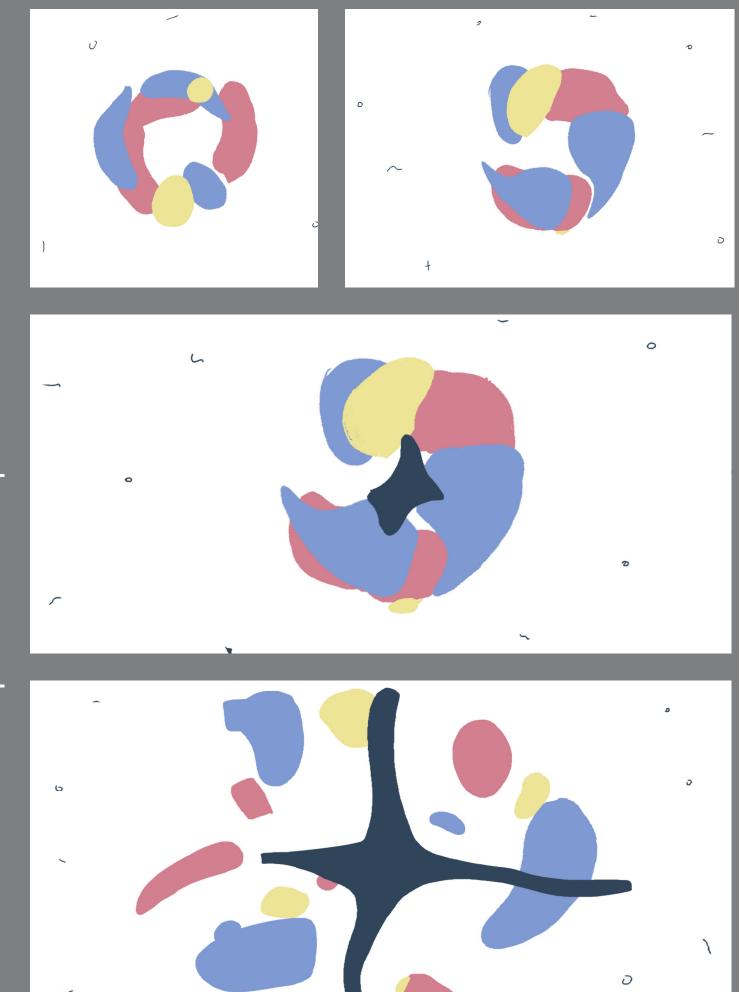
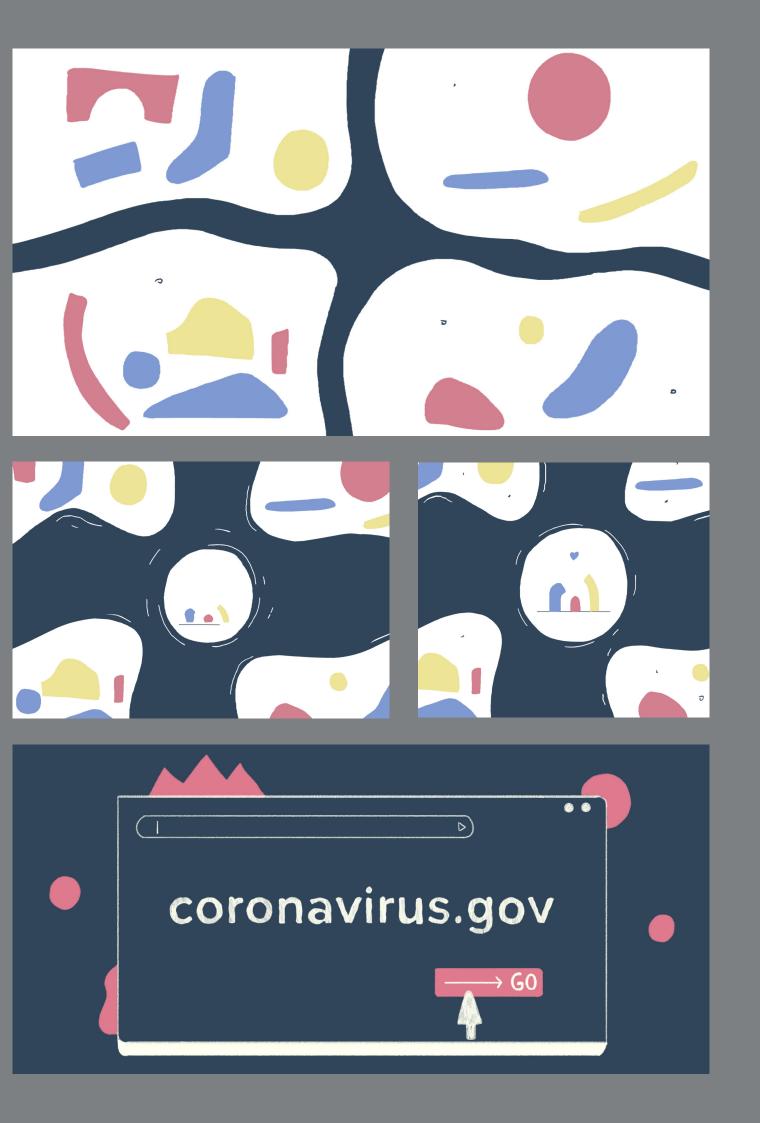


Figure 4.5 - Animating the movement lines and getting the right timings was the first step of the process





Orthodox storyboard



Two young men drinking, not preoccupied.

VO _ 00"-03": Why should young people care about the spread of corona virus?



Door closes.

VO_ 03"- 6": We're asking everyone to be selfless for others



Several doors close on same frame.



Elderly couple staring calmly at the sky.

VO_ 06"- 10":so that we can protect those who are most susceptible.

Orthodox storyboard

The orthodox animation storyboard involved a human connection, in a general way it was designed to reduce the cognitive effort required to interpret the communicational message, but in a general way I wanted to conserve an "artistic" sensation to keep interest, so I chose a relatively varied colour palette that would invoke interest to young people (remembering that this message is mainly for young people).

The narrative suggests at the beginning to young men drinking, most probable on the street (as I wanted it to be envisioned) since they have a position that seems to be on a floor. I would have liked to design all of the elements, but I had to arrive to a certain level of abstraction too (for example, there is no floor on the first frames) since I didn't have the time to draw everything, I tried to reduce it as much as I can.

The door closes, giving a message of distancing through lockdown. The connection between street and door closing would most probably relate to the young men returning home, following by many other young men turning home. At the end, the relation between protecting is more evident on a daily basis, meaning we can affect elderly people if we have more contact with them on the street, the are exposed.

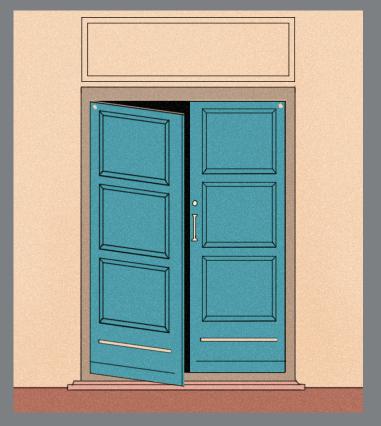
The technique used for this animation was a combination between rotoscope animation and compositing.



Figure 4.6 - Reference frame for young people on the first scene for rotoscope animation













SOLUTION

To test the result for both animations, a total of 22 test subject (age 20-35, since the message was direct to a young audience) participated online. Each one of them saw just one of the two animations (equally distributed 11 people for orthodox, 11 for experimental, selected randomly), but all of them answered the same interview, which was designed to document the scale of emotions as a reaction for the 14 second animations. The following table justifies the use of these specific emotions:

Fear	Even if the main goal of the content is not to provoke fear, it might indeed be a social construction of the individual to understand the importance of rules by fear. I think this will more probably be present on the Experimental animation, since the abstraction opens side issues/reactions.
Anger	Since the video is a reaction to a ongoing situation which is difficult to everyone there might be a portion of the testing audience that might react with anger to this suggestions.
Surprise and interest	This emotion evaluated the graphical trigger to "hook" people on active thinking.
Overwhelm	Since we are so exposed to audiovisual content nowadays, this question focuses on understanding how much of this abstraction can really provoke a reflection state on the subject. It can also direct the answer to an overall rejection of the message and not solely aesthetical, as it would perhaps be without it.
Trust and motivation	The main goal of the audiovisual content as intended.

Justification for tested emotions

SOCIAL DISTANCING ANIMATION QUESTIONNAIRE

Social practices while leaving on times of coronavirus

1.- Please watch the following animation (active audio): <link>

What did you feel?

Now, 5 basic emotions are listed. Please select the corresponding scale you felt as a response after watching the video, an example phrase is provided as a guide to what might trigger that emotion, but is not limited to that specific trigger.

2.- Fear

An idea that might trigger this feeling: "Coronavirus is a serious disease that will bring unknown suffering."

	0	1	2	3	4	5	
Not at all	\bigcirc	\circ	\circ	\bigcirc	\bigcirc	\bigcirc	Very much

2.- Anger

An idea that might trigger this feeling: "I do not agree with the suggestions reflected on the video."

	0	1	2	3	4	5	
Not at all	\circ	\circ	\circ	\circ	\circ	\circ	Very much

3.- Surprise and Interest

An idea that might trigger this feeling: "I was not expecting this audiovisual content and I feel inclined to reflect on the message presented."

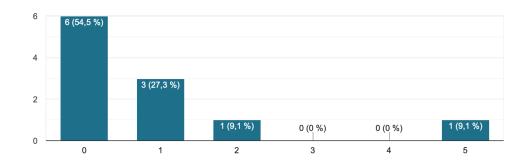
	0	1	2	3	4	5		
Not at all	\bigcirc	\circ	\bigcirc	\circ	\circ	\bigcirc	Very much	
Interest								
	0	1	2	3	4	5		
Not at all	\bigcirc	\circ	0	0	0	\circ	Very much	
4 Overwhelm An idea that might trigger this feeling: "I don't understand this video and I feel it is too much, I will probably forget about the content tomorrow."								
	0	1	2	3	4	5		
Not at all	0	\circ	0	0	0	\circ	Very much	
5 Trust and motivation An idea that might trigger this feeling: "This video made me realize how people care for each other and I feel encouraged to follow suggestions on this topic."								
Trust	0	1	2	3	4	5		
Not at all	0	0	0	0	0		Very much	
Motivation								
	0	1	2	3	4	5		
Not at all	\circ	\circ	\circ	0	0	\circ	Very much	
Commants								

Surprise

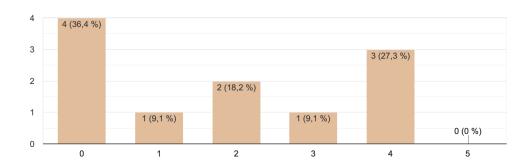
RESULTS

Fear

Experimental



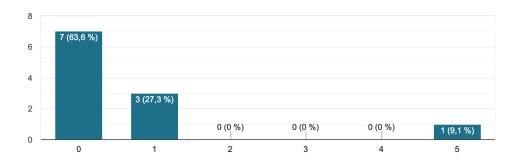
Orthodox



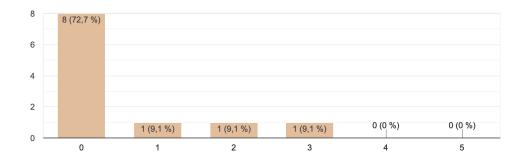
Contrary to my thoughts, the orthodox animation had more cases of triggered fear. I think this is more probably related to the first scene and the "lockdown" feeling. Since it is a subject that is still ongoing, and there are restrictions everywhere, the scene of closing the door might have had the impact experimental animation didn't have.

Anger

Experimental



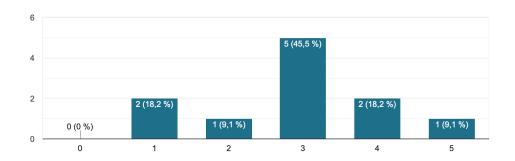
Orthodox



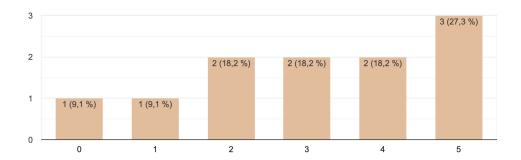
Neither of the animations triggered a significant anger feeling, the trigger phrase guided a feeling of rebellion "I do not agree with the suggestions reflected on the video". Meaning the tone and style were apparently efficient on deliver a message of subtle responsibility, empathy, connected to the current situation , in which social distancing isn't a new and radical solution, but more of a daily basis situation we are all experiencing.

Surprise

Experimental



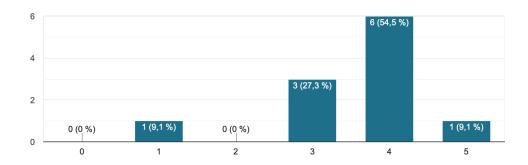
Orthodox



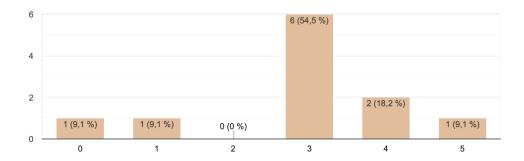
The trigger phrase invited people to reflect further on the subject, this section was divided by surprise and interest, meaning surprise was the first impression. If we divided the graphs on "more inclined on not being surprised" (0-2) and "I was surprised" (3-5) we see a tendency on both to be more inclined on the surprise, but more prominent on the experimental animation. Nevertheless the tendency was to feel somewhat surprised (3), which could mean a slight surprise due to the subject of coronavirus, but a general feeling of expectation towards abstraction. On the other hand, 27% found the orthodox animation techniques on the theme of coronavirus very surprising.

Interest

Experimental



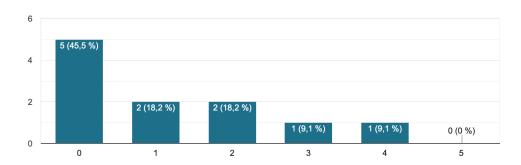
Orthodox



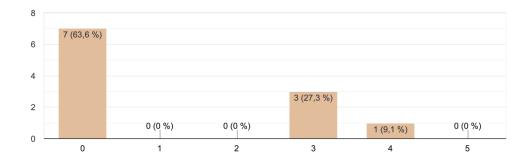
For both animation styles, there is a tendency to grab interest, more prominent on the Experimental animation. The curiosity driven by abstract figures makes it easier for people to get "hooked" into the subject, still the orthodox animation was able to achieve an interesting level of attraction.

Overwhelm

Experimental



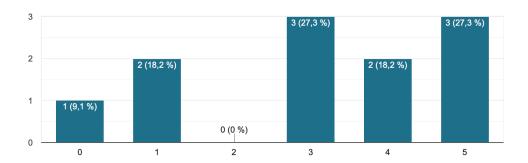
Orthodox



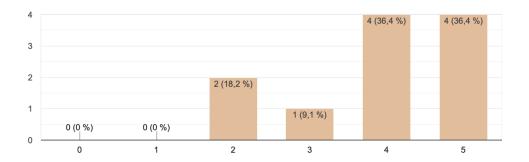
From this results, I would say that the animation didn't provoke a sense of overwhelming, meaning the concept was clear and the visual aid was not to difficult to follow.

Trust

Experimental



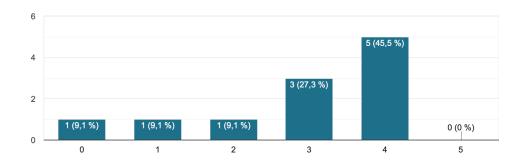
Orthodox



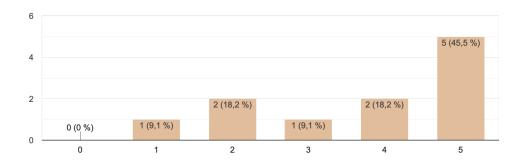
This is a very interesting graph, connected to the motivation results. People felt more trust and more motivation when looking at other people, they felt more connection. There was no participant that didn't feel trust, as compared with the experimental.

Motivation

Experimental

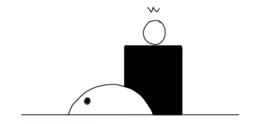


Orthodox



Motivation in this experiment is the strongest and most effective result, since it suggest not just reflecting on the content of the video, but a general transformation towards other related messages. It would be difficult to assume that people changed their perspective and feel inclined to have a social distancing just by interacting with the video, so motivation would be the first step to develop lasting interest. The orthodox animation resulted on more trust and motivation, an unexpected outcome.

CONCLUSION



On the presentation of this thesis work, an intention of discovering what is the role of experimentation for audiovisual work today and on the future was introduced. For this, basic concepts that could be applied to either 2D, 3D or immersive environments were developed, which are: form, colour, texture, tools and methods. Then, an analysis on animation history was exposed to connect to innovation throughout history, remarking the value of motion seeing as art.

Later on, an analysis on the current audiovisual diffusion settled the contextual consumption rate and situation in which we are at the moment, having changed radically on the last 70 years. It highlighted the importance on generating quality and ethical content and the level of competition on the industry, it also presented the possibilities for content producing, which are really big.

Settling more the grounds for the experiment, a comparison base was settled to analyse why three pieces of audiovisual work today were relevant. On this analysis, styles were different, but all pieces involved a graphic experimentation phase and had an different journeys, related to their own specific style as a studio and subject to communicate.

On the last section, a brief experiment was conducted to evaluate reactions to two animations concerning the same voiceover about social distancing on times of coronavirus. Different levels of abstraction were developed, orthodox and experimental. It was evident that both methods were able to transmit the message, but the orthodox animation developed more trust and motivation, as the experimental work developed more interest.

The value of experimenting is evident and rewarding, it forms personality when communicating and creates a more humanly message, which is closer to art. This approach in combination with an organized process of creation, as seen with the modern works, creates really interesting results.

PERSONAL CONTRIBUTION

When speaking about an audiovisual work today, it is difficult to think of animation as opposed to cinema and orthodox as opposed to experimental, since it is so ubiquitous. The roots, are for sure related to different styles, but Where would categorize leave us? If at the end we are thinking on **experimentation**?

Creativity is the key word on this panorama. Creativity is not settled by a style, it is not categorized, and it is extensive and expansive. It doesn't come just from one person, since we are always influenced by other peoples' work, and it is awaken and closed without prior notice. Experimental artists found a recipe to acknowledge this process, there were no mistakes. Artists defined their process as experimentation, which already involves a free zone, there is no right or wrong way to go, just what your intuition tells you how it should be, changing over time, but at the same moment being used to freeze time and understand our current inner world.

Abstraction requires so much level of thinking that we don't actually do it consciously, we can just fetch it from our subconscious at a certain moment. Perhaps this abstraction is shared, perhaps we have constructed a common understanding on how emotions can be graphically depicted, and I believe this not to be an impediment to use them anyways, originality comes from combining this abstracted elements into something that feels real.

How can we know if it feels real for other people is the right focus. From my experiment, I realized that there is no direct way to tell, but some proven methods show that you can achieve a certain level of interest and motivation.

For instance, using people to talk about people would be a first good point to start off. We inherently share a reaction to anything that looks human. This can also be applied to figures and colours through movement, just until some extent. In the experimentation animation I put myself into the figure, How would I move? How would elder people move? How is this figure different than the other? Perhaps it is too much to think of, but it was useful for me to understand if that could bring more empathy to people, it didn't. It was more amusing that communicative, because it didn't need to be communicative at all, the voiceover already settled the narrative. This is the reason why people didn't feel overwhelmed with the experimental animation.

The overall results of acceptance regarding interest, motivation and trust showed that, even for a 14 second animation, participants understood the subject and were able to internalize until some point the situation. Considering this short span of time and deep content, animation is a great tool to "skip the obvious" and jump directly into reflections.

As technology develops, the experimentation phase will keep an important role in finding new storytelling devices that will offer the right tone of communication, playing with form, colour, texture and technology. It is important to keep a relaxed area for creativity to arise and trust on instinct, but at the same time have an agenda and order to settle this creative expression.

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