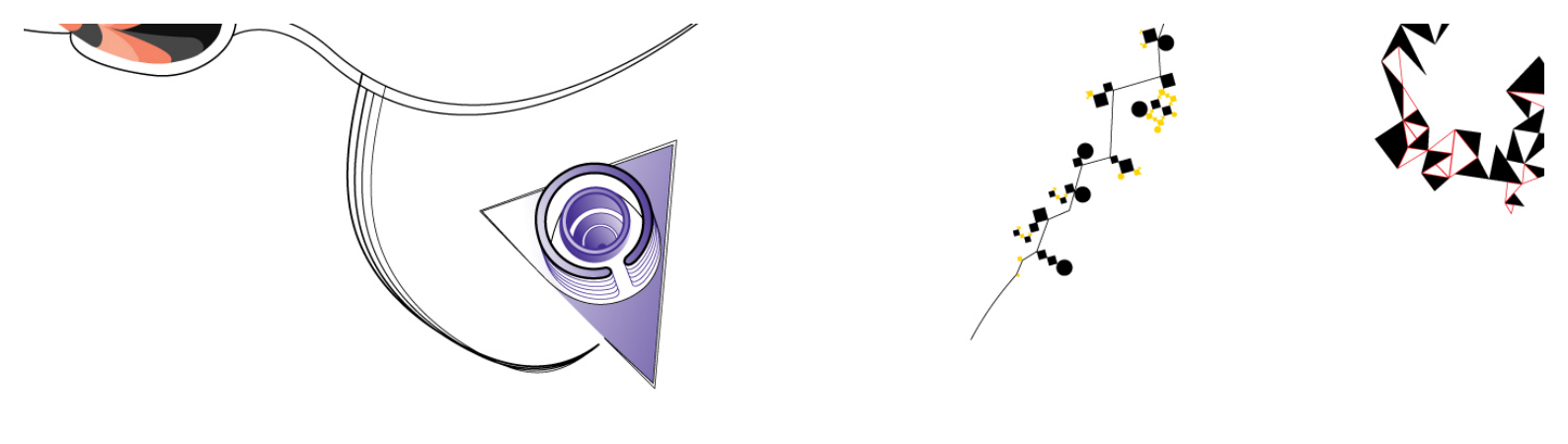
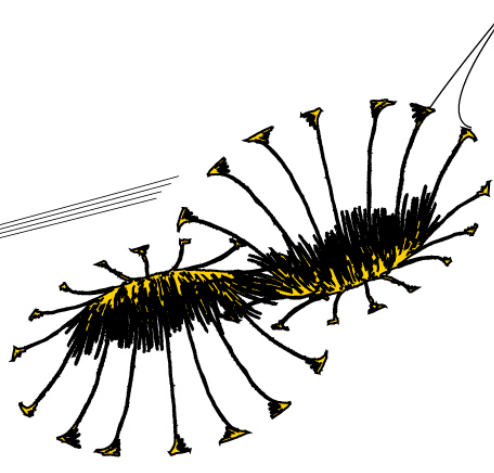




IDENTIFYING TRENDS FOR LOGO DESIGN



MASTERTHESIS
COMMUNICATION SCIENCE
CHARIS HEISING



UNIVERSITY OF TWENTE.

IDENTIFYING TRENDS FOR LOGO DESIGN

Charis Heising (s1009087)

Faculty of Behavioral Science
Communication Science
University of Twente

Supervisors:
MSc. J. Krokké
Dr. J.J. van Hoof

SUMMARY

Aim

In the Netherlands, people visit supermarkets on an average basis of 140 times a year. Every visit, consumers get to choose from thousands of products. Within every category, there are several brands that can be chosen from. The brand strategy of a brand can influence the product that a consumer picks. Brands play a critical role in establishing a firm's visibility and position in (international) markets. The Corporate Visual Identity (CVI) is an important part of the brand strategy. The CVI provides recognizability for example. Within corporate visual identity research, the logo has been highlighted as a key element, which can represent the organization to internal and external stakeholders. Although the logo is of great importance, the scientific research that has been done regarding this topic is limited. Especially when it comes to trends in logo design. There are multiple websites that predict design trends, but they lack scientific proof. Besides, supermarket brands are not commonly studied, although consumers make choices about these products on an almost daily basis.

Method

In this study, a content analysis was used to analyze the trends amongst supermarket brands for the past 65 years. Here fore, the Dutch brand top 100, conducted by the Symphoni Iri group was used. The older variances of the logos were found with help of the regarding company or by research on the Internet. A codebook was made, based on literature about logo design. The codebook was extended and improved with input from experts, some other respondents and by a pre test. The final version of the codebook was used to analyze 213 logos.

Findings

The main results that were revealed by this study, were the following. Most (supermarket brand) logos have red as a main color. Complementary, the most found color scheme had red and white in it (those colors were both found most as main color, as well as supporting color). Another popular color in logo design is blue. Over the years, the colorfulness of logos increased.

Also, a sans serif font is added more often. This adds a more modern look to a logo design. And (probably because of the crisis), more brands choose to get rid of the use of capitals in their logo design

Over the years, depth effects are more often added to designs, they also look more advanced than they used to. New technology and printing techniques have probably influenced this development. In contrast to 3D effects, also flat design seems to be a trend. Back to very simple -and as the word says- flat designs

Geometric logos do not occur very often, but logos even start to become rounder over the years. The use of opacity and lens flare increased over the years. Also, brands more often tend towards an organic, more natural look

And brands try to show their authority by adding additional information like a year of registration or a location statement to their logos

Practical recommendations

The results of this research might be very interesting for designers. Logos are one of the main vehicles for communicating the image, cutting through the clutter and speeding recognition of the product or company. Therefore, it is of great importance to make a proper selection for a certain logo. Every design option that the designer chooses, can have influence on the impact that a logo can deliver.

A very important choice is to choose the right color (combination). Many brands use red in their design, because that color is active and vibrant and it signifies a pioneering spirit and promotes ambition. However, other colors could deliver competitive advantage, because they could contribute towards an outstanding look. Blue, green and white are calming and pleasant colors. These colors could also be used when a brand would like to have a more natural appearance. This is especially interesting for brands that deliver products that are closely linked to nature. To create a natural (organic) look, it helps to add roundness, lens flare and multiple colors to the design.

If a brand wants to deliver a trendy look, it is wisely to choose carefully between either a 3D look, or the opposite: a flat design. No matter what kind of design you chose, it is always good to add round curves to a logo design.

Future research

Scientific research about the impact of color is still quite limited. In line with the findings of this research, it would be interesting to conduct research about the impact of color specifically for logos. For example, to see if consumers indeed rate logo's that are red and have a year of registration added higher for authority and credibility. Or, if red logos indeed are interpreted as powerful vibrant logos. And blue logos as calmer, or more organic.

Also, research could be conducted about the different types of logos (organic, representative, 3D, flat design) and their likeability. Maybe even divided within different groups of customers.

As it comes to the practical use of the results, it would have been interesting to see the results for a larger amount of recent logos. An interesting follow-up research would be to conduct the same kind of information (use the codebook again to analyze the logos) but then only for logos that are in use at the moment. A large sample with logos from different product categories could be analyzed.

Also, comparing logo design to other design trends would reveal interesting research

Limitations

As it comes to scientific research, it is always difficult to achieve complete reliability. Within this study only one researcher did the whole analysis. Therefore, the results are not completely objective.

Another insecurity is the completeness of the corpus. Only few of the companies whose logos were studied, were able to send their previous logo designs by email. Some of the companies did not have their previous designs digitalized very well; others refused to cooperate, because they got a lot of that kind of requests. So, a lot of logos had to be found on the Internet. Since different sources were used to hunt down these logos, it is not sure whether the list of logos is complete, or not.

“Good design is all about making other designers look like idiots because that idea wasn’t theirs”

- Frank Chimero-

CONTENT

INTRODUCTION	7
LITERATURE REVIEW	9
METHOD	25
RESULTS	31
SUMMARY OF THE RESULTS	44
DISCUSSION	45
PRACTICAL RECOMMENDATIONS	53
FUTURE RESEARCH	55
LIMITATIONS	56
CONCLUSIONS	57
ACKNOWLEDGEMENT	58
LIST OF LITERATURE	59
APPENDIX A – TOP 100 OF DUTCH COMPANIES 2012	65
APPENDIX B – POSSIBLE ADDITIONAL CODEBOOK ELEMENTS	72
APPENDIX C – FIRST VERSION OF THE CODEBOOK	73
APPENDIX D – RESULTS OF THE PRETEST	74
APPENDIX E – FINAL CODEBOOK	75
APPENDIX F – CORPUS	84
APPENDIX G – GUIDELINES TO THE CODEBOOK	93
APPENDIX H – SCATTER PLOTS	96
APPENDIX I – QUALITATIVE RESULTS PER BRAND	110
APPENDIX J – QUALITATIVE RESULTS PER CHARACTERISTIC	116

INTRODUCTION

Organizations change their Corporate Visual Identity (CVI) averagely once every eleven years (Roos, 2000). The reason for an organization to change their CVI can differ: fusion, acquisitions and divisions, shifts in market, obsolescence of the image, a new focus or vision or creating distance from social and moral baggage (Muzellec & Lambkin, 2004). Whatever the reason might be, a change in the CVI is a lot of work and can evoke resistance from all the target groups. However, the advantages apparently weight more than the disadvantages because the changes keep being prosecuted on an average basis.

When the management decides that it is time for a new CVI, mostly a design agency or communication agency will be enabled to deliver a proposal for a new design. While doing this, organizations try to find the brand and brand image that suits them best. In the literature a lot of attention is paid to this phenomenon. In 1986, Birkigt and Stadler started the discussion about corporate identity and the relation to the corporate image by introducing their identity mix. According to Birkigt and Stadler (1986) identity consists of the elements: personality, behavior, communication and symbolism. Over time, scholars introduced different kind of identity mixes (e.g. Balmer and Soenen, 1999).

Knowing that a strong identity has a number of potential benefits for an organization – e.g. adding value to increasingly similar products, stimulating investments, generating consumer confidence and loyalty, breeding employee motivation and attracting high-quality personnel (e.g. Balmer, 1995 and van Riel & Balmer, 1997) – marketing scholars and practitioners have consistently sought to keep the issue of identity on the agenda of senior managers and to integrate concerns about external environments in the planning and execution of corporate identity programs (Christensen & Askegaard, 1999). For the last recent years the marketing discipline has been quite instrumental in securing and maintaining both practical and theoretical attention to the issues of identity and image in contemporary organizations. It is often pointed out that the concepts of corporate identity and corporate image are ambiguous and need clarification. While the interest in identities and images has become a general concern among managers in many business firms, these terms have entered our everyday vocabulary with which we – as citizens, consumers, members of organizations, and even scholars – seek to describe and understand our experiences with a growing number of commercial signs of differing quality and persuasiveness (Christensens & Askegaard, 1999).

According to these theories, it should be that every company has their own identity, which they visualize in their CVI. This should be supplementary to their mission and vision. A good mission and vision should not be changed. Maybe once in a while the CVI should be adapted a bit, to make it a little bit more modern, but the core should stay the same. Therefore, the landscape of logos should be very diverse. However, it seems like there are always a lot of logos that share the same characteristics. Bill Gardner from the website www.logolounge.com defines for example every year what the trends in logos are. Is it really the case that logos

follow some kind of trends? In the literature, there is no information yet to be found about this topic. It is an interesting phenomenon however. It would explain why, for example, McDonalds changed the background of their logo from red to green. The company does have values about sustainability, but it is not one of their core actions (rather the opposite). Are they following a trend?

And if companies are still following trends and not only rely on their own identity, are they doing the right thing? A content analysis should expel whether logos can be categorized by trends, or not. The research question regarding this research is:

“What trends can be defined for the past 65 years for logos from the Dutch top 100 of product brands?”

LITERATURE REVIEW

CORPORATE IDENTITY

There are divergent views within the literature as to what is meant by corporate identity. Starting with Olins (1978) and followed by Birkigt and Stadler (1980) the understanding of corporate identity has gradually broadened. First there was what Van Riel and Balmer (1997) name the graphic design paradigm. Corporate identity used to be synonymous with organizational nomenclature, logos, company house style and visual identification. The realization by graphic designers and marketers of the efficacy of consistency in visual and marketing communications led to a number of authors arguing that there should be consistency in formal corporate communication (Bernestein, 1986; Schultz, Tannenbaum & Lauterborn, 1994). Van Riel and Balmer (1997) see this as the integrated communication paradigm. Nowadays corporate identity is taken to indicate the way in which an organization's identity is revealed through behavior, communications, as well as through symbolism to internal and external audiences. They call this the interdisciplinary paradigm.

Increasingly academics acknowledge that a corporate identity refers to an organization's unique characteristics, which are rooted in the behavior of members of the organization. The literature on corporate identity sees corporate identity management as taking into account an organization's historical roots, its personality (Balmer, 1995; Olins, 1978), its corporate strategy (Wiedemann, 1988) and the three parts of the corporate identity mix (behavior of organizational members, communication and symbolism) in order to acquire a favorable corporate reputation (Fombrun, 1996) which results in improved organizational performance (Fombrun & Shanley, 1990). Reputation and performance are also influenced by developments in the external environment such as changes in the behavior of competitors, as well as by corporate stakeholders such as customers, personnel and government.

The saliency of the identity concept to contemporary organizations, and to management academics from various disciplinary backgrounds, has been articulated by Cheney and Christensen (1999). They observed that identity was a pressing issue for many institutions and that the question of identity, or of what the organization is or stands for, cuts across and unifies many different organizational goals and concerns. New insights according corporate identity can help organizations develop a useful and supporting identity, which can help them market their products and/or services in a better way. Figure 1 (Gray & Balmer, 1998) shows how the corporate identity can lead to competitive advantage (the figure is shown at the next page).



Figure 1. Operational model for managing corporate reputation and image. Adapted from "Managing Corporate image and Corporate Reputation" by E.R. Gray and J. M. T. Balmer, 1998, *Long Range Planning* 31(5). P. 695-702.

Because the broadness of this topic, this research will focus more on one part of the Corporate Identity: the Corporate Visual Identity, with special interest in the logo.

BRANDS

According to Ghodeswar (2008) a brand is a distinguishing name and/or symbol (such as a logo, trademark or package design) intended to identify the goods or services of either one seller or a group of sellers. He also states that a brand differentiate those goods or services from those of the competitors. A brand thus signals to the customer the source of the product, and protects both the consumer and the producer from competitors who would attempt to provide products that appear to be identical (Aaker, 1991). Pendergast et al (2001) describe that a brand is a name, sign, symbol or design, or a mixture of these, which expresses a distinct message and quality from the organization to the customer.

Organizations are using branding as a strategy tool in today's business environment with increasing regularity. Although brands and branding are not new ideas, firms are applying them to more diverse settings where the role of branding is becoming increasingly important (Wentz & Suchard, 1993). O'Malley (1991) sees the definition of a brand as a name, symbol, design or some combination which identifies the product of a particular organization as having a substantial, differentiated advantage.

Three types of developments taking place outside of the organization can have an impact on its CVI: first, the development of the concept of a brand; second, the need to know the organization behind a brand; and third, the increasing number of visual stimuli in society (van den Bosch, 2005).

Brands used to relate mainly to products and their manufacturer. Nowadays, brands are being used by both profit and nonprofit organizations, including voluntary organizations (Ind, 2001). When a brand refers to a product, the brand will be judged by the intrinsic and extrinsic attributes of the product (Riezebos, 1996). Intrinsic attributes relate to the product quality (taste, size, product design, etc.) and the extrinsic attributes deal with product experiences (name, packaging,

product information, and price).

In general, a brand consists of both tangible and intangible assets. Its visual expression can be perceived as a tangible asset of a brand. Therefore, the CVI of an organization is an important asset in the branding arsenal. The identity symbols of an organization, such as its logo or emblem, typeface, and corporate colors are crucial in helping people recognize the organization, recall its image, and may even reaffirm trust in the organization (Dowling, 1993).

In Western society, consumers can choose products and services from among many brands. Besides, for producers it is quite easy to copy products. The reputation of an organization is therefore of major importance in creating competitive advantage (Herbig and Milewicz, 1995). Suppliers want to establish a relationship with consumers and strive for their loyalty.

In modern, urban environments we are overwhelmed with visual cues. Our society is becoming more and more visually oriented. Visual impressions should compete for the attention of consumers or other stakeholders and this results – together with other information – in perceptions of a product or an organization in their minds. Visual impressions are based on logos, colors, graphics, typography, photography (style and composition) and, sometimes, additional symbols. These elements are presented via signage in the street, in buildings and shops, packaging, mailings, television, and all kind of printed and online media. Mass media such as television and Internet have enhanced the scope of visual communication by adding moving pictures. Research shows how an elaborate symbolic environment made up of both visual and verbal cues expresses the essence of a brand and helps us to remember it (McNeal and Ji, 2003). According to McNeal and Ji, (2003) the main difference – compared with 26 years earlier – was the extended number of visual cues remembered. Logos and other visual cues help us recognize and choose product brands (D'Souza & Williams 2000).

CORPORATE BRANDS VS. PRODUCT BRANDS

There is a difference to be found between corporate brands and product brands. First, of course the focus of the brands shifts from the company to the product. With corporate brands, the level of everyday employee interactions is visible. So for example, the company is more transparent than when consumers are only aware of the product brands (Hatch & Schultz, 2001). Product brands have been restricted to marketing, middle management, and a consumer focus. Corporate branding involves all stakeholders, has a multidisciplinary character and is targeted to internal and external interests and networks (Balmer, 2002). For many companies, the appeal of using a corporate brand is simple economic viability. Developing and managing a single corporate brand is a more cost-effective task than managing different brands with their own nuances (Melewar & Walker, 2003). In comparison, Balmer (2001) suggests that corporate brands differ from product brands in higher strategic focus, internal as well as external targets, and incorporation of corporate strategy. He also argues that corporate brands have three general advantages: they are differentiated, they can be communicated and they are powerful sources of brand equity. Table 1 (Hatch & Schultz, 2001) gives an overview of the differences between corporate brands and product brands.

Table 1.

How corporate branding differs from product branding

	Corporate Brands	Product Brands
Focus attention on	The company	The product
Managed by	The CEO	Middle manager
Attract attention of and gain support of	Multiple Stakeholders	Customers
Delivered by	Whole company	Marketing
Communications mix	Total corporate communication	Marketing communications
Time horizon	Long (life of company)	Short (life of the product)
Importance to company	Strategic	Functional

Adapted from "Bringing the corporation into corporate branding" by M. J. Hatch and M. Schultz, 2001, *European Journal of Marketing*, 37(7/8), pp. 1041-1064

BRAND STRATEGY

Multi business companies can choose the strategy they use while communicating to customers. Brands play a critical role in establishing a firm's visibility and position in (international) markets. Building a coherent brand architecture is a key component of the firm's overall marketing strategy, because it provides a structure to leverage strong brands into other markets, assimilate acquired brands, and integrate strategy across markets. Brand architecture is defined as portfolio and allocation thinking applied to a corporation's brand structure (Douglas, Craig & Nijssen, 2001). Laforet and Saunders (1994) revealed three general patterns of brand architecture. They state that a company can have a corporate-dominant structure, a product-dominant structure or a mixed structure. Corporate-dominant brand structures are based on a visibility for the organization and the corporation as a global driver of brand value (e.g. Virgin and BMW). Within a product-dominant structure, individual brands are developed for every product (e.g. Procter and Gamble has Pringles for crisps and Ultra Pampers for diapers). The mixed structure of brand architecture considers the corporate brand as well as the product brand. Sub-brands and endorsed brands can play an important role in creating a coherent and effective brand architecture. Berens, van Riel and van Bruggen (2005) also name three kinds of strategies where companies can choose from as it comes to branding. The first one is the "stand-alone" strategy. An individual product is labeled by a separate brand name. The second option is the "monolithic" strategy, whereby only the corporate brand name is communicated. The final option is called the "endorsed" or "dual" strategy. In that case a combination of the two names together is being used (Berens, van Riel & van Bruggen, 2005).

Keller (2002) suggested a brand hierarchy, consisting four different levels. The first one is family brands. These are defined as brands covering several product classes without being corporate brands, for example Panasonic (Matshuita corporation). The second level is individual brands. These are brands that are restricted to one product class (e.g. Doritos). The third level was named modifiers. Modifiers are

descriptors that modify a corporate/individual or mixed brand structure for a particular market segment. For example the BMW X5 consists of the corporate brand BMW that is modified with respect to four-wheel drive (X) and size (5).

BRAND POSITIONING

Choosing the right strategy is very important for the market position of the brand. An important aspect of a brand's position in a product category is how similar or different the brand is perceived to be in comparison to other brands. While positioning a new brand, several choices are available to the marketer. For example, there can be chosen to position the brand within the overall market as a "differentiated" product. With this strategy, the brand is positioned in a way that it is seen as sharing important attributes or product characteristics with the other brands in the category and as being superior on the differentiating or distinguished attribute (Dickson & Ginter, 1987). According to DiMingo (1987) there are two possible ways of positioning. The first – marketing positioning- is the process of identifying and selecting a market or segment that represents business potential, targeting vulnerable competitors and devising a strategy to compete. Essentially, the process involves determining the criteria for competitive success. This contains knowing what the market wants and needs, identifying company and competitors' strengths and weaknesses and assessing abilities to meet market requirements better than competitors do. Perceptual positioning, the second way of positioning, involves forging a distinctive corporate or product identity closely based on market positioning factors and then using the tools of communication and promotion (e.g. advertising, PR and social media) to move the prospect toward a buying decision. This second type of positioning translates market-determined values into the clear, focused language and visual images that install a product into its own niche in the consumer's mind. Regardless of the strategy that is chosen and the kind of positioning that a company wants to establish, the visual communication definitely contributes to achieving the desired effect. While designing a logo (and the rest of the CVI) the brand strategy and positioning should be taken into consideration.

CORPORATE VISUAL IDENTITY

Originally, corporate identity was synonymous with organizational nomenclature, logos, company house style and visual identification, whereby the logo or corporate symbol had the potential to express organizational characteristics (van Riel & van den Ban, 2001). A corporate visual identity (CVI) provides recognizability (Balmer & Gray, 2000) and an organization must have very strong reasons before dissociating itself from an established CVI. Every major change in a CVI requires time and a substantial investment to communicate the new name and/or corporate design, stressing the presence of the (new) organization and emphasizing ways in which it differs from others. Many corporate identity practitioners had (and have) their roots in graphic design and understandably a good deal of importance was assigned to graphic design. Graphic designers have been hugely influential in two regards, in that they articulated the basic tenets of corporate identity formation and management and succeeded in keeping the subject on the agenda of senior managers (van Riel & Balmer, 1997). The role of symbolism is now assigned a greater role and has grown from its original purpose of increasing organizational visibility to a position where it is seen as having a role in

communicating corporate strategy. The realization by the design agency of the efficacy of consistency in visual and marketing communications led to a number of authors arguing that there should be consistency in formal corporate communication (Bernstein, 1986; Schultz, Tannenbaum & Lauterborn, 1994). Schroeder (2005) illustrates that CVI's are naturally visual, with the application of logos, product design, packaging, brand identity and brand advertising fashioned to produce unique brand images. Melewar and Saunders (1998) highlight CVI's as the focus of an organization's proposed image, with name, symbol and/or logotype, typography, color and slogan being the five components. According to Keller (2003) the most powerful brand elements are brand names, logos, slogans, jingles, characters and packages. In this paper, the focus is on the logo as a crucial element of the brand. Because this research focuses on historical data, there is chosen to only pick what most researchers see as the most important element of the CVI.

LOGOS

Within corporate visual identity research, the logo has been highlighted as a key element, which can represent the organization to internal and external stakeholders (Byrom & Lehman, 2007). Logos are one of the main vehicles for communicating the image, cutting through the clutter and speeding recognition of the product or company. Therefore, it is of great importance to make a proper selection for a certain logo. Because of these impacts, it also makes sense financially. Designing and selecting a new logo can be quite expensive and takes a lot of time (Henderson & Cote, 1998). Virtually every business adopts logos nowadays. Even families (e.g. the royal family of Great Britain), religion (the Christian cross) and even countries (the American stars and stripes) have used logos to represent their name visually (Hem & Iversen, 2004). Logos are a part of the sign system that an organization uses to communicate to external and internal audiences (Zaskia & nadin, 1987). Logos contribute to identify what an organization has to offer and help to differentiate from competitors (Hem & Iversen, 2004).

The logo is one of the most obvious representations of CVI and brand identity used by organizations, but under some circumstances the desired consumer responses may not be occurring (Henderson & Cote, 1998). First, the logo may be difficult to store in memory, due to it being overly complicated, for example. Secondly, it may simply not be 'liked' by the consumer, in as much as it might not be 'pleasing to the eye'. Finally, a logo may fail to create any sense of meaning, because it is built of irrelevant design elements, or perhaps elements that do not connect to the market. Henderson and Cote (1998) point in their paper to the lack of research into the effects of design on consumers' evaluation of logos. They provide guidelines for the design of logos. Since then there has been only little further investigation. One of the few researches was done by Janiszweski and Meyvis (2001). They used an experimental procedure in order to test the effect of logos on consumers' processing fluency. Other work that has been done on logo design generally is more in the way of 'how to' manuals (e.g. Silver, 2001). The visual aspects in a brand however, can be a crucial element in building brand equity, particularly as it relates to awareness (Keller, 2003). The logo is visual, and as such it can be a useful way to identify products.

There are many types of logos. The range of logos goes from entirely abstract logos that are completely unrelated to the word mark, the corporate name or corporate

activities to word marks (i.e. trademarks) that are written in a distinct form (Murphy, 1990). Examples of abstract logos (symbols) are those from e.g. Mercedes (the star), Nike (the swoosh), Apple (the half-eaten apple) and Adidas (the three stripes). Examples of word marks are Coca-Cola, Dunhill and Mars. A good logo should be recognizable, elicit a consensually held meaning in the target market and evoke positive affect (Vartorella, 1990).

LOGO ELEMENTS

Henderson and Cote (1998) named some dependent and independent variables that influence the design of a logo. The dependent variables they named are: correct recognition, false recognition, affect simply and familiar meaning. These dependent variables however are quite subjective and therefore not applicable in this research. In contrast, some of the independent variables they found are interesting design elements, which are interesting for this study. These usable elements will be discussed below. The article written by Henderson and Cote dates from 1998 and used black and white logos. Therefore, along the elements proposed by Henderson and Cote (1998) some more modern elements will be discussed as well.

COLOR

Color is an integral part of products, services, packaging, logos, and other collateral and can be an affective means of creating and sustaining brand- and corporate images in customers' minds (Madden, Hewett & Roth, 2000). Color is ubiquitous and is a source of information. People make up their minds within 90 seconds of their initial interactions with products. About 62-90 percent of the assessment is based on colors alone. So, prudent use of colors can contribute not only to differentiating products from competitors, but also influence moods and feelings –positively or negatively- and therefore, to attitude towards certain products (Singh, 2006).

According to Gage (1999) color is the attribute of visual experience that can be described as having quantitatively specifiable dimensions of hue, saturation and brightness. As it comes to a design element, Hines and Bruce (2007) predict that customers respond to a color first. There are a number of reasons for this, including strong social and cultural semiotic associations that are learned and, more simply, because a color is obviously noticeable as it covers the surface.

Hue, lightness or value, and chroma or saturation are the perceptive aspects of color defined in color science. The cognitive aspects of color on the other side are aspects like memory, color meaning and color harmony. There are no standard words for describing colors. There are words that can be used to describe the color preference, like comfortable or uncomfortable, good or bad, etc. On the other hand, primarily descriptive dimensions such as warm or cool and light or dark can be used. Gao and Xin (2006) found that the meanings people ascribe to colors are mainly culture based. In an extensive study, Berlin and Kay (1969) found that subjects of different cultures tended to point at identical Munsell colors, when asked to identify colors corresponding to the different color names of their culture. Based on these focal colors (a shade of a certain color category that represents the best example of this category) a color categorization that is independent of cultural context was developed. Speakers from different language communities recognize these colors to be the perceptually salient and to be the best representative of a particular color category. Berlin and Kay (1969) found 11 of

such colors. Eight of them were chromatic (red, yellow, green, blue, pink, orange, brown and purple) and black, white and grey are the three achromatic colors. The existence of focal colors received considerable support from several other studies. Mervis, Catlin and Rosch (1975) for example found that focal colors stabilize earlier in development and to a higher degree than boundary colors do.

BRIGHTNESS

Brightness is an aspect of color in the red, green and blue (RGB) scheme. The term is most often used in reference to the color of each pixel in a display or on a PC/tablet screen. Brightness is also called brilliance and it is a relative expression of the intensity of the energy output of a visible light source. It can be expressed as a total energy value, or as the amplitude at the wavelength where the intensity is greatest (Rouse, 2010). For colors, brightness refers to the relative lightness or darkness of a color. This is generally achieved by adding black or white to a color. Figure 2 (http://art.nmu.edu/cognates/concepts/175_color.html) shows how brightness can evolve from dark to light.



Figure 2. Reprinted from *Brightness*, an example of different shades of brightness for the color red. Retrieved from http://art.nmu.edu/cognates/concepts/175_color.html

SATURATION

According to the dictionary, saturation is an expression for the relative bandwidth of the visible output from a light source. Saturation refers to the purity or intensity of a color. A “vivid” color is highly saturated and a “muted” or “dull” color is a low saturation color. Saturation generally diminishes when colors are mixed (Levkoswitz & Herman, 1993). Figure 3 (http://art.nmu.edu/cognates/concepts/175_color.html) shows how saturation can evolve from high to low.



Figure 3. Reprinted from *Saturation*, an example of different shades of saturation for the color red. Retrieved from http://art.nmu.edu/cognates/concepts/175_color.html

GRADIENT

A color gradient specifies a range of position-dependent colors, usually used to fill a region. The colors produced by a gradient vary continuously with position, producing smooth color transitions. Two types of gradient can be distinguished: axial gradients and radial gradients. An axial color gradient is specified by two

points, with a color at each point. A radial gradient is specified as a circle that has one color at the edge and another at the center (Romaniello & Romaniello, 2004). Figure 4 (<http://designmodo.com/illustrator-gradient-fills/>) shows what these types of gradient look like.

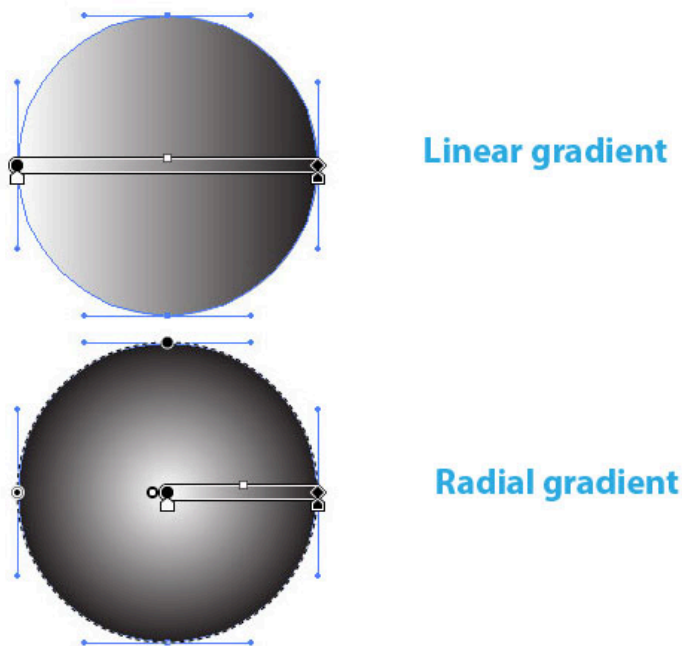


Figure 4. Reprinted from *Gradient*, an example of two types of gradient design. Retrieved from <http://designmodo.com/illustrator-gradient-fills/>

LOGO STRUCTURE TYPOLOGY

According to Adîr, Adîr and Pascu (2012) there can be three main types of logo typology be found by analyzing the logo. These are:

1. Symbolic logo – represented by an emblem, a symbol, a sign or an object. This kind of logo is a suggestive graphic representation, something which can be mental registered, processed explained and understood. Budelmann, Kim and Wozniak (2010) name this kind of logo a symbol.
2. Word mark logo (text defined) – this type of logo is represented only by letters/numbers as a text or a single letter/number. There is no graphic symbol. This type of logo is just called a word mark (Budelmann, Kim and Wozniak, 2010).
3. A mixed logo – concerning a symbol and a text together. For this kind of logo there are two support elements: the first one is a text (the name of the company/product/service/event, etc.) and the second one is a symbol (geometric shapes, different signs, various images, etc.).



Symbolic logo

NIVEA

Word mark logo



Mixed logo

TYPOGRAPHY

The typography of a logo refers to the kind of font that is used. Font sizes, font proportion, stroke thickness, distance between words and lines, font features and so on are all elements that can influence the appearance of the font. This should all be considered when looking at the design of a font (Wang & Chou, 2011). Most research on font features has focused on determining the font size and their readability (Wang & Chou, 2010). But Grohmann et al. (2013) also found for example that fonts not only influence consumers' responses to the font itself, but also affect brand perceptions. And, according to Childers and Jass (2002) and Grohmann et al. (2013), consumers form impressions based on the physical characteristics of the fonts and use these impressions to infer information about the brand. Brands even convey messages through the fonts they use, including the fonts they use in their word marks (Bottomley and Doyle, 2006). The font used in the word mark is where this study focuses on. Different types of fonts can be found. Standard fonts for example are divided into two categories: serif fonts and sans serif fonts. Serif fonts have small decorative strokes added to the end of the letter's main strokes. Times New Roman is the perfect example of this sort of font. Serifs improve readability, particularly for large quantities of text, as they create lines for the eye to move along more quickly and steadily. Sans serif fonts have no additional decoration and appear cleaner and more modern. The most obvious characteristic of these styles is, as the name implies, the absence of serifs. In many sans serif typefaces, strokes are uniform, with no or little contrast between thin and thick strokes. The first sans serif typestyle appeared in an 1816 specimen book (Carter, Day & Meggs, 2012). One of the typical examples is Arial. This font is best used for small amounts of large text, such as is the case with logos (Jolly, 2004).

This text is written in a serif font

This text is written in a sans serif font

A font can also be italic or script. Italics are characterized by right-slanting strokes developed from the Roman (serif) style. Italic letterforms slant to the right. Today, we use them primarily for emphasis and differentiation. When the first italic appeared in the earliest "pocket book", it was used as an independent typestyle. The first italic characters were close-set and condensed; therefore, it was possible to get more words on each line. Some italic styles are based on handwriting with connected strokes and are called scripts (Carter, Day & Meggs, 2012). The symbols of the script language are written in a conjoined and/or flowing manner) style. A font cannot only be italic or script (because a script font is italic per se). Another effect that can be added to text is the bold version of the font. A bold font gives more emphasis to the text.

This text is written in Italic font

This text is written in a Script font

This text is bold

A font can be written regular, but also in capitals. Since the time of the ancient Greek, capital letterforms have consisted of simple, geometric forms based on the square, circle and triangles (Carter, Day & Meggs, 2012). Capitals may be used when the sender wants to put power into his message. Mainly, names are written with the first letter as a capital. Because logos represent the name of a brand, it might be applicable that most logos have only the first letter written as a capital.

Another way to create notable text within a logo is by use of spacing. In typography, spacing refers to a consistent degree of increase (or sometimes decrease) of space between letters to affect density in a line or block of text. Letter-spacing refers to the overall spacing of a word or block of text affecting its overall density.

THIS TEXT IS WRITTEN IN CAPITALS

This text has extra spacing added

LOGO CHARACTERISTICS

REPRESENTATIVENESS

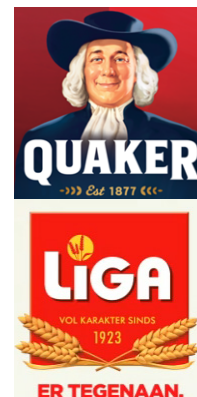
Representativeness is the degree of realism in a design. This occurs when the elements of an object are distilled to its most typical features (Henderson & Cote, 1998). A logo opposite to a representative logo is an abstract logo. When a logo is totally representative, everybody can see in an instance what it supposes to represent. This is the case for example when a photograph or a very clear symbol is used while designing the logo (Henderson & Cote, 1998). According to the literature, people prefer representative logos to the not-representative one's (Fang & Mowen, 2005).



Not representative



A little representative



Totally representative

ILLUSTRATIVENESS

All illustrative logos are pictures. They can literally illustrate a product or service or symbolically represent an idea or metaphor. The more literal an illustrative logo is, the less work a potential customer needs to do to interpret it. An illustrative logo can be with, or without text (Henderson & Cote, 1998).



Illustrative logo (with text).

This logo illustrates that the product has a connection to the condition of the consumers' heart

ORGANIC

Organic designs are those that are made up of natural shapes, such as irregular curves. The opposite is a geometric design, which tend to represent less natural, more synthetic-looking design (Hederson & Cote, 1998).



Organic design



Geometric design

BALANCE

Balance is related to symmetry, because symmetric designs are normally considered balanced. Balance captures the notion that there is a center of suspension and that different sides of the picture are in balance. Note that a symmetric logo does not have to be balanced per se (Henderson & Cote, 1998).



Balanced



Not balanced

SYMMETRY

Symmetric designs appear as reflections along one or more axis. A picture can be horizontal, vertical and diagonal symmetrical (Henderson & Cote, 1998).



Vertical symmetric



Horizontal and
vertical symmetric



Not symmetric

PARALLEL

Parallel designs contain multiple lines or other elements that appear adjacent next to each other (Henderson & Cote, 1998).



Design with
parallel elements

REPETITION

Repetition of elements happens when the elements are identical to one another. These elements do not have to be placed next to each other (Henderson & Cote, 1998). As the term replies, something simply repeats in various parts of the design to relate the parts to each other (Lauer & Pentak, 2011).



No repetition



The crown contains repeated elements

ROUNDNESS

Round designs are made of curved lines. On the other hand, there are designs without curved lines. In between, lay the designs with some curved lines (Henderson & Cote, 1998).



Completely curved design



Design with some curved lines



No curved lines

DESIGN EFFECTS

DEPTH/3D-EFFECT

Depth gives the appearance of a three-dimensional design (Henderson & Cote, 1998). Graphic identities typically take two-dimensional form, but many identity programs beg the opportunity for marks to live in three dimensions. Making a logo into a piece of sculpture risks confusing its readability as a symbol. On the other hand, other treatments may add interest (Budelmann, Kim & Wozniak, 2010).



3D Effect



Optical depth



No depth

SHADOWS

To give an optical illusion of depth, designers sometimes use shadows in their logos. The type of shadow that is used the most is the (outer) drop shadow. A lot of different shadow types can be distinguished, but the most evident differences are those between inner shadow (inside the framework of the logo) and outer shadow (outside the framework).



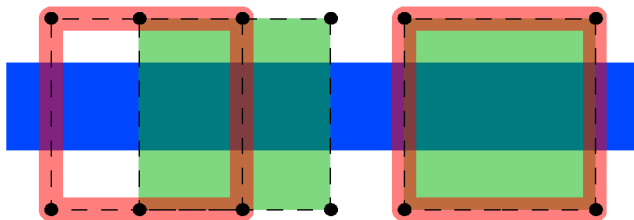
Outer shadow
figurative mark



Outer shadow
word mark

OPACITY

The opacity property specifies the transparency of an element, that is, the degree to which the background behind the element is overlaid. Through a translucent element, the background shines through by a certain amount. If an opacity object with color is placed in front of an object with color, the resulting color will be the blend.



Overlapping elements with stroke and fill opacity (retrieved from: https://wiki.openoffice.org/wiki/SVG_Group_Opacity)



Logo where opacity with a blend was added

LENS FLARE

Lens flare is the light scattered in the lens through generally unwanted image formation mechanisms, such as internal reflection and scattering from material in homogeneities in the lens. The spatial distribution of the lens flare typically manifests as several starbursts, rings or circles in a row across the image or view. A lens flare can be added to a design to spice it up and make it more realistic (www.cambridgeincolour.com).



Design with added
lens flare

ADDITIONAL COMPANY INFORMATION

Some organizations choose to add some additional information in a logo design, like the year of foundation or the location where they are established. Adding a registered trademark is also one of the additional options.



Year of registration



Location statement
(and registered
trademark added)

LOGO CHANGES

A reason for changing or adapting a logo is modernization, as trends in designs change over time. New product and brand introductions precipitate new logos (Siegel 1989), as do some packaging changes, which occur every three to five years on average (Morgenson, 1992). Changes in CVI or logos can be drastic, but also can be so subtle that they are hardly noticeable for many audiences. The changes may involve alterations in the logo or additional visual elements or new applications (van den Bosch, Elving & de Jong, 2006).

Having an insight in trends can be very valuable to predict desired actions. Rebranding costs a lot of money and time and often causes resistance. Doing a proper job can help a brand contribute to the growth of the organization. But, are there even trends as it comes to brands and logos? If there are, this can be very valuable for marketers and organizations, especially when it is possible to predict these trends. In order to find out if a trend can be found it is important to define what a trend exactly is. Trends is not a topic that got scientifically a lot of attention, but in the next paragraph there will be described what the definition of a trend is, according to this research.

TRENDS

Budelmann, Kim and Wozniak (2010) state that there exists something like logo trends. Trends come from trendsetters and they are susceptible to changes. Therefore they recommend only following trends if one is a fast follower. Besides, they also mention something called macro trends. Macro trends in brand identity are tied to trends in business models and lifestyles. McDonald's for example has a

brand identity that remained successful for decades (with the value proposition of easily accessible inexpensive fast food). Lately industry rivals such as Subway, which built a new brand around healthier lifestyle trends, have challenged McDonald's brand identity. However, Subway could not have existed without McDonald's before them. The most effective brands translate existing trends into meaning, and deliver more meaningful experiences to customers as a result.

This example shows that following trends can be valuable. However, for visual elements, it is not really defined when something can be called a trend.

An industry, in which trends play a huge role, is the fashion industry. Within that industry, trends forecasting influences the colors, styles and textures that are abundant in the stores (Hines & Bruce, 2007). The term fashion trend refers to aspects of the appearance and construction of fashion products that relate to a particular season. Such trends are manifest in the appearance of fashion products, which are designed and manufactured prior to being delivered in a season. Fashion trends provide insights into the style and color direction that future fashion products will take in their final form. The notion of a fashion trend will vary according to the kind of business using it, in particular where they are in the clothing supply chain and what their information needs are (Hines & Bruce, 2007). Also, there are long-term trends that underpin future designs.

In the fashion industry, color is probably the most important element for a trend. Although trends in fashion are reflected through a variety of design elements, it is believed that customers respond to color first. The time period for how long a trend lasts in fashion is stated by the period a fashion season takes. For logos and other CVI elements it is more complex, because identities are not stated by something like seasons or other fixed time periods.

According to the Business dictionary, a trend is "a pattern or gradual change in a condition, output or process, or an average or general tendency of a series of data points to move in a certain direction over time, represented by a line or curve on a graph". Trends can vary in length from short, to intermediate, to long term. If you can identify a trend, it can be highly profitable, because you will be able to trade with the trend. It is not defined when something is a trend exactly (like, for e.g. when 5% of the 100 datasets have some kind of conformity). To define whether something is a trend or not, the data should be visualized in a graph. When the data is spread all over the graph, there is no trend present. However, when information about the elements is clustered, that is where you see a trend.

METHOD

To answer the research question, a content analysis was conducted. There are two types of content analysis: qualitative and quantitative content analysis. Qualitative content analysis has been defined by Hsieh and Shannon (2005) as a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns. Mayring (2000) describes it as an approach of empirical, methodological controlled analysis of texts within their context of communication, following content analytical rules and step by step models, without rash quantification. These definitions illustrate that qualitative content analysis emphasizes an integrated view of speech/texts and their specific contexts (Zhang & Wildemuth, 2009). Quantitative analysis is used widely in mass communication as a way to count manifest contextual elements (Weber, 1990). Berelson (1952) defined Quantitative Content Analysis (QCA) as a research technique for the systematic, objective, and quantitative description of the manifest content of communication. In this context, description is a process that includes segmenting communication into units, assigning each unit into a category, and providing tallies for each category (Rourke & Anderson, 2004). The steps to developing a theoretically valid QCA protocol are:

1. Identifying the purpose of the coding data
2. Identifying behaviors that represent the construct
3. Reviewing the categories and indicators
4. Holding preliminary try outs
5. Developing guidelines for administration, scoring, and interpretation of the coding scheme

Content analysis instruments should be accurate, precise, objective, reliable, replicable and valid (De Wever, Schellens, Valcke & Van Keer, 2005). These criteria are strongly interrelated. Accuracy is the extent to which a measuring procedure is free of bias (non-random error), while precision is the fineness of distinction made between categories or levels of a measure (Neuendorf, 2002). Accuracy should be as high as possible, while precision should be high, but not exaggerated. Objectivity should be attained at all time (Rourke, Anderson, Garrison & Archer, 2001). Although interpretation is necessary and subjectivity might be unavoidable, one should be aware that subjectivity affects the reliability and the validity of studies.

The first step in developing the meta-review was to define a comprehensive set of variables, abstracted from the literature framework. The next step was to identify a corpus. To develop a reliable and credible codebook, a pretest was done.

DEVELOPMENT OF THE CODEBOOK

The first version of the codebook was mainly based on the article from Henderson and Cote (1998), where they developed guidelines for logo design. Due to the fact that their research took place a long time ago, it was necessary to take a critical look at the completeness of the elements. For example, nowadays color plays a significant role in the development of CVI's (Henderson and Cote (1998) only used black and white logos). So, variables related to color had to be added.

Besides, currently there is a lot more possible while designing a logo, because of technical development throughout the years. Programs like Photoshop and Indesign make design options more easily accessible. This first version of the codebook was optimized by adding elements that were revealed by a pre study amongst two different groups of people.

PROCEDURE

First, five experts (designers and marketers) were asked to review the codebook. They received the codebook by mail and were asked to look at the scheme from their expert point of view and describe the elements that they would add to it, if they would create a codebook for analyzing logos themselves.

Then, five random people with different backgrounds (students, employers, business owners) were asked to describe the elements they could distinguish within three different logos (one from Campina, one from Hak and one from Verkade). Their descriptions led to some new elements, that were not yet included in the codebook (a table with the elements that they named per brand can be found in appendix B).

PRETEST

Once the codebook was developed, a pretest had to be done. De Wever, Schellens, Valcke and van Keer (2005) state that the reliability of a coding scheme can be viewed as a continuum, beginning with coder stability (intra-rater reliability; one coder agreeing with herself over time) to inter-rater reliability (two or more coders agreeing with each other). Inter-rater reliability is a critical concern in relation to content analysis. It is regarded as the primary test of objectivity in content studies. Rourke, Anderson, Garrison & Archer (2001) define inter-rater reliability as the extent to which different coders, each coding the same content, come to the same coding decisions.

There are a number of indexes that can be used to report inter-rater reliability (e.g. percent agreement, Krippendorff's alpha, Scott's Pi and Cohen's Kappa). Percent agreement is the result of the ratio between the number of codes which is agreed upon and the total number of codes (agree + disagree). It is by far the most simple and the most popular index. However, it has a major weakness: it fails to account for agreement by chance (Lombard et al., 2002). Krippendorff's alpha, Scott's pi and Cohens Kappa are all indexes that do account for chance agreement.

When Cohen's Kappa is used, the following criteria are proposed: values above 0.75 indicate excellent agreement beyond chance, values below 0.4, poor agreement beyond chance, and values in between fair to good agreement beyond chance (Neuendorf, 2002).

PROCEDURE

To test the inter-rater reliability of the codebook that was compound for this study, the researcher and two other coders (communication science students) analyzed two different logos on the basis of the developed codebook.

RESULTS

To reveal the inter-rater reliability, KALPHA and Kappa were calculated. For logo 1 (a logo from Becel), KALPHA was 0,89. For logo 2 (a logo from Fanta) a KALPHA of 0,9 was found. To make sure the codebook is as complete as possible, also Kappa was calculated between all the raters. Table 2 shows the results for the Becel logo and table 3 shows the kappa's that were calculated for the Fanta logo.

Table 2: Kappa Becel

An overview of the kappa score between the three coders that was calculated after scoring the Becel logo

	1	2	3
1		0,54	0,60
2	0,54		0,48
3	0,60	0,48	

Table 3: Kappa Fanta

An overview of the kappa score between the three coders that was calculated after scoring the Fanta logo

	1	2	3
1		0,63	0,35
2	0,63		0,54
3	0,35	0,54	

While analyzing the Becel logo, discrepancy between the coders occurred among the following items: Brightness, saturation, saturation of the supporting color, gradient, colorfulness, typography, script font, bold font, spacing, representativeness, organic, symmetry, depth, repetition, roundness and opacity.

For the Fanta logo the problem established among saturation, saturation of the supporting color, gradient, colorfulness, typography, spacing, representativeness, symmetry, depth, parallel, repetition and shadows.

To find out what caused problems while analyzing the logos, the other coders were interviewed. The interview made clear that the following problems occurred while using the codebook:

- 1). Interpretation of the item. Some items were interpreted in a different way than meant by the researcher.
- 2). Distinguishing characteristics of the logo. Sometimes it is really hard to differentiate between for example a medium toned color and a dark toned color, because the distinction can be very small.

On the basis of the pretest the items bold font and spacing were deleted, because it is too difficult to make a clear distinction between different levels. And, some of the descriptions within the codebook were adapted to have the meaning of an item clearer. Also, guidelines for using the codebook were developed. These guidelines will help while analyzing when it is not completely clear which answer to choose. The guidelines can be found in appendix D.

MAIN STUDY

After adjusting the codebook in response to the results of the pretest, the final version arose. The complete codebook (including all the answer options) can be found in appendix E. Table 4 gives an overview of the final constructs that were used to conduct this research.

Table 4. The codebook

An overview of the constructs that were used for the codebook and the literature that was used to find these constructs

Construct	Literature	Construct	Literature
Period of time	Added because necessary for analyzing trends	Representativeness	Henderson & Cote, (1998); Fang & Mowen (2005).
Main color	Gage (1999); Hines & Bruce (2007); Berlin & Kay (1969); Madden, Hewett & Roth (2000); Singh, (2006); Mervis, Catlin & Rosch (1975)	Organic	Henderson & Cote, (1998);
Brightness MC	Rouse (2010)	Balance	Henderson & Cote, (1998);
Saturation MC	Levkoswitz & Herman (1993)	Symmetry	Henderson & Cote, (1998);
Supporting color	Gage (1999); Hines & Bruce (2007); Berlin & Kay (1969); Madden, Hewett & Roth (2000); Singh, (2006); Mervis, Catlin & Rosch (1975)	Depth	Henderson & Cote, (1998); Budelmann, Kim & Wozniak (2010).
Brightness SC	Rouse (2010)	Parallel	Henderson & Cote, (1998);
Saturation SC	Levkoswitz & Herman (1993)	Repetition	Henderson & Cote, (1998); Lauer & Pentak (2011)
Gradient		Roundness	Henderson & Cote, (1998);
Colorfulness	Gage (1999); Hines & Bruce (2007); Berlin & Kay (1969); Madden, Hewett & Roth (2000); Singh, (2006); Mervis, Catlin & Rosch (1975)	Shadows WM	Added because of expert input
Typology	Adîr, Adîr & Pascu (2012); Budelmann, Kim and Wozniak (2010)	Shadows FM	Added because of expert input
Typography	Wang & Chou (2011); Grohmann et al. (2013); Jass (2002); Bottomley & Doyle (2006); Carter, Day & Meggs (2012); Jolly, (2004)	Opacity	Added because of expert input

Italic font	Carter, Day & Meggs (2012)	Lensflare	Added because of respondent input
Script font	Carter, Day & Meggs (2012)	Slogan	Added because of respondent input
Capitals	Carter, Day & Meggs (2012)	Additional information	Added because of respondent input

For each construct, multiple answering options were available to choose from. The amount of answering options ranged from two till twelve possibilities (except “period of time”, that construct had open space to fill in the answer, because of the great variance of possibilities). The only constructs that had twelve answering options were the constructs about color. This was based on the 11 Munsell colors found by Berlin and Kay (1969). And of course, the twelfth option “other” had to be added to cover all the possible answers. Table 5 shows what this particular part of the codebook looked like.

Table 5. Example of the codebook for the construct main color

This table shows what the extended version of the codebook looked like for the construct Main color, including the answering options.

C5 Main color [<i>the color that covers the biggest part of the surface of the logo</i>]	
	01 = Red
	02 = Yellow
	03 = Green
	04 = Blue
	05 = Pink
	06 = Orange
	07 = Brown
	08 = Purple
	09 = Black
	10 = White
	11 = Grey
	12 = Other

The rest of the codebook was constructed similarly. Left the construct, with a letter and a number. The letter indicated the main topic the construct belongs to. Besides, the questions were numbered in ascending order. Between brackets a short description to explain how to interpret the construct could be found (to make it more easy for the coder). At the right side of the table, the answering options were exposed (See Appendix E for an overview of the whole codebook, including answering options and descriptions).

This research was based on a brand top 100, compounded by a reputable market research organization. There are multiple organizations that perform such market research annually. Eventually, there is chosen to use the Dutch Brand Top 100 from the year 2012, that was published by Symphony Iri. The Symphony Iri group is the global provider of market information, solutions and services in the areas of FMCG, retail, drugstores and petrol. Their brand top 100 shows the revenue of the Dutch biggest brands in the Dutch supermarkets. The results of their research were cited a lot by the Dutch media, which shows that the list is seen as a serious source of information.

There was chosen to use this list of brands for several reasons. The list is compounded based on the sales volume of the brands. That means that the brands are popular among Dutch customers. All of the brands are available in Dutch supermarkets (that sell A-brands). The advantage is that the list only contains brands that use a stand-alone branding strategy or a monolithic branding strategy. An endorsed brand, is probably not a brand that you will find in the shelves of a supermarket only the product brands that belong to this holding can be found in the shelves, but for a lot of products most consumers won't even know that the products belong to that brand. An example is Nestlè. This brand uses a range of approaches, from a Nestlè named product, through Nespresso and the endorsed Kitkat brand (Abraham & Taylor, 2011). Involving the corporate brands that belong to product brands with an endorsed strategy was too complicated for this research. Therefore, the endorsed brands that were included in the list, like Nestlè, were excluded from the research. Some other brands had to be excluded because they did not change their logo over the past 65 years, or it was impossible to find previous digital versions (including year term). In the end, 66 brands remained to form the corpus.

Another advantage of using a list with supermarket brands is that these brands have to keep developing themselves in order to 'stand out of the crowd'. The products have to be noticed in the shelves, while they are competing against hundreds of other (comparable) products. To find trends, it is desirable to compare different logos next to each other. Company logos that have not changed for many years (like the Shell logo for example) are not of real use in the context of this research.

The list from Symphony Iri contains mainly product brands. These are most suited for finding trends, because they change their appearance more often than corporate brands. Where product brands change their look (packages) every three to five years on average (Morgenson, 1992), corporate brands change their appearance averagely once every eleven years (Roos, 2000). The brand top 100 can be found in appendix A.

RESULTS

The results of the study are described below. First the general findings will be discussed very briefly. Then, the analysis of each subtopic as found in the codebook (color, typology, font, logo symbol, design effects and additional information) is outlined. A table clarifies how many logos were found with certain characteristics, for each period of time. In some cases, a chart is added to visualize the trend that is described. Scatter plots with polynomial trend lines for each construct can be found in appendix H. Also, the appendices contain some other additional results. Appendix I contains a table that describes the most remarkable results, found per brand. And Appendix J shows a table that gives an overview of the most remarkable findings per characteristic.

GENERAL FINDINGS

To define a trend, it is important to see how the studied characteristics changed over time (and if something occurred a lot during a specific time period). To display the data as clear as possible, the findings were classified in different time periods. Table 6 shows how many logos were released during the chosen periods.

Table 6.

Overview of the amount of new logo launches from 66 supermarket brands divided per ten years

Time Period	1950- 1959	1960 – 1969	1970 – 1979	1980 – 1989	1990 – 1999	2000 – 2009	2010 - Present
Number of new releases	14	16	16	42	37	59	29

As table 6 indicates, most new logos were released in the period 200 – 2009. Overall, the year 200 was the year where most new logo launches occurred (4.4%), followed by 2012 (4%), 1997 (4%) and 1980 (4%).

The logos were in use for $M = 167,79$ months (about 13,98 years). The minimal duration that a logo was used was six months. The maximum was 1944 months.

The brand that launched most new logos during the years this research was conducted, was Coca Cola (11 logos), followed by Pepsi (9 logos) and Ariel (8 logos).

COLOR

First, the development of the color use was analyzed. Table 7 gives an overview of the different constructs that were linked to color, divided by different periods of time. The table (7) shows how often the variable was counted. How many percentages the number was -according to the grand total for that specific time period- is explained between the brackets.

Table 7. New logo launches specified for the attributes related to color

The overview is divided per ten years. The table shows the absolute numbers of logo launches, as well as the percentages of the total amount of the specific time period (rounded to the nearest whole number)

	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	2010 - present
Main Color							
Red	5 (36%)	4 (25%)	2 (13%)	18 (43%)	14 (38%)	28 (47%)	12 (41%)
Yellow	0 (0%)	1 (6%)	0 (0%)	1 (2%)	5 (16%)	1 (2%)	1 (3%)
Green	0 (0%)	1 (6%)	0 (0%)	4 (10%)	1 (3%)	7 (12%)	3 (10%)
Blue	2 (14%)	4 (25%)	5 (31%)	8 (19%)	7 (19%)	12 (20%)	9 (31%)
Pink	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Orange	2 (0%)	0 (0%)	2 (13%)	1 (2%)	0 (0%)	1 (2%)	1 (3%)
Brown	1 (7%)	0 (0%)	0 (0%)	1 (2%)	1 (3%)	2 (3%)	0 (0%)
Purple	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Black	2 (14%)	3 (19%)	1 (6%)	3 (7%)	2 (5%)	0 (0%)	0 (0%)
White	2 (14%)	2 (13%)	6 (38%)	6 (14%)	7 (19%)	7 (12%)	3 (10%)
Grey	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other	0 (0%)	1 (6%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Brightness MC							
Light	0 (0%)	2 (13%)	0 (0%)	0 (0%)	1 (3%)	4 (7%)	3 (10%)
Medium	10 (71%)	12 (75%)	13 (81%)	29 (69%)	25 (68%)	37 (63%)	13 (46%)
Dark	4 (29%)	2 (13%)	3 (19%)	13 (31%)	11 (30%)	18 (31%)	13 (45%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Saturation MC							
Low	4 (29%)	2 (13%)	2 (13%)	11 (26%)	3 (8%)	5 (8%)	2 (7%)
Medium	9 (64%)	13 (81%)	13 (81%)	28 (67%)	31 (84%)	45 (76%)	26 (90%)
High	1 (7%)	1 (6%)	1 (6%)	2 (5%)	3 (8%)	9 (15%)	1 (3%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Supporting color							
None	3 (21%)	2 (13%)	4 (39%)	5 (12%)	2 (5%)	1 (2%)	1 (3%)
Red	2 (14%)	3 (19%)	4 (39%)	7 (14%)	8 (22%)	13 (22%)	4 (14%)
Yellow	0 (0%)	0 (0%)	1 (6%)	4 (10%)	5 (13%)	6 (10%)	3 (10%)
Green	0 (0%)	0 (0%)	0 (0%)	1 (2%)	3 (8%)	3 (5%)	2 (7%)
Blue	1 (7%)	1 (6%)	2 (13%)	1 (2%)	4 (8%)	3 (5%)	1 (3%)
Pink	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Orange	0 (0%)	0 (0%)	2 (12%)	1 (2%)	3 (8,1%)	1 (2%)	0 (0%)
Brown	0 (0%)	0 (0%)	1 (6%)	2 (5%)	0 (0%)	0 (0%)	0 (0%)
Purple	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)
Black	2 (14%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)	0 (0%)	1 (3%)
White	6 (21%)	9 (56%)	2 (13%)	20 (48%)	11 (30%)	29 (49%)	15 (52%)
Grey	0 (0%)	1 (6%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	2 (7%)
Other	0 (0%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)
Brightness SC							
Light	0 (0%)	1 (6%)	4 (39%)	2 (5%)	1 (3%)	5 (8%)	4 (14%)
Medium	9 (64%)	11 (69%)	5 (31%)	29 (69%)	30 (81%)	42 (71%)	23 (79%)
Dark	2 (14%)	2 (13%)	3 (19%)	6 (14%)	6 (16%)	10 (17%)	1 (3%)
Missing	3 (21%)	2 (13%)	4 (39%)	5 (12%)	0 (0%)	2 (3%)	1 (3%)
Saturation SC							
Low	2 (14%)	1 (6%)	1 (6,25%)	6 (14%)	3 (8%)	2 (3%)	0 (0%)
Medium	9 (64%)	12 (75%)	10 (62,5%)	30 (71%)	34 (92%)	50 (85%)	27 (93%)
High	0 (0%)	0 (0%)	1 (6,25%)	1 (2%)	0 (0%)	5 (8%)	1 (3%)
Missing	3 (21%)	3 (19%)	4 (39,06%)	5 (12%)	0 (0%)	2 (3%)	1 (3%)
Gradient							
Axial	0 (0%)	0 (0%)	0 (0%)	3 (7%)	4 (11%)	13 (22%)	6 (21%)
Radial	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (8%)	7 (12%)	0 (0%)
None	14 (100%)	16 (100%)	16 (100%)	39 (93%)	30 (81%)	39 (66%)	23 (79%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Colorfulness							
Zero	9 (64%)	13 (81%)	9 (56%)	21 (50%)	9 (24%)	19 (32%)	14 (48%)
One	4 (29%)	2 (13%)	5 (31%)	15 (36%)	22 (59%)	19 (32%)	9 (31%)
Two	0 (0%)	1 (6%)	1 (6%)	1 (2)	5 (14%)	13 (22%)	4 (14%)
Three	1 (7%)	0 (0%)	0 (0%)	1 (2)	0 (0%)	4 (7%)	1 (3,45%)
Four	0 (0%)	0 (0%)	1 (6%)	3 (7)	0 (0%)	4 (7%)	0 (0%)
>4	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)	0 (0%)	1 (3%)
Missing	0 (0%)	0 (0%)	0 (0%)	1 (2)	0 (0%)	0 (0%)	0 (0%)

As the table above shows, the most used main colors were red, blue and white. Red was used most frequent used as main color; it was counted 82 (38%) times. Blue occurred in 48 (22%) cases as main color. White was applied 33 (15%) times. Only in the period 1960-1980, red was not the most found main color for new logo launches, for all other time periods red was the most applied main color.

Figure 5 (see next page) gives a visually good overview of the development of the use of main colors over the years.

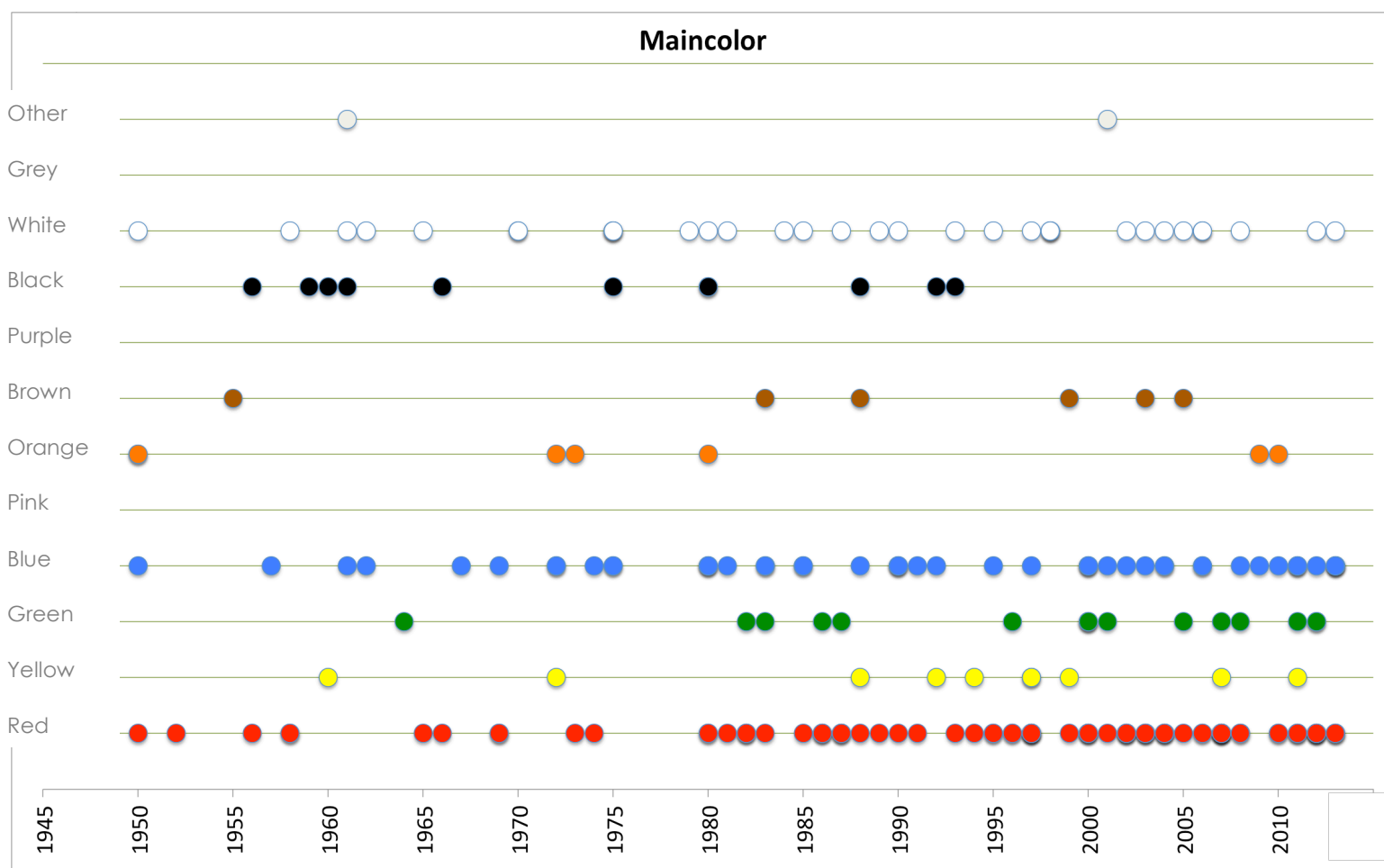


Figure 5. Development of the use of main color in logo design.

Each dot represents a new logo launch. The X-axis represents the time in years and the Y-axis the main color that was used per specific logo launch (per dot). The dots are also colored in the specific color that can also be found along the Y-axis.

As figure 5 shows, red was the most used main color. White was, in contrast to the main color, most used as the supporting color. In the most early time period, white was used in 37,5% of the cases as the supporting color. For almost all other periods of times, this percentage even increased. Hereby, red was the second most applied color. Because red and white were also used frequently as main color (as shown in figure 5), there can be stated that a high amount of logos have a color scheme with red and white in it. A correlation analysis confirms this statement. The variables main color and supporting color are correlated with $r(-.394) = .000$, $p < .01$, which is highly significant.

The results according to brightness and saturation of the colors did not show many notable results, most colors (main and supporting) had a medium brightness and saturation. Colors that have a medium saturation have also a great chance of having a medium brightness. For brightness and saturation applies $r(-.162) = .018$, $p < .05$. The period 2009-present was the only period where more dark- than medium bright colors were measured. A correlation analysis states that particular colors are more likely to have a dark or light brightness, because $r(-.139) = .041$, $p < .05$ for main color and brightness. The results show that the chances are great that a dark brightness is used for the color red (because red was marked with number one). There were no supporting colors with a high saturation found before the 1970's. Since the year 2000 the use of high-saturated colors increased.

The use of a gradient effect was found for the first time in a logo from 1983. Since then, gradient was used more frequently. Since 1990 also a radial gradient was introduced, and used more often ever since. With an overall use of 12%, the axial use of gradient was applied more often than the radial gradient (5%).

Over the years, logos also became more colorful. Figure 6 shows how the colorfulness developed.

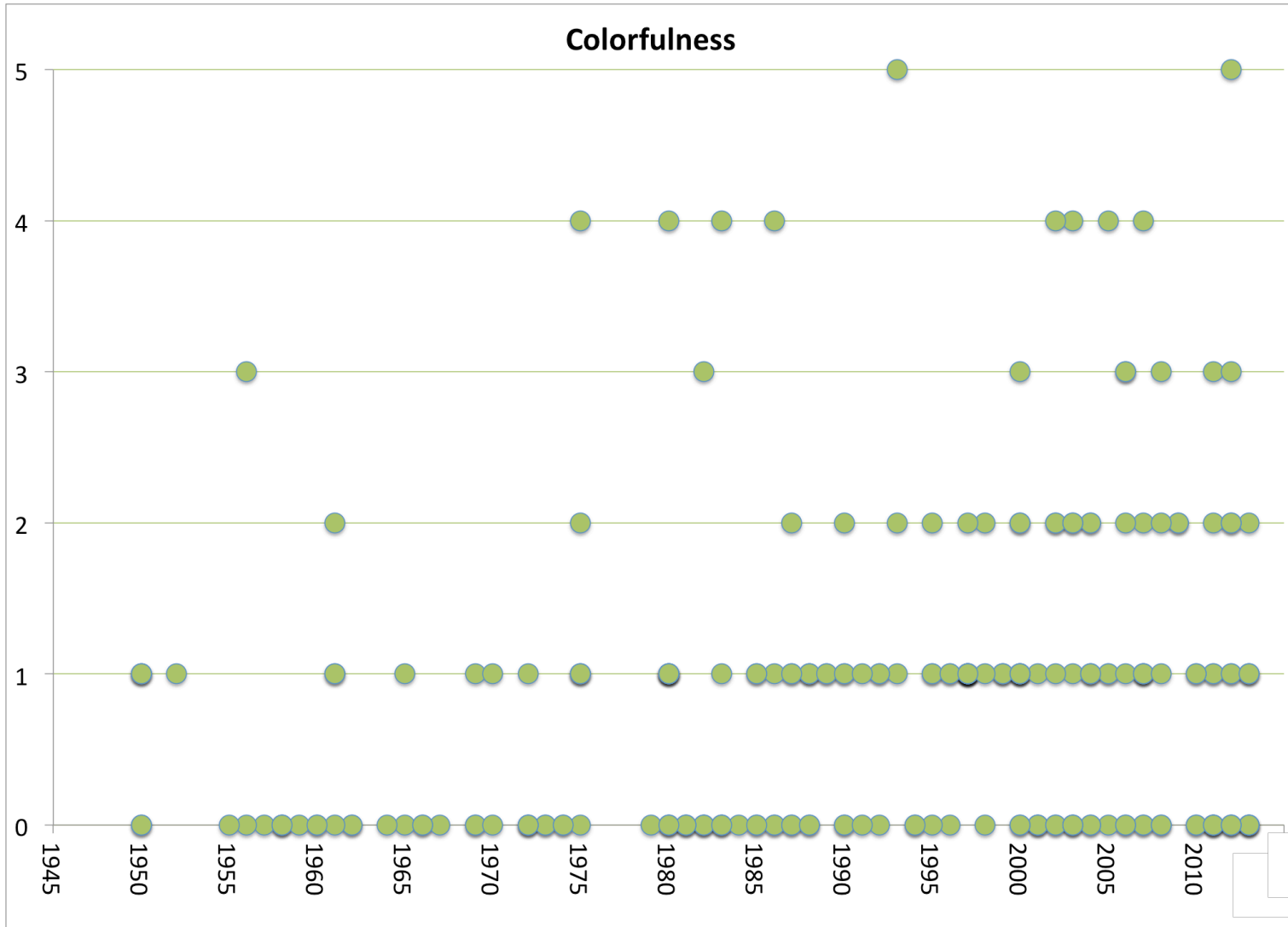


Figure 6. Development of the colorfulness in logo design.

Each dot represents a new logo launch. The X-axis represents the time in years and the Y-axe the amount of added colors (besides the main color and the supporting color) per specific logo launch (per dot).

As figure 6 shows, the greatest amount of logos did not have more than two colors (or with other words, there was no supporting color found) (43%), which shows that a lot of logos do not have a complex design as it comes to the use of colors. However, the use of multiple colors increased over the years. The reason why the amount of colors might have increased, is because over the years some logos also became more representative and organic (see further on in this chapter). If a picture has to be representative and/or have an organic look, the colors should match (a little) with reality. Therefore, more colors need to be added. A correlation analysis shows that those variables have a relation to each other. $R(-.220) = .001$, $p < .01$ for representativeness and colorfulness and $r(-.319) = .000$, $p < .01$ for colorfulness and organic.

TYPOLGY & FONT

After the color use, the kind of logo (was it only text or only a symbol, or a combination of both?) and the kind of font (in case of text) was charted. Table 8 shows the variables that were linked to this topic.

Table 8. New logo launches specified for the attributes regarding to typology and typography

The overview is divided per ten years. The table shows the absolute numbers of logo launches, as well as the percentages of the total amount of the specific time period (rounded to the nearest whole number)

	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	2010 - present
Typology							
Word mark	4 (29%)	6 (38%)	4 (29%)	6 (14%)	0 (0%)	4 (7%)	2 (7%)
Fig. Mark	9 (64%)	10 (63%)	12 (86%)	35 (83%)	37 (100%)	55 (93%)	27 (93%)
Missing	1 (7%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)
Typography							
Serif	4 (29%)	2 (13%)	4 (29%)	11 (26%)	9 (24%)	8 (14%)	1 (3%)
Sans Serif	9 (64%)	14 (88%)	12 (86%)	30 (71%)	28 (76%)	51 (86%)	28 (97%)
Missing	1 (7%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)
Italic font							
Italic	2 (14%)	2 (13%)	0 (0%)	8 (19%)	8 (22%)	11 (19%)	4 (14%)
Non-Italic	11 (79%)	14 (88%)	16 (100%)	33 (79%)	29 (78%)	48 (81%)	25 (86%)
Missing	1 (7%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)
Script font							
Script	3 (21%)	2 (13%)	0 (0%)	4 (10%)	5 (14%)	7 (12%)	3 (10%)
Non-Script	10 (71%)	14 (88%)	16 (100%)	38 (90%)	32 (86%)	52 (88%)	26 (90%)
Missing	1 (7%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Capitals							
All text	5 (36%)	7 (44%)	10 (71%)	14 (33%)	9 (24%)	22 (37%)	12 (41%)
First letter	5 (36%)	7 (44%)	5 (36%)	20 (48%)	22 (59%)	26 (44%)	12 (41%)
Some text	2 (14%)	2 (13%)	0 (0%)	4 (10%)	4 (11%)	6 (10%)	2 (7%)
None	1 (7%)	0 (0%)	1 (7%)	3 (7%)	2 (5%)	5 (8%)	3 (10%)
Missing	1 (7%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)

As it comes to typology, the data shows that it is most common to have a logo with a word mark and a figurative mark (symbol) (87%). Adding a symbol to a logo makes the design more complex. Correlation analyses confirm this, because typology is positively correlated to gradient $r(-.165) = .016, p < .05$ and colorfulness $r(.310) = .000, p < .01$. Which states that word mark logos are less colorful than logo's with a word- and figurative mark and the chance of finding a word mark logo with added gradient is minimal.

Of all logos, 18% had a serif font. Since the last couple of years, the number of new logo releases with a serif font strongly decreased. In comparison, the use of logos

with an Italic font increased over the years. However, still 82% of the fonts were non-italic.

For script fonts, no pattern could be found. The 11% of script logos was all logos that had a consistent script font in all their logos (like Coca-Cola for example).

Most word marks were written with only the first letter as a capital (45%). This was expected, because logos are representations of the names of the brands and names are normally written with the first letter as a capital. However, also a great amount of logos were written completely with capitals (36%). Figure 7 shows that the amount of logos that had no text written in capitals increased over the years.

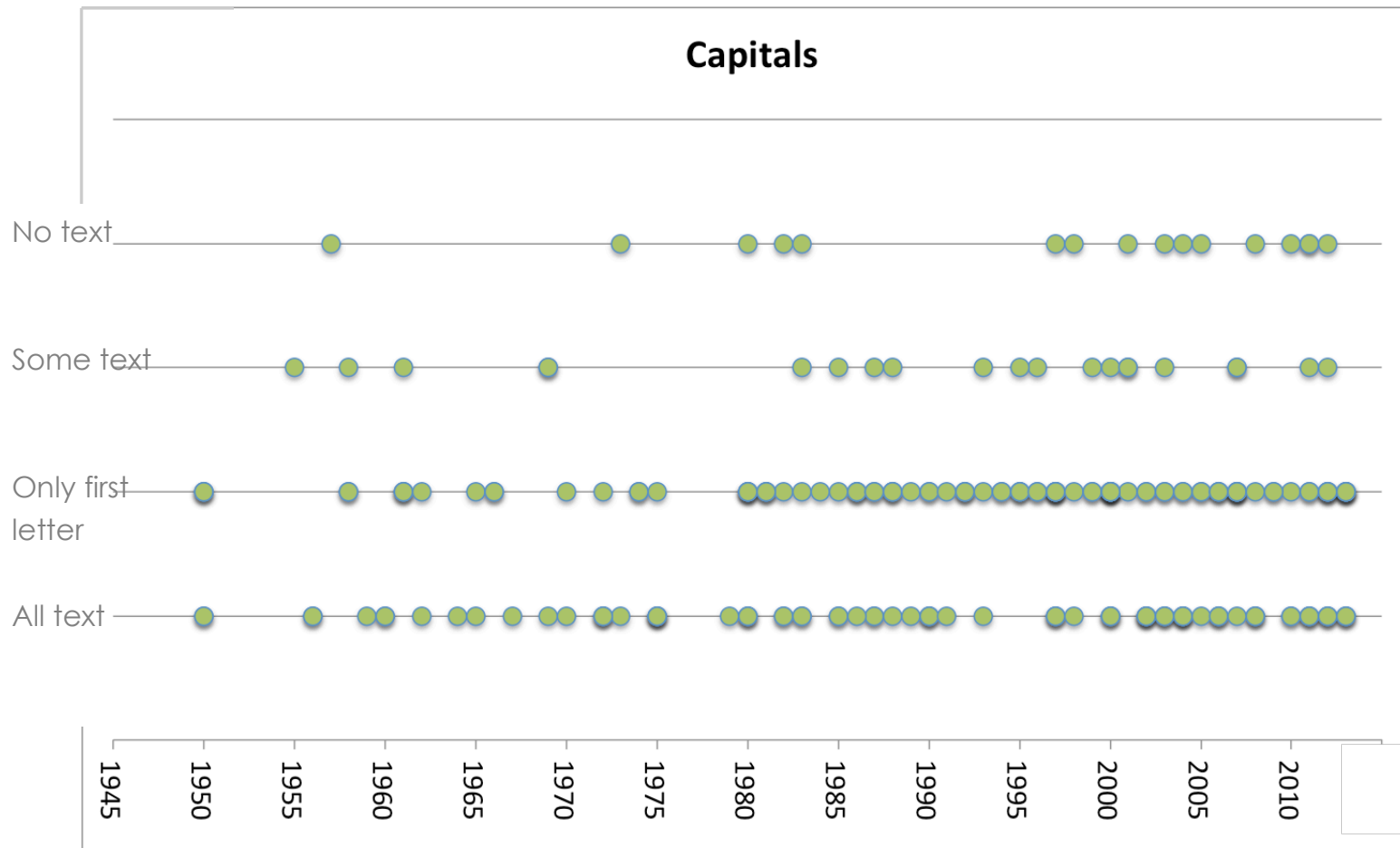


Figure 7. Development of the use of capitals in logo design.

Each dot represents a new logo launch. The X-axis represents the time in years and the Y-axis the capital use that was added to the word mark of the logo.

As seen in figure 7, the amount of dots (new logo launches) that had no text in capitals written at all, was very small at the left side of the chart. This increased over the years. Also, the logos that had only the first letter written as a capital, increased more than the logos that had all text written in capitals.

LOGO SYMBOL

Besides the text, also the symbol was analyzed. The results regarding this construct are listed in table 9.

Table 9. New logo launches specified for the attributes regarding to the features of the logo symbol

	1950- 1959	1960- 1969	1970- 1979	1980- 1989	1990- 1999	2000- 2009	2010 - Present
Representativeness							
Totally	2 (14%)	0 (0%)	1 (6%)	4 (10%)	3 (8%)	10 (17%)	3 (10%)
A little	3 (21%)	4 (25%)	1 (6%)	13 (31%)	13 (35%)	14 (24%)	13 (45%)
Not at all	9 (64%)	12 (75%)	14 (88%)	25 (60%)	21 (57%)	35 (59%)	13 (45%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Organic							
Completely	4 (29%)	4 (25%)	5 (31%)	15 (36%)	15 (41%)	29 (49%)	16 (55%)
Partially	3 (21%)	3 (19%)	3 (19%)	10 (24%)	13 (35%)	21 (36%)	7 (24%)
Geometric	7 (50%)	9 (56%)	8 (50%)	16 (38%)	9 (24%)	9 (15%)	6 (21%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Balance							
Balanced	3 (21%)	4 (25%)	5 (31%)	8 (19%)	7 (19%)	17 (29%)	9 (31%)
Not balanced	11 (79%)	12 (75%)	11 (69%)	34 (81%)	30 (81%)	42 (71%)	20 (69%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Symmetry							
Horizontal	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)
Vertical	4 (29%)	2 (13%)	4 (25%)	10 (24%)	7 (19%)	10 (17%)	4 (14%)
Horizontal & Vertical	2 (14%)	2 (13%)	4 (25%)	9 (21%)	5 (14%)	6 (10%)	5 (17%)
Diagonal	0 (0%)	1 (6%)	0 (0%)	0 (0%)	0 (0%)	3 (5%)	2 (7%)
Not symmetric	8 (57%)	11 (69%)	8 (50%)	23 (55%)	25 (68%)	40 (68%)	17 (59%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Depth							
3D	1 (7%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)	8 (14%)	2 (7%)
Optical	2 (14%)	1 (6%)	1 (6%)	10 (24%)	9 (24%)	29 (49%)	13 (45%)
No depth	11 (79%)	15 (94%)	15 (94%)	32 (76%)	27 (73%)	22 (37%)	14 (48%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Parallel							
Present	3 (21%)	1 (6%)	4 (25%)	7 (17%)	6 (16%)	12 (20%)	8 (28%)
Absent	11 (79%)	15 (94%)	12 (75%)	35 (83%)	31 (84%)	47 (80%)	21 (72%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Repetition							
3 or more elements	5 (36%)	4 (25%)	5 (31%)	11 (26%)	7 (19%)	14 (24%)	12 (41%)
2 elements	0 (0%)	1 (6%)	1 (6%)	6 (14%)	6 (16%)	10 (17%)	4 (14%)
No repetition	9 (64%)	11 (69%)	10 (62%)	25 (60%)	24 (65%)	35 (59%)	13 (45%)

Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Roundness							
Only curves	4 (29%)	5 (31%)	6 (38%)	13 (31%)	20 (54%)	35 (59%)	15 (52%)
Some curves	5 (36%)	7 (44%)	5 (31%)	21 (50%)	14 (38%)	19 (32%)	12 (41%)
No curves	4 (29%)	2 (13%)	4 (25%)	4 (9%)	3 (8%)	2 (3%)	1 (3%)
No symbol present	1 (7%)	1 (6%)	0 (0%)	3 (7%)	0 (0%)	3 (5%)	1 (3%)
Missing	0 (0%)	1 (6%)	1 (6%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)

As can be seen in table 9, the representativeness of the logos increased over the years. Especially since the 1980's, the amount of logos that are (a little) representative grew. It became clearer what the picture within the logo was supposed to represent. However, still 61% of the total amounts of logos were not representative at all. Representativeness is correlated to i.e. colorfulness $r(-.220) = .001, p < .01$, depth $r(.261) = .000, p < .01$, typology $r(-.271) = .000, p < .01$, organic $r(.245) = .000, p < .01$, balance $r(-.307) = .000, p < .01$ and shadows figurative mark $r(.245) = .000, p < .01$. These correlations make sense, because a representative logo needs more colors, more depth and a more organic look, to increase the representativeness. Figure 8 shows a visualization of the development of the representativeness of logos.



Figure 8. Development of the representativeness of logo designs

Each dot represents a new logo launch. The X-axis represents the time in years and the Y-axis amount of representativeness that was found in the logo symbol.

Further, the construct organic did not show very clear results. Over the periods of time, the organic nature of the logos did not tend significantly to any of the options per se. Most of the logos (41%) had an organic nature; but 28% had a partially

organic nature and 30% was geometric. As table 9 shows, the development over the years tended towards a more organic design. The amount of organic logos grew harder than the amount of geometric designs. Of course, organic is highly correlated to roundness $r(.770) = .000, p < .01$, because a geometric logo cannot be round. Furthermore, also lens flare and organic are correlated $r(.145) = .033, p < .05$.

Also, over the years, logos became more balanced. But overall, most of the logos were not balanced (75%). A logo without a figurative mark is not balanced per definition. Typology and balance therefore have an $r(-.213) = .002, p < .01$.

Further, the greatest amount of logos had no symmetric characteristics (62%). The highest amount of logos that were horizontal and vertically symmetric was found in the period of 1980-1989. The most vertically symmetric logos were found in the period of 2000-2009. Overall, vertical symmetry was found a little more often than vertical and horizontal symmetric. A logo that was only horizontally symmetric was only found once, in 2013.

Over the years, more depth effects were added to logo designs. Optical depth was added more frequently to designs since the 1980's. The use of 3D effects became more popular a decade later. Depth is correlated to representativeness, because a depth effect can make a picture look more representative $r(.261) = .000, p < .01$. Shadows are also highly correlated to depth, because an added shadow can contribute to the depth effect. $R(.398) = .000, p < .01$ for shadows word mark and $r(.312) = .000, p < .01$ for shadows figurative mark. The amount of logos with actual 3D effect is still quite small (6%), but this percentage will probably increase over the next years. Figure 9 (see next page) displays the development of the depth effects.

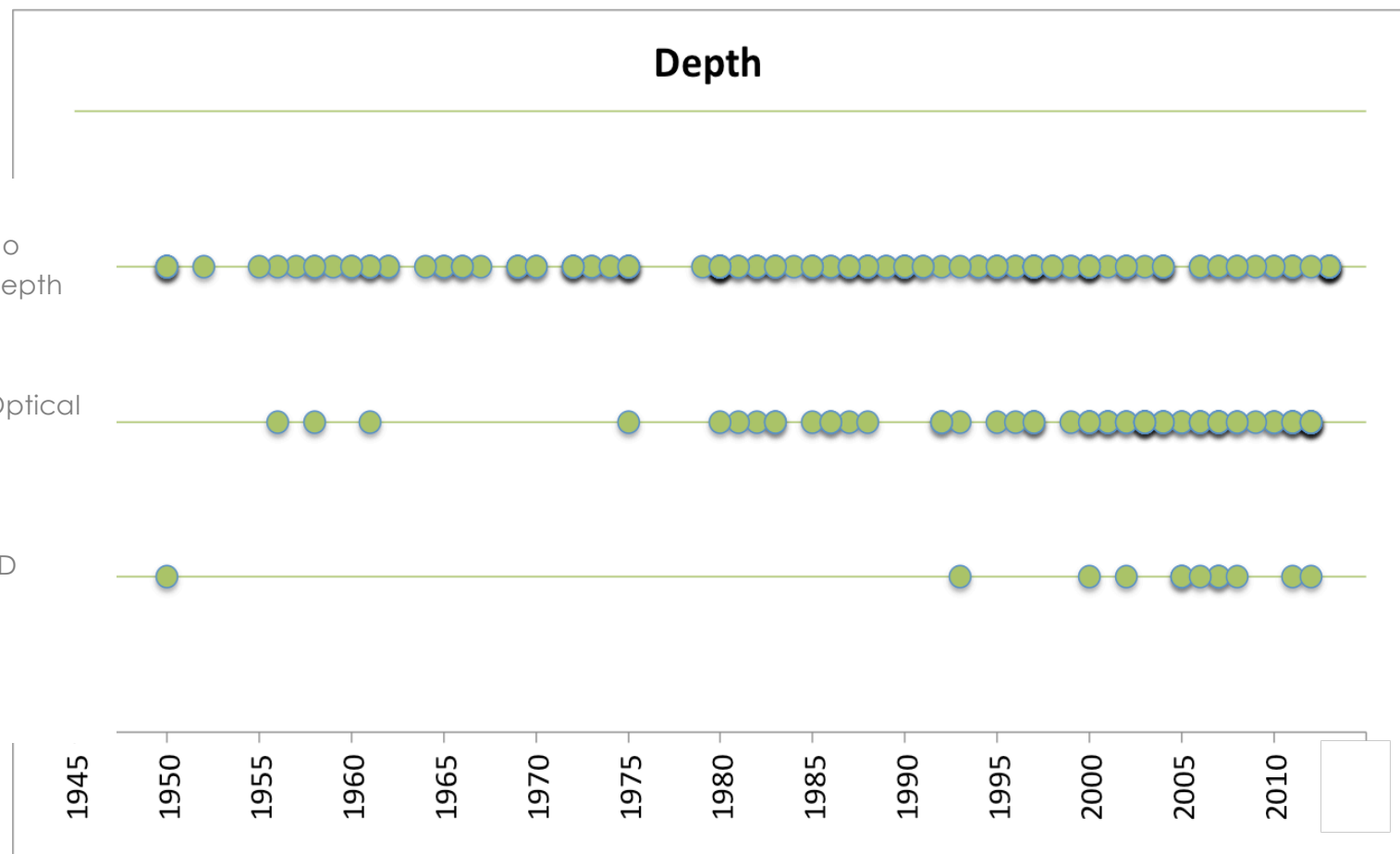


Figure 9. Development of the depth in logo designs

Each dot represents a new logo launch. The X-axis represents the time in years and the Y-axis the type of depth that was scored per logo.

The next analyzed design elements were the parallel elements. Over the years, parallel elements were added to designs more often. During the last three decades, the percentage of logos that had parallel elements present grew from 16% to 20% to 28%. Still, in 81% of the cases were no parallel elements found.

Repeated elements are highly correlated to parallel elements $r(.583) = .000, p < .01$, which is obvious because parallel elements are also repeated. Since the 1980's it became more popular to add repeated elements to a logo (see table 9). In total, 40% of the logos had some repeated elements (two or more). Overall, it was more generic to have three or more repeated elements (27%) than to add only two repeated elements (13%).

According to the shape of the logo, there was found that only 14% of the logos did not have any curves at all (from which 5% were logos without a symbol). Most symbols were completely curved (46%). Roundness is correlated to typography $r(-.190) = .006, p < .01$, which means that it is more likely to find a curved design with a sans serif font and a geometric design with a serif font, than the other way around.

DESIGN EFFECTS

Logos can be made more lively and turned into an eye catcher by adding some design effects. Table 10 gives an overview of the results that were found according to these design effects.

Table 10. New logo launches specified for the design effects added to the logo

The overview is divided per ten years. The table shows the absolute numbers of logo launches, as well as the percentages of the total amount of the specific time period (rounded to the nearest whole number)

	1950- 1959	1960- 1969	1970- 1979	1980- 1989	1990- 1999	2000- 2009	2010 - present
Shadows WM							
Inner shadow	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Outer shadow	1 (7%)	1 (6%)	0 (0%)	5 (12%)	10 (27%)	17 (29%)	9 (31%)
Shadow absent	12 (86%)	15 (94%)	16 (100%)	37 (88%)	27 (73%)	42 (71%)	20 (69%)
No word mark	1 (7%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Missing	0 (0%)	0 (0%)	(0%)0	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Shadows FM							
Inner shadow	0 (0%)	0 (0%)	1 (6%)	0 (0%)	1 (3%)	0 (0%)	0 (0%)
Outer shadow	1 (7%)	1 (6%)	0 (0%)	1 (2%)	2 (5%)	11 (19%)	4 (14%)
Shadow absent	10 (71%)	9 (56%)	12 (75%)	36 (86%)	33 (89%)	45 (76%)	24 (83%)
No figurative mark	3 (21%)	6 (38%)	3 (19%)	5 (12%)	1 (3%)	3 (5%)	1 (3%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Opacity							
No use	14 (100%)	15 (94%)	16 (100%)	40 (95%)	36 (97,3%)	44 (75%)	23 (79%)
With a blend	0 (0%)	1 (6%)	0 (0%)	1 (2%)	0 (0%)	3 (5%)	1 (3%)
Some elements	0 (0%)	0 (0%)	0 (0%)	1 (2%)	1 (2,7%)	12 (20%)	5 (17%)
Whole logo is opaced	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Lensflare							
Present	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)	7 (12%)	3 (10%)
Absent	14 (100%)	16 (100%)	16 (100%)	42 (100%)	36 (97%)	52 (88%)	26 (90%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Table 10 shows that there is a development towards adding more often outer shadow to the word mark. Often, if a shadow is added to the word mark, it is also added to the figurative mark $r(.222) = .001, p < .01$. The figurative mark is designed less often with a shadow than the word mark is. There was a correlation found between the balance of the logo and the use of shadows according to the figurative mark $r(.172) = .011, p < .05$. Apparently, a balanced logo often has an outer shadow added to the design.

The use of opacity effects increased over the years. Most logos with opacity effects had some transparent elements (without a blend) (9%), but the majority of logos did not have any elements that were transparent (88%). Opacity is used more often

within round designs than within geometric designs $r(-.174) = .011, p < .05$ and it also contributes to the depth effect of a design $r(-.373) = .000, p < .01$.

Adding a lens flare to a logo design is something that companies have started to do recently (it occurs since 1999). Lens flares contribute to an organic design $r(.145) = .033, p < .05$, this also shows because lens flares occurred most within logos where the main color was green or blue (which are natural colors).

ADDITIONAL INFORMATION

Finally, data was gathered around information that can be added to a logo, like e.g. a slogan or a word mark. These results are listed in table 11.

Table 11. New logo launches specified for the additional information added to the logo

The overview is divided per ten years. The table shows the absolute numbers of logo launches, as well as entages of the total amount of the specific time period (rounded to the nearest whole number)

	1950- 1959	1960- 1969	1970- 1979	1980- 1989	1990- 1999	2000- 2009	2010 - present
Slogan							
Yes	0 (0%)	5 (31%)	6 (38%)	3 (7%)	3 (8%)	6 (10%)	5 (17%)
No	14 (100%)	11 (69%)	10 (63%)	39 (93%)	34 (92%)	53 (90%)	24 (83%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Additional info							
Year of registration	0 (0%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	4 (7%)	4 (14%)
Location statement	1 (7%)	0 (0%)	1 (6%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)
Registered trademark	2 (14%)	5 (31%)	4 (25%)	11 (26%)	13 (35%)	27 (46%)	7 (24%)
Year and location	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Year and trademark	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (3%)	2 (7%)
Location and trademark	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1,69%)	1 (3,45%)
Year, location & trademark	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)
Additional name	0 (0%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	1 (2%)	0 (0%)
No additional information	11 (79%)	11 (69%)	11 (69%)	29 (69%)	24 (65%)	24 (41%)	13 (45%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Overall, 87% of the logos did not have a slogan added to the design. Slogans are often not integrated to the slogan, but a loose part of the CVI that can be added to visual expressions if it suits. The addition of a slogan to a logo is related to other additional information that is added to the design $r(.154) = .024, p < .05$.

However, most of the logos did not have any additional information added (56,9%). If an extra element was added, it was mostly a registered trademark (32%). Since 1983, some brands started adding the year of registration as well to their logo. This increased since 2002.

SUMMARY OF THE RESULTS

In total, 213 logos from 66 different supermarket brands were analyzed. Most of these logos had red as a main color (38%), followed by blue (22%) and white (15%). Red and white were also most used supporting colors. Since the 1990's, adding a gradient effect to colors was introduced. Ever since, the appliance of this effect showed a moderate growth. The greatest amount of colors did not have more than two colors (43%). However, over the years the amount of colors used in logo design increased.

As it comes to typology, it is most common to have a logo with a word mark and a figurative mark (symbol) (87%). Logos with a word mark and a symbol are more complex and more colorful. Further, of all logos, 18% had a serif font. Since the last couple of years, the number of new logo releases with a serif font strongly decreased. In comparison, the amount of logos with an Italic font increased over the years. However, still 82% of the fonts were non-italic.

Most word marks were written with only the first letter as a capital (45%). Also a great amount of logos were written completely with capitals (36%). The amount of logos that had no text written in capitals increased over the years.

Analyzing the symbol of the logos revealed the following results: the representativeness of the (symbols of the) logos increased over the years. However, still 61% of the total amounts of logos were not representative at all. Representative logos are more colorful, have more depth and are more organic than not representative logos. Most of the logos (41%) had an organic nature; but 28% had a partially organic nature and 30% was geometric. The development over the years tended towards a more organic design. Also, over the years, logos became more balanced. But overall, most of the logos were not balanced (75%).

Further, most logos were not symmetric (62%). Most used symmetry in logo design, was vertical symmetry. Another effect that was applied more often over the years was the depth effect. Optical depth was added more frequently to designs since the 1980's. The use of 3D effects became more popular a decade later. As it comes to shape, most symbols were completely curved (46%). Only 14% of the logos did not have any curves at all.

Other analyzed characteristics were the design effects that can be added to a logo. While analyzing this, it appeared that over the years it became more accustomed to add an outer shadow to the word mark of a logo. Also, the use of opacity effects increased over the years (but the majority of the logos (88%) did not have any transparent elements). Opacity was found more often in round designs than in geometric designs. Adding a lens flare to a logo occurs since 1999 and was found a couple of times ever since.

Finally, additional information that can be added to a logo was analyzed. Slogans were only found in 13% of the cases. Most logos that had extra information had a trademark followed by year of registration.

DISCUSSION

What the above-described results mean and how they can be interpreted (in relation to the literature) is listed in this chapter. The sequence is the same as used to describe the results.

COLOR

Most logo designs had red as main color. Red is one of the Munsell colors (which means that this color is recognized as the same color, across cultures) (Berlin & Kay, 1969). Madden, Hewett and Roth (2000) studied the meaning of colors across different cultures. They found that, across all countries, red is perceived as unique in terms of its meaning. Yet, red was consistently associated with “active”, “hot” and “vibrant”. Red was also associated with “emotional” and “sharp” in most countries. This makes sense, because logos need to activate to choose for a certain brand. A vibrant logo makes more impression.

Second most used were blue and white (a Munsell and an achromatic color). Interesting is that in the study of Madden, Hewett and Roth (2000), blue and white form a cluster (together with green). This was found for all eight countries that they studied. This indicates that they share similar meaning associations. In all countries, these colors are strongly associated with “peaceful”, “gentle” and “calming”. In some countries, customer also associated “beautiful” and “pleasant”. Of course, a logo needs to look beautiful and pleasant. Gentle and calming can also be appealing, especially when the product has similar properties.

Because white and red were also the most popular supporting colors, there can be stated that the main amount of logos (of popular supermarket brands) have a color scheme with white and red in it. This is actually quite remarkable with regard to the meaning that can be associated to these colors. A straight line can be drawn with red on one end and the blue-green-white cluster on the other end. The meaning associations along this spectrum run from “active”, “hot” and “vibrant” to “calming”, “gentle” and “peaceful” (Madden, Hewett & Roth, 2000). White might be used because it is a calm (neutral) color that does not overrule the powerfulness of the red. On the other hand, designers might choose for this combination of colors because they want to give the logo an active and vibrant look, as well as gentle, calming and beautiful (to attract the highest amount of customers). The motivation behind the use of certain colors could be expelled by further research (see chapter ‘future research’).

The color scheme designers chose to add in a logo may be influenced by the color appropriateness (the notion of color-product congruity). In 1935, Schiller stated that there are functional products (like soap) with functional benefits (economical and cleanliness) and sensory-social products (like perfume) that have sensory-social benefits (dignity and luxury). These different product types were associated to different color schemes. In 2006, Bottomley and Doyle also studied this phenomenon. They stated that red is the least sensory-social color within the set of sensory-social colors and blue is the least functional color, within the set of

functional colors. Still, brands promoting a functional image were better received in blue, while brands promoting a sensory-social image were better received in red. The majority of logos analyzed in this research were from functional products (because that is what supermarkets mainly sell). The color use that was analyzed in this study is not completely in line with the theory about color use for specific product categories.

For example, Schiller (1935) stated that breakfast products are a perfect example of functional products. The brands that sell breakfast products that were studied in this research were Campina, Douwe Egberts, Friesche Vlag, Becel, Nescafe, Calve, Appelsientje, Hero, Bolletje, Peijnenburg, De Ruijter, Alpro Soya, Kellog's, Arla and Quaker. For these brands, red and blue were equally often found as main color (both 14 times), but red was found more often as supporting color (six times, where blue was only counted twice). Further, white was used very frequent among these products (eight times as main color and 23 times as supporting color). This shows that the brands that sell breakfast products use red (that was found as more sensory-social color) more often than blue (a functional color). Overall in this study, red was counted in 38,1% of the cases as main color, where blue was found in 22,3% of the cases. Most of the brands that were analyzed in this study sell functional products, so these results are contradictory to the results that Bottomley and Doyle (2006) found in their study.

The results also showed that there is an upward trend towards the amount of colors used in the design of a logo. Over the years, logos became more colorful. The results also showed that logos became more representative and organic and that these features are correlated to each other (because more colors are needed to make something look more like it is 'real'). Also, since the first half of the twentieth century, the printing techniques started to improve (Stol, 2005). The more advanced printing techniques and the advent of the digital age made it easier and more accessible to use and print more colors in designs. Also effects like gradient became more accessible. That could explain the increased use of colors and gradient effects.



By adding a gradient effect, Lipton also added more color to the design of their logo.



Development of color (and gradient) use in the Iglo logo.

Also, research about color and the effect that colors can have within marketing could play a role. By adding more color to a design, brands could manage to stay near their previous designs (which are recognizable for the customers) but at the same time create an advantage by differentiating from their competitors. As Singh (2006) said, color can play a major role by achieving this advantage. An example that illustrates this is the logo shift that Pepsi made. They moved away from red and embraced the color blue (however, they kept a red element) just to distinguish themselves from their main competitor, Coca-cola (Labrecque & Milne, 2012).



The shift that Pepsi made from being a Coca-cola look-a-like towards a more unique appearance. They used another font and added blue to their color scheme.

TYPOLGY & FONT

It used to be more sufficient to have only a word mark as a logo. The launches of logos with only a word mark decreased, until the 1990's none of the new logos that were released consisted of only a word mark. However, since 2000 it became a bit more popular again. Some companies decided to simplify their logo. Pure text logos are the simplest, but at the risk of becoming monotonous (Oswal, Mistry & Deshmukh, 2013). Overall, word mark logos are more simplified. They are less colorful and have fewer effects like gradient added to their design.



Robijn shifted towards a design where they only use a word mark as logo.

Font is an important design element for designing marketing materials, such as logos (Henderson, Giese and Cote, 2004). Fonts can even express a symbolic association. Coca Cola is a good example of a font that reminds of the brand instantly (de Vulder, 2008). Notable was that serif fonts were applied less over the years. Serifs provide some of the most identifiable features of typefaces, and in some cases they reveal clues about their historical evolution (Carter, Day & Meggs, 2012). Apparently, a serif font does not have a 'trendy' look. A sans serif font has a more clean and modern look.

Similar to other situations where type forms deviate from a readers' expectations, italics impede reading. An extreme italic slant can slow the reading process and is disliked by many readers. However, italic type can be very effective when used as means of providing emphasis (Carter, Day & Meggs, 2012). Although it is not very common to use an italic font in logo design, it is interesting to see that more brands changed their font from non-italic to italic than vice versa. Brands that chose an

italic font were for example Appelsientje, Robijn and de Ruijter. They probably added italics to their font to create competitive advantage en lay more emphasis on their brand name.



Appelsientje changed their font into an italic one.

There is no trend found according to the appliance of script fonts. Some brands chose a script font at the beginning of their existence (again, think about the perfect example of Coca-Cola) and all of these brands chose to stay loyal to their script font.



The well known Coca-cola font. They made some changes to their design, but the font has always been the same.

Most logos had a font whereby only the first letter was written as a capital. It is known that capitals can be used to emphasize. Therefore, also quite some logos did have their word mark written in capitals completely. However, recently an increased amount of brands chose to write their word mark with no capitals at all. This trend was also noticed by Wijman (2010). He states that mostly brands that were affected by the economical crisis chose to ban their capitals. For organizations this could be a way to take a step back. From a brand image with bravado, towards a more humble, restrained look. Brands try to be less 'bombastic' and impersonal, and therefore more approachable. Also, the influence of Internet and e-mail addresses (that never included a lot of capitals) and typographic trends probably play a role.



Pepsi and Whiskas are examples of brands that chose to eliminate the capital(s) from their logo.

LOGO SYMBOL

Symbols added to a logo became more representative over the years, which states that it is easier to define what the picture should represent. Hem et al. (2004) found that logo representativeness and design are important determinants of logo success. Representative logos are correlated to colorfulness, depth, typology, organic, balance and shadows figurative mark. Using multiple colors and elements like depth effects and shadows contribute to the representativeness of a symbol.

Over the years, more depth effects were added to logo designs. This is probably because new design programs made it much more simple to add such effects. Blindell (2014) also states that 3D logo design is one of the logo design trends in 2014. According to him, 3D is a technique whereby brand designers create a three-dimensional effect with two-dimensional tools (no special spectacles are required), using color, shading, and foreground/background principles.



Hak gave their logo more depth effect by adding a shadow to their symbol. In a later version, they also made the word mark look more three dimensional.



Douwe Egberts also gave their logo an optical depth effect. Later, they changed it to a more flat design again (see design effects).

Most logos have at least some curves in their design. It is unusual to have complete geometric logos. Remarkable was that the results showed that the more roundness appeared in a logo, the greater the chance that a sans serif font was added to the design. Apparently, roundness and fonts without any additional decoration match better together (the font does not disturb the roundness of the design).



Bolletje kept their design almost as before, the only change they adapted was more roundness in their font and lines.

DESIGN EFFECTS

The results show a growth according to the appliance of outer shadows. For the word mark and the figurative mark, this increased until 2009 (probably because design programs made it more easy to add such effects). After 2009 the appliance of shadow effects started to decrease again. This might be correlated to the trend that is nowadays a buzz around the Internet, called 'flat design'. According to Lapp (2013), flat design was one of the bigger trends of 2013. Flat designs are, as the word says, flat and minimal. Simple flat colors and basic geometric shapes are integrated to these designs. Flat design has been recently used a lot for the redesign of (web) applications, but the decreased use of shadows found in this research could indicate that also logo design (from supermarket brands) are going to tend more towards a flat design.



Douwe Egberts and Becel recently evolved their logo towards a flat design.

The addition of transparent elements (opacity effects) started to become visible since the year 2000. During the time period of 2000 – present, about a quarter of new logo releases had some opacity effects added to their design. According to Logolounge.com, the use of transparency in logo design was a clear trend of the year 2012. The writer, Bill Gardner, stated that there was so much transparency in logo design, that color choices, by necessity, are becoming lighter. Where areas of a design overlap, the new resulting color needs to be readable, not just mud. Those effects were not found in this research. The brightness of the colors tended a little bit towards more lightness, but this only grew by a small percentage. The growth was not equal to the growth of the use of opacity effects. For supermarket brands, mainly transparent elements that do not overlap each other became more popular to add into a new design.



Campina not only used a new color scheme, they also added some transparent circles to their design.

Another effect that increased in popularity was the use of a lens flare in a logo design. This effect was not found before 1999, but used by time to time ever since. (See appendix E for a great visualization of the increased use). Lens flare is

correlated to organic. Besides, this effect was mainly added to a design that had green or blue as a main color. That shows that these designs are tending towards a more natural look. This is probably related to the fact that consumers choose more often for organic, natural food (at least, they are more conscious about it) (Dimitri & Oberholtzer, 2009). Brands that sell products that are related to nature, like for example Campina (if you think about milk, the image of a cow imposes itself to you) are probably trying to respond to this consumer behavior by adjusting their logo towards a more natural look.



Alpro Soya added a lens flare into their more organic looking logo.

ADDITIONAL INFORMATION

The addition of a slogan to a logo design shows some kind of 'wave' pattern. The amount of logos that had a slogan added increased, decreased and increased again. There were no brands that had a slogan added to all of their designs. Of course, slogans change over time and probably not all slogans are suited to incorporate into the design.

Other additional information gave more insights. Since 1983, some brands started to add the year of registration to their logo. This increased since 2002. Apparently, for some brands it became important to show some authority, by letting the consumers know for what period of time they existed and therefore, how many experience they have with the product(s) that they sell. Remarkable is that most of the logos that had a year of registration added, had red as main color. Red is a very powerful color, but according to some color experts, red also signifies a pioneering spirit and leadership qualities, promoting ambition and determination. It is also strong willed and can give confidence to those who are shy or lacking in will power. These brands might try to make a statement in these insecure economic times, as if they want to say: 'we know exactly what we are doing. We are the leading experts for our product category, so it is a save choice to choose our products.'



Van Gilse recently added a year of registration to their design. Verkade used this already in an older version of their logo, but their newest version also has a location statement added.

GENERAL TRENDS

Analyzing and predicting trends can signify major importance for the companies that predict them right. Nowadays, uncertainty can be created because of turbulent and volatile markets. Life-cycles shorten and global economic and competitive forces can influence the market (Christopher, 2000). Logos can be seen as the 'sign board' of an organization and therefore it is important to have a logo that is liked (and easily remembered) by the core customers. Great design can help to achieve such. However, there are other industries where design is much more important than it is in the food industry. Not only the CVI, but also the products are very susceptible to trends. It would make sense if all industries follow some main trends, whereby they inspire each other. In other words, for different time periods, some interdisciplinary features characterized the whole society. Then, logo designers would also be inspired by those common trends. Logo analysis would then not only be interesting for logo designers and marketers, but for everyone that is involved with design somehow. (Or the other way around: logo designers should take generic trends in account while designing a logo).

No trend reports like this research were yet found within the available literature. Some researchers took a more generic look at trends, like for example Bakker (2009). He found that in the fifties, CVI's were introduced. In response, he did several case studies to analyze the development of the CVI between 1960 and 1975. He found that the logo and other visual elements that organizations use are linked to each other since the introduction of the CVI. So, it can be stated that the elements that were found for the logos in this study, are probably trends regarding the whole CVI of these companies. This is supported by the fact that trends for web design show some of the same results as were found in this study, because nowadays, websites are a major part of the CVI. Development of the graphic web design trends from the past until now was not researched yet, but there are quite some trend watchers on the Internet whom are keeping up with current trends. Battjes (2014) for example wrote that web design trends for 2014 i.a. are flat design, almost flat design (for example with some addition of a shadow effect), sans serif fonts and increased use of the color white. Some other experts predicted i.a. simplicity (in stead of complexity), flat design (in stead of 3D/Skeumorphic design) and logos with depth (instead of oversimplified logos) (retrieved from <http://www.drukwerkdeal.nl/blog/7789/design-trends-2014>). Indications for most of these trends were also found in this study.

Because the logo is an important part of the CVI, it makes sense that the logo and other CVI elements are linked, and therefore indicate the same design trends. However, it would be interesting to take it a step further and research whether these trends also influence for example the interior of the company building, or even interior design in general. Maybe also trends in art could be found that show the same pattern as it comes to shapes and colors as were found for logos. Unfortunately, no other studies that reveal those kinds of trends regarding design were found.

PRACTICAL RECCOMENDATIONS

The results of this research might be very interesting for designers. While designing a logo or a CVI, choosing the right strategy is very important for the market position of the brand (Dickson & Ginter, 1987). Within corporate visual identity research, the logo has been highlighted as a key element, which can represent the organization to internal and external stakeholders (Byrom & Lehman, 2007). Logos are one of the main vehicles for communicating the image, cutting through the clutter and speeding recognition of the product or company. Therefore, it is of great importance to make a proper selection for a certain logo. Every design option that the designer chooses can have influence on the impact that a logo can deliver. The logo should be the extension of the strategy that the brand implements.

A very important choice is to choose the right color (combination). Many brands use red in their design, because that color is active and vibrant and it signifies a pioneering spirit and promotes ambition. Red could be chosen as main color if the brand wants to create a look that stands for being an authority. If so, it is recommended to also add the year of registration to the design, to show that you are an expert. Of course, this does not make sense if the organization does not exist for a very long time yet. In that case, it should be reconsidered whether promoting yourself like the authority is a good strategy in the first place, but if it is, it should be reconsidered to add other additional information to the design that can contribute to the credibility. A location statement, when the product comes from a region that is known for it, or at least a registration trademark.

However, other colors could deliver competitive advantage, because they could contribute towards an outstanding look. Blue, green and white are calming and pleasant colors. These colors could also be used when a brand would like to have a more natural appearance. This is especially interesting for brands that deliver products that are closely linked to nature. To create a natural (organic) look, it helps to add roundness, lens flare and multiple colors to the design. Together with shadows and depth effects, this could also contribute towards a representative design. According to the literature, people prefer representative logos to the not-representative one's (Fang & Mowen, 2005).

If a brand wants to deliver a trendy look, it is wisely to choose carefully between either a 3D look, or the opposite: a flat design. Both types appear to be a trend, but of course both provide a different look. If a designer wants to go for the flat design, light colors should be added. The design should be simple and no design effects should be added. Also the use of capitals should be reconsidered. Wijman (2010) stated that brands that want to have a more humble, restrained appearance are removing their capitals from their logo. So, a design with only lowercase letters could contribute to a restrained appearance.

For a 3D effect, multiple design effects could contribute to the design. Clever use of shadows can contribute for example.

No matter what kind of design you chose, it is always good to add round curves to a logo design. This gives the logo a more modern look, especially when the font is a sans serif letter type, because this is complementary to a round design.

For designers, it is always important to be aware of the Corporate Identity and the Corporate Visual Identity of a brand. Also the brand strategy should be taken into consideration while thinking about the logo design. Not just design just what you like yourself, but design with the customer in mind. Never forget the target audience and their buying intentions.

“People ignore design, that ignores people”
-Frank Chimero-

FUTURE RESEARCH

This research showed some interesting findings with regard to color use in logos. There is some research done about the impact colors can have on someone's mood, or on buying intentions, but scientific research about the impact of color is still quite limited. In line with the findings of this research, it would be interesting to conduct research about the impact of color specifically for logos. For example, to see if consumers indeed rate logo's that are red and have a year of registration added higher for authority and credibility. Or, if red logos indeed are interpreted as powerful, vibrant logos. And blue logos as calmer, or more organic.

Also, a designer can simply follow trends to create a trendy look, but at the end, the consumer should be attracted to the logo. A logo needs to contribute to a positive buying intention. Therefore research could be conducted about the different types of logos (organic, representative, 3D, flat design) and their likeability. Maybe even divided within different groups of customers. It will become more simple for designers to make certain design decisions, because the effects that are disliked by the target group should not be considered as an option.

A theory that is very interesting regarding this topic is the theory of processing fluency. Aesthetic pleasure is a function of the perceiver's processing dynamics: the more fluently perceivers can process an object, the more positive their aesthetic response (Reber, Schwarz & Winkielman, 2004). It could be researched whether variables that are known to influence aesthetic judgments, such as figure-ground contrast, stimulus repetition and symmetry also influence the likeability of logo designs.

As it comes to the practical use of the results, it would have been interesting to see the results for a larger amount of recent logos. An interesting follow-up research would be to conduct the same kind of information (use the codebook again to analyze the logos) but only for logos that are in use at the moment. A large sample with logos from different product categories could be analyzed. By comparing the different categories, the difference between product categories could be mapped. It would be interesting to see whether these differences are major, or if the same trends play a part amongst all kinds of product brands.

Also, as already described in the discussion, comparing logo design to other design trends would reveal interesting research. The codebook as developed for this research could be used for many other purposes. Other logos within other branches could be studied, to see whether certain branches are susceptible to certain trends. And with some adjustments, the codebook could also be used to research other design expressions, like for example architecture or art. A correlation analysis could reveal whether different design elements might influence each other or not.

LIMITATIONS

As it comes to scientific research, it is always difficult to achieve complete reliability. Within this study, the codebook was tested for inter-rater reliability (data was independently coded and the codings were compared for agreement (Armstrong, Gosling, Weinman & Marteau, 1997)) but still only one researcher did the whole analysis. Therefore, the results are not completely objective. To increase the reliability, other researchers should code the logos as well and the inter-rater reliability between all of these results should be measured.

Another insecurity is the completeness of the corpus. Only few of the companies, whose logos were studied, were able to send their previous logo designs per email. Some of the companies did not have their previous designs digitalized very well; others refused to cooperate, because they got a lot of that kind of requests. So, a lot of logos had to be found on the Internet. Eventually, after many of research hours, the researcher managed to find logos for the majority of the brands. But since different sources were used to hunt down these logos, it is not sure whether the list of logos is complete, or not. An important source to find some of the older logo designs was adviz.nl. This website stores old posters and commercials. The logos were conducted from these marketing expressions. So, in most cases there was no ready list with all logo versions already put on a timeline.

Because it was so difficult to find old logos and because the trends that play a role nowadays (and probably in the future) are of more practical utility, it probably would have been a better idea to conduct a larger sample of recent logos. That could have been providing more accurate results according to the trends that influence the logo landscape at the moment. It would especially increase the practical use of the results. At the other hand, it was interesting to see the developments throughout all these years and it was a valuable complementary to the existing literature.

CONCLUSIONS

Due to the use of content analysis, the results of the research are divergent and sometimes complex. Therefore, the main conclusions that were found are listed below (this are generalized results).

- Most logos had red as a main color
- Most logos have a red-and-white color scheme
- Another popular color in logo design is blue
- Colorfulness has been increasing
- A sans serif font is added more often. This adds a more modern look to a logo design.
- Probably because of the crisis, more brands choose to get rid of the use of capitals in their logo design
- Depth effects are more often added to designs, they also look more advanced than they used to
- Geometric logos do not occur very often, but logos even start to become rounder
- In contrast to 3D effects, also flat design seems to be a trend. Back to very simple -and as the word says- flat designs
- Opacity is added more often to designs than it used to
- Lens flare is added more often to designs than it used to
- Brands more often tend towards an organic, more natural look
- Brands try to show their authority by adding additional information like a year of registration or a location statement to their logos

ACKNOWLEDGEMENT

Well. This was it. You'll only find a list of the literature I used and some (oke, a lot) appendices. But this is the end of my thesis. I am done writing. For months, this was a huge part of my life and now it's over. The process was interesting. I hated it and I loved it. Finding and analyzing 213 logos was a lot of work. Older logos are not digitalized consequently, so I had to do some serious research to find all those logos. But once I did, of course I was proud. And I actually had a lot of fun studying all the old commercials and posters. Using the codebook to analyze the logos became, well, boring after about 20 of them. But once I had the results it was really cool to see the patterns and to define some trends. And with addition of some further research, I really believe that it is very useful for companies and designers.

At least, I learned a lot from writing this thesis and I hope that those who'll read it also do.

I want to thank those whom have been patient with me during this process. Guus, Kai & Sabine, thanks for listening to all my stories and to help me where you could. Hans & Petra, thanks for your believe and some critical input.

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APPENDICES

APPENDIX A – TOP 100 OF DUTCH COMPANIES 2012

	Campina
	Marlboro
	Douwe Egberts
	Coca Cola
	Heineken
	Unox
	Dr. Oetker
	Friesche Vlag
	Pall Mall
	Becel
	Camel
	Amstel
	Grolsch
	Lays

	L & M
	Danone
	Honig
	Kent
	Knorr
	Lu
	Van Nelle
	Hak
	Blue Band
	Nescafé
	Milner
	Calvé
	Appelsientje
	Mona
	Pickwick
	Hertog Jan

	Bavaria
	Spa
	Iglo
	Smiths
	Conimex
	Maggi
	Robijn
	Chiquita
	Bio+
	Mora
	West
	Drum
	Ola
	Verkade
	Hero
	John Player Special

	Ariel
	Fanta
	Avika
	Pampers
	Page
	Nestlé
	Lipton
	Beemster
	Grand'Italia
	Johma
	Bolletje
	Duyvis
	Nutrilon
	Peijnenburg
	Chocomel
	Karvan Cevitam

	Nivea
	Lucky Strike
	Croma
	Caballero
	Roosvicee
	Heinz
	De Ruijter
	Alpro Soya
	Maaslander
	Cool Best
	Red Bull
	Dreft
	Lindemans
	Bertolli
	Almhof
	Dubbel Friss

HARIBO	Haribo
<i>Kellogg's</i>	Kellogg's
	Wicky
	Bonduelle
mentos	Mentos
	Verstegen
	Whiskas
	Jupiler
	Koopmans
	Remia
	Kannis & Gunnink
	Stuyvesant
	Liga
	Van Gilse
	Quaker
	Arla

	M&M's
	Pepsi
	Samson
	Wagner
	Gauloises
	Sun

APPENDIX B – POSSIBLE ADDITIONAL CODEBOOK ELEMENTS

Logo 1 (Campina)	Logo 2 (Hak)	Logo 3 (Verkade)
Roundness x5	Roundness x2	Graceful font x2
Oval x3	Oval x2	Location statement x4
Outer shadow x3	Repeated shapes	Year of foundation statement x3
Gradient	Depth x3	Sharp corners x2
Color details	Friendly font x2	Arrow x3
Friendly font	Gradient	Outer shadow x2
Trademark in capitals x3	Shape-in-shape	Logo in logo (horse) x4
Shape-in-shape	Pellets	Registered trademark x2
Lighten	Transparency	Repeated shapes
Wordmark in figurative mark	Wordmark in figurative mark	Bright colours x2
Lens flare x3	Inner shadow x3	Shadows
Landscape	Landscape	Different
Sun	Lens flares x3	Tight
Bright colours x5	Green x7	Detailed
Peaceful	Stripes x3	Old fashioned x2
Depth x2	Lighthness	Quality
Gloss x2	Natural x2	Expensive
Playfull	Simple	Multiple lettertypes
Abstract	Clear	
Timeless		
Tightness		
Healthy		
Vague outline		

Logo elements described by random respondents for three different logos. These descriptions led to extra elements of the codebook

APPENDIX C – FIRST VERSION OF THE CODEBOOK

Start date	Literature
End date	
Duration Time	
Main/supporting color	Gage (1999); Hines and Bruce (2007); Berlin and Kay (1969)
Brightness	Gao and Xin (2006); Berlin and Kay (1969); Mervis, Catlin and Rosch (1975)
Saturation	Gao and Xin (2006); Berlin and Kay (1969); Mervis, Catlin and Rosch (1975)
Colorfulness	Gage (1999); Hines and Bruce (2007); Berlin and Kay (1969)
Construction	Adîr, Adîr and Pascu (2012); Budelmann, Kim and Wozniak (2010)
Typography	WANG AND CHOU (2011); Jolly (2004)
Representativeness	Henderson and Cote (1998); Fang and Mowen (2005).
Illustrative	Henderson and Cote (1998)
Organic	Henderson and Cote (1998)
Balance	Henderson and Cote (1998)
Symmetry	Henderson and Cote (1998)
Depth	Henderson and Cote (1998); Budelmann, Kim and Wozniak (2010)
Parallel	Henderson and Cote (1998)
Repetition	Henderson and Cote (1998); Lauer & Pentak (2011)
Roundness	Henderson and Cote (1998);

APPENDIX D – RESULTS OF THE PRETEST

The first version of the codebook was pretested by the researcher and two other coders. These coders used the codebook to analyze two different logos. To find out the inter-rater reliability, KALPHA and Kappa were calculated. For logo 1 (a logo from Becel), KALPHA was 0,89. For logo 2 (a logo from Fanta) a KALPHA of 0,9 was found. To make sure the codebook is as complete as possible, also Kappa was calculated between all the raters. The results are shown in the tables below

Kappa Becel

	1	2	3
1		0,54	0,60
2	0,54		0,48
3	0,60	0,48	

Table 3.3 Calculated kappa

between the three pretesters,
for the review of the Becel logo

Kappa Fanta

	1	2	3
1		0,63	0,35
2	0,63		0,54
3	0,35	0,54	

Table 3.4 Calculated kappa
between the three pretesters,for
the review of the Fanta logo

While analyzing the Becel logo, discrepancy between the coders occurred among the following items: Brightness, saturation, saturation of the supporting color, gradient, colorfulness, typography, script font, bold font, spacing, representativeness, organic, symmetry, depth, repetition, roundness and opacity.

For the Fanta logo the problem established among saturation, saturation of the supporting color, gradient, colorfulness, typography, spacing, representativeness, symmetry, depth, parallel, repetition and shadows.

APPENDIX E – FINAL CODEBOOK

A1 Coder	First character of the prename	
B2 Start date	The date the logo was introduced	
B3 End date	The date the logo was replaced by another version	
B4 Duration time	Time in months that the logo was in use	
C5 Main color [<i>the color that colors the biggest part of the surface</i>]		
	01 = Red	
	02 = Yellow	
	03 = Green	
	04 = Blue	
	05 = Pink	
	06 = Orange	
	07 = Brown	
	08 = Purple	
	09 = Black	
	10 = White	
	11 = Grey	
	12 = Other	
C6 Brightness [<i>whether it is a dark or a light version of the above selected color</i>]		
	01 = Light	
	02 = Medium	
	03 = Dark	
C7 Saturation [<i>Whether the color has a high saturation, intense color, or a low saturation, more of a grey-tone</i>]		
	01 = Low	
	02 = Medium	
	03 = High	
C8 Supporting color [<i>the color that colors the second biggest part of the surface</i>]		

	01 = Red	
	02 = Yellow	
	03 = Green	
	04 = Blue	
	05 = Pink	
	06 = Orange	
	07 = Brown	
	08 = Purple	
	09 = Black	
	10 = White	
	11 = Grey	
	12 = Other	
C9 Brightness of the supporting color <i>[whether it is a dark or a light version of the above selected color]</i>		
	01 = Light	
	02 = Medium	
	03 = Dark	
C10 Saturation of the supporting color <i>[Whether the color has a high saturation, intense color, or a low saturation, more of a grey-tone]</i>		
	01 = Low	
	02 = Medium	
	03 = High	
C11 Gradient <i>[The colors produced by a gradient vary continuously with position, producing smooth color transitions. Axial gradients go from one point to another, where radial gradients are a circle with one color at the inside and another at the outside]</i>		
	01 = Axial gradient	
	02 = Radial gradient	

	03 = No gradient	
C12 Colorfulness [How many other colors (besides main color and supporting color does the logo contain)]		
	00 = 0	
	01 = 1	
	02 = 2	
	03 = 3	
	04 = 4	
	05 = more than four	
The question starting with a 'D' are only relevant if the logo contains text! (Otherwise these fields can remain empty, please continue to sector E).		
D13 Typology [How the logo is build- up: a picture (figurative mark) and characters or only characters (word mark)]		
	01 = A word mark	
	02 = A figurative mark and a word mark	
D14 Typography [The font that is used in the text. Serif fonts have small decorative strokes, sans serif fonts do not have any additional decoration]		
	01 = Serif font	
	02 = Sans serif font	
D15 Italic font [Italics are characterized by right- slanting strokes developed from the roman style. E.g. <i>Italic</i> vs. non-italic]	01 = Italic font	
	02 = Non italic font	
D16 Script font [The symbols of the language are written in a conjoined and/or flowing manner <i>Like this</i>]	01 = Script font	
	02 = Non script font	

D17 Capitals [Whether the text is written in capitals or not]		
	01 = All text is in capitals	
	02 = Only the first letter is a capital	
	03 = Some of the text is in capitals (more than only the first letter)	
	04 = None of the text is in capitals	
E18 Representativeness [The degree of realism in a design, if it is a symbol with text, only look at the symbol. If it is only a word mark, it is not representative per definition]		
	01 = totally representative (e.g. photograph)	
	02 = a little representative (it is clear what it should propose)	
	03 = not representative (abstract symbol)	
E19 Organic [Natural shapes are shapes that are shapes you also see in nature, like irregular curves. The opposite is geometric design, which refers to straight lines and corners. Text can also be organic or geometric]		
	01 = completely organic design (no corners)	
	02 = Partially organic design (combination of natural shapes and geometric shapes)	

	03 = geometric design	
E20 Balance <i>[Balanced design has a center of suspension and the different sides of the picture around the center are in balance. Is only relevant for the symbol]</i>		
	01 = Balanced	
	02 = Not balanced	
E21 Symmetry <i>[Symmetric designs appear as reflection along one or more axis. Assess this only for the figurative mark]</i>		
	01 = Horizontal symmetric	
	02 = Vertical symmetric	
	03 = Horizontal and vertical symmetric	

	04 = diagonal symmetric	
	05 = not symmetric	
E22 Depth [Depth gives the appearance of a three-dimensional design. Sometimes there is just a line placed around an image or word mark to make it look a little more in depth, in this case we call that optical depth.]		
	01 = Three dimensional	
	02 = Optical depth	
	03 = No depth	
E23 Parallel [Parallel designs contains multiple (three or more) lines or other elements that appear adjacent next to each other]		
	01 = parallel elements present	
	02 = parallel elements absent	
E24 Repetition [Repetition of elements happens when elements (at least two) are identical to another. The elements do not have to be placed next to each other]		

	01 = 3 or more repeated elements	
	02 = 2 repeated elements	
	03 = no repetition	
E25 Roundness [Round designs are made of curved lines]		
	01 = only curved lines	
	02 = some curved lines	
	03 = no curved lines	
F26 Shadows word mark [Whether there is a shadow added to the design of the word mark]		
	01 = Inner shadow	
	02 = Outer shadow	
	03 = Shadow absent	
F 27 Shadows figurative mark [Whether there is a shadow added to the design of the figurative mark]		
	01 = Inner shadow	
	02 = Outer shadow	
	03 = Shadow absent	
	04 = No figurative mark present in the logo	
F27 Opacity [Opacity specifies the transparency of an element, so whether the color is meant to be transparent or not]		
	01 = No use of opacity	
	02 = Opacity with a blend (overlap of two or more elements that are transparent)	

	03 = Some of the elements are transparent (but have no overlap)	
	04 = The whole logo is colored with an opacity color	
F28 Lensflare <i>[The spatial distribution of the lens flare typically manifests a several starburst, rings or circles in a row across the image]</i>		
	01 = Lens flare present	
	02 = Lens flare absent	
F29 Slogan <i>[Is there a slogan included in the logo?]</i>		
	01 = Yes	
	02 = No	
F30 Additional information <i>[Information companies may add to a logo to reveal more information about the organization]</i>		
	01 = Year of registration	
	02 = Location statement	
	03 = Registered trademark	
	04 = Year of registration and location statement	
	05 = Year of registration and registered trademark	

	06 = Location statement and Registered trademark	
	07 = Year of registration, location statement and registered trademark 08 = Additional name	
	09 = No additional information	

APPENDIX F - CORPUS



1991 - 2004



2004 - present



2005 - 2006



2006 - present



1983 - 2001



2001 - 2011



2011 - present



1952 - 2000



Bolletje®

2000 - 2007



Bolletje®

2007 - present



1980 - 1995



1996 - present



1989 - 1995



1995 - 1997



1998 - 2013



2013 - present



1993 - 2000



2001 - 2012



2012 - present



1961 - 1977



1977 - 1980



1980 - 2013



2013 - present



1980 - 2011



2011 - 2012



2012 - present



1950 - 1975



1975 - 1999



1980 - 2006



2006 - present



1973 - 1988



1988 - 1994



1994 - 1999



1999 - 2005



2005 - present



1967 - 1980



1980 - 1987



1987 - 1997



1997 - 2004



2004 - 2008



2006 - 2008



2008 - 2012



2012 - present



2000 - 2008



2008 - present



1962 - 1972



1972 - 1982



1982 - 1999



1999 - 2007



2007 - present



1992 - 2010



2010 - 2013



2013 - present



1983 - 1996



1996 - 2002



2002 - 2013



2013 - present



1958 - 1969



1969 - present



1969 - 1987



1987 - 2000



1996 - 2003



1996 - 2003



2001 - 2003



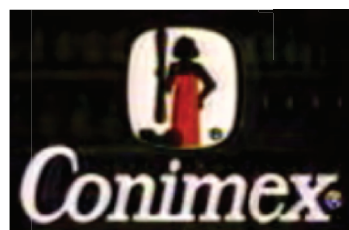
2003 - 2007



2007 - 2009



2007 - present



1981 - 1985



1985 - 1992



1992 - 2011



2011 - present



1975 - 2000



2000 - 2009



2009 - present



1980 - 1990



1990 - 2004



2004 - present



1955 - 1985



1985 - 1999



1999 - present



1987 - 2001



2002 - 2012



2013 - present



1962 - 1972



1972 - 1988



1988 - 1997



1995 - 1997



1997 - 2006



2004 - 2009



2009 - present



1975 - 2000



Friesche
Vlag®

2000 - present



1988 - 1995



1995 - present



1982 - 1986



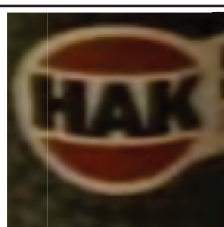
1986 - 2012



2012 - present



1964 - 1983



1983 - 2000



2000 - 2011



2011 - present



1993 - 2006



2006 - 2008



2008 - present



1992 - 2005



2005 - present



1950 - 1974



1974 - 2013



2013 - present



1962 - 1972



1965 - 1975



1975 - 2004



2004 - present



1961 - 1983



1983 - 2004



2004 - 2011



2011 - present



1981 - 2011



2011 - present



1958 - 2012



2012 - present



2000 - 2007



2007 - present



1979 - 1989



1989 - 2002



2002 - present



1965 - 1986



1986 - 1996



1996 - 2003



2003 - 2007



2007 - present



1985 - 2000



2000 - 2012



2012 - present



1980 - 2002



2002 - present



1982 - 1997



1997 - 2011



2011 - present



2010 - 2013



2013 - present



1972 - 1987



1988 - 2003



2003 - present



1974 - 2000



2000 - present



1973 - 1990



1990 - 2002



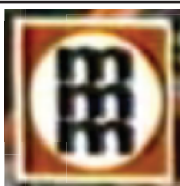
2002 - 2008



2008 - 2013



2013 - present



1980 - 1997



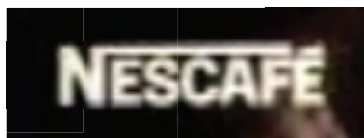
1997 - 2010



2010 - present



1960 - 1970



1970 - 1990



1990 - 1998



1998 - present

NIVEA

1959 - 2000



2000 - 2011



2011 - present



1950 - 2013



2013 - present



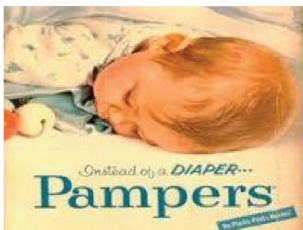
1950 - 1997



1997 - 2013



2013 - present



1961 - 1966



1966 - 1981



1981 - 2001



2001 - present



1983 - 2005



2005 - 2010



2010 - present



1950 - 1961



1961 - 1973



1970 - 1987



1987 - 1991



1991 - 1997



1997 - 2003



2003 - 2008



2008 - present



1956 - 1960



1960 - 1986



1986 - 2007



2007 - 2012



2012 - present



1980 - 1990



1990 - 2000



2000 - present



1982 - 1987



1987 - 2004



2004 - present



1956 - 1997



1997 - 2003



2003 - present



1958 - 1986



1986 - 1995



1995 - 1997



1997 - 2006



2006 - present



1985 - 2002



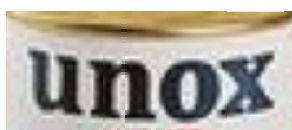
2002 - present



1966 - 2006



2006 - present



1957 - 1975



1975 - 1990



1990 - present



1982 - 2012



2012 - present



1994 - 1997



1997 - 2002



2002 - 2007



2007 - 2012



2012 - present



1975 - 1988



1988 - present



1984 - 1998



1998 - 2002



2003 - present

APPENDIX G – GUIDELINES TO THE CODEBOOK

SHAPE OF THE LOGO

Logos can be constructed in different ways. Sometimes it is hard to see what elements all belong to the design of the logo and what elements for example belong to the house style. Also, some logos contain the color white, where other logos have no clear contour. Some parts of the logos are empty and will be filled with the color of the background where they are placed. In this case that is often white, because paper is white. The coder should notice that there is a difference between a white filling (because of the background) or white color use within the logo (this can also occur with other colors because some logos in this research are a print screen).

For example:



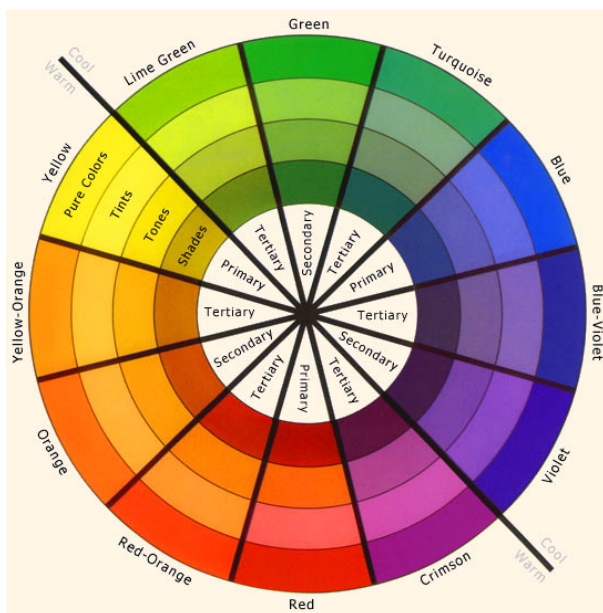
White as a color
that is part of the
logo



White as
background color

COLOR

It is not hard to see what colors a logo contains, but defining the brightness and the saturation of those colors led to more discrepancies. Probably because the boundary between for example light and medium is very thin. The color scheme as shown below gives an insight in differences between colors. The outer ring gives an overview of pure colors. The pure colors are medium in saturation and medium in brightness. The second ring shows lighter versions of the colors, or colors with low saturation. The most inner ring shows colors with shades, or high saturation.



TYPOGRAPHY

Whether the letter type is serif or sans serif is hard to distinguish when it is not completely clear what is meant by this term. A letter type is serif if there is a decorative stroke at the end of all letters, how small this decorative stroke is does not matter. Any stroke counts. An example is shown in the pictures below.



Serif font



Sans serif font

SCRIPT FONT

A script font is a graceful font that reminds of handwriting. At least two letters are adjunct to one another. An example is shown in the pictures below.



Script font



Non script font

REPRESENTATIVENESS

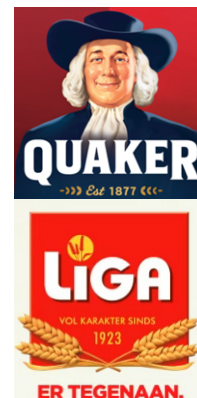
Representativeness refers to the symbol (figurative mark) of the logo. When the logo contains a word mark only it is per definition not representative. An abstract symbol is not representative as well. A symbol that makes clear what it should look like, but is still a lot more abstract, is a little representative. A picture or a drawing that comes very close to reality is representative. To clarify the differences some examples are shown below.



Not representative



A little representative



Totally representative

SYMMETRY

The attribute symmetry is only applicable to the symbol, because a word mark is per definition not symmetric. So, all the text within the logo should not be taken into account. The symbol is symmetric if you optical fold the picture in half and the two halves fit together perfectly. The imaginary line can be drawn horizontal, vertical and diagonal. It

can also appear that a symbol is horizontal as well as vertical symmetric. The coloring of the symbol should be symmetric as well for the symbol to gain the attribute symmetrical.



Vertical symmetric



Horizontal and vertical symmetric



Not symmetric

DEPTH

Some design effects can make it appear as if a logo jumps off the page, they are designed three-dimensional. This can occur to the word mark, the illustrative mark, or both. Sometimes the only effect added to make a logo look a little bit three-dimensional is a line around the word/illustrative mark. This is called optical depth. The attribute optical depth must be chosen if a line is the only effect added to give a 3D effect. As soon as the design is more extensive, also a shadow is added for example, we speak of a 3D effect. The difference is shown below.



3D Effect



Optical depth



No depth

REPETITION

Repetition is about repeating elements within the symbol. There could be repeating elements within the word mark as well, if a letter is used twice (or even more often), but that has to do with the name of the company/product and not with design elements. The name also does not change in almost every case, so repetition within the name is not of interest in this research at all. Repetition is about repeated shapes; the colors of the shapes however do not need to be the same per se.

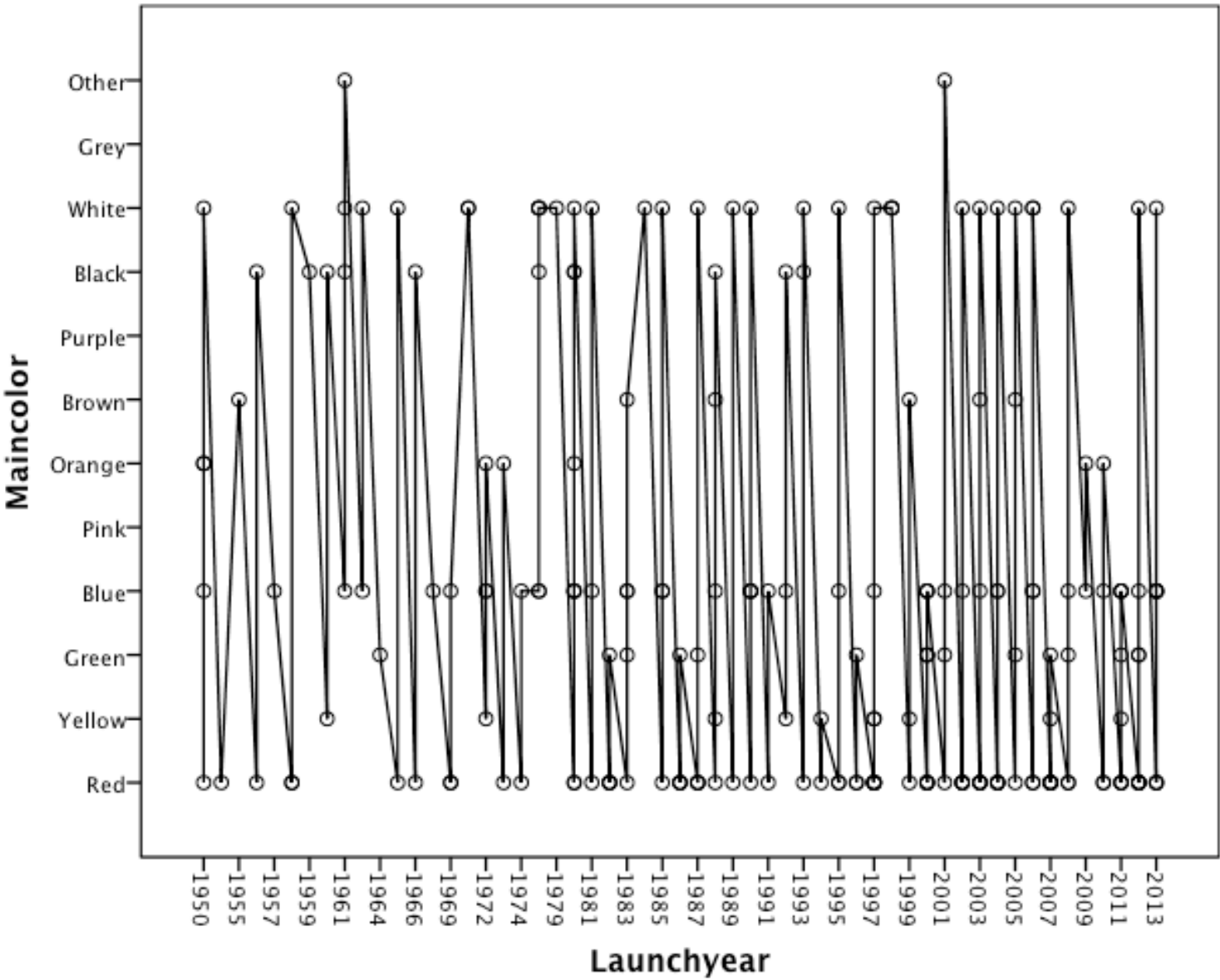


No repetition



Repeated elements

APPENDIX H - SCATTER PLOTS



Brightness

Dark
Medium
Light

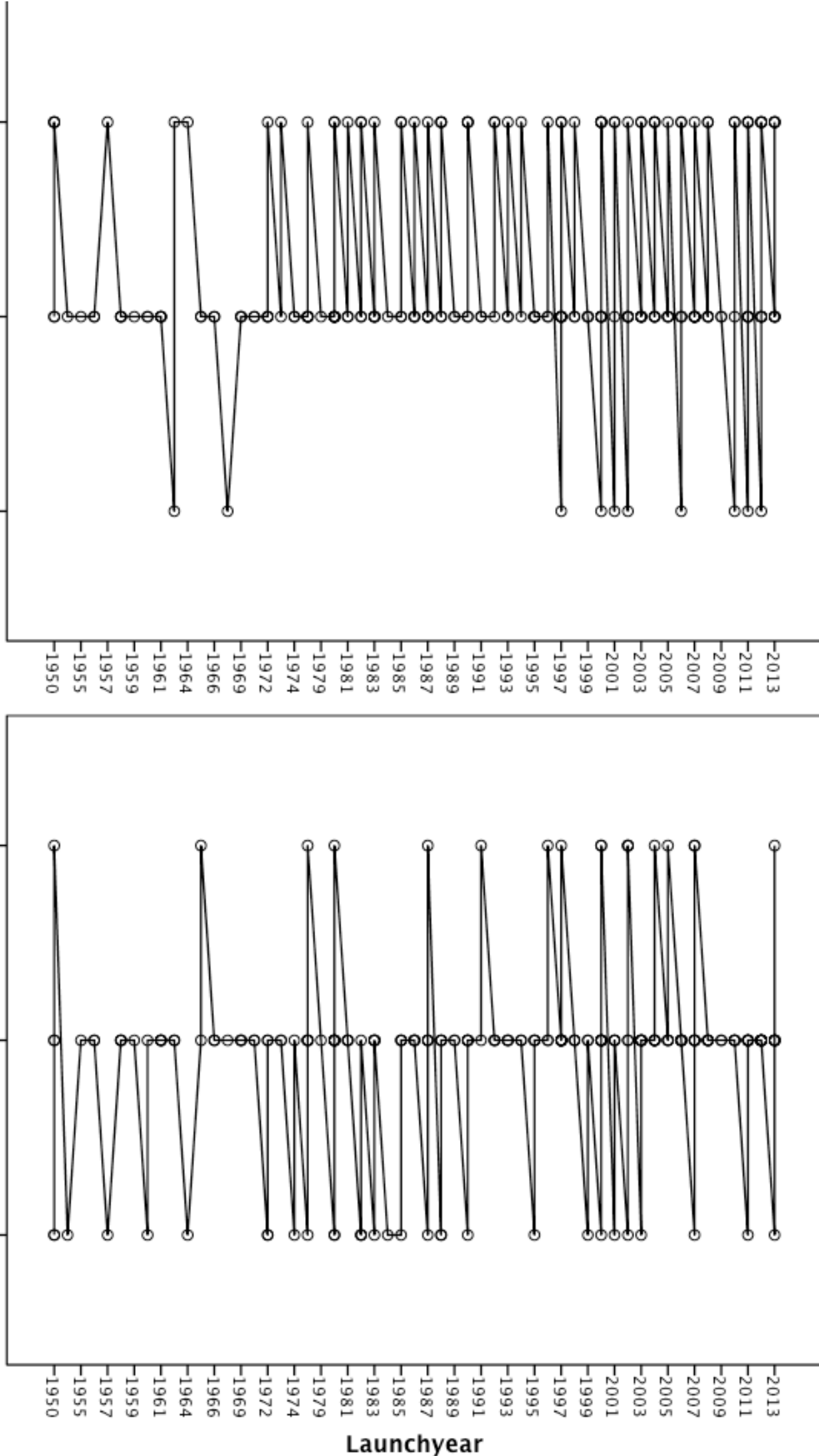
1950
1955
1957
1959
1961
1964
1966
1969
1972
1974
1979
1981
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1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013

Saturation

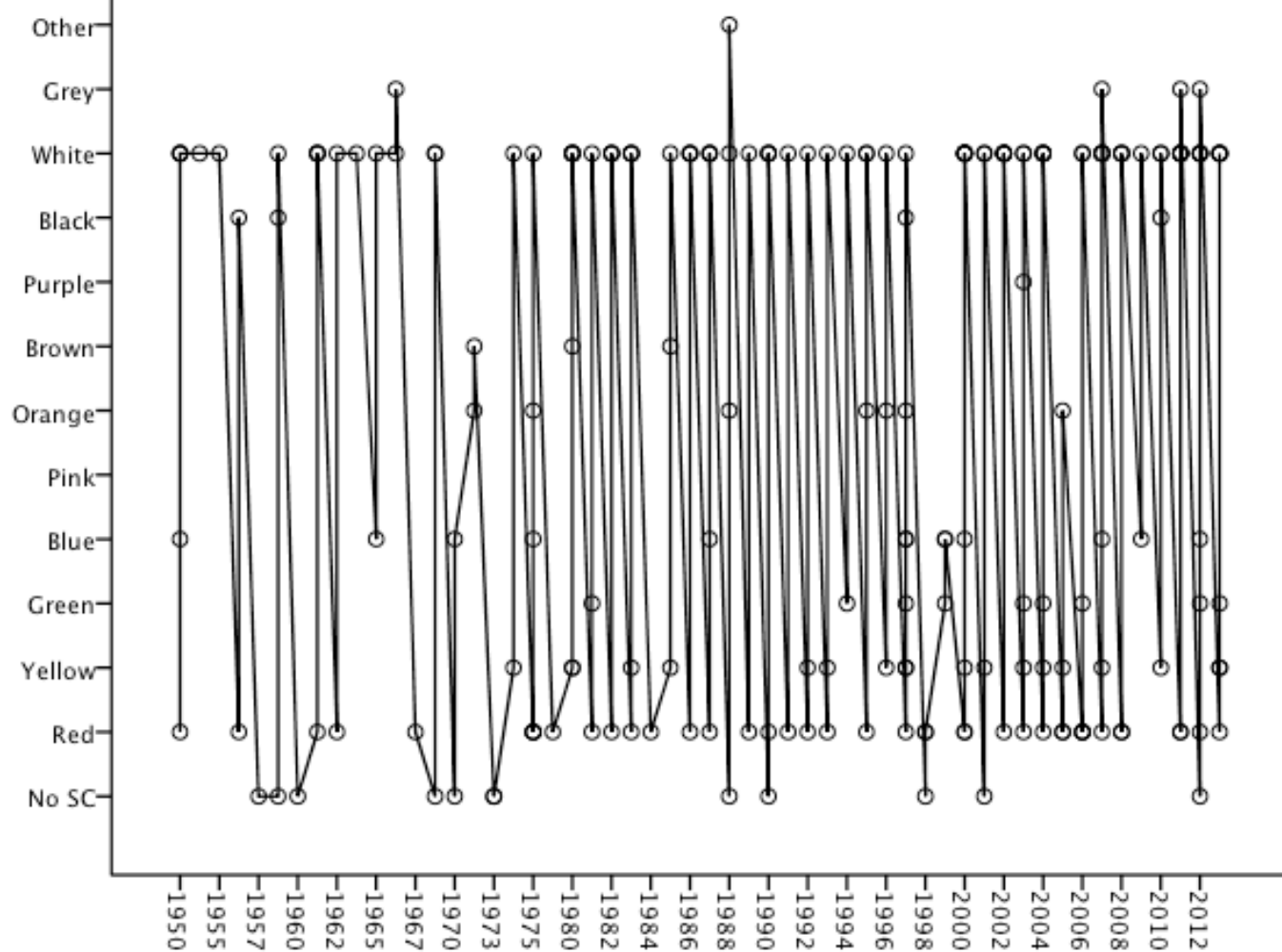
High
Medium
Low

1950
1955
1957
1959
1961
1964
1966
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1972
1974
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1981
1983
1985
1987
1989
1991
1993
1995
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1999
2001
2003
2005
2007
2009
2011
2013

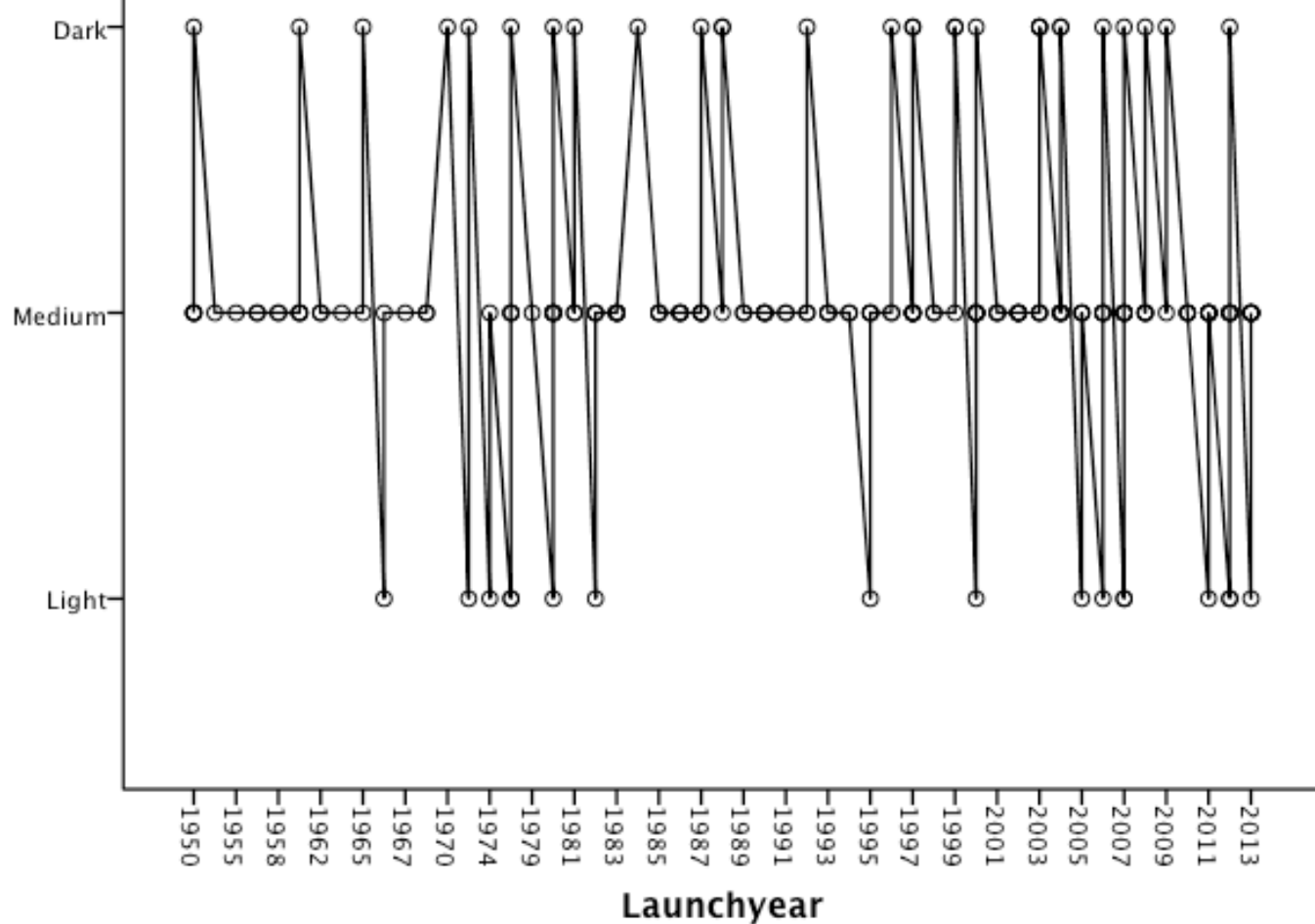
Launchyear



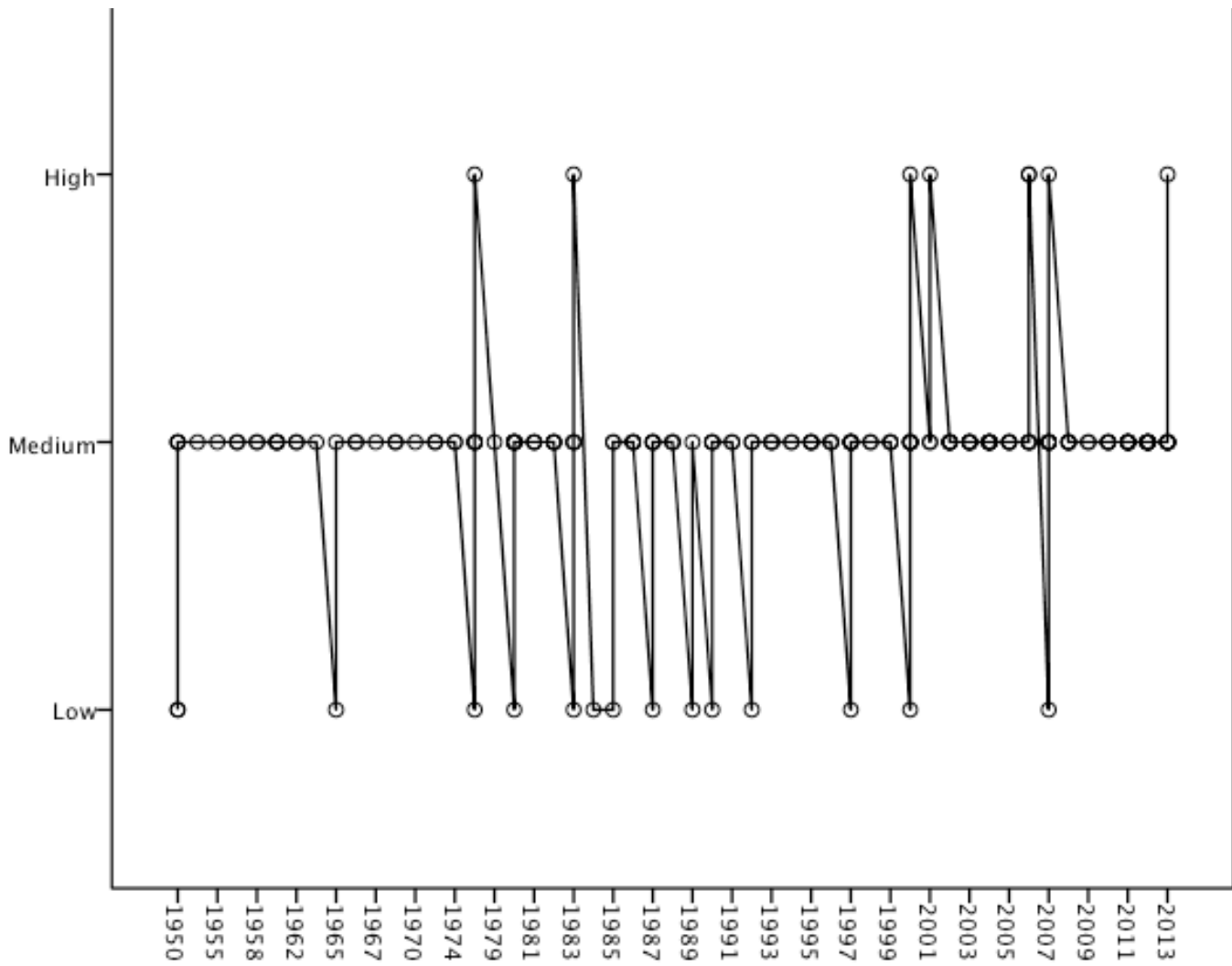
Supportingcolor



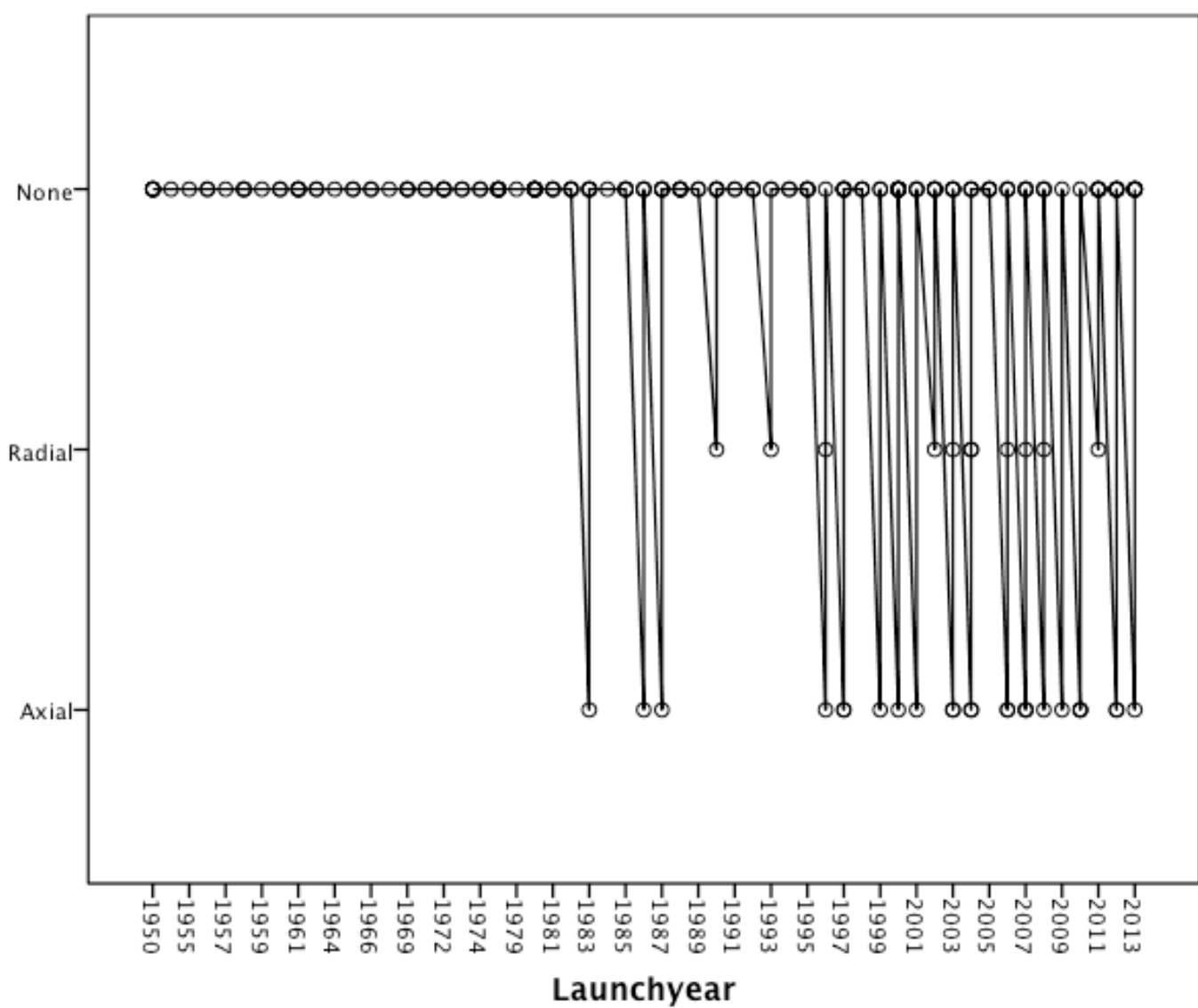
BrightnessSC



SaturationSC



Gradient



Colorfulness

>4
4
3
2
1
0

1950 1955 1957 1959 1961 1964 1966 1969 1972 1974 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013

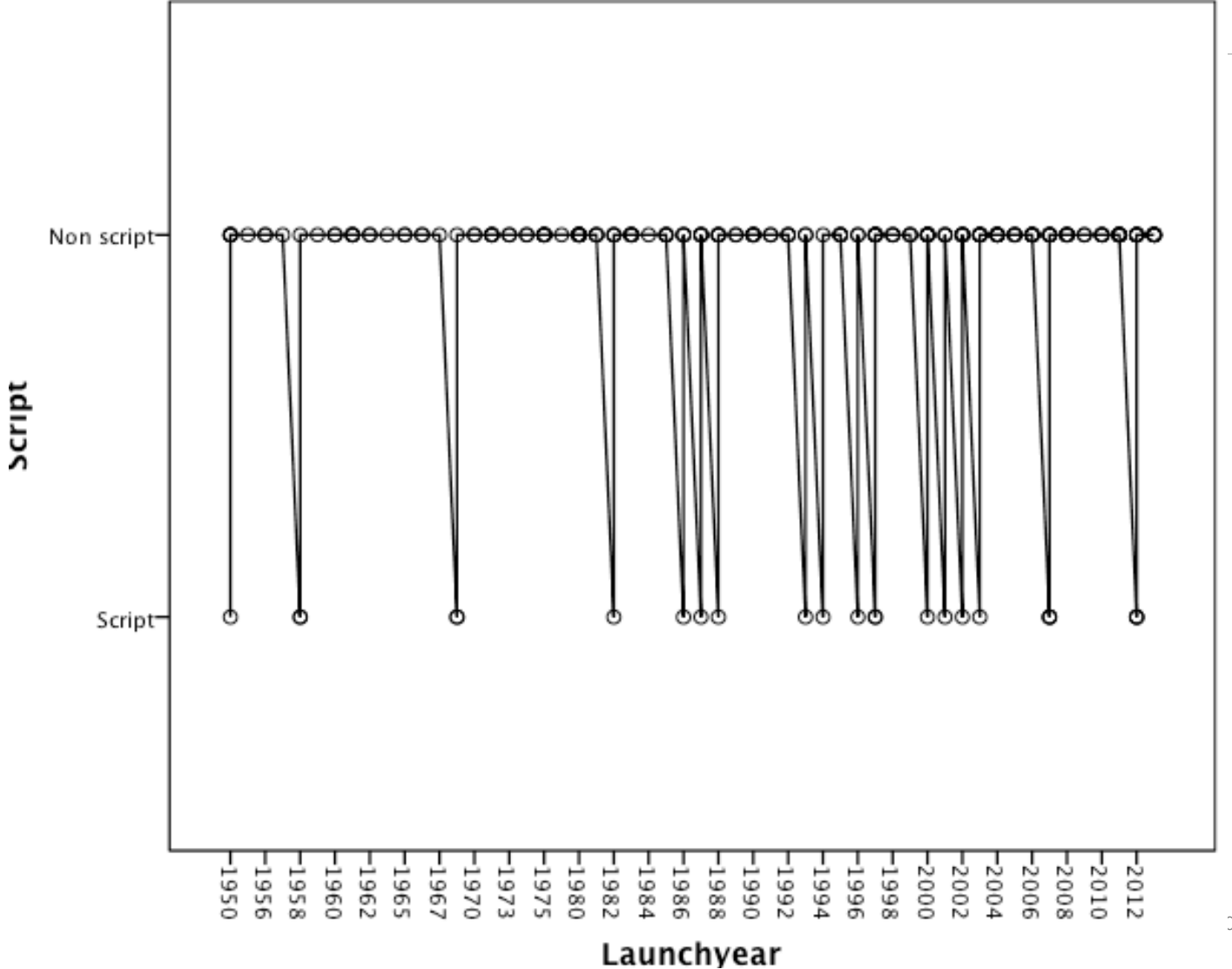
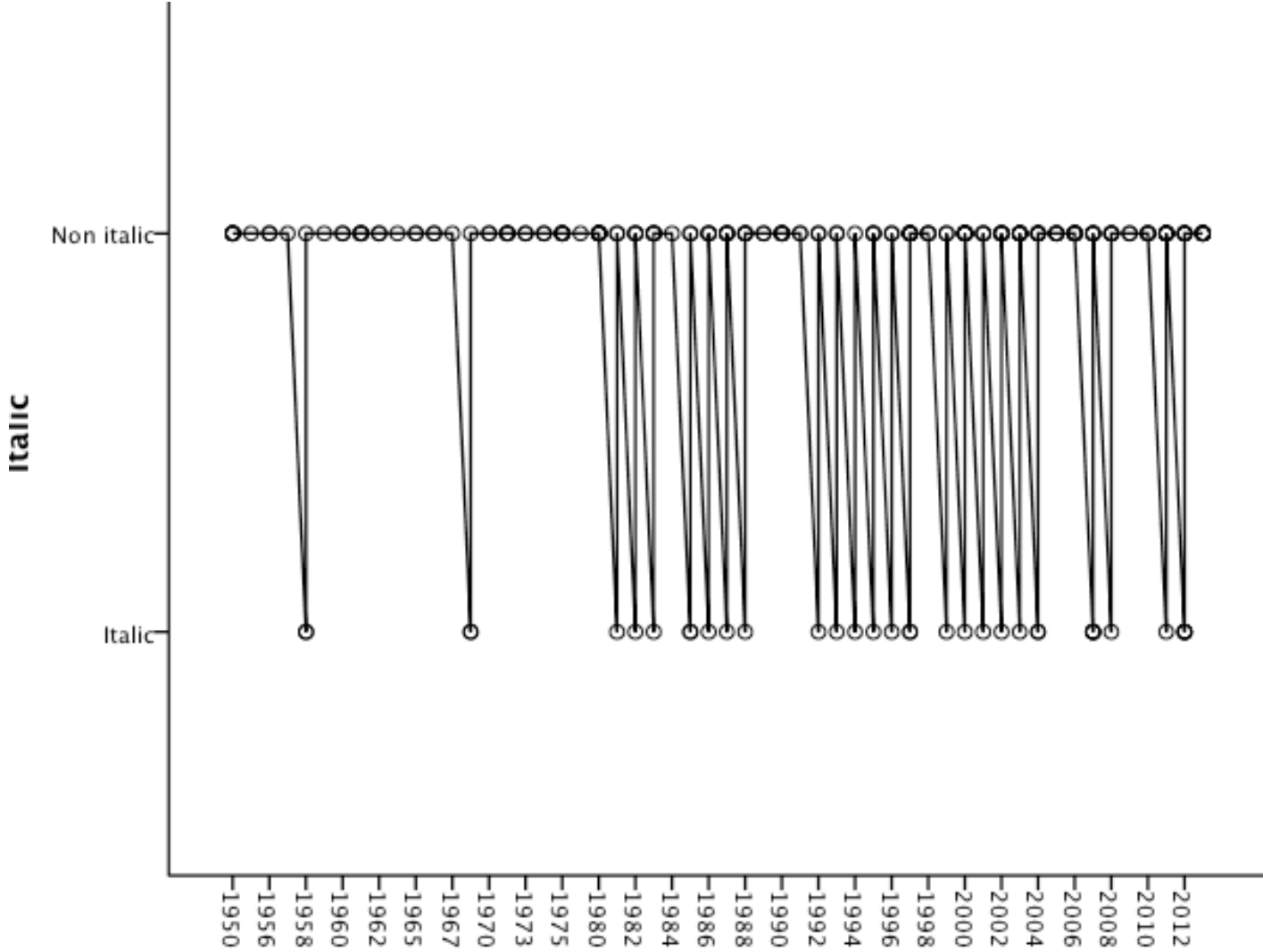
Typology

Wordmark
+ Figurative mark

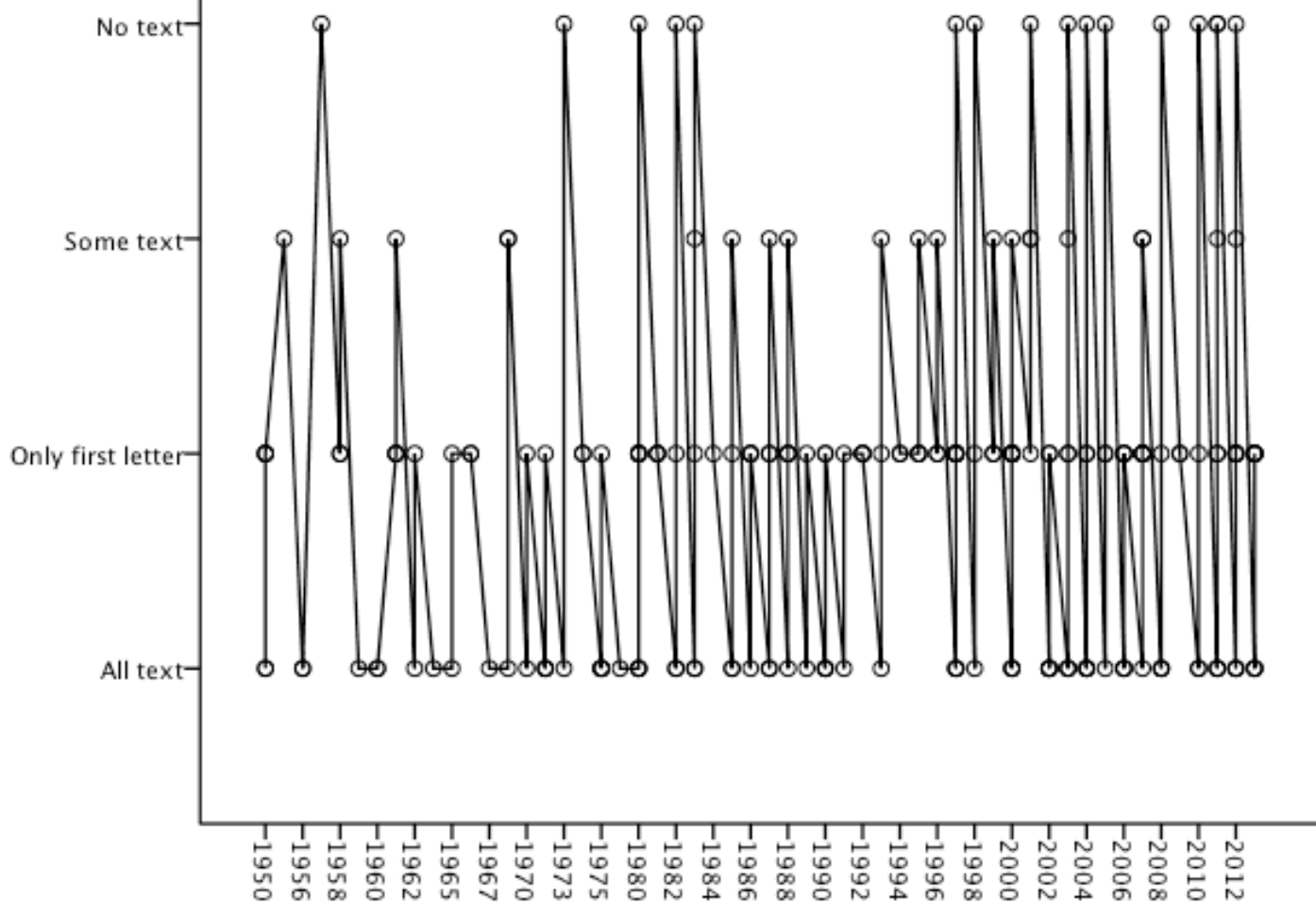
Wordmark

1950 1956 1958 1960 1962 1965 1967 1970 1973 1975 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012

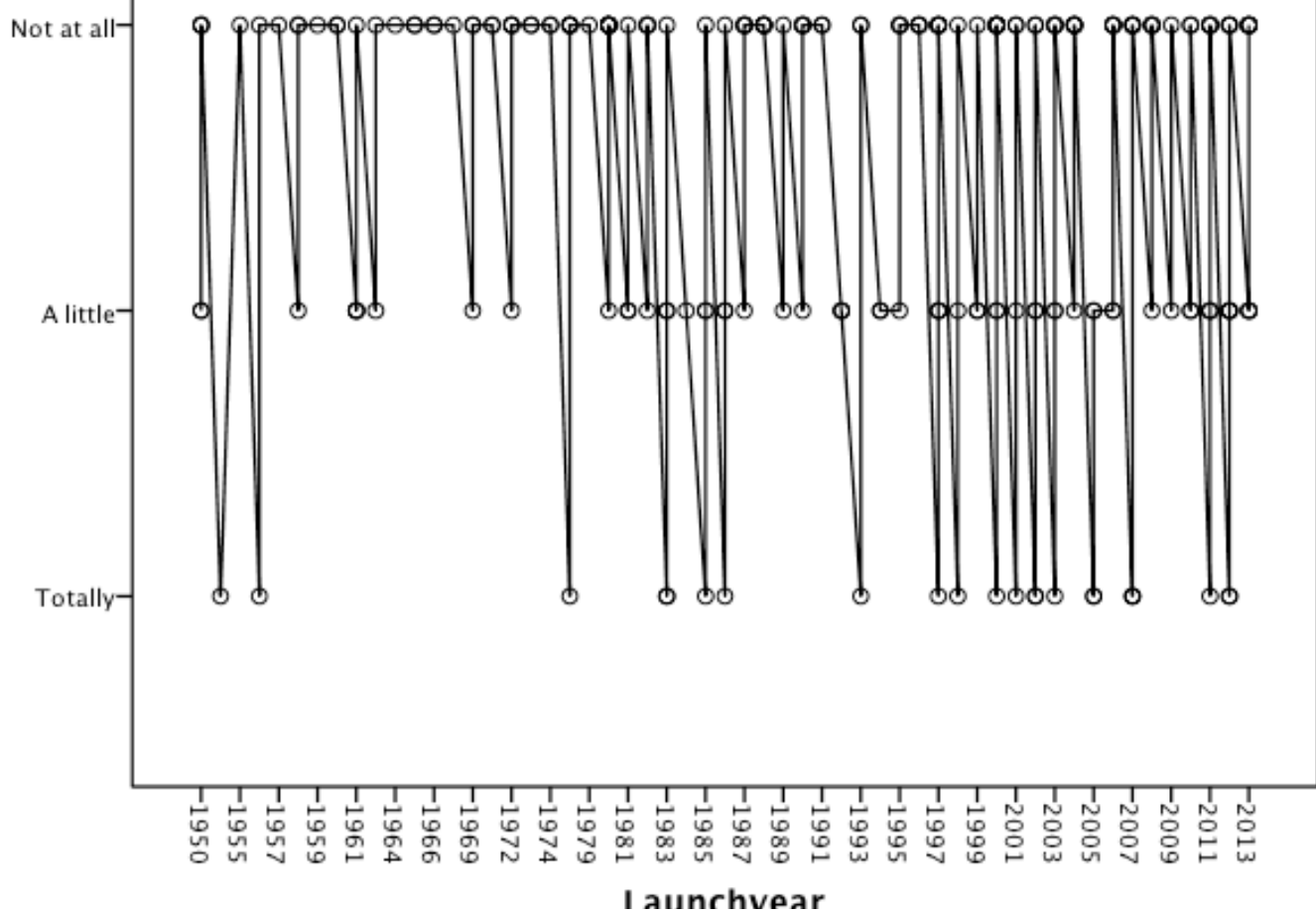
Launchyear



Capitals



Representativeness



Launch year

Organic

Geometric

Partially

Organic

1950
1955
1957
1959
1961
1964
1966
1969
1972
1974
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013

Balance

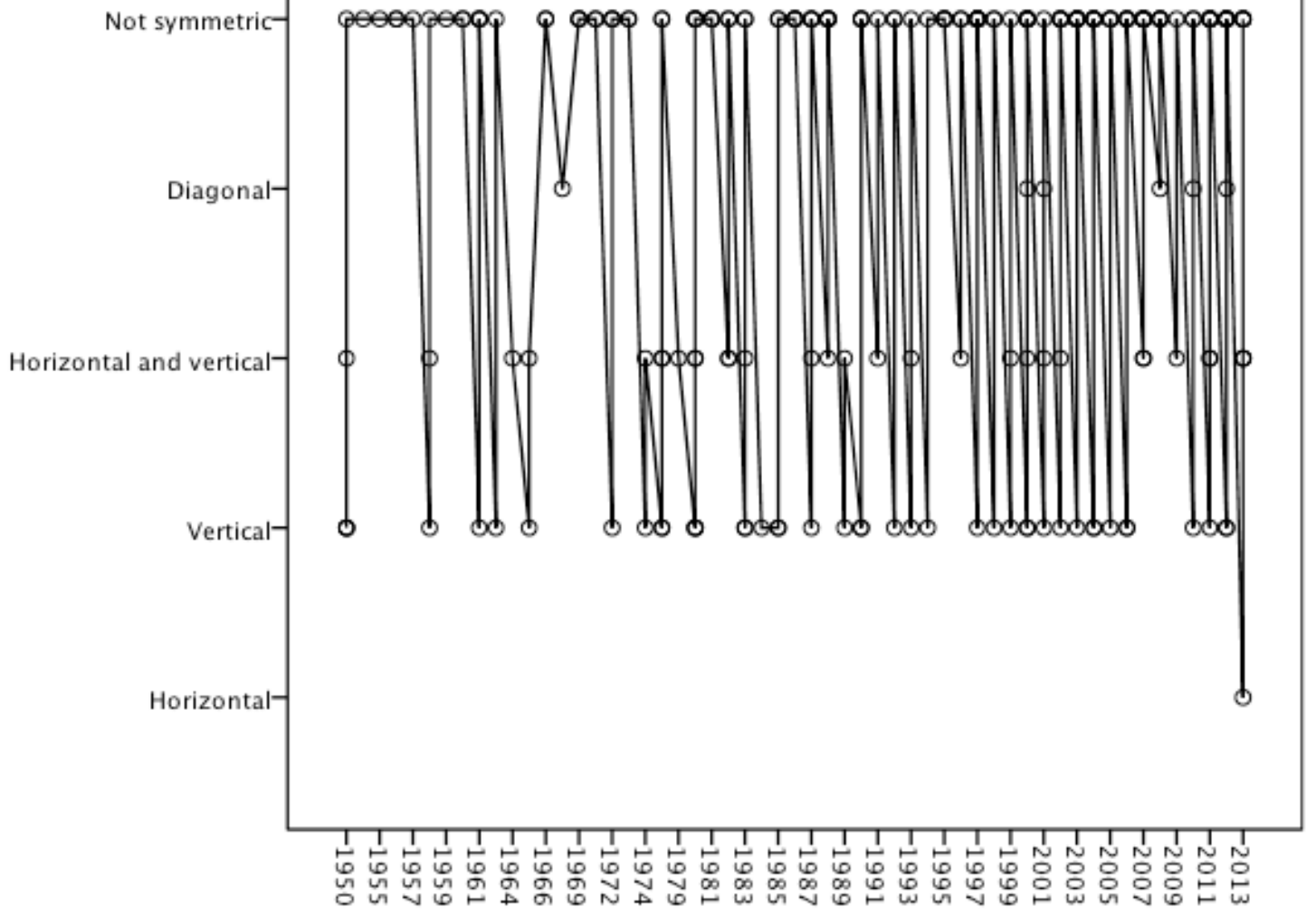
Not balanced

Balanced

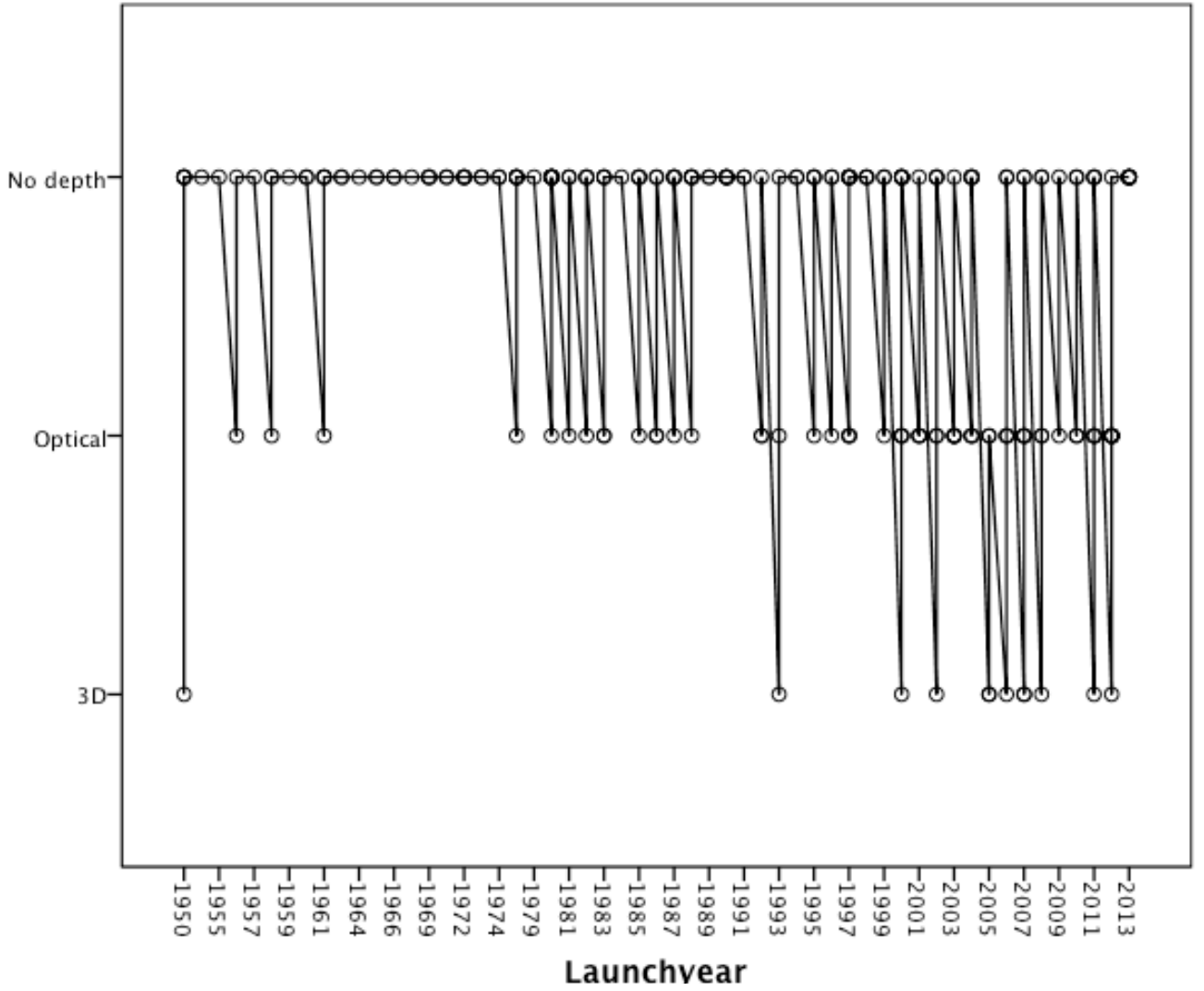
1950
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2003
2005
2007
2009
2011
2013

Launchyear

Symmetric



Depth



Paralell

Absent

Present

1950 1955 1957 1959 1961 1964 1966 1969 1972 1974 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013

Repetition

No repetition

Two

3 or more

1950 1955 1957 1959 1961 1964 1966 1969 1972 1974 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013

Roundness

No symbol

No curves

Some curves

Only curves

1950 1955 1957 1959 1961 1964 1966 1969 1972 1974 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013

ShadowsWM

No WM

Absent

Outer

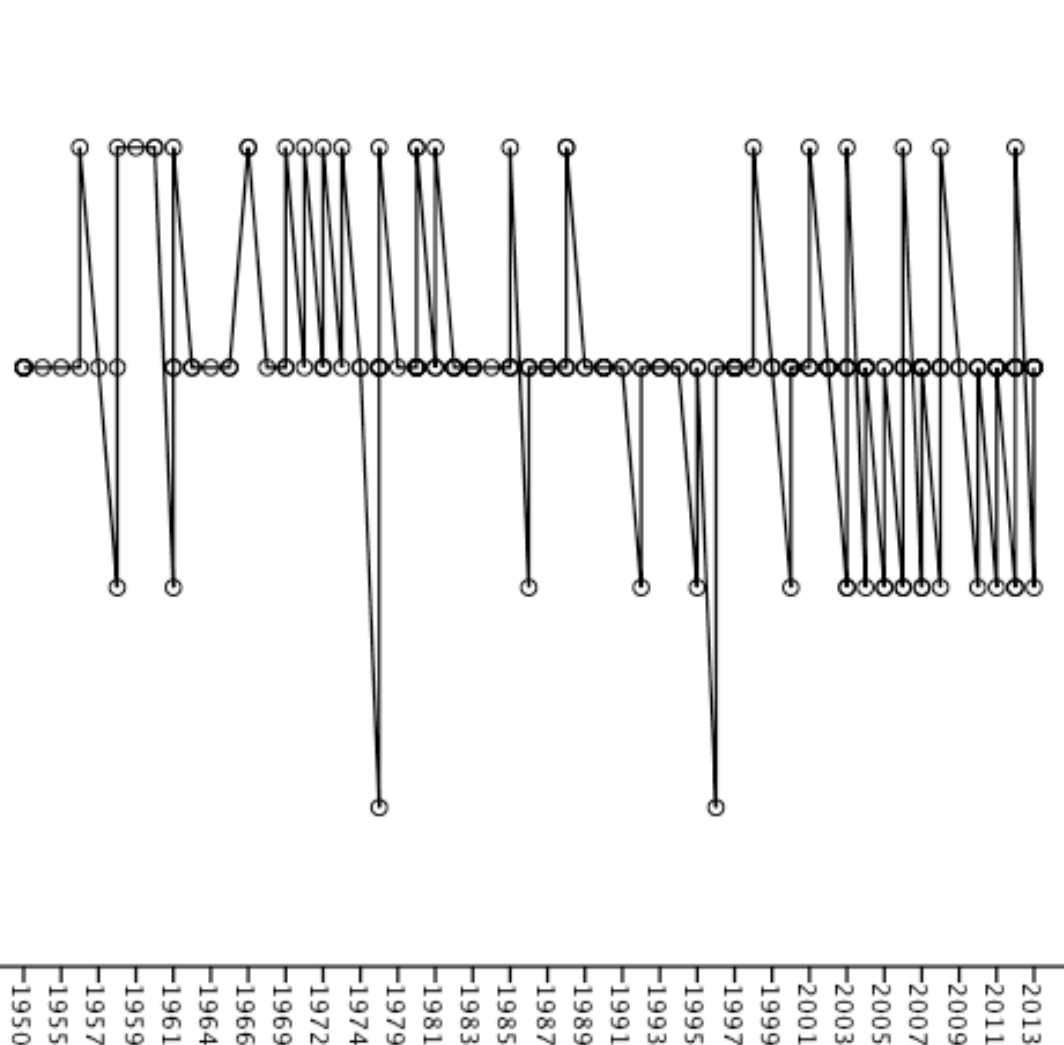
Inner

1950 1955 1957 1959 1961 1964 1966 1969 1972 1974 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013

Launchyear

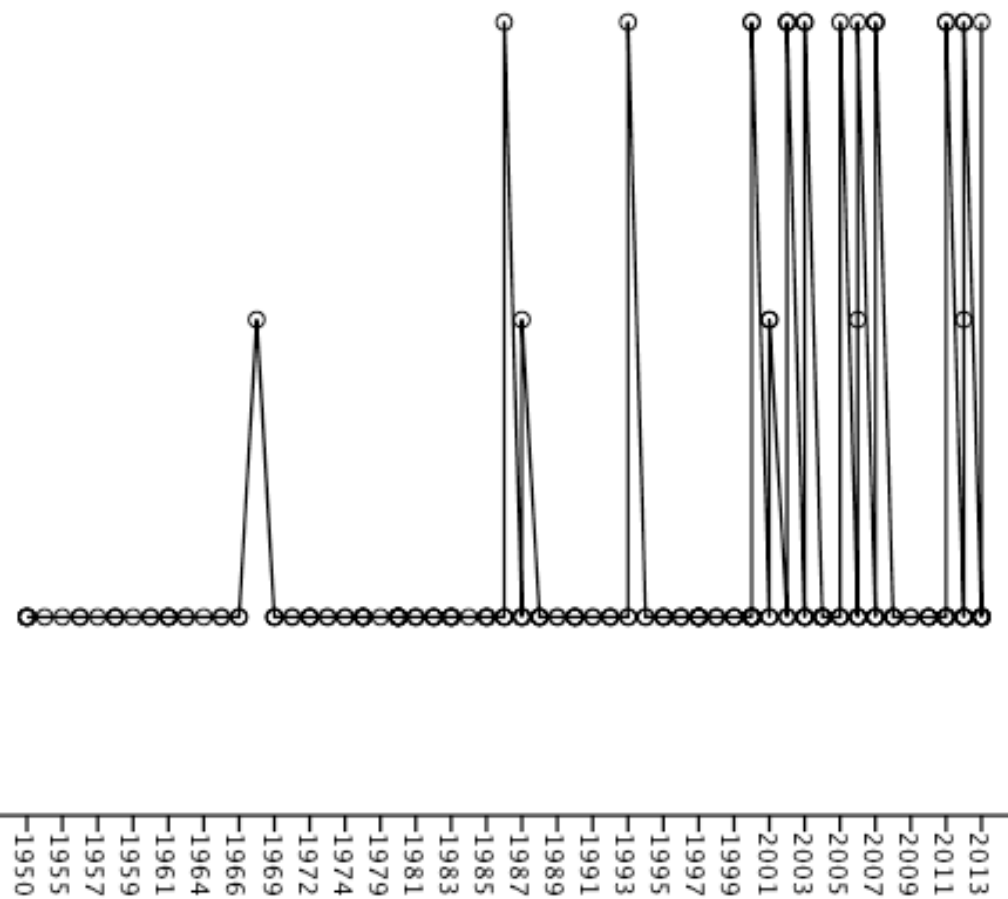
ShadowsFM

FM absent
Shadow absent
Outer
Inner



Opacity

Transparant elements
Blend opacity
No opacity



Launchyear

Lensflare

Absent

Present

2013
2011
2009
2007
2005
2003
2001
1999
1997
1995
1993
1991
1989
1987
1985
1983
1981
1979
1974
1972
1969
1966
1964
1961
1959
1957
1955
1950

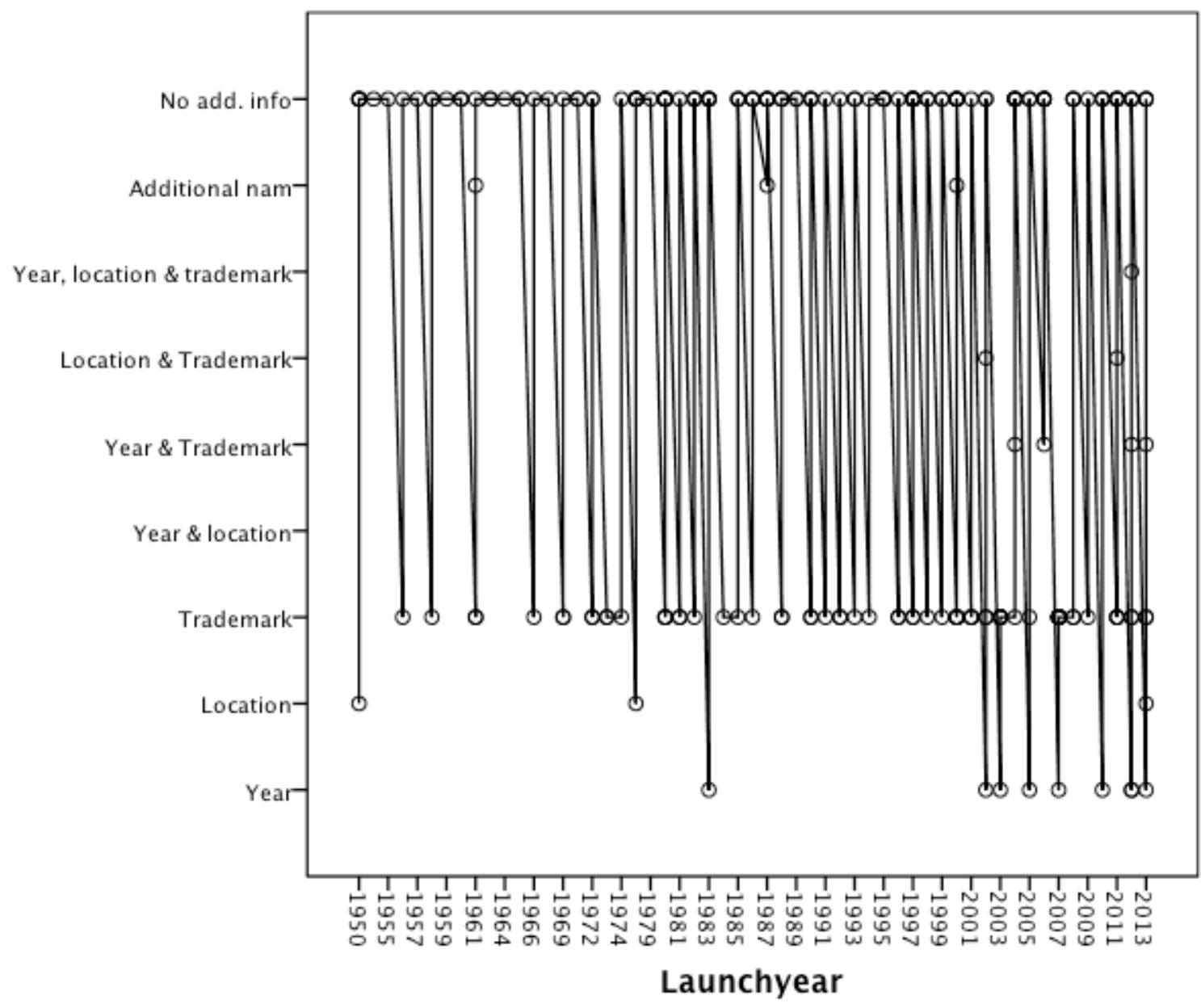
Slogan

No

Yes

2013
2011
2009
2007
2005
2003
2001
1999
1997
1995
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1991
1989
1987
1985
1983
1981
1979
1974
1972
1969
1966
1964
1961
1959
1957
1955
1950

Launchyear



APPENDIX I – QUALITATIVE RESULTS PER BRAND

The table shown below describes the most remarkable results, found per brand. The figures between brackets refer to the version of the logo the description concerns.

Brand			
Campina	The color scheme changed from white/red/blue (1) to green/white (2 & 3)	The logo became much more organic (round) and balanced (1 vs. 2 & 3)	Parallel and repeated elements were added (1 & 2 vs. 3)
Douwe Egberts	The color scheme went from simple (1) to more complex (2 & 3) to extremely simple again (4)	The logo always was a little representative (1, 2 & 3), but changed to not representative at all (4)	Graphic additions, like depth and opacity, were slightly present (1 & 2), were added more (3) and were then removed completely from the design (4)
Coca Cola	The first logo was black, all other logo's had red as main color	The basis was kept pretty much the same, only some characteristics like colorfulness and depth were changed	The first logo's had no additional info, but since 1996 the trademark became important
Heineken	The main color changed from black (1) to white (2)	The logo was more organic and not balanced (1), and became geometric and balanced (2)	The second logo was more simplified than the first one
Unox	The color scheme changed from blue (1) to blue, red and one or two additional colors (2 & 3)	The typology changed from a word mark (1) to a word mark with a symbol (2 & 3)	The logo evolved to a more symmetric entirety
Friesche Vlag	The logo was a figurative mark (1), but in the later version a word mark was added (2).	The logo became less representative.	The logo went from optical depth (1) to a logo with 3D effect (2).
Becel	A gradient effect was added (in logo 2 & 3)	Logo (3) is more colorful than logo (1 & 2)	Optical depth (1 & 2) was replaced for no depth effect (3)
Amstel	The logo went from three colors (1) to six colors (2 & 3) to five colors (4)	Only the first logo was balanced	After the (1) logo, a slogan was added (2, 3 & 4)
Grolsch	The supporting color changed from red (1 & 2) to grey (3)	The (1) logo was more colorful than the other logos (2 & 3)	The shadow effect changed from no shadow (1) to outer shadow (2) to no shadow again (3)
Lays	The main color (red)	The supporting color	Depth changed from

	evolved darker over the years (4&5)	changed from white (1 & 2) to yellow (3, 4 & 5)	no depth (1, 2, & 3) to optical depth (4) to 3D effect (5)
Danone	The (1) logo was less colorful the newer designs (2 & 3)	The last version of the logo (3) had more roundness than the previous ones (1 & 2)	The last version (3) was more organic than the previous ones (1 & 2)
Honig	The main color changed from orange (1) to white (2, 3 & 4)	All four logos had another supporting color and the colorfulness increased over time.	The representativeness changed from a little representative (1) to abstract (2, 3 & 4)
Knorr	The main color changed from red (1 & 2) to green (3)	The (1) logo contained only one color, logo (2 & 3) were more colorful	The logo changed from a word mark (1) to a word mark with a symbol (2 & 3)
Lu	The (1) logo was more balanced and symmetric than logo (2 & 3)	Logo (2 & 3) were designed with an effect that created more optical depth	The (1) logo was geometric, the later designs (2 & 3) became more round
Hak	The color scheme changed from green and white (1) to green and red (2) to green and red and some additional colors (3 & 4)	The logo changed from geometric (1 & 2) to organic (3 & 4)	The design evolved from no depth (1 & 2), to optical depth (3) to 3-D effect (4)
Blue Band	The brightness and saturation of the main color (blue) has changed over time	The design had no gradient (1), in the next design axial gradient was added (2), but they changed it back to no gradient (3)	A trademark was added (2 & 3)
Nescafe	The color changed from yellow (1) to white (2, 3 & 4)	The (3) logo was more organic and balanced than the other designs (1, 2 & 4)	A trademark was added (3 & 4)
Calve	An extra color was added (2, 3 & 4)	The design went from organic (1) to geometric (2 & 3) to a little organic again (4)	The logo was balanced and symmetric (1) but changed to not balanced and not symmetric (2, 3, & 4)
Appelsientje	The main color went from orange (1) to yellow (2 & 3) to red (4 & 5)	The logo became much more colorful over the years	A lens flare was added (4 & 5)
Mona	The color scheme changed from red (1) to red and white (2, 3, 4 & 5)	The logo changed from not balanced (1 & 2) to balanced (3, 4 & 5)	The design evolved from multiple repeated elements (1 & 2) to two repeated elements (3) to no repetition (4 & 5)
Spa	The main color became less dark and higher in saturation	The logo changed from vertical symmetric (1) to not symmetric (2)	Besides a trademark (1) a location statement was added (2)
Iglo	The main color changed from white (1) to blue (2) to red (3 & 4)	The (1) logo had a word marks written with more than one capital, the other word marks had no capitals at all (2, 3 & 4)	The design changed from a little representative (1 & 2) to abstract (3 & 4)
Smiths	The main color changed from white	The logo evolved from organic (1 & 2) to a little	The depth effect went from optical depth (1)

Conimex	(1) to red (2, 3, 4 & 5) The main color changed from white (1&2) to yellow (3&4)	organic (3, 4 & 5) The font was first serif (1&2), but became sans serif (3&4)	to no depth (2, 3, 4 & 5) The logo changed from completely round (1, 2 & 3) to round elements combined with geometric elements (4)
Maggi	The color scheme changed from yellow with red (1) to red (as main color) with yellow (2 & 3)	The text was first written completely in capitals (1) but changed to only the first letter as capital (2 & 3)	The logo was a little representative (1) but became not representative at all (3 & 4)
Robijn	The supporting color changed from white (1 & 2) to yellow (3)	The text was written without any capitals (1) but the first letter became a capital (2 & 3)	The logo changed from horizontal and vertical symmetric (1) to vertical symmetric (2) to not symmetric (3)
Chiquita	The main colors changed from black & white (1) to blue and white (2) to blue and brown (3 & 4) to blue and yellow (5)	The symbol changed from completely representative (1) to a little representative (2, 3, 4 & 5)	In the beginning, there was a slogan added to the logo (1, 2 & 3). In later versions the slogan was removed (4 & 5)
Bio+	The color scheme changed from green and yellow (1) to blue and green (2)	The text had no capitals (1) but a capital at the beginning of the word mark was added (2)	The logo changed from completely representative (1) to a little representative (2)
Mora	The logo had no gradient effect (1 & 2) but a axial gradient effect was added (3)	The logo was a figurative mark (1) but later a word mark was also added (2 & 3)	The logo changed from not organic (1) to completely organic (2 & 3)
West	The supporting color changed from red (1) to beige (2)	The typography changed from a word mark (1) to a word mark with a figurative mark (2)	The logo had no depth effect (1), this changed to optical depth (2)
Ola	The main color changed from orange (1) to yellow (2) to red (3)	The typography changed from a word mark with a figurative mark (1 & 2) to only a symbol (3)	The symbol changed from not representative (1) to a little representative (2 & 3)
Verkade	The main color changed from red (1 & 2) to white (3) to red (4) to white again (5)	The font changed from italic/script (1, 2 & 3) to non-italic and non-script (4 & 5)	The symbol evolved from a little representative (1) to representative (2, 3 & 4) back to a little representative (5)
Hero	The saturation of the main color changed from medium (1 & 2) to high (3)	The logo changed from balanced and vertical & horizontal symmetric (1 & 2) to not balanced and horizontal symmetric (3)	A slogan was added in the (3) version of the logo
Ariel	The main color changed from blue (1) to red (2) to green (3) to red (4 & 5) to white (6 & 7) to red again (8)	The gradient changed from no gradient (1 & 2) to axial gradient (3, 4, 5, 6, 7, & 8)	The depth effect evolved from no depth (1, 2 & 3) to optical depth (4, 5 & 6) to 3D (7) back to optical depth (8)
Fanta	The color scheme changed from blue and white (1) to blue and orange (2, 3 & 4) to yellow and blue (5) to blue and green (6) to orange and blue	The representativeness changed from not representative (1, 2, 3 & 4) to a little representative (5, 6 & 7)	The logo changed from geometric (1) to organic (2, 3, 4, 5, 6 & 7)

	(7)		
Aviko	The main color changed from white (1) to orange (2) to red (3) to yellow (4 & 5)	The word mark changed from written completely written in capitals (1, 2, & 3) to only the first letter as capital (4 & 5)	The logo changed from geometric (1 & 2) to a little organic (3) to organic (4 & 5)
Pampers	The supporting color changed from white (1) to grey (2) to white (3) to yellow (4)	The logo changed from not representative (1, 2 & 3) to a little representative (4)	The logo contained a slogan (1 & 2) which was removed (3 & 4)
Lipton	The gradient changed from no gradient (1) to radial gradient (2)	The (2) was much more colorful than the (1) one	The logo changed from balanced (1) to not balanced (2)
Grand Italia	The saturation of the main color went from low (1) to medium (2)	The font changed from script (1) to no-script (2)	The logo changed from geometric (1) to organic (2)
Johma	The supporting color changed from green (1) to grey (2)	In the (1) logo were parallel elements absent, in the (2) they were present	A slogan was added (2)
Bolletje	Brightness of the main color changed from medium (1) to dark (2), back to medium (3)	The logo changed from a symbol (1) to a symbol with a word mark (2 & 3)	A trademark was added to the logo (2 & 3)
Nutrilon	The supporting color changed from white (1) to green (2)	The word mark was written with only the first letter as a capital (1) but later with all text in capitals (2)	The depth effect changed from optical depth (1) to no depth (2)
Peijnenburg	The main color changed from brown (1 & 2) to red (3)	Gradient changed from axial gradient (1) to no gradient (2 & 3)	The logo changed from organic (1 & 2) to geometric (3)
Nivea	The main color changed from black (1) to blue (2 & 3)	Typology was only a word mark (1) but changed into a word mark with a figurative mark (2 & 3)	The logo changed from not balanced and not symmetric (1) to balanced and horizontal & vertical symmetric (2 & 3)
Lucky Strike	The supporting color was black (1 & 2) but became white (3)	Gradient evolved from no gradient (1) to axial gradient (2) back to no gradient (3)	The symmetry of the logo changed from horizontal and vertical (1) to diagonal, to horizontal and vertical again (3)
Croma	The main color changed from white (1) to blue (4)	The logo had no gradient effect (1), this changed to an axial gradient effect (2 & 3)	The logo changed from organic (1) to a little organic (2), back to fully organic again (3)
Roosvicee	The main color changed from black (1) to red (2 & 3)	The logo evolved from a word mark (1) to a word mark with a symbol (2 & 3)	The logo changed from not representative (1) to a little representative (2) to completely representative (3)
Heinz	The color of the logo changed from red (1) to black (2)		
De Ruijter	The color scheme of the main colors changed from brown and white (1) to blue and brown (2) to	The logo changed from not representative (1) to a little representative (2 & 3)	The font changed from non italic (1) to italic (2), back to non italic (3)

Alpro Soya	brown and blue (3) Main color changed from medium brightness and low saturation (1 & 2) to dark brightness and medium saturation (3)	The logo changed from not representative (1) to a little representative (2 & 3)	The depth effect evolved from no effect (1) to optical depth (2) to 3D effect (3)
Bertolli	An extra color was added (2)	The logo changed from organic (1) to a little organic (2)	The logo had no repeated elements and no parallel elements (1) but changed to presence of parallel elements and more than three repeated elements (2)
Haribo	The main color scheme changed from black and yellow (1) to red and white (2 & 3))	The logo changed from a word mark and a figurative mark (1) to a word mark (2 & 3)	The word mark had no shadow (1) then some outer shadow was added (2) but also removed again (3)
Kellog's	The brightness of the mail color changed from medium (1) to dark (2)	The registered trademark (1) was removed (2)	
Bonduelle	The main color scheme changed from black and green (1) to green and orange (2)	The logo changed from balanced (1) to not balanced (2)	An outer shadow was added to the word mark (2)
Whiskas	The supporting color changed from red (1 & 2) to purple (3)	The word mark was written with only the first letter as a capital (1) but changed to no use of capitals (2 & 3)	The logo made no use of depth effect (1 & 2), but some optical depth was added (3)
Koopmans	The main color changed from white (1) to red (2 & 3)	The representativeness changed from not representative (1) to a little representative (2 & 3)	The logo was balanced (1) but was adjusted to not balanced (2)
Remia	The main color scheme changed from black (1) to blue and white (2) to green and blue (3)	The logo changed from a word mark (1) to a figurative mark with a word mark (2 & 3)	The logo changed from geometric (1) to organic (2 & 3)
Liga	The logo was only red (1) but white and two more colors were added (2 & 3)	The logo changed from a word mark (1) to a figurative mark with a word mark (2 & 3)	The logo changed from geometric (1) to a little organic (2 & 3)
Van Gilse	The brightness of the main color changed from medium (1) to dark (2)	The font changed from non script (1) to script (2)	The symbol had no shadow (1), but some outer shadow was added (2)
Quaker	The main color changed from grey (1) to red (2) to blue (3) to red again (4, 5 & 6)	The logo changed from a symbol (1) to a symbol with a word mark (2, 3, 4, 5 & 6)	There was no use of opacity (1, 2 & 3), but some elements became transparent (4, 5 & 6)
Arla	The gradient changed from no gradient (1) to radial gradient (2)	The logo had no depth(1), but this changed to optical depth (2)	A registered trademark was added (2)
M&M's	The color scheme changed from yellow (1) to brown (2) to	The word mark had no shadows (1 & 2) but some outer shadows were	The (1) logo had a registered trademark, which were removed

	brown and white (3)	added (3)	(2) and added again (3)
Pepsi	The main color changed from red (1 & 2) to black (3) to white (4 & 5) to blue (6) to white (7) and back to blue (8 & 9)	The logo was a word mark (1), but changed to a word mark with a figurative mark (2, 3, 4, 5, 6, 7, 8 & 9)	The logo was not representative (1), became a little representative (2 & 3), but became not representative again (4, 5, 6, 7, 8, & 9)
Sun	The main color scheme changed from red and white (1) to blue and red (2)	The logo changed from a word mark (1) to a word mark with a figurative mark (2)	The logo evolved from geometric (1) to organic (2)

APPENDIX J – QUALITATIVE RESULTS PER CHARACTERISTIC

The table below gives an overview of the most remarkable findings per characteristic. There is a brief description of which elements stood out and how the development evolved, divided per characteristic as used in the codebook.

Characteristic

Main color	Overall, red was the most popular main color	The second color most used as main color was blue
Brightness	Most colors had a medium brightness (the colors were 'pure')	Colors with a dark brightness occurred more often than logos with a light brightness
Saturation	Most colors had a medium saturation	A low saturation (more of a grey tone) has been found more often than a high saturation
Supporting color	The most used supporting color was by far the color white	The second most used supporting color was red
Brightness SC	Most supporting colors also had a medium brightness	A dark brightness was again more popular than a light brightness
Saturation SC	By far most supporting colors had a medium saturation	A low saturation happened most after medium saturation
Gradient	Most logos did not have any gradient. The use of it was not found until the 1980's.	Axial gradient was found more often than radial gradient.
Colorfulness	Most logos had zero extra colors added, which means that the whole logo only consisted two colors	Most logos had a maximum of two supporting colors (so, a color scheme of four colors in total)
Typology	Most logos had a word mark and a figurative mark	Over the years, it became less popular to have only a word mark as logo
Typography	Most word marks were written in a sans serif font	The use of serif fonts increased over the years, but started to decrease again since 2000
Italic font	Most word marks were non italic	An italic font became more popular since the 1980's
Script font	Most logos had a non script font	The use of script fonts decreased until the 1970's, since the 1980's the use of it started to increase again
Capitals	Most logos had a text with only the first letter as a capital	Also, quite some logos had all text written in capitals. Probably because capitals can be very powerful
Representativeness	The greatest amount of logos were not representative at all	Quite some logos were a little representative (it was clear what the symbol should propose). This happened more often after the 1980's.

Organic	Most logos had a completely organic design	Almost as much as the organic logos are geometric
Balance	Most logos were not balanced	Balance became more important since the 1980's
Symmetry	It is not very general for a logo to have a symmetric symbol	From the symmetric symbols, most were vertically symmetric
Depth	Most logos did not have any depth effect	Optical depth is added more frequent to the design, especially since the 1980's
Parallel	By far most of the logos did not have any parallel elements	There is not really a pattern due to parallel elements for the decades that were researched
Repetition	Most logos did not have any repeated elements	If there was any repetition, mostly it were three or more elements
Roundness	Most logos had lines with only curves, closely followed by designs with some curved lines	The amount of logos that had no curves decreased over the years, roundness became even more popular
Shadows WM	By far, most word marks did not have any shadow added to their design	Outer shadow is more used than inner shadow. The use of outer shadow increased since the 1980's
Shadows FM	Most figurative marks did not have any shadow added to their design	Adding (outer) shadows happened most during the period of 2000-2009
Opacity	Opacity is a design effect that was not added to a lot of logos (yet)	The type of opacity used the most was where some elements were transparent and didn't blend with each other. This effect was added more frequently since 2000
Lens flare	Lens flare effects were not used before the time period of 1990-1999	The use of lens flare increased a little bit, but it never became a very popular design effect
Slogan	Within each period of time, some logos had a slogan added, but only a small percentage of the total amount of logos	The use of slogans does not really follow any pattern
Additional Information	A registered trademark was the information added the most to logo designs. This increased since the 1980's	The year of registration was added second most and this happened more since the year 2000