DESIGN, VISUAL COMMUNICATION AND BRANDING

Edited by

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PREFACE

Technological advances associated to new ways of life, new social and consumption behaviours, are leading to changes in how organisations, businesses and brands develop branding systems, create their visual identity systems and how they communicate.

In this changing context, design processes develop in the face of new realities in the way of thinking, creating, and managing brands and their visual identity systems.

Contemporary brands benefit from several technological resources, namely AI, the internet, the internet of things, which support the definition of contents, supports and experiences to reach audiences that may be dispersed around the globe.

The pressure on businesses and brands is high, along with strong levels of competition and great demand and scrutiny by stakeholders.

On the other hand, the need for constant communication and real conversations between brand and audience were enhanced by digital communication, which brought about changes in branding, namely in design, in the media, in communication languages, in the relationship with audiences, in experience design, behaviour, culture and in brand management mechanisms. On the other hand, artificial intelligence has opened doors to other ways to deal with big data and to communicate with mass audiences, through the customization of messages or a one-to-one logic. Overall, the intersections between Digital Communication and Artificial Intelligence seem to point to a new reality in brand communication, which includes Computer Vision, Pattern recognition, changes in the design business and in the way communication design and branding are done.

Alongside technological potential, design is positioned to interpret and integrate data, helping brands to develop sustainable strategies from a human, financial and environmental perspective.

This book comprises the introduction and nine chapters developed as essays that can be read separately or as a volume correlated by design, communication and branding:

-   The introduction sets out the main concepts as well as the changing landscape of branding, contemporary business, social and technology, explaining how they influence design, branding and communication.
-   The first chapter explains corporate social responsibility and how design and brands can be reformist and mobilise causes and changes for the benefit of people and the world.
-   The second chapter discusses branding as a strategic process and design thinking as a mind-set in developing a multi-sensory, more human and engaging brand experience.
-   The third chapter discusses the changes in communication models between brand and its audiences, presenting the use of Neuro Design as a life of data collection and analysis on audiences and stakeholders.
-   The fourth chapter is dedicated to the possibility of using the visual content publicly shared by users on the social network Instagram to understand what the audience of a particular place retains and the extent to which this information is relevant to solidify the DNA foundations of a place brand.
-   The fifth chapter, explores dynamic identity systems, presenting the components that form them and proposing categories.
-   The sixth chapter presents a historical overview of dynamic, fluid, or flexible visual identity systems and asks how various components can contribute to their emergence.
-   The seventh chapter presents a proposed model for the creation of brand marks through comprehensive artificial intelligence.
-   The eighth chapter analyses the form and discourse of visual identity narrative, presenting its dimensions and how they can explain how purpose has become the basis of contemporary brand history.
-   The ninth and last chapter discusses the role of design and the designer in the contemporary context.

<div align="right">Daniel Raposo, 2022</div>

INTRODUCTION

DYNAMICS OF BRANDING AND COMMUNICATION IN THE 21ST CENTURY

In the context of the new economy (Costa, 2009), increasingly, brands are the architecture of businesses. Both brand image and a business tend to be developed organically, which puts a special pressure on managing them in an integrated way (Shaoqiang, 2018).

Considering the brand as the nerve centre of business represents not only a reversal in the roles between brand-business, compared to the reality of previous centuries, but also requires the alignment of these two dimensions so that they form one single programmed front from one purpose and a defined Brand Image.

A brand is a network of intangible and interdependent concepts (its characteristics, purpose, basic concept, beliefs, and values) strategically created to identify, distinguish and positioning a certain entity, business, product, or service (what they stand for) and to generate the desired brand image.

The brand must be authentic, differentiating, and relevant, needing to be communicated explicitly and coherently, which implies collaborative work and a common culture shared by the organization's employees, because by itself the CEO is insufficient (Benbunan et al., 2019). Brand image is an ever-changing social phenomenon that requires brand management - Branding is the process of brand creation, attribution, and management.

Thus, brand management is the driving of a complex ecosystem conditioned by both internal and external factors to the organisation, requiring the prioritisation and monitoring of the brand across the various touchpoints (physical, audio-visual, digital or virtual), as well as the experience of stakeholders (Benbunan et al., 2019).

The Brand Picture consists in identifying the main characteristics of the brand at a given moment, helping to define the Brand Image, the desired

and idealized brand in a certain future (Davis, 2000), i.e., how the brand is intended to be perceived by the various audiences or stakeholders and it results in the planning of the Brand Identity and Brand Personality with a strategic sense (Raposo, 2018).

The brand identity includes a definition of purpose or greater cause, the reason why the brand exists and from which its mission derives. These concepts correlate with the vision and values of the brand, which together characterise the brand identity, personality, and positioning.

Thus, a planned brand starts with the definition of purpose (the reason why it exists in the world, the greater cause it represents for society, which gives rise to the mission) and Brand Personality (how we want the brand to be seen and valued by the public), which gives rise to strategies, goals, objectives and the management and communication program.

Although the term strategy is slightly used, it only exists when objectives, goals and tactical actions are defined with the respective monitoring instruments and indicators (the understanding of messages, the graphic components, contents, and most efficient means) or measurement of results (brand awareness and perception generated, number of impulses and mentions and financial return on advertising investment). In this sense, part of the strategic effectiveness of branding depends on how coherence with the purpose is maintained, how all forms of decision, brand communication and actions are coordinated so that they express a certain brand personality and positively generate the desired brand image.

For a strategy to be appropriate it needs to be created considering the technical, economic, and operational capabilities, as well as the ambitions and desires of the company, but also an informed knowledge of competitor practices and offers. On the other hand, the effectiveness of the strategy strongly depends on how all actions and operations are tactically matched and optimised so that the brand meets stakeholders' expectations and contrasts from competitors. The tactical options concern the position and organization in space and time, so that, successively, the components reinforce each other and lead to the desirable result in terms of information, communication, persuasion, sale or change in behaviour by the addressees (Calçada, 1997; Mozota, 2002).

A company cannot be understood outside its context or market, just as a brand only exists with the participation of its audiences and in comparison, to its competitors. Both the company and the brand must result from

programmed or intentional actions, combined with spontaneous behaviours of the players throughout the supply chain, as well as from tensions created by competitors and counterparts, consumer behaviours, social concerns, culture, technological, urban, and social developments, legislation and government policy, innovation factors, fashion phenomena or trends, among other factors.

An agile brand and communication management in constant transformation

Corporate sustainability and competitiveness require a link between brand and business or company. However, the difficulty of ensuring this requirement lies in the organic and dynamic nature of businesses and brands, insofar as both systems depend essentially on the interaction between individual or collective entities and their social and market dynamics.

In this context, Branding is a way of considering the organisation from a global and integrated perspective of management, production, promotion, sales, communication, and innovation activities. It is a way of understanding the whole by the combination of the parts and the components by their contribution to the system. Thus, management, design, engineering, marketing, communication, or production are components of a supersystem that is the brand. Or as Oliveira (2018) refers, Branding is a supersystem of management, monitoring and evaluation of the subsystems: management; strategy; visual; Texture and Environment Design; Financial and logistics; sensory and emotional; behaviour; brand.

Costa (2004) proposes to look at Branding from the perspective of interpersonal and corporate communication, defending a management model that articulates collaboratively instead of compartmentalising the various departments and teams of an organisation.

The system focuses on the proposal, on differentiation, on coherence, on communication and advertising, on the product-service-experience, on the particular and integral process, on the business-brand-communication-experience, being a global vision integrating languages, norms, actions, and results that obey defined principles and that are in constant transformation (Brea, 2020).

A brand strategy based solely on visual identity and style is hardly sustainable. The visual identity must be correlated with the other business dimensions along with all contact points, and the brand must be considered

as in an integrated system that is more than the sum of the parts. Branding is an opportunity to promote a corporate culture and an open design policy that values creativity and critical reflection, where ambiguity is possible, as well as answers that generate new questions or support the emergence of ideas and innovation. And the creation of a design culture implies availability, resources, and capabilities with equal complexity to that of the business challenges (Mootee, 2014).

However, every entity, business, product, or service aiming at selling and/or satisfying the needs of others must have a visual identity system and brand communication mediums (Lorenz, 2021).

A consistent and coherent visual identity system is not reduced to the similarity between two media, it is about the definition of a set of elements whose correlation creates a code and a visual brand language that is recognizable. The visual identity elements create an identification system by the properties which correlate them and that contribute to their partial or systemic recognition. On the other hand, the brand language system results from the application of design principles (graphic standards or selection criteria, adaptation, and use) that define proportions, rhythms, combinations, and contrasts that gain meaning in the complementary relationship between elements; a pattern of use that gives them unity and a certain meaning that is recognized as characteristic and differentiating of a brand.

In a semiotic perspective, the brand mark is a graphic sign (a pre-established element that stands for something absent, made present by invocation), while the visual identity system is a group of signs with rules of use that give them a meaningful relationship associable to the brand. In other words, the brand's visual identity is a set of signs, whose rules of use (code or design principles) constitute the visual language, ensuring both identification and differentiation as well as the construction of arguments, accounts and narratives associated with a given brand experience. It is not only about identifying and differentiating the brand, but also communicating how the organisation, business or brand is structured and what it represents or means by comparison to competitors and according to specific audiences (Raposo, 2012, 2018).

Specifically, the visual brand identity refers to the set of articulable components, to all the visible and tangible manifestations that can perform identification and differentiation functions of an organization, business, brand, product, or service, three-dimensional, graphic, audio-visual, or digital. Thus, the brand's visual identity includes components of landscape

architecture, architecture, interior design, stands and showrooms, wayfinding and wayshowing systems, the brand mark (logotype and/or symbol), the stationary, packaging, labels, uniforms, the vehicle fleet, merchandising, editorial design, advertising, digital correspondence, the website, advertising spots, among other media. The visual identity comprises dimensions of architecture and means of communication, information, and persuasion without being confused with them.

In a skilful and agile brand perspective, the objectives result from the desired brand image and the defined Brand Personality, the Visual Identity, the products, and services are defined and designed in the strategic plan, the media selection occurs in the tactical dimension and its implementation in the operational one.

Increasingly, the brand functions as an interface mediating a business (or an idea to which products and services are associated) with people whose ideals and life models are compatible with what the brand stands for. The visual identity is the visible part of this brand interface and therefore must be adjusted to the needs of use, communication, and people's behaviours.

The market is increasingly global, and communication and sales are mediated by the brand (including here communication and concrete actions), which tells us a lot about its importance in establishing a notion of brand value and positioning. On the other hand, the interlocutors of organizations, businesses or brands are no longer only consumers, but all people or stakeholders, those who may have direct or indirect impact by the brand's action.

Changes in the level of information and communication technologies, the rise of mobile devices connected to the internet, the internet of things, multinational companies and their global brands, socio-cultural changes and territorial brands are some of the factors contributing to place the brand in the centre of business and in people's daily lives (Olins, 2008).

To ensure the brand relevance it is necessary to guarantee that its purpose maintains its value, just as it is necessary to ensure a positive brand image, consistent and positioned in an explicit and advantageous way; and for this it is necessary that organizations know, always, their public, the stakeholders, what their competitors do and how the brand is understood and perceived.

On the other hand, in the context of markets and businesses, the challenges of an increasingly global and digital world are growing and changing, particularly in consumer behaviour, requiring the ability to adapt and

respond quickly. It is therefore frequent that many companies and brands face problems such as:

-   Difficulties in adapting to emerging markets, which requires new standards and specific language codes.
-   Difficulties in internationalization and adaptation to new markets with different aesthetic standards and legal regulations.
-   Difficulties in flexible brand portfolio management, adapting to diverse cultures, ideologies, and languages.
-   Difficulties in customizing products without compromising the range of products and maintaining the quality of each one.
-   Difficulty in gaining scale without distorting the brand and maintaining quality.
-   Difficulty in creating mechanisms to collect data on each market.
-   Difficulty in managing data and obtaining information from them.
-   Difficulties in managing the media and producing appropriate communication content.
-   Difficulty in ensuring that the brand remains genuine, current, and relevant for diversified audiences, demanding personalized individual treatment.
-   Difficulties in managing and adapting structurally and internally the company and the brand from external inputs, of which some weak signals.
-   Difficulty in basing the tangible aspects of the business and the brand on its intangible components.
-   Difficulty in embracing the possibility of making mistakes.
-   Difficulty in making the business and the brand more flexible to keep up with the volatility of the contemporary world.

Organizations and brands are systems that integrate supersystems of great complexity and big data. In this context, understanding change, a minor problem, or a wicked problem (a complex problem that is difficult to solve, delimit or describe, which may result from other problems) implies navigating and understanding tensions and effects of physical, social (with emphasis on publics and stakeholders), psychological, cultural, technological, marketing, and economic systems.

Social media shows how people tend to replicate behaviours observed in brand advertising, across music bands and some of the behavioural patterns promoted by the cinema industry. Ultimately, people want to become icons or brands, aspiring to have followers. Alongside this, brands personify themselves and make us think, feel, and express with them.

If on the one hand the means of brand communication are increasingly becoming digital (the business card and the stationary have almost disappeared with the appearance of smartphones and email), socio-economic and cultural contexts that require printed media or the adaptation of contents and languages (such as the translation of the name and logo) persist.

Serial production and communication have given way to customization, segmentation, and hyper-segmentation (Lipovetsky, 2007). And social media, which increased the power of recipients and consumers to be producers of messages and establish a real dialogue with brands.

In this way, contemporary brands are more sustainable when they have a strong and flexible identity and visual language associated with agile media, as they allow to ensure the relevance of the brand and the rapid adaptation of the discourse to different cultures, audiences, places, platforms, or channels (Johnson, 2019).

Aggregate, integrate and transform - being smart

Most brands operate in international markets and national or regional brands are becoming the exception. We are witnessing a convergence between the local and the global, with global strategies for local adaptation, as well as between producer and consumer (who have the means to claim, contest, invest or co-create with the brand), between the physical and the digital, and between competitors and partners (Benbunan, et al., 2019).

The context of contemporary organisations and brands, with its complex problems, requires transdisciplinary knowledge and skills to identify, frame and interpret different and dispersed data, recognise limits and capabilities to do, detect alternatives and opportunities, empathy (Ito, 2016), and vision to value weak signals with value and aligned to the brand purpose.

There are opportunities to aggregate services that cross business categories or different brands, and may include participatory design, codesign, crowdsourcing (a method to aggregate input or money from consumers/investors, generating revenue, ideas, and opinions in the business-consumer community), design thinking to solve management problems or Cobranding, among other possibilities (Gray et al., 2010).

Cobranding is a partnership between two different brands that come together to create a differentiating service or product, which may result from

the complementarity of other pre-existing ones or from the combination of different competences that are only feasible in this partnership.

In general, in the context of cobranding, the brand with the greatest reputation and link to the product category is the one that takes pride of place, while the second is implicit.

In a global market, with a vast offer and strongly competitive, there are brands seeking to be more genuine, traditional, or personal (valuing the experience of proximity consumption in interpersonal contact), while others choose automation and algorithms (valuing distance purchasing processes, namely fitting rooms, or virtual avatars, in mirrors, mounts or through shops that promote a physical digital experience. In both cases, brands need to integrate in their own time, to connect with people, with their ways of life, their expectations and needs. The customization of Visual Identity, through flexible and dynamic systems accompanies the need for a communication, but close to the one-to-one.

However, the brand experience operates and combines the available sensory, scientific and technological resources, namely AI (Artificial Intelligence), Face Recognition (facial pattern recognition system); Eye Tracking (eye tracking system to measure movement, eye position, retinal opening and determine where a person is looking, what stimulated attention, the sequence and for how long); Biometrics (statistical study of physical or behavioural characteristics of living beings), neurosensory evaluation systems (cognitive, emotional and behavioural metrics); VOIP (Voice over Internet Protocol, routing of human conversation over the Internet or computer network), Vending (vending system); Virtual reality (to simulate the use of a certain product); Augmented Reality (overlay of digital contents, ad or bring more information or media into a screen display by video camera); Digital Assistants or Chatbots (to interact with human beings, clarifying doubts); Smart search (to optimize and customize searches within a virtual store); recommendation showcases (digital showcases according to the preferences of each consumer).

Artificial Intelligence includes Machine Learning and Deep Learning, which are ways of training models so that they classify data, often used in the detection and processing of data in complex scenarios, as well as in their analysis and evaluation of results (Gunkel, 2020), but also to improve the effectiveness and customization of brand communication.

In the case of Machine Learning, algorithms are used that learn from data, usually the patterns defined based on examples uploaded to the system, defined, and selected manually, labelled, and described by their distinctive features and classifiers.

The algorithm will use these patterns to make predictions or recognise objects or images. These systems can combine several features and do not require very powerful machines and can run on less data and get results faster, although it is more permeable to human error in tagging and therefore in the results. The process can be summarised as follows:

Images > features and classifiers > Machine Learning > Predictions or object Detection based on the recognition of its features.

As a sub-area of Artificial Intelligence, Machine Learning does not have a manual learning process, being done directly by the machine from algorithms inspired by the structure and functioning of the human brain, called neural networks in which the inputs are interpreted in a crosswise manner and in different parts and in several layers. The images are interpreted by a sophisticated and complex algorithm that is more demanding on the equipment, being adequate when there is High-Performance Computing and Big Labled Data: Images > Algorithm (Input laser, Hidden layer 1, Hidden layer 2, Output layer) > Object detection based on recognition of its features. Each neuron describes a part of the image and is activated when the data is deemed relevant, leading to a pattern of activations in the layer, which determines the activations in the next (Gunkel, 2020).

AI already has multiple applications, from the execution of repetitive and structured tasks that require relatively low levels of intelligence, the detection of Spam Email, to the association of recommended or customized content to the user on websites and social networks, the measurement of interest in the brand's offer or marketing efforts, the qualification of relevant content for each user (Marketing Qualified Leads and Sales Qualified Leads), to the App's allowing to take a picture or film the user and combine it with other objects such as glasses, hairstyles, shoes, clothing, in games, etc., which require the detection and recognition of objects. It also allows establishing patterns of behaviour, types of relationships between people, the level of knowledge, or human emotions from selfies and texts written and published on social media, identify fake news, as well as the geolocation of mobile devices. At the level of content production, among other examples AI can create images of objects or 3D scenarios with 2D photographs, audio,

or visual scenarios (digital projectable or visible through Spatial Computing and Multi-Dimensional techniques, 2D, 3D, VR, or combined), cropping, image treatment and video manipulation (for example the deepfake), animated image, illustrations or create brand marks (Pell, 2019).

AI allows large volumes of data to be aggregated, processed, and related to others from different sources, bringing together context and relevance, rising to personalized and collective insights or even smart data, which characterize, with unquestionable proximity, people, and consumers behaviour (Gunkel, 2020). In parallel, AI is also used to create more personalized ads by segments, regions or even specific to a single person, as well as in data visualization and design.

The dangers and challenges posed by AI, regarding each citizen's right to privacy, are simultaneous to its potential, namely by the way it allows to explore hyper-reality, with Augmented Reality to test products (an area well developed with confinement and distance sales in the context of COVD-19), obtain product recommendations or visualize previous similar decisions, which can be correlated with Virtual Reality (Pell, 2019). In terms of advertising, AI allows segmenting audiences based on preferences, interests, and needs, targeting the right person with the right ad (the insertion of advertising according to the user's profile and within contents consistent with the ad) to engage them and drive conversions, the insertion in real time of advertisements in live television filming, adapting the ad message and/or advertiser to each location where it is seen.

In summary

We observe a fragmentation of audiences in lifestyles and ideals, dispersed across the planet, demanding more information, more customised, more genuine (or even local, personal, or even offline) or creative and experience-based products.

The digitalisation of businesses followed the internationalisation of brands and increased with the confinement to fight COVD-19, which combines with several applications that were already underway at the AI level.

On the other hand, media diversified with the internet and intersect at increasing rates, and it is expected that the internet of things and AI will bring new scenarios of information consumption and products or services.

The availability of data on brand context (brand image, competitors, stakeholders, trends, preferences, etc.) has reached unprecedented levels, offering business opportunities that organizations let slip through their inability to deal with big data.

In a scenario of strong competition and great dispersion of information and vast offer, brand loyalty seems to be in danger and brands run a greater risk of losing value and relevance in a changing context.

AI seems to be able to support in the analysis of different and dispersed data, but also in the identification of trends, in the dialogue with interested recipients, in the creation of more intense user experiences, exploring emotions and customising content to consumers' expectations and needs, generating brand loyalty. And in this sense, it allows brands to be truly data-driven and to establish a dialogue with their true addressees.

As far as direct human intervention is concerned, the focus seems to be no longer on tactical operational components or on contents, but rather on creativity and strategy, on the contribution of design as an integrator and the brand as an argument.

Design intervention can occur at smaller or larger scales of brand systems, influencing their development and of their context (Ito, 2016). The designer has the opportunity to be a catalyst for positive change in integrated systems which include economic capital, social, political, productive, natural and human systems to generate and sustainable people-focused solutions (Fuad-Luke, 2009).

Generally speaking, brand communication is organised into actions or campaigns with specific strategic, tactical, and operational options. Usually, a multimedia or intermedia strategy consists of presenting a content in several media and formats, while in crossmedia strategies, messages complement each other in a network (they can be sequential) and by people's participation, resulting from the need to adapt and diversify communication to a wide variety of media platforms, with the purpose of obtaining a higher profit margin or reinforcing each component through cross promotion between platforms. On the other hand, the transmedia strategy is crossmedia, in that it also includes the use of multiple platforms and physical, virtual, digital, static, or interactive formats, as well as the possibility of user participation, but contains a single-story that is told in a characteristic way (style, tone and rhythm), making use of storytelling to humanize and increase the effectiveness of the messages that form a coherent whole (Ibrus

& Scolari, 2012). In summary, multimedia allows increasing the number of visual impulses and contact points between brand-public, crossmedia relates the message and the media, promoting interaction and deepening the information, while transmedia allows telling a complete story, in excerpts or sequels, which can suit different segments and audience profiles.

The complexity of the market and the diversity of audiences, segments and diversity of brand communication media require flexible and diversified systems (Lorenz, 2021). In this sense, the success of a brand depends on its ability to adjust to the human, technical, social, economic, and cultural reality of an era.

Flexible or dynamic visual identity systems are ways for brands to respond to the fast-changing environment, namely a way of adapting to audience diversification and segmentation (van Nes, 2012). It is imperative that designers adopt new ways of analysing and responding to diverse changing contexts (Neumeier, 2006). Instead of small visual identity systems, strongly based on a version of brand mark complemented by a restricted group of elements such as colour, label, packaging or stationery, flexible visual identity systems offer a repertoire of graphic-semantic components and a combination program with multiple possibilities (Lorenz, 2021).

The complexity and flexibility of the visual identity system should result from the circumstances of the brand, its market and communication needs. The contemporary brand mark must be applied in a wide variety of physical media (print, products, uniforms, buildings, etc.), digital on websites, mobile applications or multiple devices with different screen sizes and resolution or video. This diversity of applications demands flexibility and scalability from the brand mark (Shaoqiang, 2018).

The flexibility of a brand mark can be achieved with a responsive design, which allows the use of components as parts of a system with various combinations or only one element of it that works as a graphic synthesis in limit reduction situations such as the favicon - the initial of the logotype or the symbol are the most frequent ones because they are more characteristic and easier to identify (Shaoqiang, 2018). The design of the brand mark as a system requires the selection of its components and the definition of principles and rules to combine them. It is about thinking of the brand mark as a system within a larger one that is visual identity.

A dynamic or flexible brand mark offers several possibilities for application and may appear in static mode (if printed it will appear with multiple

variations in the various media) or animated (in digital, video, AR, VR or other projection and display technologies).

The dynamic visual identity system is defined by the principles of use / combination of its components: the brand mark (logo and / or symbol), colour, typography, graphic elements, imagery, and language (van Nes, 2012).

There are flexible visual identity systems created from the brand mark and that operate in a complementary plan, and there are other systems that work in the inverse relationship. In both cases, the effectiveness of the visual identity system depends on the individual suitability of the visual components, but mainly on the design principles (rules of use or combinatory standards), which give it coherence and common, distinctive, and recognizable characteristics.

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From his recent books stand out:

O 5º Elemento nas Marcas (Fless, 2021); Advances in Human Dynamics for the Development of Contemporary Societies. AHFE 2021 (Springer, 2021); Driving Industrial Competitiveness With Innovative Design Principles (IGI-Global, 2020); Advances in Design, Music and Arts (Springer, 2020); Perspectives on Design and Digital Communication: Research, Innovations and Best Practices (Springer, 2020); Perspective on Design: Research, Education and Practice (Springer, 2020); Communicating Visually: The Graphic Design of the Brand (Cambridge Scholars Publishing, Hardback, 2018 and Paperback in 2019 and in Spanish published by Experimenta, Spain, 2020).

CHAPTER 1

THE EMERGENT CONVERGENCE BETWEEN
DESIGN ACTIVISM AND BRAND DESIGN

STEINAR VALADE-AMLAND

Brand design

At its very core, design aims to influence on the preferences and behaviour of individuals – whether they act on behalf of themselves only, their family or peers, company or community. Product design and so-called industrial design do so by providing a physical and/or functional solution, object or artefact that intrigues us or facilitates our choice, to do something different, or do what we always did, but differently than before. Spatial design encourages us to interact with our physical environments in novel ways. Service design influences our behaviour by facilitating transactions between a service provider and a recipient – that's the very definition of the genre. Process design and organizational design aim to enhance the effectiveness of processes, and communication design aims at influencing our ideas, our perception and our preferences through words and images and compelling visuals. Very roughly laid out, but still valid; the objective of most design activity is to mend or improve what is already there, or to introduce new and attractive alternatives, and almost irrespective of the point of departure and the ideals of the designer, to *devise courses of action aimed at changing existing situations into preferred ones* (Simon 1969, 130)*,* as formulated by Herbert Simon, half a century ago.

Branding and brand identity design is generally regarded as a sub-genre of graphic design, communication design and visual communication, and perhaps the most purebred commercial discipline on the design palette. Its objective and legitimacy lie in the ability to influence people's perceptions of and attraction to a specific company, product or service, its identity and brand, and to ultimately influence people to desire or even choose to buy the products or services of one brand origin as opposed to its competitors in

any given market category. And it works. As a matter of fact, band design is widely accepted as a cornerstone in any market driven system or infrastructure, and good brand designers are in high demand. However, influencing on the preferences and behaviour of individuals in a typically saturated marketplace, is rarely a quick-fix. It requires the ability to coherently communicate the values and intrinsic qualities of the brand itself, its behaviour vis-à-vis its clients, but also vis-à-vis the world at large – in addition to the advantages of their offerings, whether product, services or any other proposition to which they invite potential clients to subscribe. More and more often, companies' "behaviour vis-à-vis the world at large" plays a vital role when people make their choice of brand to accommodate their needs, and much speaks in favour of the behaviour and responsibility demonstrated by companies becoming even increasingly important looking forward. This is a probable assumption for several good reasons. It's expected from companies to take some sort of responsibility for their local community or the world, depending on their size, sector and strategy. The demands for accountability with regard to the social and environmental footprints of any commercial activity is increasingly being built into the annual reporting of companies, alongside purely financial and strategical, components. And – it's good for business. In a recent article in Forbes Magazine, five factors are listed as reasons why it is important for companies to prioritize social responsibility (Heyward, 2020);

CSR can help attract and retain employees

CSR can improve customers' perception of a brand

CSR shows a sign of accountability to investors

CSR saves money

CSR can enable better engagement with customers

Those all make a whole lot of sense, and from being something only a select few companies, often leaders of their packs, had the luxury of indulging in, corporate social responsibility – for the lack of a better way of framing an often cynically calculated investment in "being good" – has become a standardized component of how a brand decides to portray and reflect its values and intrinsic qualities and its behaviour vis-à-vis the world at large; of brand identity and communication, hence also of brand design.

Design for the world

Design as a means to address global challenges is nothing new. The role of design – including its societal role – has been a topic for discussion and exploration for decades. Victor Papanek was among the most articulate design thinkers arguing the need to discuss design's role as instrumental to creating a better, more just and equal world. In his book, *Design for the Real World*, Papanek claims that: "*Design must become an innovative, highly creative, cross-disciplinary tool responsive to the true needs of men*" (Papanek 1971,15) and, "*The ultimate job of design is to transform man's environment and tools and, by extension, man himself.*" (Papanek 1971,42). In 1990, the University of Illinois at Chicago hosted a small international conference entitled *Discovering Design*, boasting some of the greatest design thinkers of our time; Richard Buchanan and Victor Margolin, who organized the conference, as well as John Heskett, Nigel Cross, Augusto Morello and others. Two out of the five sessions focused on this "non-commercial" role of design; *Design and action*, focusing on "*how products can be made consonant with the qualities of human action and how they can be integrated into the lives of users*" and *Design and values*, exploring "*the relation between design and individual, cultural and social values.*" (Buchanan and Margolin 1995, 245) While varying in intensity, and without claiming that the Chicago conference was its cradle, the overriding theme of design's role in shaping our societies, our environment and the future has had its place in the design discourse since then. Looking at our most recent history, in particular two factors have influenced the discourse on design's potential and significance as a lever of change for good.

One such factor was the introduction of the Sustainable Development Goals in 2015, ratified by all 193 member countries of the United Nations, hence a historic unification on account of the acknowledgement of the most imminent challenges of the world and humanity. These seventeen, rather simple headings – almost banal, one might argue, encompassing No Poverty, Zero Hunger, Good Health and Well-being, Quality Education, Gender Equality, Clean Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Reducing Inequality, Sustainable Cities and Communities, Responsible Consumption and Production, Climate Action, Life Below Water, Life On Land, Peace, Justice, and Strong Institutions, and – finally – Partnerships for the Goals, have made a world of difference, literally speaking. From having to hire expensive consultants and PR wizards to figure out and articulate a company's social and environmental engagement, a universally known and understood framework now exists, and the

discussion can begin. The CSR Report 2018, published by the Global Sustainability Index Institute (UNGSII) shows an encouraging "corporate" response to the SDGs: *A recent survey of over 1,000 CEOs from around the world by the UN Global Compact and Accenture found that 87 percent "believe the SDGs provide an opportunity to rethink approaches to sustainable value creation." Another 70 percent of those CEOs "see the SDGs providing a clear framework to structure sustainability efforts.*" (Schatz and Vollbracht 2018, 6)

Another factor – even more recent and omnipresent – is the outbreak of and global submission to the Covid-19 pandemics, or rather what it has entailed in terms of design awareness and engagement. We've seen a mind-blowing level of civic engagement and creativity. New grass-root movements have emerged, developed services, established distribution channels and filled unmet needs. Mostly on a volunteer basis, but still a manifestation of the spare creative capacity out there. And for those, who were lucky enough to hold on to their jobs, new ways of working grew out of needs and accumulated, however often scattered experience; ways, which overnight became the rule rather than the exception. Never before have digital capabilities been boosted as fast and as effectively among baseline users as during the course of 2020. Painfully aware of the fact that it's not nearly over yet, in the aftermath of crises, great visions are born, new stories and new identities. Never before were challenging assumptions; the very core of design practice, more appropriate – more important. And never before did design capture as many agendas simultaneously.

Design for the world – which as an anecdote was a whole-hearted and ambitious, however unfortunately premature initiative taken by the international design organizations ICSID (now World Design Organization), IFI and Icograda (now Ico-D), as a platform for design as a means to address global challenges – first of all reflects the very nature of design; the urge to challenge and improve the existing and the persistent belief in the power of what design can do. Over the last couple of decades, the altruistic role of design, as well as the focus on solving "wicked problems" has captured an increasingly dominant portion of the design discourse. *Design is increasingly involved in the discourse around so-called "wicked" problems – either because we are complicit in their creation or drawn to the complexity of design opportunity that surrounds them.* (Beirne 2014, 1) This has been reflected in the emergence of sustainable design master programmes, in design research, in countless books about social design and design for sustainability and in award schemes, such as the INDEX Award, with its tagline "*Design to improve life*".

Parts of the design community have adhered to the idea that design is more than adding panache to products to justify a higher price, or to add allure to the identity of a brand, for decades, spearheaded by pioneers like Victor Papanek and Victor Margolin, and even Ray and Charles Eames. In an article about design for the triple bottom-line, I made an attempt about a decade ago, at capturing what design is all about – rather than what design is; "*Design is about attractiveness, sensuality, aesthetics, and functionality, about real people and real problems, about individuals and their encounters with systems, about encouraging responsible behaviour and choices, about challenging our prejudices, about fellowship and ownership, and about expressing identities for individuals, groups of individuals, corporate entities and society at large. It's true; design is all about people, profit and planet.*" (Valade-Amland 2011, 17) Only a few years ago, the international design community truly united in a vision for what design can be; "*Design is the application of intent: the process through which we create the material, spatial, visual and experiential environments in a world made ever more malleable by advances in technology and materials, and increasingly vulnerable to the effects of unleashed global development.*" (The Montreal Design Declaration 2017)

What is more novel is, that even the world around the design community now seems to embrace design's potential as a means to create a better future. In October 2020, the President of the European Commission, Ursula von der Leyen, introduced her idea for how to support the "European Green Deal" – the overriding strategy for delivering on the commitment that the EU will be climate neutral by 2050. The idea was conceived in recognition of the "original" Bauhaus movement that was founded in Weimar, Germany in 1919, and which some years later became a powerhouse of creativity and ingenuity in Dessau. This movement, according to von der Leyen "*literally helped shape the social and economic transition to an industrial society and the 20th century.*" A century later, the same creativity and ingenuity is called for to address the challenges that we currently face; "*This is why we will launch a new European Bauhaus movement - a collaborative design and creative space, where architects, artists, students, scientists, engineers and designers work together to make this vision a reality. The New European Bauhaus will be a driving force to bring the European Green Deal to life in an attractive, and innovative and human-centered way. It will be a movement based on sustainability, accessibility and aesthetics to bring the European Green Deal closer to people and make recycling, renewable energies and biodiversity natural.*" (von der Leyen, 2020)

Such a commitment from the pinnacle of politics in our part of the world not only defines both political, corporate and civic agendas across the continent, it also acts as a new mandate and an enormous encouragement for millions of individuals. As the world reveals its vulnerability to over-exploitation and the wounds humanity has inflicted on it, the urgency of pitching in with whatever each and every one of us can spare becomes more and more pronounced. For most of us, that means that we try to contribute wherever and with what we have to offer, and to the extent to which our lives allow us to. For some, however, the urgency becomes unbearable and triggers a shift of focus. For some, the common good and the pursuit of a more sustainable world and future become driving forces and the very purpose of both personal and professional lives. Many designers choose to this route of action; they become design activists.

Design activism

Over the last couple of decades, the concept of design activism has emerged and plays an increasingly important role for individual designers and great parts of local as well as the international design communities. *At the root of the concept of design activism is the philosophical and ethical position that design in the service of society has to embrace democracy. This contrasts with design in the service of a client where it has to embrace the client's contract and, but not always, the client's philosophy and ethics.* Moreover, *Design activists can contribute to dialogic discourse about new social goals and, in doing so, the creation of new social values.* (Fuad-Luke 2009, 196) Design activism is no longer a peripherical and obscure corner of design practice. In design education and research, as in small and large design studios and corporate, in-house design departments, an increasing number of designers acknowledge their role and responsibility as instrumental to what our future looks like. From being regarded as somewhat rebellious, design activists are now beacon lights of hope and purpose for design students and young designers, while leading design agencies like IDEO and Frog have tamed their own desires to do good, so that design activism and design business go hand in hand. While this has been more obvious and possibly easier to attain within design disciplines like product and service design, the activism potential of communication design has been questioned. A Danish study from 2016 explores the hypothesis that despite its persuasive approach, graphic design, and its relation to commercial design culture in a consumerist economy, lacks activist potential and thus social impact. (Bichler and Beier 2016, 1-10) While pointing to a series of limitations of "*mere imitations of corporate campaigns that lack disruptive*

potential to evoke significant social impact", it also demonstrates that an unexploited potential for brand design exists; "*It is crucial that visual designers are aware that apart from communicating a client's message or voicing their own agenda, they can create design that is a service to the reader. Which is one of the foremost proposals of Papanek in Design for the Real World.*" And this "service to the reader" is requisite to change the hearts and minds of people, to educate and enlighten them, which in turn is necessary to foster more sustainable choices and lifestyles. We also see a drift of individual brand identity and communication designers from purely focusing on corporate identities being developed and applied to printed and digital user experiences to actively seeking a role in campaigns and ventures undertaken by NGOs and civic society. I just recently helped a very experienced brand and visual communication designer, who successfully served commercial clients for more than two decades – in partnership with others, and more recently as an independent design consultant – to reframe and rearticulate her competences and services to focus on the facilitation and communication support of grassroot environmental groups and local community projects. From brand design to create and sustain economic value, to communication design as a key component of campaigns to underpin green transition and a more sustainable future.

Either or – or both and

In times of transition, there will always be dilemmas pertaining to whether it is possible and/or morally credible to hold on to the past while betting on the future. Many brand and visual communication designers, serving as gears in well lubricated capitalist systems, hence acknowledging their role as catalysts of often unsustainable consumption – also have an urge to apply their knowledge of how visual communication can change people's behaviour and preferences to do good. Is it possible to do both, or does that compromise one's personal and professional integrity? I believe that the times where each one of us felt that we needed to choose which side we were on, are gone. We all know that change is needed, and I believe that we all want to be part of the solution, just as much as most of us know that we've been part of the problem. We might perhaps not change the world overnight, but most visual communicators can do their fair share to bring about whatever change they see exigent. As a growing number of leaders, hence also their organizations, including whoever procures visual communication services are not only indulgent, but eager to communicate their corporate social responsibility, it's a greenfield out there for intelligent ways of "*creating design that is a service to the reader*" at the same time

and as a strategically anchored component of "*communicating a client's message or voicing their own agenda*".

We're not there yet – in full – but as commercial undertakings gradually embrace and adopt the sustainable development goals, and as the European Green Deal and the New Bauhaus are written into educational strategies and research agendas, we see an emergent convergence between interests and movements that not very long ago seemed in opposition to each other and unreconcilable. "*Today's pressing need is sustainability – particularly to address climate change – and legislators are not the only ones who can shift course. Many companies recognize this challenge and are pushing for new market models. In the words of Unilever CEO Paul Polman, "We are entering a very interesting period of history where the responsible business world is running ahead of the politicians" and taking on a broader role to "serve society.*" (Hoffman 2018)

Emergent, however, is still a keyword, as different visions and understanding of what sustainability looks like, what it will take to get there and – not least – how fast it should go, still take up a lot of space at both ends of the spectre. "*Unfortunately, nine times out of ten, the interests of profit blatantly conflict with the interests of people and planet, at least according to any reasonable calculation.*" (Eisenstein 2014) This argument is still heard, and still muddles discussions in many companies, however with decreasing audacity and weight.

The emergent convergence between design activism and brand design

Reverting to the professional realm of brand design, and merely to frame the core of its purpose, I choose to lean up against a "neutral" source to define what a brand is; "*A brand is a set of associations that a person (or group of people) makes with a company, product, service, individual or organisation.*" (Design Council n.d.) More and more companies seek to identify ways in which to incite in people a set of associations that resound responsibility. CSR – not only as a matter of compliance and governance, but as core to strategies for brand building, marketing and public affairs – has become the rule rather the exception. Then, of course, the quality of execution differs, as does the substance behind the claims of responsibility, while the concept of green-washing, which was heavily discussed some years ago, and which most certainly still exists, has proven dangerous and with devastating backlashes. That doesn't mean that it's history, but fewer

and fewer companies seem to run the risk. "*The global eco-awakening means former 'green sheen' business practices no longer work. Embracing sustainability is the key to future profit.*" (Osman 2020) What this implies is that gradually, the causes and concerns that companies choose to communicate as being of strategic importance and pursuit most likely reflect in their actions and priorities. Those can be closely related to the products or services that any given company has on offer. The sports attire company Adidas has committed to circular economy to the extent possible by re-using plastic waste from the ocean, while at the same time substituting plastic with plant fibers. By 2024, Adidas plans to produce their entire product lines only from recycled materials, not only making a significant contribution in itself, but just as importantly, it sets new standards for the entire sporting goods sector. A story, which does not only deserve to be told, but which forms the very base of Adidas' brand design platform. Lego has committed to invest $150 million over the next decade to address climate change and reducing waste, reduce their packaging and invest in alternative energy sources. Already in 2019 – one year ahead of originally promised, their own energy consumption was provided by 100% renewable energy. Numerous other initiatives to underpin the underlying objective of securing a sounder planet and a better future for the children they serve support the credibility of true engagement and a genuine sense of responsibility. Those, of course, are global giants with the privilege of allocating whatever resources they see fit to please their market, and it's merely natural that they take a lead in using their positions and powers to show the way. However, studies indicate that SMEs are not necessarily less advanced in organizing CSR than large firms, and smaller firms possess several organizational characteristics that favor the implementation of CSR-related practices in core business functions. (Bocquet et al. 2018)

Moreover, it "*has been estimated that SMEs have a greater environmental impact per unit than large firms and are the largest contributors to pollution, carbon dioxide emissions and commercial waste.*" (Baden et al. 2009, 428-441) Which is not only good news, but which also confirms that there ought to be ample opportunity to pursue – and to communicate – doing good, no matter which size of organization or which sector one – or one's client – operates in. What those few, scattered examples also imply is that agendas previously pursued by NGOs and unorganized communities on- and offline, and which were by many seen as utopic, counter-capitalist and anecdotical have been accepted by both multinational and local, small and medium sized companies. Agendas previously reserved for pro bono enthusiast designers have become key components of the briefs given to independent brand and communication designers and the world's most

successful design agencies alike. One could argue that the difference between doing brand design communication taking its departure in a client company's product specifications or price, and doing brand design taking its departure in some story about how the same client company wants to save the world, is negligible; they're fundamentally just different mechanisms of pushing a product or service into the marketplace. That could have been true, if it weren't because studies show that "*firms' intrinsic motivation drives CSR more than extrinsic motivation. Intrinsic motivation is understood as a firm engaging in CSR because it is the right thing to do and done out of one's free will without compulsion or coercion.*" (Grimstad et al. 2020, 553-572) The legitimacy of commercial companies is still the same as ever; to generate profit for its owners, to provide jobs and to cater for the needs of the market. What is new is the important role that companies can also play to foster environmentally and socially sustainable communities, a future in which we wish to bring up children and a world that is just a little more resilient to "incidents" like global pandemics and alike.

A revised business case for brand design

A number of questions arise inflicting on the role and potential influence of brand identity design in the wake of this emerging change. The complexity of design and the failure at communicating design's multifaceted character is already a barrier to the pursuit of a meaningful dialogue between design knowledge and business knowledge, but there is no way around it. Businesses and decision makers need to acknowledge design – not only as a field of professional practice, research and education, where design thinking empowers, design management enables and design embodies – but also as a key component in the pursuit of meeting the needs of tomorrow; not only our own needs for material and immaterial well-being, but also the needs of future generations. (Borja de Mozota and Valade-Amland 2020, 103) This goes for all design disciplines, and not least for what was once called graphic design, and which today – more often, and more appropriately – is labelled visual communication, including the design of user interfaces and our daily, digital interactions, as well as another, increasingly important factor in terms of capturing or attention; storytelling. One of the most impressive deliveries to that extent and to date is the conceptualization of the sustainable development goals; a massive achievement, indeed. However, when it comes to communicating and relating to what hides behind each one of the seventeen squares; not only what is embedded in the 169 articulated targets, but of stories to be told about how companies and organizations pursue their own aspirations for a better world, we have only seen the tip of

the iceberg. As design climbs the ladder of recognition, the potential of professional design practitioners influencing on the strategic communication of companies and organizations grows. Since the beginning of last decade, large global consulting firms like Accenture, Deloitte, McKinsey and Boston Consulting Group, as well as a significant number of their colleagues and competitors, have acquired creative agencies – communications, digital and service design agencies in particular. This is no coincidence, but an "awakening" reflecting a change in the perception of design as a competence and as a professional service, hence also – over time – the perception of what design contributes to agendas beyond tomorrow's deadline. From being an add-on and somewhat anecdotical to being core to innovation and transformation processes in businesses and the public sector, of value-chains and business models, and of communication and how each one of us relates to the world around us. This shift is still work in progress, and countless biases towards design are yet to be dismantled. However, as the climb continues, and as bridges are built between design thinking and design management on one hand and on business thinking and universally embraced business approaches on the other, between the siloes of academic research and the silos of consultancy, and – not least – between all the factions and contingents of the design community itself, reconciliation could emerge. Design activism and brand design have occupied each their own flank, as each other's adversaries. Altruistic and revolutionary, firmly rooted in the conviction of the transformative powers of design on one extreme, and altogether commercial, vested in the evidence of how design can change people's preferences and loyalty on the other. However, as corporations all over the world adopt altruism as fundamental to their conversation with their markets, this disparity may slowly prove redundant. "*Companies which act unconditionally for the common good, unconstrained by financial considerations, through the company's core business processes. This differs from philanthropy – outside a company's business processes – or CSR – constrained by financial considerations.*" (Getz and Marbacher 2020) If these two French researchers are right in predicting that altruist companies will be the rule, rather than the exception in the future, because, as they write in a World Economic Forum article; "*Every business was created in the first place to serve society, to provide it with a useful product or service. Evidence shows that profit is not a driver for most entrepreneurs, but rather the consequence of their creation of a service for others via their start-up. So, in a way, the road to the altruistic enterprise is a return to businesses' DNA, to what they should never have ceased to be: a means to build prosperous and harmonious societies, all the while enjoying the profits needed to sustain themselves.*" (Getz and

Marbacher 2020) - then design activism and brand design share, not only the means and measures to, but also the very objective of their endeavours. To design compelling visual and verbal stories, identities and interfaces, to inform and move us, and to which our response is to change our minds and ideas, our preferences and our behaviours. As commercial companies often dispose of an entirely different scale of resources to communicate with the market than NGOs and civic initiatives, corporate environments might even prove to be the most effective to pursue whatever "causes" designers find most imminent. If Getz and Marbacher are right, and if the civic engagement we currently see in the wake of the pandemic that is currently changing the world before our very eyes perseveres, we're bound to see an emerging convergence between design activism and brand design, which will be good for all. For design activists as well as brand designers, for design, and for the world.

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Economist by training, Steinar Valade-Amland is an independent strategy consultant, keynote speaker, workshop facilitator and EU expert evaluator, besides acting as Head of Strategy and Business Development at Triagonal, a Copenhagen based consultancy offering wayfinding strategies and design globally. From 2000 to 2012, he served as CEO of the Association of Danish Designers, closely following the transformation of design from primarily being an arts and crafts based practice to becoming an evidence based, strategically anchored lever for growth, organizational and societal change.

He has contributed to the design discourse through articles, book contributions – amongst others with fifteen entries to the Bloomsbury Encyclopedia of Design (2015) – and two books; "INNOLITERACY – From Design Thinking to Tangible Change" published in Denmark (2016) and the US (2018) and "Design: A Business Case – Thinking, Leading and Managing by Design" co-authored with the internationally acclaimed design management scholar, Brigitte Borja de Mozota and published in the US (2020), India and Korea (2021).

He believes in design as a catalyst for sustainable development, more responsible products, services and environments. That good design encourages more responsible lifestyles and social structures, circular

business models, transparency and accountability. That good design has the power to promote a more sustainable future. And, that good design can demonstrate the pursuit of sustainability as a better and more meaningful alternative to the current levels of untamed growth, to over-consumption and exploitation of natural resources and habitats, and to injustice, imbalance and inequality.

Chapter 2

Developing Multi-Sensory Brand Experiences: A Design Thinking Approach

Homayoun Golestaneh, Armita Serajzahedi and Hassan Sadeghi Naeini

Introduction

To ensure competitiveness in a given market, some organisations resolved to concentrate on the customers' needs and desires, pursuing pleasant brand experiences (Biswas et al. 2014). However, it seems classical marketing methods are becoming less effective in this regard. The first reason for this claim is that conventional marketing and branding strategies focus on satisfying customer demands by developing distinctive products and services. However, today's customers have insight beyond the satisfaction of their needs. Hence, businesses need to leave lasting impressions on their customers through memorable experiences. Such experiences may derive from pleasant customer interactions with their brands. Second, as the scope and complexity of modern life challenges increase, so do the ways in which customers interact with products, services, environments, and brands. Thus, businesses need to (re)design all their touchpoints to develop a memorable and pleasant experience. This increases the customers' level of awareness and perception and provides them with the necessary information in a personalised manner, evokes their emotions, and develops a unique experience.

Lastly, the increasing advances in technology and the emergence of Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR) have enabled customers to involve in multi-level experiences (cognitive, behavioural,

emotional, sensorial, and relational). These technologies promote new ways of experiencing brands through the virtual simulation of real-world events and the inclusion of virtual objects in real environments. Furthermore, through the adoption of such technologies and various sensors and actuators, the ability to simulate real events has been realised, which has accelerated the shift from conventional brand strategies towards multi-brand strategies. In this regard, Wala et al. (2019) stressed that engaging all five senses makes it easier for establishing a relationship with the brand, keeping the brand awareness alive, increasing sales, and exceeding the competition to a greater extent.

Experience can be designed to provide pleasant and memorable instances for consumers (Muthiah and Suja 2013). However, to provide a pleasing and memorable experience, all branding touchpoints should be identified, designed, or improved by focusing more on customers' perceptions, feelings, and behaviours (i.e., cognitive, affective, and conative dimensions of the customers' attitudes towards the brand). Thus, achieving a memorable brand experience depends upon empathy and deep immersion in customers' attitudes to adequately acknowledge their needs, perceptions, feelings, and behaviours. In this regard, this chapter is dedicated to introducing design thinking and the human-centred approach as key drivers in developing the multi-sensory branding strategy.

Brand Experience

Brands represent a network of mental associations formed in customers' minds (Keller 1993; Keller and Lehmann 2006). Effective brands bear strong personality traits, become more human to their audiences, and draw meaning and value. Every customer has an individual level of engagement with a brand. Like so, meanings and values can only be created through the quality engagement and interactions between the brand and its audience – that is, brand experience. This is a multifaceted process that entirely depends upon human interactions. These interactions set values and give direction to experiences. Experiences generate meanings, which in turn lead to people's cognition, feeling, and behaviour. The feelings and behaviours are then characterised by people's perceptions of their experiences with the brand. These perceptions represent a critical factor that should be addressed in any branding strategy or brand management process.

Brands are gradually seeking alternative ways to indicate their advantages to consumers through an experience rather than a product. By contrast, consumers are also looking for brands that can provide them with distinct

and memorable experiences (Gentile et al. 2007; Grønholdt et al. 2015; Zarantonello and Schmitt 2010). From a branding perspective, an experience is an engagement delivered to the consumer through an integrated system of "touchpoints" that evokes a consistent sense of the brand's essence (Diller et al. 2006:19). Therefore, brand experience is considered a series of consumers' sensory, emotional, and behavioural responses induced by brand-related stimuli associated with a brand (Schmitt 2009).

The concept of brand experience has increasingly gained attention among marketing scholars and practitioners (Brakus et al. 2009). Despite traditional boundaries, brands are now being used to create evocative experiences through sensory exploration with their audiences. However, most branding strategies are developed solely based on one or two senses: vision and hearing. Nevertheless, the main objective of branding is to develop a network of associations in consumers' minds through experiences. Consequently, developing brand strategies based on cognitive processes that rely on the consumers' sensory experience can be considered as a means to relate to their perceptions in a more personalised fashion.

Sensory Branding

Sensory stimuli are everywhere, affecting our perceptions of the world around us. However, despite their immense importance, the human senses have been overlooked in traditional marketing strategies. Customers' perceptions of the product-related brand attributes – which are based entirely on their cognitive beliefs – positively affect their preferences (Ebrahim et al. 2016), but this idea endures nothing new. The alternative idea represents the application of sensory branding in further dimensions, involving all human senses to create pleasant experiences.

Sensory branding involves a multi-sensory approach for developing brands to provide the customers with the optimal and the most valued and motivating emotional outcomes. Thus, sensory branding can be considered a marketing strategy is aiming to establish a connection between a brand and its audiences through their sensory interactions on an emotional level. In fact, sensory branding stresses the significance of sensory perceptions in the development of individual experiences that result in the creation of emotional associations in the minds of consumers (Chakravarty 2017).

Martin Lindstrom is the first to introduce the concept of Sensory Branding. In his seminal book, Lindstrom (2005:103) has indicated that:

> […] "the purpose of sensory branding is to ensure a systematic integration of the senses in your communication, your product, and your services. This will stimulate the imagination, enhance your product, and bond your consumers to your brand."

Following Lindstrom, several researchers and scholars have addressed the concept of sensory branding and examined its various aspects (e.g., Hultén et al. 2009; Krishna 2010; Lusensky 2011). However, these researchers have often focused on one of the senses. As a result, most published studies on sensory branding have focused on the importance of the senses in creating customer interaction and have neglected the significant role of sensory experiences in creating brand meaning (Gains 2014).

The purpose of sensory branding is to use all senses simultaneously to promote a five-dimensional experience for the customers. An effective sensory branding strategy is essential to stimulate the highest possible number of senses in customers and elicit the desired response and positive sensations by the applied stimuli. Brakus et al. (2009) noted that when consumers interact with brands, they are exposed to various stimuli related to those brands. Such stimuli may be part of a brand's design and visual identity (e.g., name, logo, signage), marketing communications (e.g., advertisements, brochures, websites), and environments in which the brand is promoted (e.g., stores, events). However, to generate a pleasant, meaningful experience for customers, the brands should be designed considering all aspects of customers' attitudes. This means the brands should engage customers' cognition (enhancing their perceptions) and emotions (involving all human senses) while developing an intentionally designed environment to affect their behaviour and improve their overall brand experience.

Several brands have adopted sensory branding strategies. For instance, Apple, BMW, Dunkin Donuts, Harley Davidson, Starbucks, Visa, and Volkswagen are the most notable examples that have employed more than one human sense in their products, services, or retail stores. However, despite the differences in their branding strategies and the distinctions in the type and usage of the human senses, they possess one thing in common: the widespread application of design (sensory design, design thinking) as a key driver of developing meaningful, memorable, and pleasant experiences for customers. This highlights the importance of design in the development of marketing and branding strategies but also underlines the existence of a relationship and shared language between strategic branding and design thinking. In the following, to better understand the role of design and its

impact on the development of branding strategies, the importance of design in the business world will be examined, then, we will discuss the role of design thinking in creating a memorable multi-sensory brand experience.

Design Matters

Brands are not just attractive names, beautiful logos, or catchy slogans. They are emotional experiences that define specific offerings and values. However, creating and offering such experiences and values requires a detailed, integrated design process. At its core, the design is a process of delivering an exceptional experience in which everyone can participate and create a new meaning or value. Design, in all its disciplines (e.g., product, service, environment, communication, etc.) is a strategic business imperative that acts as a differentiator, helping to develop other disciplines it gets involved in (Nica 2013).

Emerging design practice is experiencing a shift from being product-oriented to being value-driven and from being a user-centred process to a more collaborative, human-centred practice (Sanders and Stappers 2008). Throughout the last decades, design has dramatically evolved from the limited application as a style to an integrated part in the business process further to the new advanced level of being used as a driver of change and business transformation. Concepts like strategic design, design management, and design-driven innovation are notably entering the business environment by conceptually new applications to foster order in external changes and global challenges (Volkova and Jākobsone 2016). The impact of this design evolution on various aspects of organisational strategy, including marketing and branding, is undeniable. Kotler and Rath (1984) emphasised that design is a powerful but neglected strategic tool that companies can use to gain a sustainable competitive advantage, enhancing their products, communications, and corporate identity.

The role of design has expanded from creating the tangible characteristics of a brand (e.g., visual identity and communication materials) to developing fundamental aspects of the brand (e.g., equity, experience, and all brand touchpoints). This extensive role of design is likely to reflect a change in customer expectations. In this regard, Prahalad and Ramaswamy (2000) explained that nowadays, customers are expected to be involved with the branding process and shape their own experiences. The authors stated the experience is the brand and branding should be viewed as both a co-created and personalised experience.

Since the 2000s, customers have looked forward to meaningful brand experiences while most branding strategies have focused on brand authenticity. This provided design discipline with an exceptional opportunity to become increasingly accepted as a strategic tool for generating authentic and meaningful experiences. Later, various branding models were developed based on design capacities in developing the value and experience. The first model is the Emotional Branding Model (Gobé 2001) which includes sensorial experience as one of the core elements. Next, the Sensory Branding Model (Lindstrom 2005) is also developed based on sensorial experience. Finally, the concept of Lovemark (Roberts 2005) follows the idea of fostering deeper connections with customers, suggesting that companies use design to move beyond brand loyalty and develop a sincere love for their brands.

Design has now become an essential means in the development of branding strategies. The current increasing pace of changes in the business world has amplified the focus of organisations on more innovative processes and outcomes, wherein beyond the conventional design approaches, Design Thinking, and human-centred approaches are more relevant (Datar and Bowler 2015). This paradigm shift has highlighted the role of design in the branding process, with some researchers arguing that design should lead the entire branding process. For instance, Abbing (2010) suggested that design thinking and human-centred design should be considered key drivers of developing innovation and branding strategy. Granting the author, design thinking is essential for developing core brand value and branding strategies (Lam and Choi 2017).

Design Thinking Mindsets

Design thinking has emerged from the very heart of mainstream design through the exploration of theory and practice in a range of disciplines and sciences to address the human, technological and strategic innovation needs of our time. Design thinking is broadly defined by a set of attributes including creativity and innovation, human-centredness, iteration and experimentation, interdisciplinary collaborations, the ability for visualisation, Gestalt view, abductive reasoning, tolerance for ambiguity and failure, and blending rationality and intuition (Kolko 2015; Liedtka 2011; Lockwood 2010).

The expansion of technology and ubiquities access to global markets has enabled customers with unlimited options, making it harder for brands to survive in the game of providing value to customers. This highlights the

importance of design thinking – as a driver for the development and improvement of value to customers – in strengthening businesses in the face of market turmoil, providing brands with a sustainable order to develop new values. That is why design thinking design has received so much attention from academics and practitioners as Buchanan (1992) argued the concept could be applied to nearly anything, whether a tangible object or an intangible system.

In a broader context, design thinking has been described as an approach, a discourse, a philosophy, and as a set of practices, principles, tools, and mindsets commenced to promote the innovation (Brown and Wyatt 2010; Gruber et al. 2015; Leavy 2010) that draws on affective, behavioural, and cognitive aspects of customers' attitudes. However, one of the most salient attributes of design thinking is its constituent mindsets which in literature prominently described as abductive reasoning, human-centredness, and iterative experimentation (Beverland et al. 2015; Dorst 2011; Martin 2010, Micheli et al. 2019). These interconnected mindsets cover an extensive range of design processes and practices and are crucial in our further discussion.

The first mindset is abductive reasoning, which challenges existing practices to be informed by alternatives. Abductive reasoning is in opposition to deductive reasoning (top-down logic) and inductive reasoning (bottom-up logic), which come to answers through building a precise premise usually to evaluate or justify a phenomenon. Abductive reasoning, by contrast, is a creative leap of the mind without any ties to the apparent and feasible to imagine possibilities. Based more on assertion than evidence, abductive reasoning constantly searches for what might or ought to be rather than what already is (Liedtka 2015; Martin, 2010), providing the argument to the best explanation. It, therefore, allows for the creation of new knowledge and insight and promotes an attitude towards feasible solutions.

In this sense, abductive reasoning may be used to approach and solve problems by relying on existing frames of reference or by challenging prevailing practices and assumptions (Micheli et al. 2019). That is why abductive reasoning is considered a chief attribute of the design thinking process (Dunne and Dougherty 2016). Abduction provokes exquisite and novel solutions, often by setting aside or reconsidering constraints or prerequisites. Using abductive reasoning throughout the design process–whether for the whole branding or just designing the customers' experience––the target audience will remain the focal point. Furthermore, as discussions move from evidence-based towards assertive, dialogues may form among

all stakeholders in which challenges can be explored from different perspectives, and all ideas will be absorbed, trimmed, and reframed to suit the customers' needs better.

Abduction acts as an inference or intuition which can be driven by individuals' perception and lived experiences. It involves continually generating and abandoning hypotheses until no better explanation can be produced (Nakata 2020). However, considering design thinking as an abductive sensemaking process (Kolko 2010), this mindset has several offerings for developing the brand strategy. First, it reveals the hidden meanings of people's attitudes and behaviours. Second, by reframing challenges, emphasising priorities, and creating connections, it seeks to integrate people's experiences and create collective sensemaking. Finally, it takes people's perceptions out of their minds, making them tangible so everyone can understand them. The main idea here is to put together what we had never dreamed of putting together before: cognitive, emotional, and physical aspects of the experience.

The abduction-ideation link is suggested in processes whose main purpose is to identify or develop novel ideas, meanings, or values. In fact, through abductive reasoning, one can overcome mental puzzles, contradictions, and the pitfalls of competence (Dunne and Dougherty 2016), creating new values and experiences by developing multiple views of what might work. Thus, abductive reasoning can be considered an effective mindset in promoting and shifting customers' attitudes toward new experiences and alternative values. Therefore, the abduction helps generate practical solutions (experiences, meanings, and values) that are assertion-based rather than evidence-based (Micheli et al. 2019).

As the second mindset, human-centredness is mainly concerned with the people's substantial needs and aspirations that should be addressed through innovative solutions. Human-centredness is considered as the fundamental characteristic and integral component of design thinking. It is the core quality of design thinking that contributes to understanding human activities and human concerns during design processes (Jones 2014). Human-centredness scrutinises the premise that human perception and behaviour go hand-in-glove. Such an approach is based on the principle that the design process results (whatever they endure) inextricably linked to how users perceive them, can imagine interfacing with them, using them, and talking about their stake in them with others (Krippendorff 2004). Human-centred tradition celebrates the diversity of human skills and offers an alternative to the 'mechanistic' paradigm of only one best way, the uniformity of science,

and the desire for exact language (Gill 1996). Over the years, the human-centred tradition has built upon the socio-technical approach and has shaped the human-factors approaches towards user-centred and participatory design approaches. This, in turn, resulted in the advent of new types of design professionals, ergonomists, human-factors experts, usability researchers, and user experience specialists. But more importantly, it challenges the techno-centric focus of science and technology which ignores the diversity of human knowledge and marginalises human skill (*Ibid.*). This mindset goes beyond customer orientation by empathically seeking to resolve customers' issues as experienced, including the full range of emotional, embodied, and substantial human experiences. As noted by Hugentobler et al. (2004), human-centredness criticises the artefact-centredness of design with its orientation towards function, technology, aesthetics, as opposed to user experience. It criticises author-centredness, aiming at the expression of self, as opposed to being in responsible service. Ultimately, it criticises business-centredness, aiming at shareholder value, instead of value creation for all stakeholders. Human-centredness calls for full involvement and deep immersion in people's lives to identify and gather meaningful insights rather than superficial abstractions. As a result, a full range of human experiences can be discovered (Beverland et al. 2015; Gruber et al. 2015).

This mindset requires empathy (the ability to perceive, imagine, and share what others undergo) which provides a key portal to lived experiences – including the thoughts, feelings, and meanings that people attach to the phenomena around them (Kelly and Kelly 2013). Moreover, human-centredness involves empathy to understand better and address the implicit needs of the customer. Such an approach may also enable the development of human-centred branding strategies that promote more empathetic relations with customers and support the acquisition of deeper insights into customer experiences. Based on the attitudes that underlie this mindset, Liedtka and Ogilvie (2011) have suggested a deep understanding of the experiences of all people involved (whether they are customers or not). With this view, empathy goes beyond customer relations, extending to all stakeholders in the branding process. Therefore, it requires interaction with an immediate understanding of the needs, aspirations, and behaviours of all people who can be considered brand audiences (Schweizer et al. 2016). With this mindset, branding strategies can be developed to provide compelling experiences that are memorable and meaningful and can be part of the brand itself.

Iterative experimentation, the third mindset, is framing early failure as necessary for learning. Based on the perspective of failing early and often (Brown 2009; Lockwood 2010) this mindset contrasts with the traditional practice of theorising a solution and waiting to test it, all too often only to find out that it does not meet market demands. Instead, design thinking promotes a culture of prototyping through the development of small-scale, iterative, trial and error experiments. Conducting such tests helps in the quick determination of what does work and what does not, forming the rudimentary insight for the development of the most effective solutions (Beverland et al. 2015). This iterative process breaks through mental blocks by the constant production of inexpensive, rapid prototypes, exposing them to customers, and getting clear feedback. The feedback is then used in the next round of prototyping to generate alternative, more practical solutions. This mindset promotes early failure, allowing for unexpected and more creative solutions, reducing the likelihood of customers' dissatisfaction.

The mindset acknowledges the general idea of learning by failing as a co-evolution process in which both problem definition/solution proposition occur simultaneously (Tonkinwise 2011). In this process, prototypes perform a pivotal role, not for the validation of products or services, but as they allow customers to learn about the strengths and weaknesses of the proposed ideas through a direct experience, identifying new directions that could be reached through further prototypes (Nakata and Hwang 2020).

The signature traits of these mindsets are highlighted by the roles they perform in the design thinking process. Abduction facilitates the extraction of alternative ideas and solutions to customer problems by framing imagined possibilities. Empathy helps to fathom the implicit needs of customers more broadly and accurately. Prototyping provides the basis for receiving the customers' feedback and improving the presented ideas by engaging diverse stakeholders in the design process and developing small, inexpensive, and iterative experiments.

This would be an effective design thinking-based process for developing a brand strategy since it is based on customers' needs and aspirations through their active participation in the design process. However, if the brands' touchpoints could also be developed pivoting around human senses and sensory stimuli in such a process, the result can be considered a multi-sensory brand experience (Figure 1).
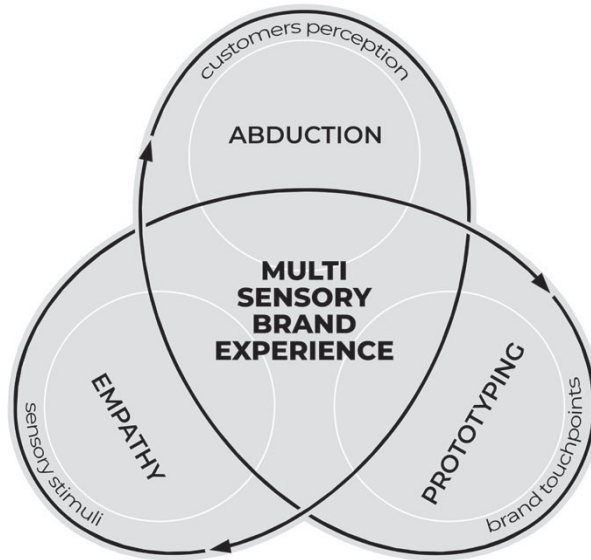
Figure 1. Design thinking-based multi-sensory brand experience (authors elaboration).

Eventually, after defining the relationship between design thinking and sensory branding and briefly discussing how brands target human senses, we might safely hypothesise that creating (multi)sensory stimuli while promoting brands enables stronger connections with customers due to the human factors and five senses that engage in the process. Even adding one more sense to the touchpoints of a brand can dramatically alter the customer experience.

Conclusion

The purpose of this chapter was to investigate the link between branding as a strategic process and design thinking as a set of mindsets in developing a multi-sensory brand experience. It is highlighted that branding strategies can be developed to provide compelling experiences that are memorable and meaningful and can be part of the brand itself. Effective branding strategies increasingly focus on the human aspects of the brand and their customers' desires, interests, and needs. Similarly, through empathy and deep immersion, human-centred design thinking focuses on human needs, perceptions, emotions, and behaviours. Such commonalities enable the development of more humane brands that, on the one hand, support a

remarkably dynamic relationship with their audiences and, on the other hand, can promote exceptional experiences at an extremely meaningful level for customers using emerging multi-sensory tools and technologies.

What makes design thinking so important in developing memorable brand experiences is its ability to rethink current branding and design practices using design-based techniques and emerging sensory technologies. Human-centred design can use multi-sensory stimuli to articulate and communicate the narratives of a developing brand more interactively and coherently. It can also enhance the quality of brand experiences by integrating some sensory elements that can further make a particular experience more humanised. Having more senses engaged makes a brand experience more human-centred, engaging, and memorable.

The human senses and feelings are fundamental to branding, sensory stimuli, and design thinking. An effective design-driven, multi-sensory experience engages all human senses well enough to create a pleasing, impressive and memorable brand experience. A bright future lies ahead for all brands, especially those that remain humane by using sensory stimuli, thus paving the way to multi-sensory brand experiences.

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CHAPTER 3

NEURODESIGN AND THE BRAND PERCEPTION: COMMUNICATION CHALLENGES IN THE XXI CENTURY

CÁTIA RIJO AND CAROLINA MARMELO

1. Introduction

Before the era of Internet-driven globalization, much of a brand image was built into the minds of the audience by telling a story that the company or organization decided upon, as the entire storytelling was controlled by it and communicated as the organizations wanted. This story could then be received, or not, by the audience in question. However, the paradigm has changed, and with it the way brands are built and how they gain notoriety, since today the perception of a brand is not only dependent on itself and the way it conveys its message, but is also much more dependent on the relationship it establishes with its consumer and the dialogue, they establish among themselves.

With the creation and dissemination of online search tools in the 1990s, most organizations understand the advantage of the internet as a marketing tool and distribution channel, since through its use, the brand shares information about itself with its consumer, and if this information is true to its identity it can influence the first impression that the target audience acquires in its first contact with it. However, new technologies continue to evolve, and social networks are emerging. According to Grams (2011) the institutional website tends to become less and less important when it comes to defining your brand on the web and social networks such as Twitter, Instagram, YouTube and Facebook are now the main platforms for the dissemination of your brand. These tools provide the world with new content and new voices, allowing companies to engage in dialogue and create a close relationship with the consumer in a way never seen before. In

the past the consumer absorbed the image, today the consumer absorbs and gives feedback about it, interacting with the brand giving opinions and suggestions about it. If on the one hand the internet has facilitated and brought brands closer to their audience, it has also increased the complexity of controlling their perception and communication of their identity.

The creation of brand communication strategies that integrate social networks reinforces brand recognition, facilitates its relationship with the target audience and influences the content of the message and its dissemination (Smith & Chaffey, 2005).

According to Grams (2011, p.6) "the great brands of the 21st century will not be built through the tale, they will be built through being". Organizations today bring their brands to life through everything they say and do, largely because of the power the internet gives to consumers, and social networks have become an important factor when making strategic decisions about brand communication. If there were times when companies controlled the way their brand was communicated, today they have lost control over their brand, as brands are no longer defined only by companies but also by the target audience, partners and all those who in some way relate to the brand. This relationship can work in two ways: either the brand is valued or not. It can then be said that social networks have brought the brand closer to the consumer, and have exposed the consumer's commitment to the brand, provoking a need to share the feeling that the brand awakens in them, becoming their ambassador.

Bedbury and Fenichell (2003, p.46) state that "brands are sponges of content, images of fleeting feelings. They become psychological concepts kept in the public mind, where they can remain forever (…) you cannot fully control a brand (…) you can only guide and influence it". The lively and dynamic characteristics of a brand are the basis of the dialogue between it and its customers and potential customers. A brand is a product, and with everything that differentiates it, it is distinguished from other similar products that have the same purpose. The differentiating elements may have tangible and measurable aspects (characteristics and performance of the product) or intangible (the emotional and symbolism of the brand). These characteristics will influence the consumer's choice when faced with two similar products. For Smith and Chaffey (2005) the dynamism of the brand determines the dialogue with the customer. The more striking the brand, the stronger that dialogue will be.

2. Challenges of the brand communication
in the XXI century

The proliferation of images via the web has created an excess of visual information. While humans have evolved to decode information through the eye, the volume and variety of artificial images and designs to which they are exposed daily is unprecedented. For this reason, the consumer becomes a selector being able to locate and satisfy interests and needs through searching the web.

Through technology, the individual creates new markets and affects existing ones, so its use by brands, especially on the Internet, applications and tools, allows a large-scale connection to the network that overrides everything that was created before (Ryan and Jones, 2009). This overlap has meant that traditional media have become outdated as advertising is no longer the only way to communicate with the public.

The Internet can be seen as having a hybrid character where its communicative potential exists. It is thus seen as mass communication, providing a high level of individualization for multi-channel communication. Within this process new demands and new communicative possibilities are created which presuppose a reflection on the function and action of the user. As this is an interactive communication, it facilitates different levels of communication only permissible on the Internet. Web advertisements combine characteristics of interpersonal and mass communication. They demonstrate the permission of an individual or mass communication, as well as a reciprocal interaction between sender and receiver, individual or mass (Janoschka, 2004).

The communicational and advertising developments aim to reinforce all those that preceded it, providing a greater diversity of forms and connections in a more transversal and expanded section of consumers. Each brand has to make a constant search on how it can supplant itself, attracting the eyes of consumers, becoming desirable, demanding a fast and constant evolution of its image. This evolution aims at differentiation and supplantation of competing brands, leading the consumer to make a choice based on the stimuli that the brand awakens in him.

In this context, brands need to stand up and claim the attention of the publica and all brands need a strong and striking brand image. According to Costa (2011), it is through the creation of exclusive and lasting symbols that a brand becomes visible, present, perceptible and memorable. It is through

vision that our brain recognizes and memorizes images. The association of the image to an entity is quickly made through this sense. Its identity must allow differentiation, claiming distinct and exclusive values that are retained in memory, differentiation and the capacity to remember are the essential principles of a good design of identity. A brand depends on its distinction through processes that allow the memorization of its identity, making it timeless, versatile and at the same time immutable. Thus, it will be easily recognized by the audience. It is through the graphic quality, adapting a visual style appropriate to the type of language, that a brand proves its effectiveness becoming perceptible, respected and recognized by the public.

According to Wheller (2009), there is no specific reason to categorize and subdivide brands, the designer's work consists of analyzing a wide range of solutions/hypotheses based on functional and aspirational criteria that help determine which approach best serves the client's needs, creating a distinct approach for each brand. Due to the existence of a high number of competitors, brands seek ways to emotionally connect with the public in order to stand out in the surrounding community, thus enhancing recognition and distinction by the public.

The message conveyed to the public seeks to be a representation of the brand itself, distinguishing values, ideals and future perspectives, being of utmost importance is the existence of consistent communication, where its identity must be present in all forms of communication. The strategy used by the brand allows the consumer to recognize themself in it, cultivating a sense of belonging, by identifying themself with the company's philosophy. Therefore, the more enlightening and conscious the strategy, the more perceptible the brand's personality and, naturally, the quality of its manifestation in visual elements.

3. The importance of neuro design in brand communication

Neuro design is an approach that allows one to analyze the brain triggers behind a good experience and use them to support more informed design decisions based on behaviors, human trends and global interactions (Kirkland, 2012), using concepts from neuroscience and psychology to create more effective designs. Through its relationship with other adjacent areas, neuroscience helps build a better understanding of why people react in a certain way.

The internet is the biggest psychological experience. For Bridger (2017) this is a psychological space where millions of designs, photographs and images are uploaded daily and tested against countless behavioral relationships: clicks. Metrics like fashionable social networks measure the psychological pulse, exposing people's thoughts, desires and feelings. According to the author, the Internet has facilitated the relationship between the creators of images and their receivers by being able to teach new "things" concerning the functioning of the human mind by exemplifying this idea through the possibility of content creation by users.

Due to the constant and incessant bombardment of information and images, the need arose to create strategies that allow the definition of choices according to individual needs since it became quite difficult to differentiate a product based only on quality and functionality. Design, in this way, becomes one of the most important threads of the brand value, where understanding neural and cognitive models of the intended target audience allows designing intuitive solutions that satisfy it.

According to the author, we are visual creatures and for this reason the visualization of images is one of our most relevant senses, and the one that occupies the most space in our brain. That is why we have an innate appetite for the consumption of images, easily decoding them and quickly absorbing their meaning. We don't have enough time and energy to carry out detailed and complete research, which considers all the details of a brand, so it is through image and sensory and neurological stimulation that we make our choices, a conscious choice where it is the unconscious that commands.

Therefore, neuro design values the brand and the way it is communicated. Sites with designs optimized for what "the brain likes" are more likely to be accepted and trusted; products and packaging with appealing designs increase the probability of people paying more for them.

3.1 Images as a visual stimulus

So, what is behind the decision making when we make our choices? Intuitive thoughts are often guided by mental shortcuts that the brain develops which allow it to act quickly, some of them relate directly to the way the individual decodes images, others relate to the way choices are made, given any particular presentation of options.

Kahneman (2013) points out that emotion remains active much longer in intuitive thinking and choice than in the past. When confronted with a

problem, intuitive mechanisms try to respond as correctly as possible. However, according to the author, if the individual has specific knowledge in the area, he or she will automatically recognize the situation and the intuitive solution that occurs to him or her is more likely to be correct. If the question is difficult and knowledge is not inherent, intuition has a chance to answer. The author designates this behavior as the essence of intuitive heuristics: when a difficult question is presented, the individual tends to answer it with an easier question, without noticing the substitution.

Bridger (2017) presents two distinct models of thought, metaphorically described by Kahneman (2013) as System 1 *and* System 2 according to the nomenclature adopted by psychologists Keith Stanovich and Richard West.

The author defines System 1 as the automatic and rapid thought process carried out with very little or no effort unintentionally. This system tends to use quick and imperfect pattern recognition and rules instead of deliberating and calculating reactions rationally. The System 1 thinking is important in terms of image and design: frequently, image and design are inherent and irrational. It is not intended that they have a logical and concrete answer. It is preferable that they produce an intuitive feeling, or even an emotion, "there is no logical reason to prefer one design over another, yet we do. (…) designs that we think of as purely conveying functional information will have a feeling associated with them "(Bridger, 2017, p.9).

In contrast, System 2 is slow and time consuming. Kuhnman (2013) defines this system as the attention given to demanding mental activities that include complex computations. These operations are associated with subjective experiences of choice, concentration and control. However, the automatic operations of System 1 generate complex patterns of ideas that can only be ordered in System 2 and thoughts constructed. Bridger (2017) defines System 2 as the slowest, the one that expends the most energy and the one that causes the most effort to be put into practice, most people tend to avoid using it.

As an individual encounters a continuous increase in visual stimuli, System 1 becomes increasingly important, however, as this system is processed unconsciously, it is by definition something unknown, being difficult or even impossible to describe. Despite this, humans like to consider themselves as rational beings with conscious control of their actions. If one is motivated and influenced by the mind (System 1, not conscious) but is not familiar with the process that influences them, they will tend to build a reason. The more visually complex and information-rich the routine, the less

the subject depends on the rational, conscious, and logical mind, and the more it depends on the intuitive, non-conscious, and emotional mind.

According to Kunhman (2013) System 2 is mobilized when a question is raised that System 1 cannot answer or when an event is detected that violates the reality model that System 1 maintains. Some attention is required for a surprise stimulus to be detected. The surprise activates and guides the attention in order to search the memory for a reason for the surprising event. Most people are not aware of the mechanisms of the mind, they do not understand why they make choices or why they prefer one design over another. Perhaps this is why there is a tendency to justify the choices made, because it is easier to fill in the gaps with conscious rationalizations for their behavior and choices.

3.2 Neuro Design principles

Neuro Design focuses on understanding the processes and differentiating aspects of the unconscious mind of man in order to create designs that are pleasing to the eye.

Bridger (2017) defines that some of the principles of neuro-design include:

- **Processing fluency:** Human brains are prone to easily decoded images. Simple images or images that are easy to understand have a great advantage when compared to more complex images. These effects operate outside the conscious knowledge of the recipient.
- **First impressions:** The human brain cannot avoid making intuitive judgments, quickly, when it sees something for the first time. The feeling resulting from this first contact will unconsciously guide its reaction to the design. This happens before this feeling even has time to make a conscious understanding of what you are seeing.
- **Visual saliency:** The way the brain builds an understanding of what it is visualizing creates what neuroscientists call a saliency map. A visual map that portrays what our brain thinks it's giving attention to. Images or visual elements with large visual saliencies can - like first impressions - guide our subconscious reactions.
- **Non-conscious emotional drivers:** Small details in the designs can have a big impact on your ability to emotionally capture viewers. Creating an emotional effect is important in creating influential design. Pre-conceived ideas in the human brain can be followed in order to create more meaningful emotional designs.

- **Behavioral economics:** The way in which the peculiarities of the unconscious can influence people's choices, mostly in irrational ways when exposed to them.

Many of the visual perceptions and recommendations of neuro-design can be categorized from one of the five principles presented above. Understanding the principles leads to understanding visual perceptions and prevents forgetting them. The principles of neuro-design can be applied to almost any design element, however, the author states that at the moment, human beings do not have a concrete understanding of the brain processes related to pleasure behind an image pleasing to the eye.

3.3 The universal principals of art and the brand

Based on knowledge of neuroscience and visual neuroscience Ramachandran (2012) proposes nine possible universal principles of art: the peak shift principle and supernormal stimuli; isolation principle; grouping principle; contrast principle; peekaboo principle; orderliness principle; visual metaphors principle; abhorrence of coincidence principle and symmetry principle.

Some of these principles touch on other already well-known principles, such as the Gestald principle or the principles of visual communication, some of which are present when developing integrated brand communication. Ramachandran (2012) evokes the ancient Sanskrit word "essence" to describe the brain's constant search for distinctive and identifying visual elements. The principle of peak change is to take interesting or useful elements for the recognition of something and increase them. Bridger (2017) points out that by activating these codes, artists and designers are "hacking" the visual system and stimulating it directly.

A more recent example of this phenomenon is the use of augmented reality, this technique goes against the law of the Principle of Peak Displacement, which presupposes that formal exaggeration is intended to highlight certain characteristics considered relevant to the human being. However, there may be other ways of applying this law: a photograph may highlight a certain element in order to evoke a stronger emotional response.

In turn, the principle of isolation states that looking at something under ideal viewing conditions is easier and requires less mental effort. Similar to the principle of peak change, the principle of isolation states that when we want to highlight an element of a piece or brand, we should avoid having other

elements of the design superimposed on or obscuring it. Instead, you should use selective white space around the design elements you want to highlight.

The principle of grouping says that it is natural for humans to group things visually because the eyes capture only shades and luminosities. It is the visual brain that groups these patterns with objects and scenes. Apparently, separate visual elements can be grouped in the mind through characteristics such as color and shape, among others. This allows the creation of associations to a brand through the use of individual elements that symbolize it. As opposed to the grouping principle, the contrast principle says that contrasting color combinations can be aesthetically pleasing because they jump out of sight more quickly (visual salience phenomenon). On the other hand, these principles are similar because the Principle of Contrast helps the brain to visualize and identify borders and contours of objects by promoting their recognition. A good way to use them may be to pair images or patterns that we do not normally see together, or to draw attention to an element of a brand by superimposing it on a background or other design element with a contrasting color.

The peekaboo principle states that the human brain likes puzzles, when something is obscured/hidden, it immediately becomes more attractive. Recognizing a partially hidden object is like solving a puzzle. Visual perception requires the constant formation of patterns from ordinary, potentially confusing signals seized by the eye. Simple and easy to solve puzzles can be an easy way to capture attention and engage observers. If an object or image is too familiar to the target audience, it may be more intriguing to partially obscure it.

Visual metaphors, in turn, are ways of reflecting an idea visually, Ramachandran (2012) exemplifies with cartoonists who use typographic fonts that reflect the meanings of the world. The author believes that the principle of visual metaphors is unconscious, but if the observer realizes its existence, it functions as the "peekaboo" principle. This kind of principle is applicable in design if the text reflects the meaning of the words or when the concept and emotions inherent to a brand are reflected through its communication.

The Aversion to Coincidence Principle says that coincidences without reason seem too obvious and, in a way, wrong. When seeing a coincidence, the brain assumes that it is seeing a random image or a generic vantage point, not a special vantage point that makes a difference. This principle suggests that when creating a brand, we should be careful not to use order

and symmetry too obviously. The human taste for symmetry is based on the past, when symmetry was synonymous with the biological. The principle of symmetry when applied to the brand is pleasant because it makes the design easy to process, however, similar to the principle of aversion to coincidence, if a design portrays something from a vantage point in which it is aligned symmetrically, it should be confirmed that it does not look too perfect (Bridger, 2017).

The Principle of Order relates to the regularity of the image, Bridger (2017) defines this process as similar to the Grouping Principle: the visual brain has a strong tendency to link things together. Like the law of Constancy of Zeki (1999), the Order Principle says that the brain looks for continuity parameters, trying to extract essential and relevant properties from the environment, while discarding secondary and inconstant characteristics. This means that our brain is attracted by repetitions and rhythms looking for patterns that lead to anticipating actions, reducing the energy used in processing new information. Transposing this principle to the visual identity of the brand, it can be seen that graphic elements that are repeated favor its apprehension and memorization. This is one of the principles advocated for good integrated communication. In order for a brand to be correctly perceived by its audience, it must be repeated with a certain uniformity.

According to Zeki's (1999) law of abstraction, it states that however much the individual seeks perfection, the world is confusing and chaotic. Each thing has its individual and unique characteristics that will never be ideal. As part of the search for the perfect image, which Zeki refers to in the law of Constance, and which Ramachadran (2012) describes with the word "shallow", our brains form models that consider ideals without being able to find them in the real world. According to this law, the designer can visualize ideal and "perfect" images/models, abstracting from the confusing and chaotic reality that surrounds them. By assigning a concept to a brand and applying it to this kind of art, we can replicate something natural and known to the brain, stimulating different areas and processes of it, enhancing the differentiation of the brand and the recognition of its characteristics.

Contrary to Zeki's (1999) law of abstraction and similar to the principles of Symmetry and the Order of Ramachadran (2012), the Constructural Law states that any system of movement or life - trees, rivers or lungs - evolves in a pattern or design that allows energy to flow with less consumption. This explains how nature creates geometric and structured patterns. Bridger (2017) considers this theory important because it connects the design of

living things to physics (formed by similar processes). Finding the most efficient way to transmit information or allow the user to complete tasks is a challenge for the designer and may result in something natural and inevitable in the solution. By using geometric and symmetrical patterns, such as those found in nature, the design of a brand, carried out in this way, will be more easily absorbed and retained by the consumer, because the effort made by the brain to understand it will be less.

Bridger (2017) concludes that these principles/laws are not absolute. Their success is not guaranteed. Breaking them can lead to pleasant results, for example, the peekaboo principle and the principle of isolation can be considered opposite ideas. The former suggests hiding an image in order to make the brain work, the latter suggests viewing it. Similarly, the principles of order and symmetry and the Constructural Law debate regular patterns while the principle of aversion to coincidence and the law of abstraction argue randomness. Finding a proper balance between principles or knowing when to use them is part of the designer's skill.

All the principles mentioned above can be very useful in the construction of the communication of brand identity, since they help the designer to better understand the actions of the target audience before a certain type of design. A good understanding and application of these principles can significantly change the way in which brand communication is perceived and understood. Through the application of these principles, it is possible to try to anticipate and plan the interaction of the public with the brand, thus trying to control a communication that has long ceased to be unilateral as much as possible.

Conclusion

Today, the world is interconnected and connected through different communication networks. The Internet has dramatically changed the notion we have about how brands are built. In this framework Neuro Design helps us to communicate in the best way with our market niche, it also helps to make our brand more memorable, at a time when communication is so fleeting, and we are bombarded incessantly with thousands of pieces of information a day.

Brands no longer have a unilateral communication with the target audience. Today our consumer is an active participant in building the communication of our brand, and, more than that, they have the power to influence it positively or not. As if this were not difficult enough, the proliferation of

images increasingly forces brands to make an effort to stand out from others and understand what captures their consumers' attention.

In this framework, it is essential for brands to understand why their target audience chooses, how they decide, what is behind their choices and what triggers emotion, among others. It is in this field that Neuro Design can be an indispensable tool for brands in the future. To understand the stimuli in humans and to understand which techniques design can use to communicate brands in a more appealing way and what leads to a planned action on the part of its audience, is probably the greatest challenge of the near future. Neuro Design addresses themes such as psychology and neuroscience, referring to how the brain processes, assimilates and reacts to Design. In doing so, it provides different principles that designers can use in order to enhance their work.

Of course, this challenge makes the planning of a brand's communication even more complex, since it involves studying, understanding and planning future behaviors of the audience to which we communicate.

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CHAPTER 4

VISUAL LANGUAGE, IMAGINARY AND BRANDING IN THE CONTEXT OF CITIES: STUDY ABOUT CHAPECÓ – SC, BRAZIL

VALÉRIA C. FEIJÓ AND FERNANDO OLIVEIRA

1. Introduction

Digital technologies, seen as changing points in creative production, develop and become more and more constant in society, directly impacting visual identities and branding. The Internet, social networks and other interacting devices allow brands to become living organisms (Nes 2013). Interactivity enables identities that were largely static before to be created with symbols, random shapes, chromatic choices, or even controlled and stimulated by sound to be increasingly more alive, experimental, and dynamic (Nes 2013).

In this new context, social networking sites have gained important spaces in social life in recent years, mainly expanding and changing information and communication. Data sharing is a standard behaviour among users of social networks, and such practice contributes to the expression of identities and behaviours that go beyond the public-private spheres, defining a set of information that outlines the collective imaginary.

Growth perception of such movement was mentioned in publications in the final decade of the 20th century and the initial decade of the 21st century, in which aesthetic-emotional attributes, symbolic value and the search for a sense of belonging were cited as prevalent in social life (Maffesoli 1995). It is a world in which the idea of "community", security of belonging, everyday experiencing, emotion sharing, sensations, and experiences make life vibrate and are associated with something good (Bauman 2001).

The predominance of imagery culture, in which information and symbolic construction are increasingly permeated by the visual language and the power of images, collaborates with the consolidation of shared imagery in the digital context. The concept of image as mediation between man and the world stands out here. Such mediation occurs mainly through technical images, that is, the images produced by devices that have a symbolic character. One of the main types of technical images (Flusser 1985), built and enhanced by smartphones, is the photographic image.

Therefore, if we consider the concept of a technical image, the photographic records shared on social networks do not represent the world but represent concepts related to it, which are the results of imagination (Flusser 1985). Thus, images are codes that translate events into situations, processes into scenes. Not only do photographic images eternalise events, but they also replace occurrences with settings. These images collaborate with the construction of the collective imagination, which is configured in a collaborative social narrative, a network of connections and hypertexts, which comes together symbolically (Silva 2003).

As a social network for sharing images, Instagram stands out as the most popular and the most used worldwide over the last ten years. It is considered a space where static or moving images can be published or saved in real time. They present information and opinions about people, things, destinations and cities. Furthermore, by using hashtags, groups are identified, and murals with shared images allow one to investigate cities' imagery (Deyan Sudjic 2019).

2. Visual language, imaginary and branding in the context of cities

The term city can describe many things, but it is understood as something beyond its geographical space in this research. A city is formed by people, local identity, culture, architecture, historical origins, infrastructure, economy, among other characteristics which show authenticity, personality and sense of place. In other words, the city is a dense symbolic network in constant construction, resulting from social, collective and historical identities. These identities can be cultural, territorial or visual, and they are what differentiate one location from another through its representative elements (Martino 2010).

Cities work with branding strategies to enhance their representative elements and stand out from the rest in the current world. Cities often want

to attract people, businesses or tourists, depending on the vocation and the defined objectives. To be successful, they work with strategies that enable the validation of identity and the creation of a unique image, creating and developing brands and brand identities that represent their local identity characteristics and offer a greater capacity for attraction and connection with inhabitants, tourists, visitors and other audiences (Kavaratzis 2004).

Therefore, in contemporary society, brands enable understanding of the market, consumption of goods and services and the whole of an organisation and its culture when referring to cities. Brands are a cultural phenomenon, and, as such, they become messages through the use of the design language (Gobé 2010; Semprini 2006).

For Oliveira (2015), in the scope of Design and Communication, the term brand addresses a comprehensive notion involving the interactive process between palpable and nonpalpable resources, such as its vision and relationship with its audience, linked to human behaviour. These characteristics contribute to the construction of a mental image created by the public from the synthesis of the aspects that make up the "Brand Identity System".

The branding concept is in line with what is approached by design, as it involves the brand's global strategy, from design, management and communication, managing all the elements that are part of the brand universe. Thus, branding can be defined as "a set of actions linked to brand management; actions that take brands beyond their economic nature, making them part of the culture and influencing our lives." (Oliveira 2015, 44).

According to Kotler (2010), with the advent of information and communication technologies (ICTs), participation begins as the age of globalisation paradox and creative society. Knowledge gains space in the light of human strength; there is the appearance of a new type of capital, the intellectual. "Questions of time, rhythm, speed and sequence are part of the communication designer's action in a world in which digital interfaces blend with the physical world." (Consolo 2015, 22). Therefore, it is necessary to be aware of socio-cultural orientation and interaction processes, considering perception, cognition, and technologies.

From the perspective of brand's meaning construction, Semprini (2006, 123) claims that "the brand is, first of all, a system of production of meaning ... a structure that must be organised and managed in hierarchical and countless manifestations". The management of such events is the responsibility

of the branding area, which delivers the brand promise. Such promise is developed from the selection of concepts that make up the brand identity.

Brand identity is a fundamental concept for brand management. It stimulates recognition, expands differentiation and makes great ideas and meanings accessible (Wheeler 2012). Therefore, it should be considered by companies as an important intangible asset. According to Wheeler (2012), brand identity is expressed visually and verbally by brand communication. Visual, tactile, auditory experiences, among others, can be developed through brand identity. The brand is a promise, whether of quality or value. Therefore, it needs to be communicated to different audiences to understand the brand message and its functional and emotional benefits (Ruão 2017). The visual identity is part of the graphical expression of the brand, and it is defined as the practical form of design application that visually singularises a given object through visual elements inspired by a creative concept. It is seen as a system that encompasses all visible aspects of the brand in an image that is immediately recognisable, differentiated and professional (Peón 2009).

It is noteworthy that in the context established in this study, the concept of a brand is understood beyond its logo and symbol. The brand's visual identity is understood as responsible for materialising its concepts so that they can pass through the perception of the human brain and be absorbed by the senses (Feijó, Frandoloso, and Gomez 2014). The visual materialisation of the brand concepts is, in fact, fundamental and complementary to deliver all the essential values contained in a brand identity to the public consistently and coherently.

The relationship between brand perceptions and associations made by consumers is highlighted by Feijó (2014) as they are built from two perspectives: the brand identity and the brand image. The first is identifying and constructing the fundamental concepts that belong to the company; the second is defined by the consumer from the contact with the brand and in its communication. Identity is a concept of emission, in which the meaning of the brand is unique in its conception.

However, it can be seen that identity and image establish the dependence between cause and effect; identity is the conception that the brand has of itself; the image is how the public perceives the brand. Identity is built internally; the image, externally. Identity is objective; the idea is subjective and symbolic. The image is configured based on identity; identity precedes

the photograph. The identity and brand image differ in form and content; however, communication links them. (Vásquez 2007).

Therefore, the brand image is the understanding consumers have from all activities and communication around the brand. Thus, the brand identity expresses the variety of meanings and the universe of composition and manifestation of the brand (Feijó 2014). Studies and discussions on the importance, contributions and implications of creating and managing brands for places, countries and cities have been presented and discussed for more than two decades. In 1996, Anholt (2005) introduced the term place branding, in the Portuguese translation place-brand, in which he highlighted the idea of working to shift the concept of branding, which then belonged to products and services, to the reality of cities, places and territories.

These changes in perception impact representations of the territory, which are governed differently: physical presence is no longer necessary to obtain information or interact with anyone in the world, for example. In this sense, places, territories and spaces need to be reorganised in the light of these new needs to maintain their own identities.

The places inserted in the logic of networks have to differentiate themselves to affirm their individuality in searching for a common goal. Many authors argue that the construction of brands of places and territories works similarly to the creation of brands of products or services, only differing on the complexity of identification and validation in the face of actors and spheres involved (Anholt 2005; Azevedo, António Magalhães, Duarte Pereira 2011; Kavaratzis 2008; Kotler, Haider, and Rein 1993).

That is why brand management is so important. In this sense, places have ensured that their identity characteristics will not be transformed into commodities, but instead, they have worked to strengthen their values, belonging and competitiveness towards social and market changes imposed by globalisation. Furthermore, the attractiveness of the place is related to its ability to closely approaching individuals involved, that is, residents, visitors, tourists, government, public and private organisations, among others, in order to establish a meaningful relationship by offering more remarkable and sustainable benefits to all (Anholt 2005; Ashworth and Kavaratzis 2009).

Brand-place management is a complex process that needs development to obtain a competitive advantage, in the sense of attracting investments and tourism, reinforcing the local identity and the recognition of its citizens and

activating all social forces to improve the quality of life and avoid social exclusion (Kavaratzis, 2008).

The territorial brand is the result of a global strategy that takes all factors linked to the identity of the place into account and allows the creation of a unique personality, which will be added to the brand management strategies, providing the audience with authentic meanings and experiences (Anholt 2008).

For Almeida (2018), place branding is responsible for the reputation and representation of places, for internal and external audiences, through the management of a set of elements selected by a group of actors responsible for the community who defined the vision, the concept and the essence of that place's brand.

Based on these concepts, place branding should be a composition based on physical and social attributes of the place. Thus, physical characteristics, the landscape, the structure and infrastructure, and actors' identities, personalities, and behaviours must be considered in designing the brand of a place.

The identities of the place will only be known through an understanding of the construction process, that is, the histories, cultures and memories of the area. These constructions are perceived by the community's imagination and expressed through common sense. In other words, it is a unique character capable of providing a type of symbolic identity that distinguishes one place from the others (Lopez 2010).

However, the context of places, even if meanings are individual, in some instances, ends up being influenced by social interactions. Therefore, it is almost impossible to elaborate definitions solely and exclusively in one way, mainly due to many narratives shared and reproduced all the time.

The significant elements linked to the identity of the place are generally produced in the context of substantial experiences of everyday life and integrated into memory, becoming part of the representations of the area. Thus, within the narratives of personal memories, there are collective facts intertwined in meaningful experiences, responsible, in a way, for directing understanding (Martino 2010).

The projected images are crucial, as they are processed through cognition due to the interactions between what is seen and experienced. Through such a mental process, the image of the place will be constructed in each person's

mind. Therefore, the management of place branding deals with these images specifically by collaborating with perceptions and projecting them.

The management of the place-brand is an attempt to influence these 'mind maps' in a favourable way to the issues present in the place and its future (Kavaratzis; Ashworth 2005). The narratives about the place confirm the meanings and collaborate with the construction of the place image, validating speeches, updating traditions and reinforcing specific characteristics. Through records, people share stories from the past, get involved with experiences of the present and make predictions for the future (Campelo 2015).

3. Material and research methods

The methodology used is based on different procedures since digital social networks represent a complex field for analysing various social, communicational and visual phenomena. Therefore, we searched for previous research, methods and tools capable of dealing with the quantity and quality of the collected data. Mixed research approaches are one of Lev Manovich's (Manovich 2016) main proposals for analysing Instagram images. It is noteworthy that the method used here is the one that advocates the analysis of images and their grouping using hashtags.

In this type of research, we start with the field approach, in which the first non-qualitative observations are made, noting and describing the observed patterns. This is the initial phase in which the researcher has his own experience concerning the platform and exploratory visualisations of images, hashtags, and samples, seeking to prepare consistently, outline, and adjust the investigation path. Then, from experimental research, perceptions and reflections in the empirical field are constituted to ground the systematics for sample collecting, in parallel, enabling the development of the theory that underlies the research approach (Fragoso, Recuero, and Amaral 2011).

The study's objective is to identify the collective imaginary of the city, identifying patterns, groupings and uniqueness in figurative elements from the photographic images shared by users on Instagram with specific hashtags. It also seeks to broaden the understanding and discussion of the methodological proposal applied in the study, seeking to validate it within its application.

As research steps were contemplated:

(a) **Field approach with exploratory and documentary research**: non-qualitative observations and initial tests with different hashtags; annotation of identified patterns for further analysis and definition.

(b) **Choice of hashtags to be studied:** analysis of the field approach and definition of hashtags, as well as the methodological parameters of the search. The hashtags were thus defined: #chapeco, #chapecocity, #chapecosc, #descubrachapeco.

(c) **Selection of posts:** posts on Instagram were mapped and collected using software[1], allowing viewing and downloading different hashtags directly on the computer.

(d) **Data organisation, coding and cataloguing:** the data collected were encoded in an excel spreadsheet, systematically adding the number, post identification code; description of the photo analysed; direct link to the profile and category explored. This initial information was extracted directly from the software used in the research.

(e) **Choice of categories:** The initial categorisation took studies on contemporary images on Instagram into account, which features three popular types of photos shared by users on Instagram: casual, professional and projected. Considering the weightings of the same study on the existence of other categories and analyses, the perspective that classifies the degree of humanisation and photographed element was adapted to the study (Donaire and Galí 2011)

(f) **Development of the analysis**: finally, the study was performed with the morphological analysis of the content. It is noteworthy that in some cases, the fact that Instagram is a multimodal tool based on image and text (captions) was taken into account to enable an analysis of the representation and expression of the city's collective imagination.

The results are presented and discussed with theoretical support on the image of cities and allow reflection on how cities can work with place branding to identify critical points, improvements and possibilities for action for residents, tourists, investors and other audiences that relate to it.

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[1] The images were captured from Instagram using 4k Stogram software. Stogram is an online application, which has a free module and a paid module, which makes it easy to access, view and download photos directly from Instagram to the computer <https://www.4kdownload.com/pt-br/products/product-stogram>

3.1 Results and discussions

This section presents the detailed results of a survey developed on Instagram about the image of Chapecó city. This city was chosen because it is one of the researchers' hometown and also because it is located in the south of the country, the smallest region in Brazil. Furthermore, it was populated by European immigrants, and therefore, the city has many architectural and cultural features inspired by European countries.

Thus, before a specific analysis, it is crucial to briefly discuss the context of Chapecó, a Brazilian city located in the west of Santa Catarina state, which has 224,130 inhabitants. On August 25th, 1917, the city was founded and became an agro-industrial hub in southern Brazil and an economic, political and cultural western centre. It has international prominence in the business export of food products and industrialised animal meat. Its agroindustry has expanded the labour market and is the base of the economy, together with agriculture. It is estimated that currently, the western region of Santa Catarina has about two hundred cities and more than 2 million inhabitants, and Chapecó is known as the regional capital and reference site (IBGE 2019).

The local sport, soccer, has been remarkable in national and international soccer scenarios in recent years. The city's professional club, Chapecoense Soccer Association, competes in the major Brazilian national soccer championship.

Chapecoense is the same team that unfortunately suffered a plane disaster and caused a worldwide commotion on November 29th, 2016. There were 71 fatal casualties among players, coaching staff and journalists. As a result, the city was impacted emotionally and economically, changing its local image, infrastructure and many other aspects. In recent years, the city has continually grown and has sought strategies to build a local brand capable of keeping its worldwide prominence. Thus, it is interesting to analyse how the city's image is elaborated in social media, verifying how users collectively develop this imaginary.

The research sample was collected through a field approach with exploratory analysis and defined hashtags. The hashtags were chosen within the context and aimed at raising the city´s imagery, focusing on questions about its identity and culture. They focused on using words directly related to the city, and the tourism context was not included. This research is based on

Lev Mavich's approach, which considers that a set of objects represents some aspects of the phenomenon and excludes others.

The data collection period was from December 1st, 2020, to January 15th, 2021. The results were initially coded, and 3,198 photographs in total were catalogued. Those which did not fit the research context were excluded from the total images collected, such as clothes, promotional photos, personal publications, and selfies. In addition, seeking to refine the research to images in the universe of the city´s imaginary construction, the sample was reduced to 120 photographs.

Table 1 Hashtag and number of photos

Hashtag	Number of photos
#chapeco	1200
#chapecocity	842
#chapecosc	1000
#descubrachapeco	156
Total number of photos	**3198**

The sample was analysed and categorised as follows: **Casual Images:** casual images produce images to document, share experiences and situations visually and to portray people or groups; **Professional Images:** based on aesthetically established social concepts and; **Projected images:** are linked to more "contemporary", "cool" and "urban lifestyle" choices. The results obtained are presented:

Table 2 First analysis

Category	Number of photos	%
Casual	96	80
Professionals	6	5
Designed	22	18,33
Total	**120**	**100**

Referring to humanisation, which deals with the presence of people in the photos, only 28 of the total photos showed people, and 92 of them did not show people. When analysing the photographed elements, prominent points

are identified in cities and places to be monitored, among other situations. Therefore, there was a subcategory for better understanding.

The subcategorisation was carried out with the adaptation of the studies developed by Donaire and Galí (2011) to analyse images of tourist destinations and also considered the study carried out by Feijó, Oliveira, and Gomez (2019) on the analysis of Lisbon City's pictures.

Table 3 Share of photos in subcategory

Category	Share of images in subcategory	%
Religious monument	15	9,49
Historical cultural heritage	10	6,33
Entertainment	18	11,39
Street/Avenue/ Traffic	17	10,76
Square/Park/Garden	2	1,27
Urban/building element	29	18,35
Public Transportation/Station/Airport	5	3,16
Gastronomy/Drinks and Beverages	12	7,59
Landscape / Natural Attraction	38	24,05
Other	12	7,59
Total Frequency	**158**	**100**

The highlighted images are related to landscapes and natural attractions of the city (24.05%), followed by urban elements, such as buildings (18.35). It is also worth mentioning that most of the framing duplications of images occurred in these two categories, i.e., generally, the landscapes also contained urban elements (9 times).

Fig. 4-1 Examples of landscapes, natural attractions and urban elements used in Instagram photography. Selected photos from Instagram feed using 4k Stogram software

About the subcategories, focusing on content analysis to identify repetitions and shared themes, the elements linked to the place are produced in the significant experiences of daily life and integrated into memory. The casual images are the most shared representations of the place.

In addition, within the narratives of personal memories by users, collective facts are intertwined in significant experiences, directing understanding and sense of place (MARTINO, 2010). As an example of this narrative, the sunset images stand out as they combine the designs of buildings and urban elements, showing the collective urge to express the pleasantness of the city and ensure its life quality.

Fig. 4-2 Examples of the sunset in the city, buildings and urban elements used in Instagram photography. Selected photos from Instagram feed using 4k Stogram software.

The city streets are also highlighted in the photos. They show various roads around the neighbourhoods and flowering trees, which are typical of spring and summer. The main avenue is also admired because of its functionality and natural beauty.

Fig. 4-3 Examples of streets and flowering trees used in Instagram photography. Selected photos from Instagram feed using 4k Stogram software.

In the subcategory of religious monuments, the Central Church is the most photographic element. The church is also considered a historical settlement landmark. Its building has marked the history of the city.

Fig. 4-4 Examples of religious monuments used in Instagram photography. Selected photos from Instagram feed using 4k Stogram software.

The historical and cultural heritage elements include the statue of one of the city's first pioneers, located near the church and the central square. Besides it, another landmark of pioneers is also shared, but less often.

Fig. 4-5 Examples of historical and cultural heritage used in Instagram photography. Selected photos from Instagram feed using 4k Stogram software.

Regarding gastronomy and beverages, the traditional gaucho's drink called "chimarrão" is also highlighted in the imaginary of "Chapecoenses", possibly because many people who live in Chapecó came from the neighbouring state called "Rio Grande do Sul".

Fig. 4-6 Examples of Gastronomy and beverages used in Instagram photography. Selected photos from Instagram feed using 4k Stogram software.

Regarding fun, leisure and entertainment, the professional soccer team is undoubtedly beloved since different elements of the soccer team, such as its stadium, its indigenous statue, its official shirt, and the colours of its flag are the most shared elements in the image composition of Chapecó city.

Fig. 4-7 Examples of leisure and entertainment used in Instagram photography. Selected photos from Instagram feed using 4k Stogram software.

Other highlights are the images of the asphalt and buildings around the city. Again, there seems to be a desire to demonstrate magnificence and grandiosity in the shared images. The skyline photos reinforce this idea and collaborate with constructing the image of the western capital.

Fig. 4-8 Examples of City buildings used in Instagram photography. Selected photos from Instagram feed using 4k Stogram software.

Finally, other images such as the sign "I love Chapecó" and "I am very Chapecó", mugs and glasses with the city's name, building facades and graffiti all around the city walls complement the collective imaginary identified in the catalogued images.
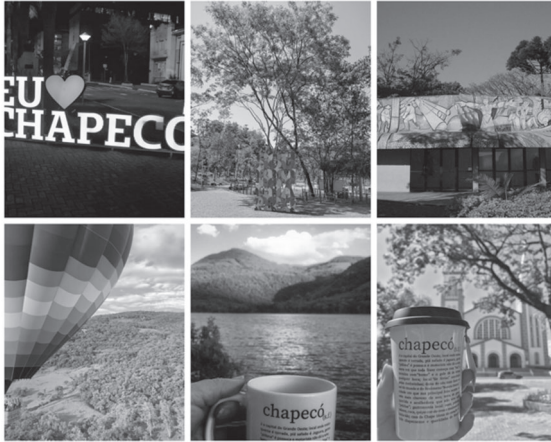
Fig. 4-9 Examples of Images about Chapecó used in Instagram photography. Selected photos from Instagram feed using 4k Stogram software

Conclusions

The narratives about the place confirm the meanings and collaborate with the construction of the place image, validating speeches, updating traditions and reinforcing specific characteristics. Through records, people share stories from the past, getting involved with experiences of the present and predicting the future (Campelo 2015). Therefore, the placemark will be built in the interaction between the identity of the place (internal) with the image of the area (external). The image is a set of impressions and expectations about a location, simplifying a significant amount of information that involves the object and the observer. Therefore, different individuals may have other images translated from selecting and interpreting multiple characteristics of the place.

When well-constituted and identified, the image about a particular place, represented coherently, undoes negative images and stereotypes, creating a positive reputation and a meaningful narrative. In this sense, there are advantages to applying the territorial brand, as the negative notability of a

place can be modified internally and externally. When internal, it seeks to solve the collective problems of that local context, offering creative solutions that benefit the community. When external, it adds value to the territory.

As a strategic tool for places, place branding has power for social and cultural change and can lead to large-scale emancipation and, therefore, it must be seen as a new paradigm for the future orientation of places, as it integrates a critical view on the world and organises spaces more thoughtfully as a whole, which in fact, makes a considerable difference (Anholt 2005).

Thus, the identification and analysis of the collective imaginary of the city, through different social media, collaborate with recognising the local identity and managing the image of the place. As a result, it is possible to (re) imagine this place, check common ideas and directions for the future, and produce collectively generated stories and visions of the site, guiding community building and a sense of belonging. Also, personal communication to different audiences is enabled and the monitoring of patterns and changes.

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CHAPTER 5

HOW TO CREATE A LIVING BRAND

IRENE VAN NES

Where 50 years ago a brand was just a single mark that made a company recognizable and set them apart from the rest[1], now a brand has become a platform, a place of exchange, an experience that gives an emotional attachment. Internet, social media and technical revolutions give the brand the opportunity to connect with people. In an era where brands are seeking to connect with people on a human level, it is wishful that they can behave and communicate like human beings.[2]

As human beings, our identities are dynamic. It is not just a face that forms the identity, but also the content of our wardrobe, people we hang out with and actions we do or do not take that define who we are. We might choose a red blouse if we want to make an impact or wear jeans and a shirt to blend in. And in time, as we learn and grow up, our accessories and beliefs might even evolve.[3]

Dynamic components

Like humans, a brand can also accessorize. Specific choices in color, font and tone of voice can reflect their values and beliefs. When a brands identity implements the same flexibility, we call this a dynamic identity. An identity that is flexible, and can take on different forms to communicate and connect with their users. Combining certain fixed components with other variable components gives the brand much more freedom to reveal who they are.

Creating a dynamic identity is all about finding the right balance between fixed and variable components. On one hand maintain constancy for recognisability and on the other hand creating freedom for expression. The way I see it, there are six components to an identity. A logo is one of them, colour and typography makes three, and then there are graphic elements,

imagery and language. Together they form a system that builds the identity of the brand. Each component helps sharpen the identity of the brand it represents. The more components are defined, the more specified the identity becomes. Establishing at least one recognisable component can leave room to play with the others, creating a dynamic identity.
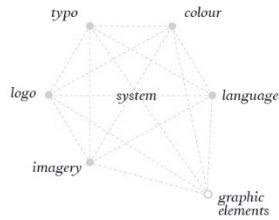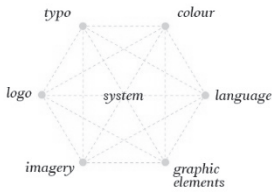
The 6 components of an identity and its connections create the system. Variables create the dynamics, keeping a certain constant to maintain recognition.
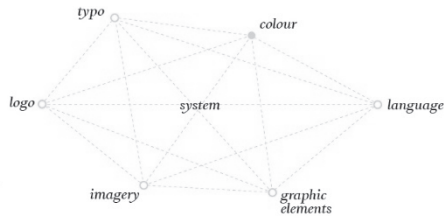
Dynamic systems

One of the first companies to take the leap was Manhattan Design, who created an identity for MTV in 1981. They created a system where 'M' and 'TV' have a fixed shape and position, but can be built with thousands of variations of colours, patterns, textures, animations and illustrations. All of its iterations have only served to strengthen the youthful vibe that is synonymous with MTV. In 1994, Bruce Mau Design projected a fixed wordmark of the Netherlands Architecture Institute (NAi) onto a range of surfaces and materials, maintaining consistency while communicating the diverse activities and ambitions of the NAi. Today, this system of a **container** 'holding' content is still a common way to create a variable identity.
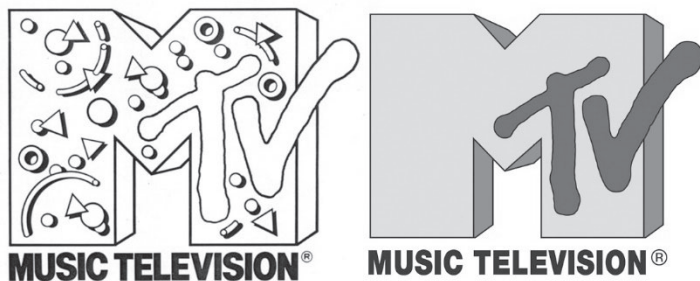
MTV, Container
Logo design by Manhattan Design, 1981

A similar system is placing a **wallpaper** behind a fixed item. Wolff Olins created this type of dynamic identity for Aol. Behind the wordmark 'Aol.', a space is created that forms a platform for artists. Each time, different artwork is selected from a monitored data bank of images created by artists around the world. Visitors of the website can even select their favourite to use.
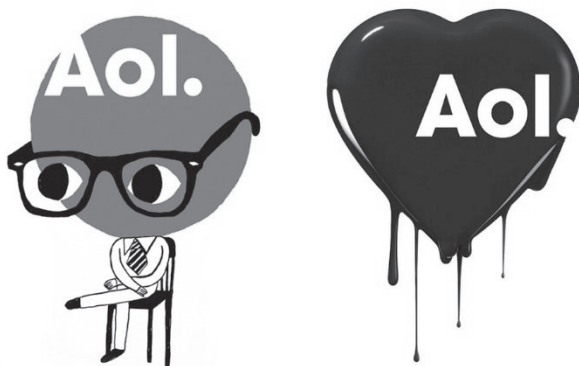
Aol. wallpaper
by Wolff Olins, 2009

It does not necessarily have to be the ingredients, such as the four black and white pixels that form the **DNA** of IDTV, or the set of colours, gradients and grids for pop temple Effenaar that form the identity. It could also be a set of rules, a formula. Back in 1998, the Google Doodles were created when Google founders Larry and Sergey played with the corporate logo to

indicate their attendance at the Burning Man Festival. The identity **formula** – a set of colours in a particular order and a vague shape of the wordmark – still stands, daily commemorating interesting events and anniversaries. In a similar fashion, New York's New Museum could communicate their different exhibitions and events each day due to its system of leaving a space between 'New' and 'Museum' that can be filled in endlessly. The formula could also be a fixed language in combination with set typography and colour. Take the Nikolaj Kunsthal, for example, a Danish art centre which Scandinavian DesignLab personified and gave it a language/tone to speak in. Because it is located in a former church, they let it preach its passion for art through biblical quotes: "Let there be art" and "May art be with you".

DNA of the IDTV identity by Lava, 2007

The Google Doodle formula by mwmgraphics, 1998

Predetermined input leads to controlled output. Opening up one of the components and letting it be influenced by external input can lead to more

living results. Take for example the OCAD University, where the identity holds actual student art and design. The logo literally becomes the display window for the students, **customised** to the graduating student medal winners each year. The logo of the Design Academy Eindhoven is a framework for infinite iterations of the school's name, enabling its users to personalise it with different messages and slogans, reflecting its inclusive and dynamic nature. Customisation is the first step towards letting the identity reflect a certain sense of community, creating an emotional bond, letting the users be part of the brand.
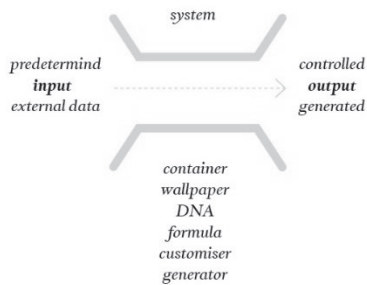
system

predetermind **input** *external data*   *controlled* **output** *generated*

container
wallpaper
DNA
formula
customiser
generator

Predetermined input leads to controlled output.
Opening up one of the components and letting
it be influenced by external input can lead to
more living results.

Customised logos for OCAD University
by Bruce Mau Design, 2011

"I BELIEVE IN ART"
NIKOLAJ KUNSTHAL

"IN ART WE TRUST"
NIKOLAJ KUNSTHAL

"MAY ART BE WITH YOU"
NIKOLAJ KUNSTHAL

"LET THERE BE ART"
NIKOLAJ KUNSTHAL

Personifying formula of the Nikolaj Kunshal
by Scandinavian DesignLab, 2011

A much less controlled and much more recent technique is the **generative** approach. The identity of the Scandinavian peninsula Nordkyn designed by Neue, for example, uses real-time data coming from a weather station to build their identity. For the identity of the Japanese television station TV Asahi, Tomato had let the identity be reactive to sounds recorded at a certain location. Both these 'generative' identities are created with scripted tools, a gift of modern technology. When using real-time data to feed a number of parameters, artwork is generated that forms the identity. It is basically a technical tool: once programmed, the computer does the work. This may feel like a trick, but it is one that can be performed in many different ways. When the input is generated by live information, the identity reflects the world it is living in and adapts according to its real-time input. It literally becomes alive.

Generative identity of Nordkyn
by Neue, 2010

Possibilities for this input are numerous: time, the activity on a site or in a building, live tweets, stock information, the news, the number of visitors to a museum, anything really. The less controlled the input, the more alive the identity, keeping in mind that there should always be a constant that makes the identity recognisable. Losing touch is a danger inherent to dynamic identities, so avoiding that pitfall should be a priority for the designer. The trick is to create as much room for dynamism as possible, while maintaining recognition.

So is this generative approach enough to create a living brand? I feel that we're only at stage one; despite the huge potential offered by current technology, there is still vast room for improvement. Perhaps the next step in creating a living identity goes beyond the external live input that flows through the tool, letting the tool itself be influenced by external input, making it a learning tool that is able to evolve over time, shifting from a 'live' identity to a truly living identity.

Dynamic future

Knowing that brands need to constantly adapt themselves to their fast changing environment in order to survive[2], why doesn't every company around have a dynamic identity yet? Yes, many in the cultural sector and the creative industry have embraced the concept of dynamic identities. The concert hall Casa da Musica in Portugal, the New Museum and the Brooklyn Museum in New York, big players in the media and entertainment industry such as MTV and Google, and forward thinking research and educational institutes such as the MIT Media Lab and the Design Academy Eindhoven have all adopted dynamic identities.

These are only a few of the numerous examples. However, other sectors are still tailing behind. The financial industry for one, insurance companies are another example. Areas it seems where reliability is an important value. Perhaps dynamic identities seem too whimsical to these more traditional organisations.

But there might be another issue at hand. A dynamic identity is hard if not impossible to patent.[4] Companies might be afraid to take a leap with a corporate identity they cannot be protected by the current Intellectual Property Law. Indeed, in this fast changing world, the IP Law is not changing fast enough. Should progressive companies and designers wait until lawmakers have caught up? Of course not. There is no time to waste. We live in a dynamic world. To any self-respecting company, a dynamic strategy, and thus a dynamic identity is a bare necessity. Dynamic identities are not just a passing trend. They are the future of branding.

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FLEXIBLE ID:
TO ADAPT IS TO RESIST

RITA COELHO

An exploratory approach combining actuality and moving dynamic visual identities

Dynamic visual identities have been existing in our design arena for almost 70 years now. This pandemic, however, allied with the available technology, have created new fertile ground for designers and brands to revise and tailor their visual identities in this state-of-the-art. This current uncertainty can make us look to branding and to dynamic visual identities in a fresh way.

Indeed, this chapter was written under lockdown, due to SARS-CoV-2, in imposed quarantine, just like a significant portion of the world's population. The culprit, a tiny microstructure, also known as Coronavirus, has made quite a stir in societal, economical and political macrostructures. *Mutatis mutandis*, if one studies the impact of a logotype or a picture mark on its consumers' behaviours, one will observe that such a tidy microstruture has deep impacts on the brand's macrostructure: the audience's perception, its image, its values.

During this confined time, selfpromotion, sales and advertising, seemed different. And even as the lockdown was starting to be lifted, as people, governments and the economy were getting adjusted to the new normality, much reflection was needed: What is now the role of graphic design and branding? What happens to our profession? Are we dependent on traveling and sales? Clearly, we have managed to survive without them, so now, what happens to graphic design and to visual identity in particular? What happens to brands and to the millions of design students worldwide, who were

confined in their rooms without workshops and open studios and are now graduating? What is going to happen then? One might wonder, now that many of us are working remotely, that some companies have come to the conclusion that some professionals can be substituted by machines, and now that we can use automation or generative design, thanks to Artificial Intelligence, what is the role of the designer? And of visual identity design in particular? Generative design is a current paradigm, and one can find several results put together, for instance in Algorithm-Driven Design website (Vetrov, 2019).

Those are neither outstanding nor one can say they do not respond to a brief… They are underwhelming to say the least, but they're not completely inappropriate. The design is simple, probably too basic and similar to so many other logo designs; the drawing of the lines and curves are bland; and the chosen colors, shapes, are safe, but not completely original. They are not wrong *per se*, but they are not enticing our emotions either (so important according to Costa, 2013) in a world moved by images and moving images. These are the questions this chapter is delving in.

First of all, we do not consider that the designer is going to be extinct in any shape or form, but a new role in commissioning design results is fresh anew. Flexible and algorithmic processes have been embraced throughout history, the latter built on randomness as a fertile principle of generativity in which results are more diverse, than if they are individually designed from a manual process, one by one, by the designer. Some designers are not accustomed to coding. (Coding in a visual manner, would help those unfamiliar with hard core coding and would feel more at ease.) Would AI and algorithmic processes substitute the designer? Their virtually infinite results could be an extension for the human judgment.

On https://algorithms.design website (Vetrov, 2019), one can find generative and artificial intelligence designs such as: Brandmark or Automagic Design[1]; Nutella Unica[2] and Google AutoDraw[3]. In most of these apps, human designers and artificial intelligence are combined in order to offer the user a logo, according to the app itself, in seconds. The so-called rough sketches are softened, the angles and lines become fluid Bézier curves, the proportions are harmonized. But a logotype or a picture mark are not a

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[1] Algorithm-Driven applications which allow you to design a simple brand identity
[2] Graphic identity that derives from an algorithm that searches in a database of several patterns and colours to splash it across its packages;
[3] A project that turns sketches into icons, helping non-designers manipulate icons in their mockups

visual identity in themselves alone.

In between worlds, a virus is neither a true living cell nor a dead object, but rather some kind of *zombie*. During this pandemic due to the Coronavirus, one could argue that visual identity should also be placed in between worlds, not choosing either one strict image or a set of given options, but rather navigating movement, a *fluidity* of *several universes*. In short, not choosing from a system of several designs, but in itself, showing motion, animated sequences, a fluidity that shows flexibility contrary to a stiff over-controlled-not-too-authentic-picture-perfect with overly-strict-manual-of-norms visual identity of the past.

Firstly, we will make a short summary from certain dynamic visual identities from 1959 to 2020. Then, we will skim through the notion of movement, allowing the growth from the frozen image to the animated sequence of visual identities and connecting that to our brains' need for pleasurable feelings, and finally, making an exploratory connection of motion against stillness in these uncertain pandemic times.

The fun in function: a brief history from 1959 to 2020 of fun and vibrant dynamic visual identities

Any corporation or institution possesses a visual identity and any visual identity retains a logotype or a picture mark. Some of them even seem to take on a life of their own on the minds of the users. Take for instance, *Nike, Adidas, Starbucks, Mobil*, to name a few. Logotypes and picture marks, from the corporate boom in the 1950s, were made to last at least 10 years and were made to conjure loyalty, dignity and recognition in the users' minds (Olins, 2008; Rand, 1994). Visual identity was key – and still is (Rowden, 2000; Thomas, 2000; Delahunty, 2013, Van Nes, 2013) – in portraying a positive, memorable, emotional image of the company. Through it, the design had to deal with consistency, color, proportion, scale and a myriad of relationships, it had to be attractive and legible in any medium, hence its simplicity to conquer its functional and beautiful effectiveness. Viewers were and are, indeed, considered not only as users, but creators of the visual design, as they contribute to its semiotic landscape (Kress & van Leeuwen, 1996) being creators of meaning (Arnheim, 1969; Berger, 1972).

John Hewitt designates *Boîte à Musique* by Karl Gerstner from 1959 as one of the first examples of a dynamic visual identity (Hewitt, 2008).
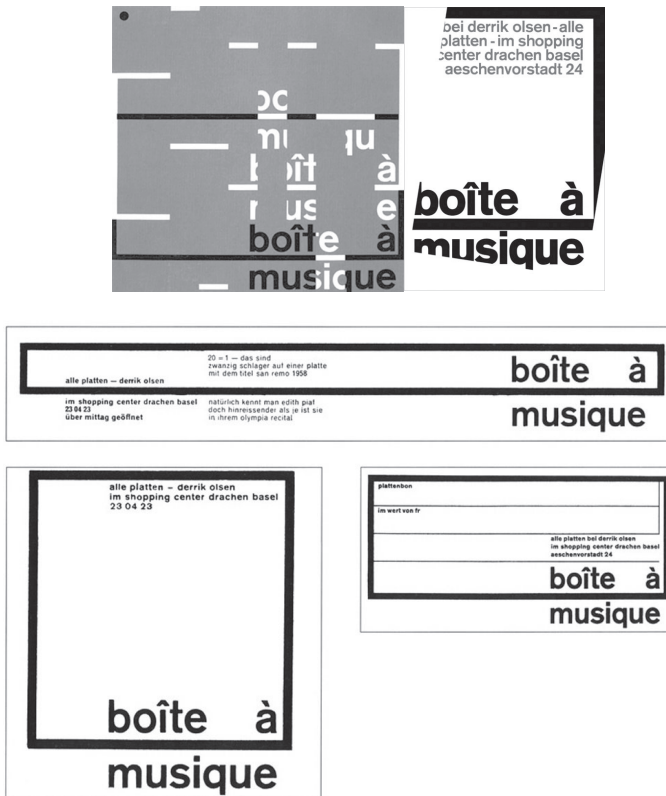
Fig. 1. *Boîte à Musique* visual identity design, by Karl Gerstner, 1959

In flexible visual identities there is a constant part of it: some of the graphics remain the same to guarantee recognition; and a variable part: which might be the color palette, position, scale, shape, typography, visual language, that trigger its flexibility. As we can observe from figure 1, in *Boîte à Musique*, which was a record shop in Basel, the typography, kerning and leading are constant, but the position of the logotype, black box within it, and pretty much everything else is variable in position, color, combination of elements and scale.

From 1959 we move on to the 1980s, to another reference in visual identity flexibility: *MTV*.

Fig. 2. *MTV* visual identity, by Manhattan Design, 1981

Here, the M opens up as a window to show different textures, videos and images that inhabit that character, functioning as the variable, but everything else remains constant. Unlike Hewitt (2008) who argues that *MTV*'s flexible identity has little connection to its function, the purpose for its fluidity, we think, is to convey a musical, rhythmic flexibility and a human, emotional connection to its young viewers (Kreutz, 2005). The M in *MTV*'s logo functions as a static window for different colors, textures, images and movies that live inside it, which is a common strategy for dynamic visual identities.

The technical parameters that defined the 1950s and 1960s, even from the 80s, have expanded, the digitization *zeitgeist* allows a more freely approach to the visual identity and, particularly, to the visual mark or logotype. It allows a more iterative and interactive design process. For instance, visual identities that change according to the year's season, that react like a living organism or a creature that feeds from its surroundings, as a seductive actor who lives different personas according to its audience.

There is *Seed Media Group, Casa da Música, Lovebytes, MTV, Københavns Naturskoler, Troll, imagine everything D&AD Festival and Awards 2020*, among others, as we will observe. As Hewitt puts it, limitations in visual identity design are disappearing faster than ever, and other possibilities in multiplatform, flexible, moving mediums are rising: possibilities that should not be overlooked, neither should they be blinding the designer's judgement. Drawing, sketching and designing have had the ability to stop time, but in this fast-paced panoply of a myriad of digestible gadgets, one must find the time for it and fight for it, as the study of the human mind by Lorenz-Spreen has recently found (Lorenz-Spreen, *et al*, 2019). So we shall fight for drawing and sketching in our design process, in our iterations, even in these crazy digitized multi-platform times. To adapt, they say, is to resist...

Meanwhile, a long time ago, notably from 1921 to 1986 the brand *Betty Crocker* changed appearance showing the female character, supposedly Betty Crocker herself, on product packages, writing recipes and even having her own radio show, without ever having existed as a real person. Mascots can be considered a flexible part of a visual identity: it changed according to the likings and trends of each era. Even if in today's digitally driven, media-focused society, this printed portrait format might seem odd, the idea behind it doesn't cease to entertain. Even though it took *Betty Crocker* 65 years to change seven times, it can be considered a flexible approach in order to resist through the ages… Changing haircut, hair color, posture, jewellery, blouse, appearance and smile, but maintaining constant her name, portrait format appearance, light background and jacket's dominant red color (*vide* figure 3).

Fig. 3. *Betty Crocker* visual images from 1921 to 1986[4]

A similar approach can be observed in *Mr Bibendum* from *Michelin*. One can consider it a flexible part of the visual identity, also being a mascot. It too changed posture, through the decades has gotten slimmer, but its smiling, friendly face and body constituted of tires, has resisted through time, due to its lively energy. It has also been a core part of the *Michelin*'s identity since it was launched. But unlike *Betty Crocker*, *Mr Bibendum* has its own name which differs from the company for which he stands, although it appears in several of its range of assets and communication media, expressing distinctiveness, personality, playfulness and warmth.

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[4] Image source: Olins, Wally (1990). Corporate Identity. Boston: Harvard Business School
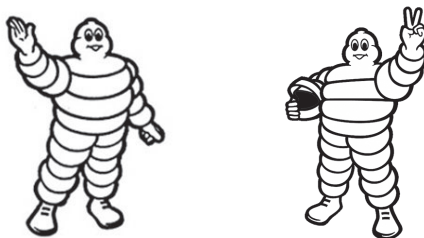
Fig. 4. Mr Bibendum, from the visual image of Michelin, triggers a lively energy and human connection to the brand

Another example of a dynamic visual identity is *Casa da Música*, a concert hall situated in Porto, Portugal. It was designed by Stefan Sagmeister (Art Direction), Mathias Ernstberger and Quentin Walesch, deriving from the architecture of Rem Koolas' iconic building. Based on its perspectives, the chromatic pallet of its different surfaces adapts to the event's image *Casa da Música* intends to publicize, based on an algorithmic procedure on 17 facets of different colors from the image of the music concert (*vide* figures 5 and 6).

Fig. 5. *Casa da Música* visual identity, by Stefan Sagmeister (Art Direction), Mathias Ernstberger and Quentin Walesch, 2007

Fig. 6. *Casa da Música* visual identity, by Stefan Sagmeister (Art Direction), Mathias Ernstberger and Quentin Walesch, 2007

On the other hand, *Seed Media Group*, a scientific publisher, has another standardized but flexible visual identity. It has a constant number of cells arranged in a permanent flowery way. It is inspired by *phyllotaxis* that allows a variability through chromatic differentiation of each cell in the icon, allowing its personalization identifying every one of its collaborators.

Fig. 7. *Seed Media Group* visual identity images, by Matej Koren, Stefan Sagmeister and Matthias Engelsberger, 2005

Diversely, the visual identity of a large scale project of Copenhagen's City Hall, *Københavns Naturskoler* (which has the objective of teaching children about the natural world) has scale and position of the picture mark set as variables, which can be visually treated has a *rhizome* or biological organism. Copenhagen's City Hall project actually encourages children to manipulate its visual mark while teaching them about natural growth. That flexibility in growth and interaction with the project's main audience is clearly portrayed in the communication of that visual identity. It shows flexibility and playful manipulation over scale, position and direction, in parallel to a resistant, adaptative, evolutionary natural being.
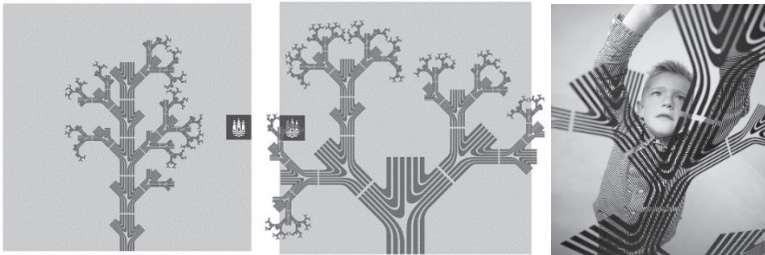
Fig. 8. *Københavns Naturskoler* visual identity, by Peter Graabæk, Kursiv, and photo by Torben Nielsen, 2008

Joan Costa in his seminal book *Imagen Global* (1994) described the communication process as a sequential order from emitter, to encoder, to message, to media, and finally, to the receiver. Nowadays, all these agents interact with each other in a virtuous cycle (or is it vicious?), contrary to a linear process. The user becomes key and also a co-creator, as we can observe in the photo in figure 8 for *Københavns Naturskoler*.

Creative nucleus on social media and the current global digitization accelerate the power of manipulation, of assembly, of accessibility and of visualization. Creating, streaming, downloading or viewing a motion graphics, a video, or any short animated sequence is faster than ever. Virtually anyone with access to a computer, phone, or tablet can create, observe or interact with enticing visual identities. We're now far from Thomas Carlyle's history of *The Great Man Theory* (Shirky, 2008; Grossman, 2006; Manzini, 2015). Hence, for instance, the visual identity of the UK design studio *Bunch*, which was created and recreated by over seven hundred people who decided to participate by downloading the letter B (the

matrix or constant in its visual image) and transform it completely, making it part of an eclectic visual system, virtually infinite, flexible and dynamic. The audience, the user, is also a coauthor. Several users interacted and co-created the dynamic visual identity, as can be observed in a small sample on figure 9.
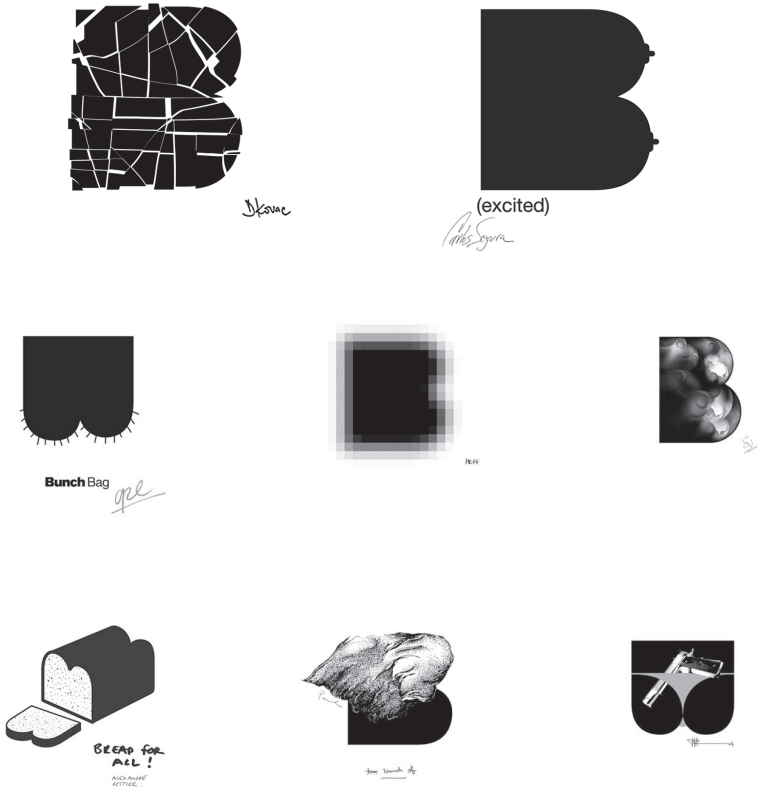
Fig. 9. *Bunch* visual identity by several coauthors, namely Denis Kovac (Bunch Design), Carlos Segura, Aaron Easterbrook, Gary Hoff, Si Scott, Alexandre Bettler, Paula Castro, Paul Insect, 2008

Additionally, another example of a virtually endless dynamic visual identity system is for the music festival *Lovebytes*, designed by Matt Pyke and Karsten Schmidt from Universal Everything, in 2007. Being an example of generative visual identity and through an algorithm that maintains as constant an interval for the position of the eyes, for the area of the body's

color gradient, shape and length of the fur of each of the creatures; and varying, in contrast, color gradients, shape and look of each of those little monsters, the solutions are basically limitless, easily created and distributed, in accordance to the playfulness and rhythm of a joyful youth music festivity.

Furthermore, an example of a playful dynamic visual identity is *Troll*, by the Portuguese design studio This is Pacifica, for a post-production company, based in Berlin, and created with motion capture technology. The dynamic visual identity is composed of several variants, that mimic the human gestures made with typography, which seek to be fluid, similarly to the human body with different attitudes and poses. The visual identity surprises with a new gesture turning the logotype into a charismatic, performative character. The visual identity was created linking the typography to the movements of the human figure and, because it was able to entice and inspire an emotional response from the viewer, it has won several international design awards. A sample of the visual results from this dynamic visual identity can be found in figure 10.

Fig. 10. *Troll: Supernatural Post-production* visual identity, by This is Pacifica, 2015

The digitization of multi-platforms through which we now experience brands, makes it even more plausible for visual identity to present itself, not through a sole image, but as a living creature, packed with movement, action and motion. But firstly, what is that? Motion or movement is an action. It is perceived as the adaptation of a constant (the main overall object perceived)

through variables (that can range from position, to scale, direction, color, content, or shape, just to name a few of the compulsory *gestalt* theories that no matter how many years have passed, still remain reference), giving it rhythm. This motion results in an emotional part of the visual identity. More than rational, in a world where there is a clear migration of conventional media, towards multi-platform, the strategies require new, *authentic* modes of engagement[5] that mimic the real, emotional, endogenous biological world.

In dutch, for instance, there are two words to describe design: *vormgeving* and *ontwerpen*. The first stands for a somewhat superficial process of making things look appealing; the latter, *ontwerpen*, stands for design as more of a 'problem-solving' activity. *Ontwerpen* versus *vormgeving* (Coelho, 2019). In the examples examined in this chapter, *ontwerpen* is *vormgeving.* Visual appeal, emotional connection, interaction and fun, *are* the solutions to the design problem. Therefore, fun is an integral part of function. In this process we – both as designers and as audience – are facing a fresh adaptable response, in which the problem to be solved is, in itself, an emotional issue. The dynamic visual identity design that new brands present, either by means of several variants or by fluid videos, by generative coding techniques or animated sequences, entice a somewhat emotional, passionate response from the viewer because he/she is seeing something alive, that breathes and lives just like he/she does. (There is this subtle and hidden anthropocentrism in which we, observers and users, respond in a deeper level to something that recalls our very own animated nature). You and me, us, the users, are at the centre[6]; we are vital in the zoetic operation of these flexible visual identities that keep thriving amongst others, in this digitized world of ours.

From 2D to 4D: From tiff to gif or from image to moving images

In diametrical opposition to the inflated 3D tendency observed almost ten years ago (Coelho, 2011), there is, nevertheless, a certain degree of minimalism in the drawing of the curves and shapes of recent visual identities, specifically their picture marks and logotypes, due to the fact that two-dimensionality and flatness respond more effectively in a multiplatform world. From a punctum (Barthes, 2005) of a stable image or a set of given images, such as a system of static results from a dynamic visual identity (in

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[5] Ways that mimic living organisms and nature with its rhythmic cycles.
[6] Even Time magazine, already back in 2006 chose You as the Person of the Year.

the form of a number of versions for a logotype or a picture mark), we come to view a motion set, an animated sequence which still responds to our perception of purity and *gutten form* – straight lines, simple shapes, complementing colors – but in the new digitized multiplatform screen experience with logos and visual marks, visual identity is portrayed in an animated sequence. From one still frame to an animation. From a punctum to several. A line, a plane, a narrative with rhythm, time, and sometimes, even sound – in short, from one image to the mimic of the real, as it breathes and moves. Part of the digital lexicon, gifs, or other short movies in apng, avif, webp or other format, promote an enriched experience.

There is definitely a certain allurement in biological traits such as motion, rhythm. Therefore, whereas ten to five years ago the trend in visual identity, in logotypes and picture marks was such that resulted in a set of several static images, established jpg, eps or tiff results, today it is hard to find an identity design that does not showcase itself through *motion*. Apps such as *TikTok*, *Youtube*, *Instagram*, even *Facebook* and previously others, are now urging users to create, edit and publish *videos*, which respond to our inner bio-rhythm that is, to us, so natural. Even artificial intelligence which ceaselessly works better than humans, most of us may think, needs rhythm – it needs a time to work, but also another to rest and sleep, similarly to our human condition, to find moments of quietness, in contrast to other moments of huge activity, according to a recent scientific study (Cuthbertson, 2020): this narrative, this rollercoaster between stillness and changeability, between night and day, light and dark, utopia and dystopia, is basically the sound of life and, in its essence, what we are drawn to. 4D, motion throughout time, through storytelling, through short animated sequences, portrays that more effectively than 2D. Visual identities shouldn't stand aside and, in contrast, replicate this endogenous kinetics phenomenon.

Cross-platforms are defining the *zeitgeist* of visual imaging and short animated sequences are powerful tools in turning a visual identity discussed and viewed in a more mainstream manner. Short-form videos, even shorter than 60 seconds, are fragments of life, a snippet of nature of our true selves, of authenticity, of motion and complexity. A cool motion graphics of bold plane colors, with fast and fluid travellings, short cuts, accompanied by a hip soundwave, makes wonders in bringing an image to life. Chion (1998) would put it more eloquently. Nevertheless, flexible identity design in this fluid, visually moving manner, makes brands demonstrate themselves in a more rhythmical, human and authentic spirit.

Making a not so obvious comparison, the new SARS-CoV-2 that cannot be seen but has also got a visual identity, spreads itself, adapts, resists to the most varied hosts and environments, infects and recurs again to keep us confined in an altered space of our houses or in our safety nets. We will have to change our ways of working, to an even more networked, online and digital way. Interestingly, it was due to this network facility – of aviation, of diluted borders, of democratization – after all *the world is flat*, as Friedman put it in 2007, that the virus spread so easily through the globe in the first place.

We work more digitally, more online; therefore, will jobs and people be replaced by machines whenever possible? What about the designer, the freelancer? Graduates from around the world in this area? More and more young people are choosing this area of expertise, but it's more and more difficult to find a stable paycheck, particularly in these troubled times.

We will not call dynamic visual identities as viruses (as we know, advertising that now works, has this viral characteristic of infecting users, and is made by users and for users (Godin, 2008)), but undoubtedly, in these constraints, where technology is prevalent, the designer will have to be a curator of technology. The computer, the software, the technology makes mistakes much less often than a human does, it also does not get sick the way we do and might leave us more space and time for creativity, for delegating on automation the mundane, time-consuming, techy tasks. Universities and companies realize that redundancies were massive and that they can save money by working remotely, through technology; therefore, technology is something the designer should carefully embrace and indeed assume in its designs: from high-tech to low-technology.

Strikingly, during this pandemic, we were all connected in a network, then borders closed, physical distance increased[7]. Most of social relations started to be mediated by technology, the feeling of belonging to a specific community – home, family, neighbours, city, area, country – became stronger. Identity is born in contrast with *otherness*, similarity by contrast with difference, the notion of *us* or *we* by comparison to *the others*. For this reason, an identity that strives for flexibility, has these advantages: an identification that is adapted (*glocally,* Roland Robertson) to each medium and purpose while, at the same time, being very specific and unique for each

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[7] There are several examples of logos that replicated this increased social distance, also trough motion graphics, with increasing kerning on their logotypes and spacing withing their picture marks representing a safe distance, seeking to maintain relevance of the brand (Valinsky, 2020)

one of them. It is a dynamic visual identity that varies for each purpose, but maintains constant the essential characteristics throughout all solutions: a consistency that admits flexibility. A similarity that admits alterity, a family, a system with common ground, respecting the identity of each of its members.

The criteria for designing a logotype or a picture mark was, according to the author of *The Regime of Visibility*, Camiel van Winkel (2006), simplicity, modularity, timelessness and applicability in multiplatforms. These characteristics can be traced back to the *Gestalt Theorie* in the 1920s, Bauhaus and to the Ulm School (Olins, 2008; Costa, 2001; Chaves, 2005). The criteria for a good design is no longer assessed by the influence of the few to the many, from institutionalized and recognized design firms, studios, agencies or designers, but rather from many to many, from users to users (those are not necessarily designers, they could be anyone, you, me, anyone with an outspoken or even unspoken influence). Therefore, the importance of visual identities such as *Bunch* or *Københavns Naturskoler*. In any case, they set the influence from many to many, which contributes to some degree of democratization.[8]

Much has been scientifically written about the importance of visual identity design, and within it, of a logo or picture mark for brands recognition, user loyalty and sales. In this wave of pandemic and longing-for-a-post-pandemic-era, even of racial protests[9], of cohabiting and structuring in various communities helping each other out, locally and globally, what one is looking for is more than a brand's inherent values, but its actions. Actions that can be seen easily. What the brand does, says, communicates, how it stands to global and local issues in this multi-platform, and cross-applications viralization, is defining the brands' *zeitgeist*. Audiences are weary of stillness, of the one image, of the one picture-perfect visual solution, they are thirsty for excitement, action, movement, entertainment and education. A visual identity image, logo or picture mark might even have its design issues, concerning its spatial relations, figure and ground, color palette, proportions, harmony, kerning or leading, but its vitality in movement contributes to its lightness, its distinctiveness and authenticity. The words of order are joyfulness, fun, amusement, entertainment; the user seeks snackable content that can easily be digested, identified with and

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[8] That could, on the other hand, contribute to some sense of lost and noise, as well.
[9] The moving image has highlighted its importance in denouncing racial prejudice, abuse of power and murder in recent cases such as George Floyd case, and motivating action from people all over the world.

shared across apps and mediums. Additionally, when a myriad of Silicon Valley brands have adopted an equivalent cold, rational, sans-serif look (Tucker, 2020; Caruso, 2020), these touches of life, warmth and even sense of humor, are vital at helping brands stand out, to be recognized and interacted with.

The ever fast-paced evolution in technology has not been accompanied by an equally rapid evolution of the human brain and general biology. What made us get out of Plato's cave and, simultaneously, run away from our predators, is our attraction to movement, our ability to put moving, flexible images which contain consistency with adaptation, on top of our visual list, making them the most notorious to our brains. For instance, TV makes us turn our heads once it is on; flashes on a car draw our attention. Why are the flashing lights flashing, for instance? They are signs of danger, they are noticeable, and are perceived as a moving image; therefore, they overlap everything else, by having this apparent motion through time. Our complex selves, our emotions and perceptions of our five senses still operate in a similar way to our ancestors'. That being said, new opportunities arise from new platforms, apps, mediums and technology that can trigger our rational as well as our reptilian brains.

During this pandemic and slow lifting of confinement, we have witnessed both utopian and dystopian moments. We have experienced and viewed through mediums both uplifting moments of cooperation among communities, moments of lightness that restore faith in humanity and moments of sheer darkness that make us question its future (Pinker, *et al*, 2016). This fluctuation between utopia and dystopia, good and bad, light and dark, heroism and villainism, tension and tranquility, has characterized the vibrancy of life. It has been a distinguished mark in the passing of time, seasons, life and death, and it's what we can call rhythm or movement. Even a gesture in a person's attitude that completes its identity is composed of high and low, fast and slow. There is no engaging movement without rhythm, nor an appealing dynamic visual identity design without this kinetic appearance.

Brands are interested in storytelling through narratives with beginning, middle and end – accordingly, what better strategy to show the passing of time than motion, possibly, even with sound? The showcase of a dynamic visual identity through movement is a rhythmic powerful tool for the audience as co-designer, as creator of meaning and as emotional actors.

Today's market in this *liquid modernity* (Bauman, 2000)[10] is shifting from uniformity to diversity. It is becoming obsolete to create a visual identity through a conventional method. It is important to reflect the complexity of today's market by incorporating this flexible, moving, fluid concept of short moving images to visual identity design.

Autonomous sensory meridian response

In this hastily digitized world of today, one can associate those short animated sequences, moving images, gifs or videos to the so-called Autonomous Sensory Meridian Response trend: ASMR. Basically, ASMR deals with a biological phenomenon that arouses the senses when we see or hear something that is pleasurable to our brain. When there is motion, when there is synergy between sound and image, or when the image moves or shows that it has a natural connection with time or with sound, which is the vibration that denotes time and rhythm, through changes, mutations, flexibility, it is then perceived as a more pleasurable experience. This is supposedly a current trend on *Youtube* and *Instagram*, but as a matter of fact, this is not new. It's what has kept us alive as a species until now, it's the reason we escaped from our predators and into the light, as we have seen[11].

As a way to illustrate this, Design studio Vault49 worked with artists and CGI animators to try to communicate a satisfying experience for the brand *So Satisfying*. They did a motion presentation of a variable logotype. The fluid animation of the logotype, is smooth looking, resulting in an appealing animated sequence or motion graphics. (*Vide* frames on figure 11.)

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[10] Bauman explores that recent modernity is characterized by *light*, *liquid* software, contrary to the previous *solid*, heavy hardware characterized modernity.

[11] It is also the reason why we enjoy sugary or sweet sustenance that have proven compelling to our growth because they give us energy, or why we like fruits of the season because they give us the nutrients we need at that time of the year to protect us and to live healthier. For instance, oranges in winter have vitamin C to boost our immune systems. This is not new in the history of the human race, or even in the history of life for that matter. We do seek pleasure, from an infant stage as a child up to adulthood, considering the different notions of pleasure one has at each stage, or as a young creation on earth onwards which made us exist so far as a species for more than three hundred thousand years.

Fig. 11. *So Satisfying* visual identity: frames from its motion graphics, by Vault49, 2020

This Autonomous Sensory Meridian Response or, in better words, this pleasure seeking tendency of our brain is so pervasive, that if you look at logos from *Esprit* by Pentagram (showcasing a *joyful*, *authentic*, *effortless* new identity video, in 2020) to the new logo of *OLX* (2020), they show an animated sequence to explain that dynamic visual identity, particularly that picture mark or that logotype in motion: demonstrating a fluid, moving, flexible nature that appeals to the viewers.

One can also find this almost reptilian brain pleasure seeking nature, or ASMR in the way the brand is explained. Taking a few of the common words of a new logo description, such as the visual identity for *OLX*, in DesignStudio words: «(...) *we created a visual design system that's dynamic, confident and bursting with energy — expressing all the optimism and attitude that's true to OLX.*» [12] In OLX, the shapes that compose the logotype inflate or deflate smoothly, as technology now allows us to download and upload animated sequences faster than ever before and the smoothness of that rhythmic approach can be beautiful to watch (as can be inferred from the frames on figure 12.

Fig. 12. *OLX* visual identity: frames from its motion graphics, by DesignStudio, 2020

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[12] https://www.underconsideration.com/brandnew/archives/new_logo_and_identity _for_olx_by_designstudio.php

Vibrant, confident, flexible, dynamic, custom… these are commonly stylised expressions, used at the designer's convenience when a new visual identity is unveiled. The visual identity expressing itself by virtue of fluid motion, appears responsive and vivacious to such an extent, that any misstep it might have in its design, its proportions, its spatial relations, kerning or scale, seems to be disregarded in the face of the immediate gratification its animated sequence provides to our brains, because it is the way our brains work.

Even the logotype or the picture mark explain themselves better through motion, such as seeing a person live can be more enticing than looking at one's identity card photo: one is still and lifeless, dull and unchangeable; the other a complexity of light and shade, a myriad of emotions that range from happiness to surprise and fear, a system of gestures, attitudes and tone of voice that doesn't seem to captivate us in a more emotional way, even in a subconscious level, or intrigue us in a rational way.

The notorious project among the branding design discipline fans, Brand New website, by Armin Vit and Bryony Gomez (UnderConsideration), puts together a voting poll on each new visual identity article. Every article about a new launch is followed by a ballot consisting of two questions: how users find the logo itself, and how they find its application. Curiously, no matter what the results are concerning the logotype or picture mark – which might range from great to fine or bad – the application's results are, in the majority of the cases, between great to fine. In other words, even if the mark or the logotype might be far from reasonable, its lively state, its flexibility in the different media, makes it so enjoyable that the website users tend to overlook those minor drawbacks and enjoy the dynamic reality of the design.

Therefore, even if an identity consists of only one solution, it is hard to find a visual identity design that does not have a video, or motion graphics somehow bringing its picture mark or logotype to life. No matter what you might call it – flexible brand (Hewitt, 2008; Felsing, 2010; Marriot, 2011; Cox, 2014), mutant or changing identity (Kopp, 2002; Kreutz, 2011), open or fluid visual identity (Lapetino, 2011), dynamic identity (Nascimento, Kosminsky, 2012; Nes, 2013), logomorphism (Elali, Keiser, Odag, 2012), or mutatis mutandis (Coelho, 2014) – recent visual identities show a flexible state to it. A flexible, moving, changing, morphing side in a *fluid*, continuous rhythmic state.

One final exemplification of this fluid motion in identity design is the one by Amsterdam's design studio, Studio Dumbar, which was invited to design the *D&AD Festival and Awards 2020* visual identity – *imagine everything – celebrating the infinite scope of human creativity*. Due to the pandemic, the festival adapted its presence to a digital atmosphere, and the variable font visual image is shown using video. Strategies, including naming, communication approaches and branding campaign are presented mostly by virtue of moving images. Indeed, the moving images of this visual identity in motion are inspiring: they trigger our emotions, they make us curious about what is coming next. Continuing the studios spirit, similar to D&AD's event objectives of engaging and amazing, Studio Dumbar even made AR face filters to use on social media reels and *Instagram* stories, to captivate users and to be manipulated by them, as can be seen on figures 13 and 14.
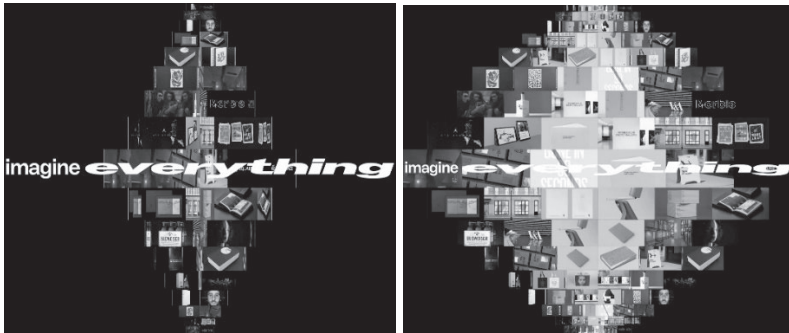
Fig. 13. Frames from the visual identity of *imagine everything – D&AD Festival and Awards – celebrating the infinite scope of human creativity*, 2020, by Studio Dumbar

Certainly, such epidemic stage has made us reflect upon what drives and motivates us deeply, seeking even further for joy, despite all the odds, despite all difficulties. Life is full of antagonisms, light and darkness, joy and sadness and to mimic that rhythm, we often enjoy and favour dynamism (one consistency that allows flexibility or a flexibility that in itself is composed of constants and variables) over pure stability and unrealistic stillness. Life is motion; there is a saying in Portuguese that litterally translated would be – *to stop is to die*. The equivalent in the English language could be something like – *there will be plenty of time to sleep once you are dead.* This rhythmic vision of life can be more scientifically backed up already by Norman (1993), Huizinga (1998), Heidegger (1977), Fiske (1997) or Chion (1998). Rhythm is a particular kind of characteristic that applies to sound, to life, to graphic design, and particularly, branding is no exception. It has the ability to surprise and to leave space for quietness,

stillness, stability and constancy, as well as fun and dynamic emotion.
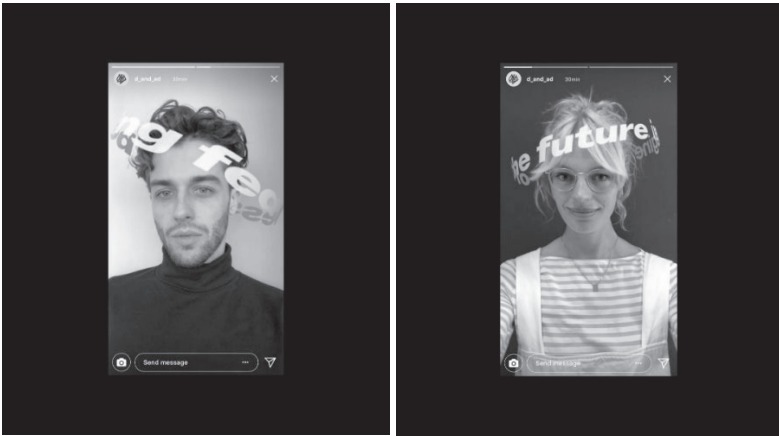
Fig. 14. Face filter from *imagine everything – D&AD Festival – celebrating the infinite scope of human creativity*, 2020, by Studio Dumbar

This pandemic, this quarantine in consumption we are now facing has forced us to turn our attention even further to simple pleasures in life[13]. And life itself is movement.

Furthermore, an utter impatience, user-generated-open-free-and-authentic state-of-the-art, algorithm generated paradigm implies an empowerment of the audience. Motion in the presentation of a visual identity translates this migration of conventional media towards multi-platform strategies: it translates these modes of engagement in a digital multi-platform context – in short, this overall digitization and meaning creation democratization in dynamic visual identities.

We have been confined to our little rooms looking not exclusively and not as much at TV anymore but at our personal screens for simple pleasures. And if those pleasures come from watching oddly satisfying videos of people cooking, people cleaning, dancing, etc, it will certainly also come

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[13] Even though, as some put it, as a negative drawback from this pandemic is that, for some companies, humans have proved redundant, and technology proved more economic and stable. Furthermore, by using user generated content, from people who are not employees but eager to share, that process feeds convergence in these troubled times, anxiety, impatience for results with invisible designers as the technology.

from watching beautifully crafted dynamic visual identities which feature short motion graphics with contrasting bold colours, a strict palette, harmonious movements and rhythmic cuts, (even with or without sound), which catch the eye, draw attention and dance with us, giving it a sense of living beauty.

Final thoughts

There is no sector in industry that does not need graphic design in general and a visual identity in particular, so as the economy slowly re-emerges and society reconfigures itself, this is an exciting era to be, in which great creativity and dynamic visual identities are going to be crucial for the engagement of users. Audiences are no longer craving to buy, waste, or work without a solid cause. They are not open to hard-core economic hazard nor are they just passively receiving any content that does not engage with them. Users are also creators of meaning and crave to partake in meaningful, identifiable and, if possible, electrifying ways. This pandemic has made us look into the rhythm of life, to its core and express it in a more authentic way. This fluidity in motion of a dynamic visual identity (be it generative and computer automated or completely drawn by the author(s) and audience) is a highly effective way for brands to expand their appeal in the vitality of this new cross-platform paradigm. Organic content in the form of motion graphics, videos, animated sequences for moving brands, are useful creations in identity design for companies that seek to stay relevant and up-to-date in this ever changing world of fast-paced new technologies, in which our natural biology has, in its essence, stood true to our old complex selves: our *old-constructed* brains get adrenalin with activity, and much like a gesture to complete a person's identity, that vitality in motion is crucial to the completeness of a visual identity and for its message to come across.

This era will also present a great opportunity for design graduates and designers to excel at their creativity, pushing economic growth without creating havoc and for automating trivial tasks. In short, creating a society that they love, full of energy and determination. In this post-Covid19 era that is lying ahead one must learn to question new ways to think, reflect, and design visual identities that echo a better understanding of our complex lives, our relationship with nature, our relationship with technology and with each other, as it is by moving and adapting that a visual identity stays relevant and resists throughout time. It is not only high-tech that is paramount in the flexibility of dynamic visual identities. Much like our human species, as we are born without much sharper capabilities compared

to others, we have readjusted ourselves to our surroundings and we should use that flexibility to maximize and strengthen our creativity. Feeding the discussion of how fun is an integral part of function, from the brief sampling ranging from 1959 until 2020, we have come to realize the way dynamic visual identities can move from static to moving images, responding to deeper biological features. An animated result that becomes, in the near future, a natural phenomenon of almost any visual identity that seeks flexibility and resilience, in other words, visual identity kinematics.

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LOGO GENERATION THROUGH ARTIFICIAL INTELLIGENCE

ÂNGELA DUARTE, CARLOS ROSA AND BRUNO SILVA

Much has been said about the possibility for the graphic designer to completely stop creating brand marks, also commonly known as logos, and let all this work be done by artificial intelligence. The visual identity of a brand is more complex, and it's is clear in the design science community that a visual identity is more than the brand mark, but this study is focused only on the most basilar expression of a visual identity: the logo or brand mark to be even more precise, which in this study, for easier communication, is referred to as logo. So, this research explores hypotheses and reflects on the best way to generate a logo through artificial intelligence that can be useful for designers and presents a conceptual proposal for a logo creation model through artificial intelligence comprehensive. This chapter also presents a review of the state of the art on both Artificial Intelligence and/for Design through the analysis of previous studies and interviews. Moreover, this study presents a discussion and open issues on the application of artificial intelligence in design methods. Finally, we conclude the chapter by presenting future work and research insights.

Design methods

Design methods can decrease the time it takes to find a solution and make it "more efficient and effective", the methods never led to the solution, but they are tools for finding it. (Frascara, 2004) Despite the idea that rules or methods block creativity, even the designer can benefit from these, and sometimes it is these that help in the process of creating something. Besides, Martin and Hanington also consider that the use of a design method can

facilitate the conversation with "stakeholders, team members, clients and most importantly, with the people who will ultimately use design products, systems, and services" (2012).

Since 1960 there has been a great evolution in the study of design methods, as people began to realize that the way of thinking of the designer could be used for other areas as well. Most of the literature written on this was done by engineers, architects, and industrial designers (Frascara, 2004). Only recently have more designers started talking about their design methods. Lawson says that most maps made for the development of design methods are "logical and systematic", also because most of them are done by those who study design and not by those who do it (2005). This may be a result, as Frascara said, of the majority being made by people connected to more scientific areas, such as engineering, and for that reason, they look for logic among the creative method of problem-solving done by designers (2004).

Lawson analyzes some "maps" related to the design method and reduces these maps to three phases: Analysis; Synthesis; Appraisal. He started to notice that there was this idea that the design creation process would have to be something logical and that to find a solution the designer would have to go through several steps to find it. The design process is not as organized as these "maps" make it seem. Lawson concludes that "(…) design is a process in which problem and solution emerge together" (Lawson, 2005). If so, the attempt to come up with a design method is not linear and has to be flexible enough to be changed.

Munari (1981) considers that being given or defining the problem will give rise to other subproblems as we realize what their aspects and functions are and define their limits. These subproblems in turn are grouped into categories for later, with the collection of all data, which can lead to simple problems. The designer's goal is not only to answer these problems, but to add something more to this, in other words, to have the ability to not only find a solution, but also to give it a way of "adding value to the experience of the public, and attending to cultural, personal, and experiential dimensions" (Frascara, 2004).

Most designers seem to agree on the idea that "a design project is, in fact, a sequence of design problems" (Archer, 1989). Asimow says that there will be a temptation to skip phases to come up with a quicker solution, which he does not advise to do so, as we will enter a mental rut where creativity will be limited (1962). For Munari creativity is the synthesis of research done earlier, so as Asimow, Munari considers the primary phases of research and

problem definition as the most important phases for a creative solution (2006).

As good as the initial concept may be, the choices made to present it can damage the entire design. The designer must know what type of technologies to use and use them to be useful for the project. Good design must be evaluated by communicating what is intended, adapting to cultural issues, and being functional (Frascara, 2004). Nevertheless, the solution made by the designer when applied will always be criticized, and the way it will be received by the target audience will only be known after its implementation (Lawson, 2005).

Lawson says we should not look at the "maps" of design methods exactly as they appear on paper. Although it seems that all of these are to be followed in a "predictable and identifiably logical order" (2005), this way of interpreting the schemes can give problems later. In the end, every designer is different and uses different methods. The process has a lot of phases that are very personal to the designer, which turns the whole process "a mix of intuitive and deliberate actions" (Lupton, 2011). Lawson says that the ability to know when to stop has to come from the designer as there is no way to know if a design problem has been fully resolved (2005). The only conclusion that it seems we can take is that design methods are a design problem and that is why it is up to each designer to continue trying to solve this problem, as there are no correct answers when a design problem is at hand (Cross, 2006).

Technology in graphic design

Gutenberg's Printing Press was the first technology that revolutionized the way graphic design is done and viewed. In the first half of the twentieth century, televisions appeared and started what would be the era of screens and therefore a shift from written communication to mostly visual communication (Crow, 2006).

The launch of the Apple's Macintosh computer and its operating system in 1984 was important for design as it was this that popularized the idea of a personal computer. This meant that the designer could make the computer a common tool in his creation process, but for this, he had to acquire other skills such as the operation of several softwares as well as reproducing digital content. At first, the opinions were divided between the designers that rejected the computer and the enthusiasts like Greiman that saw an opportunity to experiment with a new tool (1989).

The computer allowed the designer to work wherever he wanted, whether at home or in a specific place, also allowed him to do more activities and experience other areas. Thus, by lowering the barriers, he was able to do more creative work.

Jennifer Cole Philipps disagrees with this idea saying that creativity can decrease with the increase in the time that the designer has to spend learning all the new digital technologies wasting time to design creative projects. Although the Internet is a great space for obtaining information quickly (which is essential for the research and concept formulation phase), in the act of making a project if we limit ourselves to using the computer, we can obtain superficial results. If we only use the computer, we cannot stay on the first page of a search engine, we need to search further to be able to select what is important from everything that does not bring anything new to the project (Lupton & Phillips, 2015). Stefan Sagmeister also says that despite the possibilities that the computer came to present to the designer, he thinks it has also made the profession more boring, because instead of working with several tools in different rooms the designer is now almost always in front of a screen (n.d).

Gill says the designer has to give more than he used to. The designer has to strive to be better than the computer and for that, he has to acquire not only more capabilities, how the new software that updates frequently works, but also has to become a more sensitive being to what surrounds him and maintain a good synthesis capacity to deal with all the information coming from the internet (1999). Other skills are a good understanding of human nature as well as culture; the ability to be a leader or/and to work in a team; a good eye for detail; among others (Gordon & Gordon, 2005). The easy access to the software allows everyone to create all kinds of visual objects, from logo to business cards. The use of the term logo as a synonym of brand mark, which means a symbol or a logotype, isn't completely correct since it is an abbreviation of logotype. Despite this is commonly used for suggesting the same as a brand mark.

But to be a designer it is not enough to have the technology you must have other skills associated with the profession that are what distinguish the designer from the rest of the professions. On the other hand, the variety of software made it possible for a project made by a group of people to be done by just one person, thus ending some hierarchies that existed in design (Crow, 2006). As time progresses these barriers that existed before the computer are getting smaller and smaller and today, we can almost say that they practically do not exist.

Hierarchies decrease, but the possibilities increase. Malcom Garrett explains that before the computer if he wanted to explore other things besides what he was used to doing, he would have to wait for an opportunity for a client to finance the work since everything was more expensive. Now the software that exists is cheap and this opens the door to explore new things so that the designer can move forward and learn more easily (Garrett, 1994).

Maggie and Bob Gordon say that there are several possibilities for using the most diverse technologies in the creation process. Even so, they warn that when switching to the most diverse content creation software, it is necessary to take into account that they produce appealing results and that it is necessary even if it is visually good that there is substance behind the visual part (2005).

Artificial intelligence

The field of artificial intelligence is as much about understanding knowledge as it is about creating that knowledge, since there are definitions that tend more towards the perception and understanding of knowledge while others, tend towards a more practical definition of artificial intelligence (Norvig and Russell,2010).

Although it seems a recent thing, the first time this term was used was in 1956 by, McCarthy, Minsky, Claude Shannon, and Nathaniel Rochester when they presented a two-month workshop, which brought together ten men to study artificial intelligence. Even so, two other scientists ended up being associated with the term: Allen Newell and Herbert Simon. What distinguishes them is that Newell and Simon admitted that they already had a program capable of reasoning. Between 1952 and 1969 there was a great enthusiasm around artificial intelligence, and Simon even says that "there are now in the world machines that can think, that can learn and that can create" (1957).

Although the confidence shown in the first years of research and studies in the field of AI, the evolution seemed to be slow and without major success stories. Despite the difficulties and all the ups and downs in the evolution of AI, in 1980, the first AI system reached the industry. They gave it the name R1 and had the function of helping to configure orders for new systems for computers. From then on, several companies started to realize the value that AI could bring, since in this first company it saved them about

40$ million per year. So, more people started to invest in research in this area.

More recently, AI has finally managed to establish itself because it has adopted a scientific methodology to which all new programs are tested and compared. Now AI is a research field with several subfields that continue to grow while the large field of AI joins other areas, such as statistics and psychology (Norvig & Russell, 2010).

There are several types of artificial intelligence, the most common being Artificial Narrow Intelligence (ANI) and within this type are machine learning and Natural Language Processing. Two other types that are still just theories are Artificial General Intelligence (AGI) and Artificial Superintelligence (ASI) (Viebig, 2016). These are rarer due to three types of complexities that make it difficult to reach this advanced point of artificial intelligence: spatial, temporal, and human complexity.

To be able to evolve in this area, a large database is necessary. The computer does not know anything and cannot learn completely on its own without having a database so that it can transform this data into knowledge. In addition to the space occupied by these data, the time it would take to run could be too long. But perhaps the worst adversity is human complexity. The human being is not perfect and sometimes the algorithms can become so complicated that he will simply not be able to detect errors and thus will never be able to get the algorithms to do what he wants (Domingos, 2017).

i) Machine learning

Pedro Domingos defines the algorithm as "a sequence of instructions that tells a computer what to do"[1] (2017). These instructions must be clear, explaining to the algorithm what it is, and in what order it should do the task. Also, it must be written in a language that the computer understands, such as Java and Python. The purpose of this sequence of instructions given to the algorithms is a way to find a solution to a problem. There are different types of algorithms and sometimes the results of some algorithms are used by others to create new ones.

The algorithms consist of an input and an output. The input is the data, which is provided by the programmer and the algorithm will take that data

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[1] "uma sequência de instruções que diz a um computador o que fazer." (Domingos, 2017, p.25)

and give an answer, this is called the output. In machine learning the algorithms work more independently, the programmer gives data and the desired answer, the algorithm takes these and creates other algorithms from the information it receives.

In machine learning, the algorithms can be divided into three categories: supervised learning, unsupervised learning, and reinforcement learning. In supervised learning, someone must classify the data (put labels on them) that are inserted for him to learn. This is mainly used for classification (separating information from each other) and regression (identifying values). In unsupervised learning, as the name implies, it will be the machine itself that finds similarities between the information it has and separates it without the need for a supervisor. This type of learning is used for clustering problems (to identify similarities between groups). In reinforcement learning, the machine will learn through trial and error, observing its environment, and realizing what is right and wrong (Sathya & Abraham, 2013).

ii) Deep learning and neural networks

Deep learning is one of the evolutions of machine learning, which uses complex artificial neural networks. Our brain has billions of neurons, which through synapses, establish connections between themselves and thus forming a complex network. Whereas "knowledge is stored in connections, between neurons"[2] (Domingos, 2017, p.118) so to create a computer that learns on its own we would have to create a network of artificial neurons. Computers have fewer transistors than the brain has neurons and still use more energy than the brain to process information. The big advantage that computers have that the brain doesn't have, is its ability to turn transistors on and off thousands of millions of times per second while our brain only has neurons firing thousands of times per second, which makes the brain slower, although it can be performing several actions simultaneously and the computer processes everything step by step.

In 1943 the first artificial neuron was presented by Warren McCulloch and Walter Pitts, and it was only in 1950 that the perceptrons that enabled neurons to learn were made by Frank Rosenblatt. Perceptrons are the first network of artificial neurons and also the simplest ones, and since 1950,

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[2] "o conhecimento é armazenado nas ligações, ou conexões, entre neurónios." (Domingos, 2017, p.118)

neuron networks have become increasingly complex and today it is difficult to keep up with all the developments in this area (Veen, 2016).

Although the goal will always be to try to make things simple because although the human brain is compared to the computer, the goal is not to create an artificial brain, but rather an algorithm that we can use in various things that will make the life of the human being more simple without complicating problems, which in themselves are already complex (Domingos, 2017).

AI in graphic design

AI has helped in the evolution of the most diverse software, making it increasingly easy to use, consequently helping in the design process. An example of this is Adobe Sensei, an assistant that works with AI to help with more time-consuming tasks. One of the biggest advantages that this technology introduced was in improving the image search, using Adobe Stock. In addition to allowing a detailed search, we can just drop a reference image and then define what are the characteristics we are looking for.

Other possible applications for AI, in graphic design, ranging from the identification and creation of fonts, image editing to drawings and paintings made by algorithms.

Gatys et al., through a Deep Neural Network, transferred artistic styles from known painters to photographs, through a convolutional neural network (CNN). Luan et al. are based on the research done by Gatys et al., try to change the photograph overnight (or vice versa), the season, or a type of edition (2017). Penhouet and Sanzenbacher took the research by Luan et al. and tried to get closer to photorealism using neural image assessment to improve the aesthetic values of the image (2019). While the results are becoming more and more similar to photorealism, these forms of image editing are becoming accessible to anyone.

Another important component for creating graphic design is typography. Some software such as Identifont, MyFonts, WhatTheFont, Fontspring, etc., has helped in this identification process by comparing several fonts to each other. Still, it is difficult to identify fonts as there are hundreds of thousands in online repositories (Wang et al., 2015). DeepFont is a "VFR system for the Roman alphabets, based on the Convolutional neural networks (CNN)" (Wang et al., 2015) and can distinguish and recognize fonts, already accessible to anyone with access to Creative Cloud.

Bernhardsson, also uses deep neural networks to analyze 50k fonts, with the aim of obtain from these other variations and thus generate new fonts. Bernhardsson started by training the neural network so that it reproduced the same characters as existing fonts. Despite obtaining good results, the network gives up on reproducing the more complex characters, but this experiment can be a beginning of future studies. Other examples are Font Map and FontJoy, the first is a map of 750 fonts created to understand the relationships between them and the second is a font generator that combines the fonts that look better together.

Google Creative Lab has funded several of experiments to see if an algorithm can draw, from which Autodraw and "Quick, Draw!" were born. The first, is a software that through any type of scribble suggests some improved designs, and the second the neural network tries to guess what is being drawn. This experience contributes to the continued training of the neural network so that it learns to recognize the drawings (2017).

i) Logo generation with ai

Shape grammars were invented by George Stiny and are a set of rules for transforming simple shapes to generate other shapes (1980). Li et al. used four essential shapes and through those they got 60 different new shapes and chose the one that caught their attention the most to create the final logo. This logo was given the name "Design 101" and even without having an initial semantic meaning the shape they chose reminded them of an owl, which ended up giving the logo a meaning (Li et al., 2017).

In turn, Sage et al., choose another method for generating logos "clustered GANs" (2017). GANs stands for Generative Adversarial Networks, and as the name implies, they are two competing neural networks. The major disadvantage of GANs is that they are difficult to train since it is not enough to train two neural networks, but also to control the dynamics between them so that they are not unstable (Goodfellow et al., 2014). The likelihood of them becoming unstable increases with the improvement of the image resolution, which is why Sage et al., used synthetic labels to stabilize a resolution greater than 10X10.

Another project like this is the one that uses color as a conditional to generate logos, using information from the Large Logo Data (LLD) made by Sage et al. This project was done by Mino and Spanakis and suggest the use of descriptive labels (color) so that they could give more flexibility than synthetic labels don't allow (Mino & Spanakis, 2018).

Oeldorf and Spanakis, try to increase the resolution and control over the results obtained in previous studies that had problems with these two parameters. For the label extraction, they used Google Vision API to extract 4 to 8 words that described the logos. After having these words, they were extracted to a quantitative space through a pre-trained Word2Vec model. Then, they use K-means clustering to separate the visual properties of the logos in various segments. This method was not very effective in separating the characteristics of the logos, and they had to do a second clustering approach. Even so, they conclude that "language-labels does not result in descriptions that define the visual characteristics of logos." (Oeldorf & Spanakis, 2019)

Methodology data collectrion & analysis

This is a study based on the qualitative research method, due to whether a flexible structure (Creswell, 2014). Research questions can evolve throughout the research, and we are not looking for conclusive answers so we can say that this is an exploratory study (O'Grady & O'Grady, 2017). Data collection was done through books, studies done previously, websites, documents, articles, and publications, but also interviews to graphic designers.

Pedro Domingos (2017) says that for the algorithm to result in useful solutions, it must have precise instructions on what it is and what order it must follow to find the solution. There are some basic rules to the creation of a logo, but it doesn't mean that designers are always following them since the entire creation process of a logo will depend on several variables. Adding this to what Domingos says is a successful algorithm, we conclude that creating this logo generator can be a complex task. Sage et al. say that the logos present difficulties for the generative models due to their multimodal characteristics and that, besides, they are difficult to label, as they are designed to be unique and present several visual characteristics (Sage et al., 2018).

Li et al. although they created a form generator that they transformed into a logo, it was limited to the four forms and had no semantic meaning or specific briefing that the algorithm had to follow, thus resulting in several abstract forms. Even if these abstract forms have resulted in a logo, it does not mean that they result in other cases, nor does it contribute to facilitating the method of creating logos. Even abstract forms convey the values of the company, service, or product and have meaning.

That said, the work of Sage et. al., Mino and Spanakis, Oeldorf and Spanakis have a major contribution to the creation of an algorithm that generates logos. These three projects improve the architecture of the GANs for easier training and thus overcome the disadvantages of this generative model (Sage et al., 2018).

One of the first contributions to the creation of a logo generator is the Large Logo Dataset (LLD) created by Sage et al. The LLD is a good basis for the success of a logo generator, as it contains 600k + logos. Even so, the use of a characteristic that gave rise to other forms was made by Mino and Spanakis who used color as a condition in the creation of a logo. Although, color is still a very ambiguous feature to be useful for the designer's creation process, since color can have several different meanings and it is not the only feature that it has to take into account. We assume that if the client only wants a blue logo, the designer could use this algorithm to generate several blue logos, but even so, the algorithm is still unaware of the differences and it is just programmed to organize blue logos from the most diverse sectors and create others that are also blue. Even so, Oeldorf and Spanakis consider the conditions to be important for the generation of unique logos. They say that the following unconditional model generates simple and similar logos to those that already exist, but conditional models can generate nonsensical output, but even so, they compensate for their unique characteristics. They managed to improve the studies done previously, in the sense that, they obtained results with a resolution four times higher. They also conclude that the way to obtain detailed logo synthesis is to give the generative model high-quality information (Oeldorf & Spanakis, 2019).

There are two main ideas for the success of the logo generator that we can take from the data analysis:

- Finding ways to characterize logos more efficiently will be essential to obtain good results;
- Using conditional models seems to generate the best results, although they can also generate nonsensical output.

So, it seems that the best way is to generate logos through a generative adversarial neural network with some conditions. It seems that observing other studies done previously, the problem is not in generating logos but in generating good logos and one of the causes for this to happen is the conditioning factors.

The problem mentioned by Sage et al., about logos being complicated to label due to their "very few categorical properties" (2017), it is repeated in the two works done after that, the chosen conditions are still not good enough to reach good outputs.

Conceptual proposal

In this study, the conceptual proposal is then to use the studies done previously (Sage et al.) as a base, and experimented, through a conditional model of characteristics for logos, which results better. Is proposed to start with a fictional briefing for a contemporary art museum in Lisbon, that would be analyzed according to the characteristics of the logo. For this, it was made a detailed collection of logos, which includes only symbol marks (some of them are symbol marks with alphabetic forms), with labels classified by type; form; color; movement; industry or activity:

- The type was: Figurative; Abstract; Alphabetical
- The shape was: Geometric; Organic; Random
- The color was: Monochromatic and Polychromatic
- The movement was: Static and Dynamic

So the designer that analyzes the briefing needs to choose the characteristics that he thinks are more appropriate. In the case of the museum, we would choose for example: abstract; random; monochromatic; static; museum. The generative model will organize the existing logos in the characteristics indicated and thus from these will create several outputs

New methods of design: discussion and open issues

The computer, and the internet, in turn, have forever changed the way not only how design is done, but also how it is seen by people around the world. The simplification of the tools used by the designer, and because more people start to use the same programs, force the designer to shift is attention for the analysis and problem definition. The more improvements in the technology, the less time is spent on the project and more in the concept.

Zhang et al. proposes a design method that the designers is just the decision maker, and the algorithm will generate all the results. This leaves more time for the designer to concentrate in resolving the problem creatively (2017). The problem with this is that to explain to the algorithm what the designer wants he needs to have a solid first idea which in the start of a project that

rarely happens. Also, drawing for the designer is a way of communicating with himself. That is, through drawings, he unfolds ideas and creates new ones, it is also a way for him to visualize his thoughts (Cross, 1998).

It still doesn't exist AI, because intelligence "(…) integrates cognitive functions such as perception, attention, memory, language, or planning" (Colom et al., 2010) and for this to happen it is necessary a large database that can storage a lot of information. The question that remains is: if artificial intelligence would be something that would help human beings to complete activities that are complex and considered difficult for them, why are we now trying to make them do activities that are fun and considered leisure for humans? Maybe to seek some type of artificial intelligence we need to start with one of the most difficult parts of the human mind: to understand which is the parts that relate to creativity and intuition.

The method of observing AI to learn more about the human mind hasn't yet shown great results from what we say we can do through artificial intelligence. In the study of man versus machine playing chess, (*Deep Blue*, 1997) the results revealed that nothing was discovered about man's natural intelligence. They managed to put a machine to play chess and thus proved that the machine can calculate moves, but since chess is a game based on logic and not intuition, it adds nothing if the machine can have natural intelligence (Cross, 1998).

Design is linked to the creative cognitive act (Cross, 2006), and testing thinking related to intelligence is different from testing creativity since a test to evaluate intelligence seeks logical answers and there is only one right answer while tests to evaluate creativity have more than one right answer (Lawson, 2005). One of the problems that arise from trying to apply AI to design is that all visual arts use qualitative methods in their evaluation (J. Zhang et al., 2017), which makes it difficult for the algorithms to learn since the whole algorithm needs accurate and clear data (Domingos, 2017). J. Zhang et al. studied ways to get the computer to evaluate logos, and even with good results they considered that there are more parameters to consider.

The classification of artifacts in both design and visual arts has been underestimated for several years, and the evolution of the study in AI "perhaps served mainly to demonstrate just how high-level and complex is the cognitive ability of designers, and how much more research is needed to understand it" (Cross, 2006).

The strengths of artificial neural networks are the ease in "discovering existing patterns in data and extrapolating them" (Oleinik, 2019) and because of this, we would have to make the design into more quantitative methods and concretely define many of the design principles and concepts. So instead of trying to figure out whether AI will ever be as smart or as creative as the human, we should be exploring what it would be useful for AI to do to help the designer improve his activity.

Boden refers to a type of creativity that is one of the most used types in design: combinational. The designer often creates links between existing concepts to create new ones. In creating these connections, you need a high level of knowledge about the problem so as not to make connections that don't make sense. One of the things that neural networks can be useful is to help the designer make these connections, as they can generate millions of connections in a short time. Boden says there are some challenges to be faced before this can happen which are "database with a richness comparable to ours, and, second, methods of link-making" (2004, p.8). Even so, exploring the ability of neural networks to create connections can be one of the possibilities to improve the design process, effectively and quickly, combined with software improvement for the practical part of the process.

In one of the interviews, Pedro Magalhães, recalls that design is a communication made by humans for humans and that is why there is an entire emotional component, taken from our experience that would hardly be understood by any machine. One of the reasons for this is also due to the problem of complexity since there is no large database that supports all the information necessary to represent all the ideas and concepts of a human mind (Domingos, 2017). So probably in the near future, we still have designers but with more powerful tools.

Conclusions

This research aimed to contribute to the study of the generation of logos through artificial intelligence, analyzing if there's a need to apply AI to the design methods. Based on a qualitative analysis of the data collected, it can be concluded that this is a complex issue that needs more time and several different approaches to reach definitive answers. Despite this, it was made a conceptual model for the generation of logos through artificial intelligence using an approach not yet tested in other studies. In this there was a focus on finding a way for the characterization of logos, that wasn't based on shapes or colors in specific. Also, rather than trying to generate multiple types of logos without a structure, the conceptual model starts with the

analysis of one briefing, so it is possible to concentrate on very specific characteristics and trying to avoid nonsensical results.

As there was a merge between two different areas, it was especially important that both had a literature review, that we could compare their common points and what they diverge to understand how we could connect them. It was thus clear that both areas are aimed at problem-solving, but with different strategies for common purposes.

Design is a discipline with a weak theoretical basis, and only with the cooperation of designers and professionals linked to information technologies would an evolution in both areas be possible. This study tries to start the collaboration of these two disciplines even though due to the limitations that were put in the way, it is not possible to show any definitive results. It thus presents some contributions to the beginning of the collaboration:

- A literature review of the two disciplines that try to explain concepts and present the similarities between them;
- An analysis of the studies done previously in the generation of logos through artificial intelligence, from the designers' perspective;
- A logo characterization model, with 235 logos all characterized so that from these it is possible to create labels to teach artificial neural networks what each logo represents as well as its elements and the industry or activity they represent;
- A conceptual proposal using the studies made previously but with a new approach.

Even with the presentation of a conceptual proposal for the generation of logos through artificial neural networks, many doubts are raised as to whether, even with these changes, the algorithm will be able to generate something of sufficient value to be used in a real context and how to find a way for this generator to be part of the design process. In the interviews and data taken from this study, it seems that all designers expect a change soon but are not afraid to be completely replaced, as they believe that AI cannot work without a designer behind it, and perhaps access to increasingly intelligent tools it will be an opportunity for designers to become better at their work.

It was not possible to test the model for the creation of logos presented here, and thus, it is not possible to answer whether this would be a successful model. Since its complexity has been recognized since the beginning of the

work, and for this reason, we can say that the objectives were fulfilled because the hypotheses and ideas for answering the questions that this study intended to answer were created. Thus, confirming that the designer's profession as we know it today will end, but it will start a new era for the designer.

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CHAPTER 8

THE HOW BEHIND THE STORY:
A FRAMEWORK FOR THE DESIGN
OF BRAND NARRATIVES

CATARINA LELIS
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What if we start with HOW?

In his bestseller "Start with Why", Simon Sinek (2011) proposes that most individuals are inspired by a sense of purpose (the WHY) that drives decision-making and action, rather than by the WHAT, which is where, traditionally, most leaders or organisations used to start when descriptively presenting themselves or telling their brands' story. This inside-out way of communicating is represented by a bullseye diagram with three concentric circles (the Golden Circle) and where, in between the WHY and the WHAT circles, one would find the HOW.

Because Sinek's most well-known quote is "People don't buy what you do, they buy why you do it", independent marketing practitioners and the communication departments of several brands have been attentively looking into the Golden Circle as a tool to support and sustain brands' storytelling and content marketing. Interestingly, for designers, who ultimately design and develop experiences that are expected to optimise people's lives, the simplicity and empowering message of this framework seem to work as a confirmation of the design research practice itself, as described in the Double Diamond model proposed by the British Design Council in 2005, a model that is represented by two diamonds, each split into two stages. The first diamond represents the quest toward "designing the right thing" and implicates an exploratory stage of research (*Discover*) seeking answers to WHY: Why is this a need? Why do people behave the way they do? Finding answers to these questions allows designers to *Define* their stance on the

problem and the identification of converging themes concedes the consolidation of a narrative that helps in building their creative briefs. This is followed by the moment for How Might We (HMW) questions to emerge. The second diamond of this design-led model is concerned with "designing things right" and through the *Develop* phase, where divergent thinking, ideation and ideas' evaluation are expected to happen, designers will concentrate on answering their HMWs.

As with Sinek's model, only at the end of this thinking and investigative process one would be concerned with the final solution (WHAT) and its implementation. Notably, as opposed to the Double Diamond model, where the HOW alone involves two stages (out of four), in the Golden Circle the focus of Sinek revolves around detracting people, groups and brands from the tendency to start telling their stories with the WHAT, shifting their efforts toward the WHY, with the downside of not paying enough tribute to the HOW – even when Sinek and his partners Mead and Docker say "The WHY is the destination and HOWs are the route we take to get there" (2017, p.9). However, as opposed to Sinek's Golden Circle, the Double Diamond framework is not the most popular in the context of branding practice and, whilst Sinek's can be used to fairly inform the design of meaningful and purpose-oriented experiences that brands can use as narrative heuristics, there is little work done on HOW such narratives can be created as routes to take the audiences to the desired experiences.

Narratologist Mieke Bal (1997) highlights narrative's social relevance given its pervasiveness to most human communication techniques. In fact, narratives have been essential for humans to learn about the world and about themselves, but also to exchange all sorts of information and knowledge:

> Narrative is the primary way through which humans organise their experiences into temporally meaningful episodes (...) narrative is both a mode of reasoning and a mode of representation (Richardson, 1990, p.118).

As expected, given its human centrality, designers have been employing and exploiting narrative in most of what they do: Design Thinking approaches heavily rely on the power of narratives and storytelling for empathising purposes and for exploring the WHY (Kankainen *et al.,* 2005; Hellström, 2007) and it is acknowledged that narrative is a powerful tool when used "beyond the experiential aspect of briefing" (Fritsch *et al.,* 2007, p.6). Creatives, planners, developers and production teams resort on narrative to organise, systematise and represent not just the HOWs and WHATs, but also to anticipate future needs and contexts (Wright & McCarthy, 2010), forecasting new WHYs. In fact, Damásio (2019, p.25) states that narratives

are essential for human homeostasis which "ensures that life is regulated within a range that is not just compatible with survival but also conducive to flourishing, to a projection of life into the future of an organism or a species".

Likewise, brand designers anticipate a great deal of storytelling, many of which can be experienced by the audiences in every interaction these have with the brands, from printed or online adverts to packaging and store design. Hence the undiscussable importance of narrative for brands, particularly visual narrative, when sight is (and will continue to be, when it comes to the integration of augmented reality and artificial intelligence systems) the most addressed and explored sense in branded experiences.

Hence, visual identity elements such as logos, typography, colours, style (WHAT) that one would expect to have correspondence with the brand's values and core beliefs (WHY) – tell way more stories than one can expect. Typically, these stories have been following a structuralist/modernist and traditional HOW approach to narrative: visual consistency and predictability. Yet, contemporary brands, that according to Neumeier (2006) are live constructions, have been moving away from these visual identity methods, introducing variations that aim at expanding the limits of the story being told. Grounded on Zadeh's (1996) theory, that natural language is not easily translated into the absolute and dichotomic terms of Yes or No, True or False, 0 or 1, this research assumes that contemporary brands' narratives include the various states in between each of the binary options, hence extending the range of possibilities on HOW to tell a branded story.

Therefore, the main objective of this research is to identify the storytelling HOWs behind contemporary brand's visual identity.

1. Understanding narrative

The first considerations on narrative (structure, creation, its effect on audiences) go back to the times of Aristotle (1987) and have been more recently developed by European structuralists (such as Seymour Chatman, Gérard Genette) and Russian formalists (Roman Jakobson), but also by the futurist works advanced in many different domains of human sciences (fine arts, literary studies, narratology, film studies, architecture) and by contemporary psychology research and practice.

Thus, narrative, as a concept, is (and will be) open to diverse interpretations, mainly because it is so relevant in everyday practice and, therefore,

impactful in both many different disciplines and in personal and professional approaches. It is, therefore, rather difficult to find a single definition but, according to Berger's (1997) review, narrative includes the description of a sequence of events, throughout a time period and, for Murray (1998), action is the vital element because it introduces change. Chatman (1978) explains that a narrative has two components: a *story*, that encompasses the content related to actions, happenings, characters and items of setting, and a *discourse*, which defines the means by which the content is communicated to the audiences. The story comprises the WHAT in a narrative (i.e. the substance), whilst the discourse comprehends the HOW (i.e. the form). Hence, the minimum WHAT-related elements are the existence of characters, their depiction/details, the action taking place, the location and spatiality, and the story resolution and elicitation of emotions (Abbott, 2008), whilst other frequent aspects to consider as part of a narrative are HOW-related elements such as the duration of the sequence of events that constitutes a plot, the order and frequency of the events (Genette, 1980), the role of the narrator, and the narrative genre (Berger, 1997).

Chatman (1978) also distinguishes narrative events in terms of their hierarchy, explaining that classical narrative uses mostly major events (*kernels*) that, working as structure nodes, advance the plot by raising and answering questions and cannot be deleted without damaging the narrative logic. On the other hand, minor events (*satellites*) are created to add details to kernels and some can be eliminated (or not even created) without affecting the plot.

The sequential aspect attached to action seems to be of utmost relevance and, alongside the story resolution being reached, it is what distinguishes narratives from non-narratives (Berger, 1997; Cobley, 2001). With an illustrated book the reader is given the narrative's representational details in the textual resources, which are accompanied by images that depict only one (or part of an) action, usually capturing a single moment in time. Hence, traditionally, with the exception of comic strips made up of frames capturing different moments in time, drawings, paintings, photos and all sorts of stand-alone static imagery are not understood as having narrative content (idem), seemingly contradicting what others define as visual narratives.

1.1 Visual narratives

Few authors have been dedicating their efforts and research to the definition of visual narrative (VN). Murray (1995) defines narrative illustration as the pictorial representation of one or more events that, taking place through a

period of time, cause some sort of change in one or more characters. Neil Cohn (2013) has been developing the theory of Visual Narrative Grammar, but very much focused on comic strips, hence a sequence of images defined by panel borders simultaneously displayed in the same medium and concerned with a navigational component that explicitly tells the audience where to start and how to progress through the sequence.

Pimenta and Poovaiah (2010) summarise VN as a visual that essentially and explicitly tells a story. The authors organise VN into three major types:

- *Static Visual Narratives*, in which the visual is fixed on the surface of the medium and the spectator, who has prior knowledge of the story (usually due to the support of other kinds of narrative, such as text) can decide the speed and sequence of viewing (precisely what Berger calls non-narratives), providing as examples of this category comics strips, picture books, narrative scrolls, infographics, among others.
- *Dynamic Visual Narratives*, in which visuals are replaced and succeed at the same pace, being both the speed of viewing and the sequence of visuals predetermined by the author/creator and where the audience does not need to know the story prior to viewing. Examples of these are animation, movies and puppet shows.
- *Interactive Visual Narratives*, in which visuals appear to be fixed but can be replaced by other visuals through a triggering feature, where the audience may need or not prior knowledge of the story, as in some cases the viewer decides how the narrative evolves, hence with the possibility of manipulating both the story contents and its sequence and form. Examples would be interactive e-books and interactive games, where AI and augmented reality can play a part.

Hence, visual narratives do not differ much from text-based ones: they tell a story through other sorts of graphic elements, which replace the written (or spoken) word, still providing the audience with the idea of continuity.

2. Postmodern are poststructuralist times

The structuralist approach to narrative has been the most prevalent, since structuralist thinking is such an integral part of our culture and language. However, while structuralism attempts to reach objectivity, post-structuralism denies such possibility.

Postmodernism shares some premises with post-structuralist: it recognises that human perception and interaction are necessarily subjective and that constant change, ubiquity and mobility are the *status quo*. At the end of the 20th century, the so-called *new media* allowed a large quantity of information to move around within innumerable interconnected nodes. Hypertextuality emerges in its open-ended and ever-developing fashion (Riffaterre, 1994). By the end of last century, some authors propose non-conventional narratives, hyper-novels in which the story unfolding possibilities are virtually infinite and where the reader becomes an interactive participant with increased ability to take part in the narrative, which becomes, as life, "a complex, heterogeneous assemblage" (Cotrupi, 1991, p.280).

Transmedia storytelling and hybrid narratives emerge with the new century. Scolari (2013) argues that, besides allowing the expansion and distribution of contents throughout different platforms, they also facilitate the real-time participation and involvement of audiences in the construction of the narrative itself. With such configuration, narratives evolve and expand, allowing different meanings, creation times, media and authors, becoming more and more distant from its traditional linearity and loyalty to the original plot, clearly embracing a more fluid and organic philosophy, giving room to the development of cognitive features and meaningful/emotional experiences.

In the poststructuralist approach to narrative, the reader becomes the primary subject of inquiry, and semantic content can be extracted from diverse sources (Barthes, 1987), such as the readers and other pieces of narrative with diminished consistency and a more democratic distribution of voice/opinion.

2.1 Postmodern brands

According to Dubberly (2008, p.2), current design practice has been adopting and replicating such postmodern poststructuralist "organic-systems ethos" and similar changes have been taking place within the domain of brand design. From a modernism perspective, brands have been known to ease recognition due to the implementation of consistent communication and design strategies. By the end of last century, the brand was commonly defined through rational statements: classic authors used to define a brand by grounding it on its products/services, and with the main function of differentiating these from their competitors' (Kotler, 1981; Aaker, 1991; Ries, 1993). However, contributions to neurosciences – namely with Damásio's

work (1995) on the relevance of emotions in decision-making processes – changed the way we perceive and conceive the world of brands. In fact, contemporary authors such as Lindstrom (2007), Gobé (2010), Batey (2016), Troiano (2017), among others, consider the brand as an emotional asset that facilitates the involvement of audiences and, through that, build their preferences systems.

2.2 Brand storytelling

A brand can only be memorised when it becomes part of its audiences' lives and stories. For that reason, brands and their associated "experiences, that are memorable or engaging, are mentally structured in narrative form by the user" (Grimaldi, Fokkinga & Ocnarescu, 2013, p.201). Brand storytelling consists of a communication strategy aiming at sharing knowledge and creating bonds, using either a factual or fictitious narrative to connect the brand to its audiences, linking the brand's values to the ones it shares with its customers. Accordingly, Fog, Budtz and Baris agree that "storytelling becomes an effective tool for creating an entire brand concept: one that stays with us, because it touches our emotions" (2003, p.47). When it comes to traditional popular stories circulating at a global scale, brands tend to create adapted versions by assimilating local idiosyncrasies that define the different cultures and communities (Rogojinaru, 2011). Brand storytelling is, therefore, subject to flexible localisation strategies. As a consequence, when the audiences are personally involved in the storytelling process, they get to better understand the values embedded in the narratives, incorporating them due to the increased and eased identification (Batey, 2016).

In contemporary brands, the storytelling hero is decreasingly the brand itself (which used to push its attributes) and is increasingly being embodied by the brands' audiences (who are pulled by the brand that merely guides them). Therefore, brands that adapt to the context in which they operate and where they know their audiences will be, embrace a level of flexibility that allows them to develop and closely accompany a constantly evolving world, hence disregarding the need of a strictly consistent approach (Lelis, 2019).

2.3 Brands in mutation

In the early 2000s, Kreutz (2001, 2005) identified two main visual brand identity systems: one where she would group brands labelled as *Conventional*, which main characteristics are standardisation, linear progress and fixedness, and another one that the author categorised as *Non-Conventional* or *Mutant*,

where brands would present as multimodal, plural, fragmented and heterogeneous – postmodern. This very approach has also been researched by other authors, although recurring to different labels: *flexible* (Campos, 2007; Hewitt, 2008), *fluid* (Lapetino, 2011); *dynamic* (Felsing, 2010; Nascimento & Kosminsky, 2012; van Nes, 2012), *liquid* (Elali, Keiser & Odag, 2012), *elastic* (Muscianisi, 2017).

Nevertheless, Kreutz (2018) explains her preference towards the adjective "Mutant": it was due to the clash between 21st Century living generations, with emerging technologies and distinct systems of perception and sense making. The world was changing, but the word mutation was still associated with aberration and anomaly, when in fact, all the evolution on Earth has been intimately linked to biological mutations and ecosystem adaptations. Humans are naturally mutant beings in their capacity to self-reinvent and self-manage (Maturana and Varela, 1997). Interestingly, for Dubberly (2008) design shares with biology a focus on information flow, on networks of actors operating at many levels, and exchanging the information needed to balance and develop communities and systems. Design promotes mutation.

Within the Mutant group Kreutz found that these could be split into two visual identity categories: *Programmed*, where brands would respond to pre-established, scheduled or fixed in time variations (Fig.1), and *Poetic*, where brands can, potentially, be completely free of rules, only following the designer's creative and imaginative intent, in close communion with the audiences, constantly interacting with the brand (Kreutz, 2005), either by interpreting or appropriating the brand's message (Kreutz, 2012) (Fig.2).

Figure 1. Battersea, a London-based animal rescue centre, uses a collection of ten hand-drawn watercolour dogs and cats (designed by Pentagram).

Figure 2. Rio450 celebrates the 450th anniversary of Rio de Janeiro since elevated to city, allowing any party involved to have a stake at the visual identity's storytelling (designed by Crama).

2.4 On brand poetics

Kreutz and Heck (2016) mention that Jakobson's poetic function of language, frequently used by brands in advertising, is a way of enticing the audience. Intensifying emotions as the authentic source of aesthetic experience is at the very nature of poetry. Shelley (2012) defines poetry as "the expression of the Imagination" and, according to contemporary pragmatism philosopher Richard Rorty, for the romantics it is the poet (broadly speaking, the imaginative genius), who prevents humans to fall into communication finitude. The author states that:

> To be imaginative, as opposed to being merely fantastical, one must both do something new and be lucky enough to have that novelty adopted by one's fellows – incorporated into their ways of doing things. […] On the pragmatist view I am putting forward, what we call "increased knowledge" should not be thought of as increased access to the Real, but as increased ability to do things – to take part in social practices that make possible richer and fuller human lives (Rorty, 2007, pp.107-108).

Such openness to new communication opportunities would expectedly have more or less impact on postmodern brands' narratives and corresponding visual discourse. In fact, this rising ability to poetically do things is increasingly being embraced by contemporary visual identities, mostly through the diversification of visual-based expression, or via the combination of visuals with other sensorial modes. Therefore, it seems appropriate to understand visual identity narrative (VIN) in the context of these more or less poetic orientations in branding.

3. Framing Visual Identity Narrative

The working framework is grounded on Lotfi Zadeh's Fuzzy Logic (1996), which supports approximate modes of thinking rather than exact ones, acknowledging the virtues of imprecision, very much common in human life complexities. Therefore, with a focus on narrative discourse and form, HOW-related elements explained through discrete labelling units – such as the type of narrator and the narrative genre – will not be considered.

Hence, as a frame of reference underpinning the definition of VIN, this research proposes the following:

- *Static visual narrative* (or non-narrative) does not fully apply to Poetic VI, where logo variations and potential hypertextuality are allowed and welcome. This sort of visual narrative would easily apply to Conventional brands, in some cases being adopted by Programmed brands.
- The cases in which each logo variation can be replaced by a succeeding one at a regular/irregular pace would fall within the scope of *dynamic visual narratives*,
- Cases relying on a triggering feature, which can be predetermined and mechanical, or unforeseen and poetic, allow the active participation of expectant audiences, now empowered with the capacity to co-design the logo and its VI, to follow the characteristics of *interactive visual narratives*.

4. Method

This research followed an inductive reasoning, within the interpretive paradigm, aiming at adopting a post-structuralist perspective in order to deal with puzzling facts that emerged in the recent years, while both researchers had encounters with empirical phenomena that were not being explained by

the existing range of theories, typically structuralist by nature. Therefore, the 'best' explanation among many other possibilities was chosen with the purpose of organising the complexity of the topic or finding clarity in the identified problematic.

The method consisted of a qualitative hermeneutical content analysis. Because the discursive dimensions defining narrative in the context of visual identity (VI) have not been identified, the utmost goal was the definition of such dimensions within the context of contemporary brands, following the overall definitions of narrative and visual narrative found in the literature presented above. Although this approach had no intention to generate a precise labelling or classification system and moves beyond the self-sufficient ideals of structuralism, each dimension is explained through the use of binary oppositions, as in a semantic differential. This allows the conceptualisation of a mapping tool where VIN can be conceived somewhere (anywhere) between two polar positions.

The starting point was grounded on the analysis of a wide range of brands (80+) conducted by the researchers throughout the years. From these, 10 brands were shortlisted for analysis, all of them widely acknowledged as having dynamic visual identities (or allowing dynamic graphic ventures) and that were collected from the most up-to-date informal online resources of specialist knowledge (Underconsideration and The Branding Source websites) or from the online public and published portfolios of major communication agencies (e.g. Pentagram, Wolff Olins, among others). This guaranteed a minimum of credibility in both the strategic aspects and the design concerns of such brands. The 10 brands were Apple, City of Melbourne, Google, Melissa, MTV, NYC, OCAD University, Oi, Rio 450 and Russia, hence representing a wide range of sectors (ICT, Tourism, Fashion, Entertainment/Culture, Education and Telecommunications).

Then, by elaborating on the work of Leitão, Lelis and Mealha (2014) and using the reviewed literature on literary narrative and visual narrative, the minimum structural requirements for logos to be considered a narrative (or narrative containers) were identified, originating a preliminary code book with a large number of descriptors of structural/discourse elements (Fig.3). These were polished (in the sense in which related/similar categories were grouped and, whenever possible, reduced to one), and an organising matrix was created (Table 1), showcasing the emergence of six dimensions, their bi-polarities and their corresponding (and opposing) descriptions.

Figure 3. The 10 shortlisted logos used in the code book

Table 1. Conceptual organising matrix

Discourse elements of narrative	Dimensions of VIN	Nuclear	Analysis-led Semantic Differential	Peripheral
Hierarchy of events	Hierarchy	The narrative relies mainly/repeatedly on the protectable and trademarkable version of the logo.	|||||||||||	The narrative commits to the use of diverse variations of the logo, without attributing each any specific or differentiating relevance.
		Sequential		Non-linear
Sequence and order of events	Linearity	It is possible to perceive the consistent flow of the logo's information in its several appearances.	|||||||||||	The logo variations differ from one another depending on different occasions/events.
		Permanent		Transitory
Duration and frequency of events	Longevity	The brand wishes to use such visual representation or approach in the long run and without a pre-established deadline.	|||||||||||	The brand's logo is created for a short-term and time-bound event, with an established deadline.
		Anticipated		Open-ended
Plot strategy	Predictability	The narrative is self contained in all predefined logo variations and no additional variations are expected in the future	|||||||||||	The narrative is explored through endless and random logo variations, which upcoming iterations allow for new paths.
		Interpretative		Appropriative
Hypertextuality	Interactivity	The audience interprets the story presented by the logo	|||||||||||	The audience co-creates the logo's representation and adds to the brand story.
		Asynchronous		Synchronous
Creativity time	Synchronicity	The narrative contained within the logo is created at a moment that differs from the one in which the audience "receives" it	|||||||||||	The narrative contained within the logo is co-created or changed in real time as an immediate result of audiences' interventions

5. Narrative dimensions in contemporary visual identities

The presented dimensions were created to simplify the immense corpus on narrative theory, combining it with the scarce literature on visual narratives and intersecting it with the notions of brand storytelling and the current practice of visual identity design. The main objective was the proposal of the pivotal discursive dimensions of VIN.

5.1 Hierarchy

Ranging from *Nuclear* to *Peripheral*, this dimension describes the dependency relation between the trademarkable version of a logo and its possible variations. Nuclear cases are those where the narrative relies mainly (or uniquely) on the protectable version, such as IBM. Peripheral are the ones where the narrative commits to the use of diverse variations of the logo, without attributing each any specific or differentiating relevance, like Google, with its thousands of Doodles. However, it is expected that all brands will have a nuclear version, for trademarking purposes.

5.2 Linearity

Intimately related to Hierarchy, Linearity refers to the perception of sequence the logo usage and application provides the audiences with, ranging from *Sequential* to *Non-Linear*. Sequential cases are those where it is possible to perceive the consistent flow of the logo's information in its several appearances. Battersea is a good example of a programmed case that follows a linear approach. Non-Linear cases occur when the logo variations differ from one another depending on different occasions or events (time-related or not), again, being Google a good example. However, non-linearity should not be understood as synonymous with inconsistency and it may include aspects such as retrospective, *analepsis*, *prolepsis*, all very welcome in storytelling.

5.3 Longevity

This dimension ranges from *Permanent* to *Temporary*. Permanent refers to the time duration of the narrative associated with a specific visual identity; in other words, for how long will the logo be telling its story. These cases are those when the brand's visual representation lasts for a long period, without having a pre-established deadline. As an example, we could point to IBM, which basic design has remained unchanged since 1972. Temporary

cases are those of a brand's logo created for a short-term and time-bound event, with an established deadline, such as the case of Apple, with its Special Event in October 2018, which, for the first time, used dozens of different Apple logos featuring unique artwork, exclusively to promote the event.

5.4 Predictability

As in a script-based plot, visual identities play with archetypes and narrative structures that can be more or less expectable, mostly when it comes to their story resolution, allowing both finite and incalculable versions, hence ranging from *Anticipated* to *Open-Ended*. Anticipated cases occur when the story is self-contained in all predefined logo variations and no additional variations are foreseeable in the future; this would be the case of MIT Media Lab, which dynamic visual identity, designed by Michael Bierut (Pentagram), presents its 23 research groups with their own logos deriving from the MIT Media Lab one. Open-Ended involves visual identities that acknowledge room for endless and random logo variations, which upcoming iterations allow for new organic narrative paths. Google is, in this case, the best example, where each one of its Doodles bring a great level of unpredictability, namely when it comes to the Doodle4Google contest, in which students from nursery to last grades of secondary/high school can submit their Google logo versions.

5.5 Interactivity

Grounded on hypertextuality potential of creating a network of several narrative pathways, this dimension spreads from *Interpretative* to *Appropriative*, referring to different possible levels of interaction between the brand's logo and the audiences. Interpretative visual identities are the ones in which the audience interprets the narrative presented by the logo without intervening in it, as in IBM, MIT Media Lab and in most brands' logos. Appropriative cases are those in which the audience co-creates the logo's representation or adds visual elements to it. This can happen both by invitation, strategically defined by the brand that welcomes this sort of collaboration, or as both a positive or negative manifestation that comes from the public and in which cases the brand has little will or control. The former can be exemplified by OCAD University (Ontario College of Art and Design) whose visual identity, created by Bruce Mau Design, is based on black-and-white modular frames to hold examples of actual student art and design work, being the students responsible for the integration of their

own materials in the logo. The latter can range from passionate appropriations (such as the unofficial screen wallpapers using Apple's logo in complementary ways), or anti-branding appropriations, as in the case of BP's logo.

5.6 Synchronicity

This dimension refers to the alignment between the time of creation of the narrative (design time) and the time of reception of the narrative (use time) that can be misaligned or *Asynchronous*, or totally aligned, hence *Synchronous*. Therefore, Asynchronous cases are those in which the narrative contained within the logo is defined at a moment that differs (because it is previous) from the one in which the audience "receives" it. Most nuclear cases fall within this approach. Synchronous refers to the simultaneity between the logo's story creation and its transmission to the audience, where the logo changes in real time as an immediate result of certain actions (human – by intervention of both designer and/or audiences – computerised, natural, etc.). An example (of approximate synchronicity) is Nordkyn's visual identity, created by Neue Design Studio. Nordkyn is an arctic cold peninsula in Norway, where its extreme weather conditions play a huge role in the region's attractiveness from a touristic point of view. To represent such essence, the studio combined nature-based information with technology, developing a logo generator that allows the region's website to update the logo every five minutes, accurately representing the exact weather conditions of that particular moment according to the data constantly received from the Norwegian Meteorological Institute. Other synchronous examples include gamified logos, such as the Google Doodle created to celebrate Pacman's 30th anniversary.

6. The six dimensions within the fuzzy logic of Dynamic/Interactive VN

In order to better visualise how the six dimensions of VIN could be used to analyse and benchmark a brand's visual identity against, for example, its competitors, the authors created a representative visual map of contemporary dynamic place/destination brands considering their narrative choices and their position within the fuzzy-logic spectrum of Mutant Visual Identities. For this exercise, official sources of brand application were consulted (brand/company website, brand manuals and standards and published/available social practices).

It was observed that the polar characteristics of the six dimensions that occupy the left-hand side of Table 1 are strongly related with Programmed VIs. In fact, adjectives such as *nuclear, sequential, permanent, anticipated, interpretative* and *asynchronous* are associated to the very idea of organisation, prediction and consistency, whereas qualifiers such as *peripheral, non-linear, transitory, open-ended, appropriative* and *synchronous* transport the reader to a context of instantaneous and multi-directional complexity, which is the extreme definition of a Poetic VIs (Fig.4).

Therefore, this research suggests as well that the six dimensions of VIN can be used to create and explore new dynamic VIs, and explain existing ones, either by informing or by being grounded on the Mutant Visual Identities framework (Fig.5) as per the proposed framing of Visual Identity Narrative.

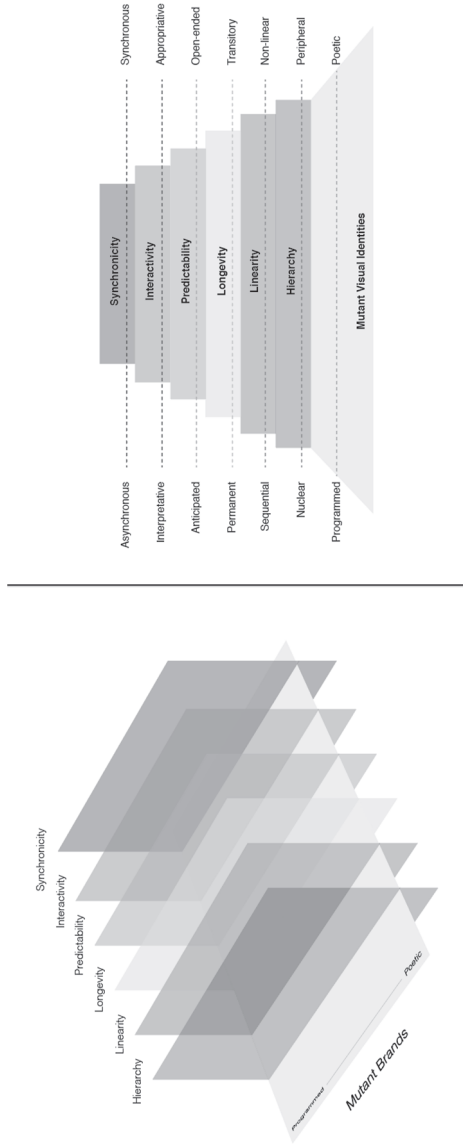*Figure 4. Using the six Dimensions of VIN to map place/destination brands*

Figure 5. The six Dimensions of VIN and the Mutant Visual Identities framework

7. Discussion

It is important to emphasise that, within this framework, no pole or side of the semantic differential is meant to be understood as a better or preferable narrative approach as opposed to the other. Starting from each dimension and their qualitative elements of analysis, designers will be equipped to better assess and plan (or replan) a brand's visual identity according to its specific context. Notwithstanding, the poles on the same side of a poetic visual identity approach seem to rely on a democratised use of peripheral visual elements, varying in sequence according to their needs, following a swift and short-term kind of exposure hence increasingly unpredictable, especially if the audiences are given the opportunity to intervene, in real-time, on the spot.

As per the fuzzy logic framework, each VIN should be analysed and represented in terms of fuzzy sets, where each pole is always the crispiest possibility, but in between them one will find unclear sets, for which designers will try to find a nominal category – such as, for dimension Longevity, Less Permanent, Almost Permanent, Not Permanent or Transitory, Somehow Transitory, Very Transitory – and even micro fuzzy sets in between those categories, for the cases in which objective classification can be detrimental.

While it is clear that mobility and mutability is part of the way humans currently live it is not a good idea to adjust a brand's VIN every time a new trend emerges, without a contextual critical analysis. Surely design possibilities evolve thanks to the constant development of technology, and brand design is likely to become even more exciting in the years ahead. Throughout the history of design, many different trends were brought to scene, and yet they were not all necessarily good. An absolutely poetic approach may not suit all brands and all audiences.

8. Concluding remarks

By looking into the form/discourse of VIN, the objective of this research is achieved with the identification of six VIN dimensions that can explain the HOW underpinning contemporary brand's story: Hierarchy, Linearity, Longevity, Predictability, Interactivity and Synchronicity, all vital elements in a contemporary visual identity narrative. Therefore, this research provides insights for designers to look at how visual identities can be used to successfully support the brand storytelling, establishing or maintaining customer loyalty via synchronous or asynchronous practices, linear or non-

linear stories, interpretative or appropriative approaches that last for longer or shorter periods of time and that can, more or less, surprise their audiences.

If in the past brands' main goal was to be recognised by their audiences, currently brands are mostly focused on creating meaningful experiences through the active involvement of their audiences, imaginative geniuses with an increased ability to do things. In a time where younger generations are becoming increasingly aware of and sensible toward societal issues, brands that augment their audience's ability to do things with their logos (which used to be a finished, untouchable and proprietary resource, and is becoming an always open-to-creativity canvas) may well be the ones that most successfully establish stronger emotional bonds with the public by, possibly, making richer and fuller human lives. A brand logo can hopefully be admitted as an element that can serve many other purposes than the mere and traditional identification one: it can, in fact, with a well-thought discourse that, simultaneously, embraces serendipity and the audiences' generated inputs, be a gold mine of semantic and relational opportunities.

This paper is, therefore, a contribution to the knowledge of how just one of the many elements that form a brand (its visual identity, namely its logo), can still be conceived as a useful resource with so many other possibilities beyond the conventionally functional ones. And whilst some significant research in brand storytelling has already been done, most of it looks at the brand in its whole or uses one of the brand's intangible elements as frame of analysis (its culture or personality, for example, great assets for the development of representational and informational components of narrative), but no studies have considered the tangible and highly interactive element that the logo is, and how relevant it can be as a contributor and container of narratives itself.

So far, the value of this research resides in the identification and definition of a framework composed by the six main narrative dimensions of logos in contemporary brands, with the potential to allow future developments on a heuristic mapping and benchmark-led tool for a) better aligning the creative brief with the client's needs, and b) the extended benefit of increasing brand engagement and meaningful brand experiences by designing the most structurally appropriate visual storytelling strategy.

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Chapter 9

Designing Design to Death

Steven Skaggs

We're in the midst of a design glut. The other day I was paging through a magazine and saw a picture entitled "raindrop design" — a pattern in sand made by a passing sprinkle. Later that day on the web I encountered a photo of a piece of driftwood labeled "natural wood design." Then a book called *Designing Your Life*. And a set of courses called *Design Thinking*.[1]

We include methods of design that include random action, we speak of "designs" that are the result of happenstance; we include, under the term "design," the play procedures of toddlers, paint markings made by elephants, stochastic number sequences: in short, whatever actions unexpectedly result in some material object (c.f. Dunne and Raby, 2013).

Is there anything that is *not* design?

There is a simple concept in semiotics: when everything is a sign for x, nothing is a sign for x. When everything is design, nothing is design. Design becomes meaningless.

For the word to have any import, "design" must be *restricted*, differentiated from things that are *not* design.

Now, the people ramping up this design glut mean well. They are no doubt impressed with the methodologies and effectiveness of design processes and they want to bring them into their own sphere of influence in whatever discipline they work in. Or, in an amplification of the deep-seated human drive for aesthetic experience, they conflate that which is designed with that which gives us a sense of the beautiful. But not all that imparts a sense of

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[1] Stanford University d school: "Getting Started with Design Thinking" (online: https://dschool.stanford.edu/resources/getting-started-with-design-thinking)

wonder has been designed, and not every object is the result of design methodology. Even some useful things are the result of complete random chance, that, unless you are a literal believer in Genesis, has in no way been designed.

There was a time when to figure out a solution to a problem with a bit of thought and a lot of trial and error was known as designing. This is a more narrow application of the term, and gets closer to the core of what design is. It's what Wilbur and Orville did with their airplane, what the Egyptians did with a succession of ever-larger tombs, what Miedinger and Hoffmann did with the Helvetica typeface, what the team at Apple under the direction of Steve Jobs did when developing the iPhone. Less famously, it's what people do when they lay out a garden or arrange a living room.

Whether grand or humble in scale, the key to all of these actual incidents of true design is that they involve *planning toward a particular purpose*. The fancy word for this is "teleology." Teleology means having some end or purpose in mind; it describes a process of moving toward some goal, striving to find a good fit. That is why we say design is a problem-solving activity. It's a simple enough concept and worth preserving as a starting point for design. After all, there are times when happy surprises happen — raindrops make a beautiful pattern, an elephant swashes interesting marks with a paintbrush held in its trunk, the rustle of a branch against the side of a house scratches out a catchy rhythm — but these happy surprises are not *designed* to delight or inspire us, even though we may find joy in them or take inspiration from them.

Purposeful material utility

Design is always purposeful, the planning of something. Design always moves toward a future, from a state of want, from need, to a state of fitness, achievement and greater fulfillment.

Indeed, the words design and planning are almost perfect synonyms; "planning" places a stronger connotation on the narrative, sequential, durational part of the process, while "design" places stronger connotation on the mental, the creative, on ingenuity. Design is a process of *working through* a problem, seeking satisfaction for solving something that is perceived as a *creative* challenge.

Design is creative but not every creative act is one of design. It's informative to think of the ways we use such language around various creative pursuits.

We think of Brunelleschi *designing* the dome of the Duomo in Florence, but Ghiberti *sculpting* the reliefs that adorn the doors of the baptistry, or Michelangelo *painting* the ceiling of the Sistine Chapel. Of course, the doors and the ceiling were also, in a sense, designed; they were made to fulfill their purpose according to the imagination of the artists, but isn't it peculiar that using that word seems slightly off? So what does that tell us and why should that be?

I think there are two reasons. First, the sculptor and the painter are working in a particular medium; they are fashioning the substance of that medium (bronze or tinted plaster) into particular forms and compositions. So we say he sculpted or painted the form or image. In other words, the emphasis is on the decisions that are made in the translation of substances into compositional forms.

The second reason is that they have narrative content, they tell stories, they call attention to their content which they deliver by becoming the representation of subjects. Or, in the case of non-objective art, the painting or sculpture is taken to be — in itself as formed material — an object to be studied *in itself*.

The work of fine art calls attention to itself (Skaggs and Hausman, 2012). We call this an *intransitive* function. Notice that if we take the example of the baptistry doors in Florence, the functionality of the doors themselves — how well they swing open and closed for example — is not what we refer to when we speak of Ghiberti's artistic achievement. It is the bronze panels that are placed upon the doors of the baptistry that are in the art history books.

Unlike the piece of fine art, a designed object serves a *transitive* purpose, a utilitarian need that does not attract attention to itself itself as a narrative but puts attention toward the external problem for which it—the "design"— serves as mediating solution. The doors of the baptistry must be strong for security purposes yet light enough for a man to open them; the Duomo's dome must span the nave and support itself without the need for additional pillars; the party invitation must tell where and when the party is while suggesting that the party will be fun to attend.

As a result of this implied utilitarian materiality, this transitivity in which they act as go-betweens, most designed objects go unnoticed in our lives. Even though the best designed objects may be noticed (especially if they are novel) and some of them eventually considered remarkable creative

achievements, they are *primarily* remarkable not for what they are in themselves, but rather for how well they fulfill their purpose. Almost all designed objects are life-assists. A designed object is always helping you to achieve something else, persuading, informing, or perhaps (in the case of a shelter, dome, or package) protecting. If a designed object entertains you, the enjoyment of the entertainment is a by-product of, or sometimes a device in service of, a utilitarian purpose. The piece of fine art is an end in itself while the designed thing is a means for doing some other work in the world.

The distinction between a work of design and a work of fine art can be diagrammed (figure 1) by whether the object has a single, semiotic, function, or whether the semiotic function is joined by a utility function. A work of fine art has a semiotic function. It has meaning within itself, draws attention to itself as an object that is, in a sense, its own purpose. The designed object has a semiotic function, too, in the sense that all made things communicate cultural values, symbols and norms through some combination of presence, expression, denotation and connotation (Skaggs, 2017); but in designed artifacts this semiotic function is joined by the utility purpose, and it is the utility purpose that is foregrounded. Even in fashion design, probably the design field closest to fine art, the appropriateness of a particular article of clothing to the circumstances of its wearing is vitally important. When those norms are violated, so that the article could never reasonably be worn in the implied circumstance, the article of clothing immediately becomes a fine art vehicle rather than a work of design.
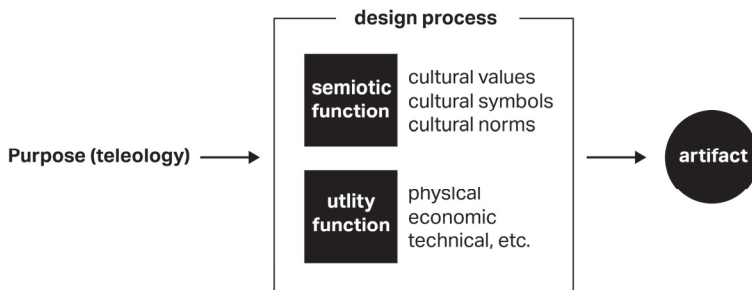
Having said this, a designed object's utilitarian *raison d'etre* does not preclude it from becoming a representative, or sign, of the character of a culture. Far form it. Entire works have been devoted to spelling out the cultural connotations signified by utilitarian objects (c.f. Floch, 2001). But when we address only the cultural connotations of a designed artifact, connotations that lie adjacent to, but not directly within, the teleology of the problem the

designer was given, we leave the world of design criticism and enter the world of cultural criticism.

Distinguishing design criticism from cultural criticism

This cultural embeddedness of designed objects can blur the lines between the teleology of the designed object and later critical appraisal ascribed to it within the cultural matrix. That is, there can be a disconnect between what the object was "designed to do" and what the object is "taken to represent." The holding up of designed artifacts as signs of cultural attributes by critics who are often distant from the time and place of the making can lead to problems. In the Introduction to their *Graphic Design History—A Critical Guide*, Johanna Drucker and Emily McVarish fall into this trap, stepping back and forth from design critique to cultural criticism: "Graphic design is never *just there*. Graphic artifacts always serve a purpose and contain an agenda, no matter how neutral they appear to be. Someone is addressing someone else, for some reason, through every object of designed communication." (Drucker and McVarish 2009, xiii-xvii) True enough, and good to be reminded of it. But by their use of the phrase, "serve a purpose and contain an agenda," Drucker and McVarish conflate these two areas of criticism. When they speak of the purpose or agenda, they could be speaking of the client brief which sets the target teleology for which the artifact was consciously created. That would be design criticism. But they are also referring to a kind of systemic purpose, perhaps an insidiously covert, hidden agenda, one that would situate the McDonald's brand system, for example, within a certain strain of corporatist capitalist culture. That is cultural criticism. In terms of design criticism, you cannot validly claim that the golden arches are a bad design because they so successfully badge a company that sells not-so-good nutrition, any more than you can claim that Leni Riefenstahl was a poor filmmaker because she worked in the service of the monstrous ideals of the Third Reich.

Failure to disentangle design criticism from cultural criticism leads to significant erosion of the meaning of the word "design." If, one assumes the cultural critic's perspective, that any material artifact (whether designed or randomly derived) can serve equally to tell a story about the culture within which it is embedded, then the narrow and specific utilitarian problem of the designed artifact is being ignored. And that which is being ignored is precisely the necessary condition that distinguishes something as having been designed. After all, it may be true that a Marlboro advertisement from the 1950s is evidence of America's suppression of health information in

deference to the profit motive, but that cultural gloss has nothing to do with the immediate teleology of that design: to entice consumers of tobacco products to purchase this particular brand rather than another. Design criticism would speak to the success or failure of the designer's efforts to attract attention, identify with the appropriate consumer, deliver denotative information, irrespective of what the advertisement as a category within a period of Post-WWII consumer life might have to say as a meta-cultural or ethical motif.

Design actions: sifting and nudging

Anthony Dunne and Fiona Raby (2013) call design *a method for doing*. They are doubly correct: it is both doing the "figuring-out" of what some some object should be — and simultaneously it presages the way that object will be doing its work in the world. The object will do its work on the basis of being just the way it is, and it is the planning of that particular way of being that is the heart of the designer's work.

But if you think of design as a "method for figuring out," you have what would seem to be a tautology. After all, why don't we just say design is simply the "figuring out"? What saves Dunne and Raby from tautology is that one could figure something out by random chance or some other (likely unsuccessful) method. Design is the sifting method. We entertain ideas, thoughts, experiments, trials, and then we sift through them, choosing on the basis of the teleology. We use data, our reservoir of experiences, and an understanding of context, to select the kernels of ideas that offer the best chance of success. Design does the sifting according to a sometimes implicit sense of fitness, the rightness-for-the-work-at-hand. We see this rightness because we have established a problem and we sense a goal. In the planning, there is always this purposeful movement forward toward that goal, even if it cannot be wholly attained or if, after a month or a year, the goal may shift.

There is always this process of "nudging nearer." In design, we move towards an end, even if we do not reach it, even if it is indeed unattainable in the end. The felt problem, and the sensed release of that problem (achieving the goal) become the energetic current that nudges us ahead as we sift through available choices and potential solutions.

Sometimes a designer might say the idea "just came to me" almost as if she were completely passive or asleep. Yet, how different is this process than daydreaming or sleeping. Sleep comes upon you, takes you over, and you have no sense of control over the it. Designing, even when a great idea

"comes to you" when you are in that creative flow and solutions seem to stream in from outside your awareness, always has the sense of active moving forward.

Design does its sifting and nudging through a series of iterations. Iterations are attempts, essays, sallies, tries. Not all succeed to the same degree, and sometimes none succeed ultimately. Even those iterations that do succeed are probably not the only possible successful outcomes. All we have in design is a set of attempts to have an object harmonize with its purpose as best we can. It's a game with a few winning solutions and an endless number of losing solutions.

For those of us who practice it, design is a valuable and fulfilling enterprise. But design is not everything. If design were everything there would be no word to distinguish it. When something is everything it is reduced to nothing. So let's not use the word "design" too casually. Let's not use the word for everything. If we let our lingo get too loose with the concept of design, we'll lose it. We will have designed design to death.

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