PRINTED ADVERTISEMENT AND WEB ADVERTISEMENT: A COMPARATIVE STUDY ON DESIGN CHARACTERISTICS OF BOTH MEDIA

A THESIS

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

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MASTER OF FINE ARTS

By

Gökçe Çuhadar

September, 2005

I certify that I have read this thesis and that in my opinion it is fully adequate, in scope and in quality as a thesis for degree of Master of Fine Arts.

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Assist. Prof. Marek Brzozowski (Advisor)

I certify that I have read this thesis and that in my opinion it is fully adequate, in scope and in quality as a thesis for degree of Master of Fine Arts.

_____

Assist. Prof. Andreas Treske (Co-Advisor)

I certify that I have read this thesis and that in my opinion it is fully adequate, in scope and in quality as a thesis for degree of Master of Fine Arts.

_____

Assist. Prof. Alexander Djikia

Approved by the Institute of Fine Arts

_____

Prof. Dr. Bülent Özgüç. Director of the Institute of Fine Arts

ABSTRACT

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MEDIA

Gökçe Çuhadar

M.F.A in Graphic Design

Supervisor: Assist. Prof. Marek Brzozowski

September, 2005

This thesis compares two forms of media advertising; printed advertising and advertising designed for the web, and covers the elements of design, the principles of design, and the experimental design aspects of the two mediums by means of the question "Do the principles of printed advertising design apply to web advertising?"

Keywords: Printed Advertising, Web Advertising, Design Elements, Design Principles, Experimental Design Aspects

ÖZET

BASILI REKLAM VE WEB REKLAMI:
HER İKİ REKLAM ARACININ TASARIM ÖZELLİKLERİNİ
KARŞILAŞTIRAN BİR ANALİZ

Gökçe Çuhadar

Grafik Tasarım Bölümü

Yüksek Lisans

Tez Yöneticisi: Yar. Doç. Marek Brzozowski

Eylül, 2005

Bu tez basılı reklam ile web reklamı arasındaki, tasarım elemanlarını, tasarım prensiplerini ve tecrübesel tasarım özelliklerini karşılaştırmalı olarak incelerken, "Basılı reklam tasarımı prensipleri web reklamına uygulanabilir mi?" sorusunu sorgulamaktadır.

Anahtar Kelimeler: Basılı Reklam, Web Reklamı, Tasarım Elemanları, Tasarım Prensipleri, Tecrübesel Tasarım

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INTRODUCTION

According to the Wainhouse Research Company, the Rich Media Communication Research report confirms that "Today over 70 percent of all impressions that we comprehend are not spoken nor written but visual." (2004). The field of visual communication is in the middle of a powerful transition driven by changing technology and a changing marketplace. Communicators are struggling with ambiguous definitions and expectations. As a graphic designer or as a communicator, it is impossible to avoid taking a part in the continuous and variable developments in this visual field.

After having learned, and still continuing to learn, many aspects of graphic communication, it is time for me to collect all this information and organize it in such a way that both the apparent and unnoticed sides of design can be brought to light.

The aim of this thesis is to compare a number of design aspects of two different advertising media; advertising designed for the printed medium and advertising designed for the web medium.

By doing so, this thesis will be able to show which principles of design are common to both the printed and the web medium, that is, shared by both, and which are unique and applicable to only one particular medium. Moreover, this comparison will

be undertaken through one of the most effective methods of graphic design application forms: "advertising". This is because, in our century, advertising is one of the most important communication tools since it includes all the principles of design in action in one comparatively small area.

Therefore, in this study the core question examined is, *do the principles of printed advertising design apply to web advertising?*

Obviously, this thesis testifies that while there are many parallels between the principles of printed advertising and web advertising, conversely both possess different concessions in their designs. The methods of this research were based on finding and exploring the basic important characteristics of the two media without making a judgement regarding whether one is superior to the other. It means that the aspects of the two media will be clarified clearly and their features will be enlightened with visual materials.

In addition, the reason for choosing printed advertising to compare with web advertising rather than one of the other forms can be explained by considering the user groups of both mediums. In other words, like the web, the most available medium being used by the same middle and small target marketers in the overall mass media is print advertising. Therefore, this common aspect of both media plays a big role in deciding which media are to be compared with each other.

The scope of this work concentrates on web ads and printed ad materials. In view of the fact that both print and web advertising design can use a variety of different

approaches and styles, this study mostly talks about advertising which consists of image and text-based contents. In this way, it is easier to compare similar applications created for different media without the risk of creating an unrelated comparison between the two different approaches.

The first chapter will begin with a brief explanation of both printed and web advertising mediums. Throughout the rest of the paper this short clarification of both mediums will help the reader, especially those who are unfamiliar with these design concepts, to understand what these notions refer to in this study.

In the second chapter the study will present a comparison of the two media of advertising design. In the first section of chapter two, the comparison of the two media will be explored through the means of their formal design differences, where the arguments will depict how they differ from and resemble each other. In addition, in this section examples and illustrations will be used to clarify the subject matter.

In the second section, a comparison of design principles between the two media will be made. This section will explain how the two media apply the same design principles, and again by the means of design principles this section will describe the similarities and differences between them through exemplification and illustration.

In the third section of chapter two, a discussion concerning the similarities and differences of both media will be realized through some experimental aspects such as; time, touch (virtual/corporeal), and the organization of information. This section will concentrate on the applicability of different experimental aspects in both media.

In addition to this, some other aspects such as interactivity or navigation will also be discussed.

Finally, in the concluding part of this research, the results will be presented in relation to the arguments, and this chapter will try to give an answer to the main question of this thesis; do the principles of printed advertising design apply to web advertising?

Since the web is a continually developing medium and changes in it appear so rapidly, some examples may become out of date, but it should be noted that the aspects and principles that are put forward in this study will be enduring.

As a final point, this comparative study is an appealing work which may be read in order to identify the two media, and it may also serve as a source manual for people wishing to work in the design field of advertising and who wish to design for the World Wide Web.

CHAPTER 1: DESIGNING ADVERTISING FOR THE PRINTED AND FOR THE
WEB MEDIUM

1.3 Delineating the printed advertising medium

Advertising is the area of marketing concerned with the communication of information by the company to the market or the market participants. At the center of marketing is the commercial or private customer with his purchasing decision. The basis of purchasing decisions is information. Advertising tries to communicate this information in such a way that the company positively distinguishes itself from its competitors so that customers are motivated to make the purchase. In the face of the growing diversity and ever increasing interchangeability of products, advertising has evolved into a critical competitive factor in the marketing mix.

In his book *Advertising Today* Warren Berger defines advertising media in two senses. For him in a narrower sense, advertising media include TV advertising (commercials), radio features, print advertisements, and billboards and advertising letters (direct mail). In a wider sense, today's advertising also includes sponsorship, trade fairs, internet advertising and sales-promoting advertising at the point of sale (2001: 16).

Advertising reaches people through varied types of mass communication. In everyday life, people come into contact with many different kinds of advertising. Printed advertising is one of the most commonly used types among them. Although newspapers and magazines have been unable to keep up with the rapid increase in the advertising volume on TV stations, the print media continues to be an important

advertising medium that guarantees great success even in the age of electronic advertising media. According to the International Advertising Association's (IAA) communication research reports, television has long been the leader in the ranking of classic advertising media. (2004) In the field of print media, newspapers generate the highest advertising sales, while radio and billboard advertising occupy the next lowest ranks.

In this study the expression printed advertising medium will convey the advertising designs prepared especially for every kind of printing. It should be noted that whether the design of the advertisement is prepared by hand or with some other devices such as using a computer, the final result will be that they are printed on paper.

It is known that various different formats are available in the printed medium. Printed advertising media examples may include magazine ads, newspaper ads, brochures, flyers and posters, etc. As Schierhorn and Wearden explained in their article *What printed formats do consumers prefer?* "Some printed media formats are more accepted, or more effective than other ones."(2004: 27) Therefore, from among all these formats this study will try to refer to the most appropriate examples of magazine ads, brochures, newspaper ads, etc. in order to help the target reader to understand the subject better.

As has been mentioned above, various types of printed advertising media are available to designers. Choosing the correct advertising medium to suit the purpose is an important decision that has to be made. Despite the fact that advertising has many

different printed media alternatives available, one of the alternative rules for arranging information in the printed advertising medium is the AIDA formula. (Ballard, 2003)

In her book *Buying Facilitation* Sharon Drew Morgen, who is arguably one of the most advanced thinkers of the modern age in selling and decision facilitation, claims that AIDA is an old, tried and tested formula that originated in the late 1950's and which describes the basic process of how to arrange information in the most effective way to create a selling message (2003). Audiences make purchases in line with the AIDA process.

The process of grabbing "attention" is the "A" of AIDA formula. By using effective words in the right type style, or by using effective images, the designer must first grab the attention of the audience. "I" stands for the process of "interest", in which the designer must stimulate the audiences' interest with a written text or with a different organized layout. After grabbing the attention and arousing the interest of the target, the "D" stands for "desire." At this stage the designer must give the audience a strong shot of desire. In other words, the product or service must appear to closely match the audiences' needs or aspirations. Finally, the "D" for desire is followed by A, which stands for "action." If the audience is stimulated to overcome their natural sense of caution, they may then become motivated or susceptible and thus take the action to buy. In advertising, by using some devices such as limited time offers and coupons etc. action can be generated. Especially in printed advertising, the AIDA formula ensures a dynamic layout. In addition, the AIDA process also applies to any advertising or communication that aims to generate a

response. It provides a reliable template for the design of a vast array of marketing materials. In consequence, it can be said that this effective formula should not be in use for only specific mediums such as printed ones. All other mediums in other media can apply this alternative formula easily in their selling messages.

It is known that advertising is basically a relationship between words and imagery. A designer should seek to create a match between what s/he says and what s/he shows. According to *Media Awareness Network*, an official website, the key elements of print advertising are divided between copy and art. The copy elements include headlines, body copy, captions, slogans, and taglines. Art refers to the visual elements, which include illustrations or photography, the type, and the layout itself (2005). The audience reading the printed advertising medium can either scan the material linearly or browse through parts of the document. The visual layout, that is, the way the images and texts appear on paper, enable such browsing. In addition, printed medium advertisings are able to preserve their original design. In other words, once they have been created, they do not need any additional devices in order to be viewed.

In his article *Getting More From Print Advertising*, Scott Young highlights the fact that due to an advertising overload in our environment, recent researches indicate that 95% of printed advertising is thrown away without even being looked at[1]. In addition, in printed advertising people generally start with the main visual in an ad and spend the majority of their viewing time there. Also, the Perception Research

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[1] Young, Scott. "Getting More from Print Advertising" Perception Research Services.
15 Feburary 2002.< http://www.prsresearch.com/Articles/getting_more_from_print_advertising.htm>

Service indicates that ads are rarely considered for more than 15 seconds and that text-heavy ads do not consistently generate longer viewing times (2002).

Every printed advertising medium should exhibit the attributes of good design principles and be legible and readable. In addition, the layout, the use of type and image, and the role of paper and ink are other various elements in creating a printed advertising medium. The objectives of printed advertising can be summarized as delivering brand and product awareness, and giving information to the audience.

Actually, it is possible to point out some other characters of printed advertising media under this heading but in the next chapter other qualities such as form, size, color, etc. will be considered in a more detailed way.

1.2 Delineating the web advertising medium

In order to define the web advertising medium, it is first necessary to try and give a description of what the World Wide Web is. The Web takes advantage of a global computer network that connects thousands of computers throughout the world. The Web makes sharing information both easy and attractive by combining text, graphics, sound, and film clips into a single multimedia document. Further enhancing the Web is its ability to use hypertext links to connect to other sites around the world. These powerful multimedia capabilities have encouraged a lot of people and many organizations to place information on the Web. These organizations place their information on servers that allow other Web users to access the information. The market research firm IDC predicts that with the recent explosion in computer sales

and the number of internet users growing at a phenomenal rate, companies and corporations alike have been quick to realize the internet is an excellent opportunity to advertise, promote and sell their products. (2005)

Consequently, as Barbara Kaye and Norman Medoff, authors of *Just a Click Away: Advertising on the Internet,* explain, the internet is an electronic medium used to communicate as well as to sell products and services (2001: 28). The World Wide Web is the fastest-growing new medium of communication ever. The web medium and its technologies offer new and distinct ways of communication to audiences. At the end of the 1990's many companies did not want to leave this opportunity unused and thus also placed their advertisements on the World Wide Web. The growth rates were enormous. According to an analysis by the Global Reach Company, between 1996 and 1997 alone, expenses for online advertising increased by more than 400 percent[2]. (1998)

There is a high potential in web advertising. The acceptance of online advertising today is much greater than that of TV commercials. This was the result of a survey by the European Interactive Advertising Association (EIAA) at the end of 2004. In addition, 31 percent of those polled said that brands are provided with a more progressive image through online advertising. Nevertheless, only 1.5 percent of the overall advertising investments across Europe are spent on Internet advertising.

The British inventor of the World Wide Web, Tim Berners-Lee remarked that the Internet was still in its infancy and predicted that new technologies would give it

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[2] For more information refer to: <http://www.glreach.com/globstats/>

even more features and possibilities (2004). Also, there are still relatively few people who have access to the Web, and the Web itself is still somewhat limited in its capabilities. However, due to the phenomenal growth that the Web is experiencing, companies are investing huge amounts of money to make the Web both easier and cheaper to access, as well as more entertaining and interesting.

Current global estimates indicate that there are upwards of 840 million of us online, according to the Global Reach Research Agency (2004-5). This means that almost 14 out of every 100 persons in the world use the Internet. Since the year 2000 Internet usage has grown 146.2%. Internet World Stats forecasts that the Internet will hit one billion users by the end of 2005[3].

Web advertising media has been defined in various ways, but virtually all definitions include the notions that it involves presentation of information through mediated means (technology of some type, whether a computer or a mobile phone) and mutual, relatively immediate interaction between consumers and marketers. An especially important characteristic of web advertising media and one that differentiates it from other media is sustained interactivity. In his *Catering to Customers' Needs* article Kent Wertime defines sustained interaction as "purposeful and goal-directed." (2001). Because it is goal-directed, it is also dynamic, and the interaction itself will tend to change over time.

On the web, advertisers really have two separate goals. The first one is to have the user click on the advertisement, seeking further information about the product or

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[3] Internet World Stats Blog. 22 January 2005
 <http://www.internetworldstats.com/blog.htm>

delivering the user to an ordering page, and secondly to have the user actually purchase the product. This assumes that the advertisement is designed to generate a purchase and not, as many are, to further the brand of the product. In addition to this, cookies, which are a piece of text that a Web server can store on a user's hard disk, can allow a Web site to store information on a user's machine and later retrieve it.

The first goal, once accomplished, may deliver the second; if the advertisement is clicked on, the audience may be persuaded to purchase the product. So the above two goals should encourage the advertiser to think very clearly about the strategy that is used through advertising. Generally, some argue that the hierarchy of effect model (AIDA) which is an alternative method of generating a response, has the same place in web advertising as it does in printed advertising.

In this study, the expression "web advertising medium" will convey the advertisements accessible through the World Wide Web. There are various types of ads in web advertising such as banner ads, pop-up ads, side-bar ads, floating ads, interstitials, etc. The web advertising medium that I want to refer in this study will be generally banner ads, HTML documents, and some web sites consisting of a number of those documents.

Unlike printed media, web advertising media need some additional hardware machinery including a computer, handheld device etc; software, and lastly an internet connection including a modem, network card, telephone etc. in order to be viewed. It can be said that the web advertising medium is dependent on some essential devices, while the printed media reaches the consumers solely and directly via paper.

In addition, the web advertising medium content can be displayed differently on different users' computers because technical possibilities and various types of computer systems provide the audiences with many different choices, and thus rather than being displayed in one exact way the audiences may easily change their preferences according to their individual taste.

In addition to these qualities, some distinctive characteristics of the web advertising media such as some aspects of interactivity will be discussed in the study.

CHAPTER 2: A COMPARISON BETWEEN THE TWO MEDIA OF
ADVERTISING DESIGN

2.1 Comparing elements of design between the two media

At first glance, the formal differences between the two media seem very obvious to us. Anyone could easily list them. However, this study will not only state the differences and similarities between the two mediums. The important thing is to show how the two differ and resemble each other, and what the causes and results of this are.

In this section, to make conclusions more clearly, four major areas will be analyzed in depth. These are form and size, color, image, and text. By taking these four aspects into account, this study can easily explore the differences and similarities between the design elements of the two mediums. Moreover, the main reason for choosing these criteria is because of their important function in graphic design.

2.1.1 Form and size

Both print ads and web ads have a variety of form and sizes, and it can be said that differences in form and sizes are the easiest aspects for the viewers to observe.

When we compare typical printed advertisements with web advertisements, the most common format for the printed ads are the typical A4[4] standard sheet of paper, which are generally used in magazine advertisements. On the other hand, the most common

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[4] A4 is an international standard 21cm x 29,7cm paper format.
<http://encyclopedia.laborlawtalk.com/A4_paper_size>

format for banner ads are TV and computer screens where viewers are faced with banners all the time. Therefore, it can be said that the formats of both the sheet of paper and the computer screen are different advertising areas which offer the designers different usage alternatives.

When considering the unlimited choice of paper size and form found in printed advertisements, the visual-based and text based formats are the most suitable to enable us to make a comparison between web and print advertisements. For this reason, in print advertisements the most commonly-used formats which I will include under this heading are magazines, newspapers, and brochures.

From the viewers' perception one of the major differences between the two mediums are the positioning of the design space. As seen in Figure 1; while print ads formats are generally vertical, in contrast web ads are placed in a format of horizontal spaces.

When a TV screen is compared to posters on walls it is obvious that the computer screen is a small area on which to view advertising. The viewers do not want to waste space displaying adverts when they have such a limited area for the material they want to read. The web has primarily been used for the presentation of text and graphics onto fairly small computer screens. This size limitation restricts the conventional web ad to a banner, asking the user to click 'here' for more information. Therefore, with the use of small advertisements on the screen, the users have a chance to view more information on a wider area by clicking on the ad.
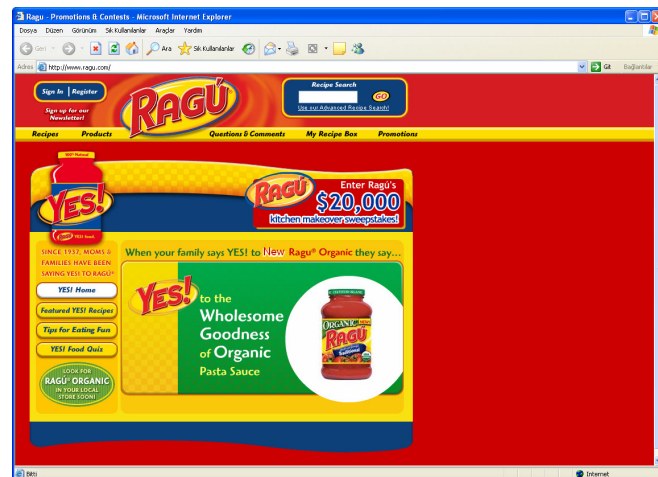
Figure 1: Portrait arrangement in application
a. Porche advertising in A4 sheet of paper
b.Ragu sauce advertising on a computer monitor
Source: < http://www.ragu.com/>

In general, web pages are created in the vertical or we can say in the portrait manner.

Moreover, it can be said that the same rule is current for web advertisements too. The

most important reason why the portrait arrangement is the most preferable in both

web and print advertising occurs when the content of the design comes to the surface.

This means the content of the design; in short the presence of the text, is the basic

reason for designers to use the portrait manner in their designs. This is due to the fact

that the length of the text that takes place on an ad should be short enough to be read easily and the best way of doing this is to work on a vertical axis.

In the design of an advertisement readability is very important, and no one likes to read very long lines of text; moreover it may be irritating to the eyes to try to read a number of consecutive columns in a long text. Thus in this aspect web and print advertisements resemble each other.

Like print ads, banner ads[5] are the most common type of ads on the web and they come in a variety of shapes and sizes.

The Internet Advertising Bureau (IAB)[6] specifies eight different banner sizes, according to pixel dimensions (2000). (Figure 2)

As technology critic and essayist Bill Thompson states, banner ads are not only annoying for many, but also seem to represent inferior brand products when compared to full page ads (2002). Bill Thompson states that;

> "This is first of all because of their small size. Banners simply don't give the graphical opportunity for presenting a concept- be it a photo-dominated ad or an illustration-dominated ad- or even and especially one which is dominated

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[5] Banner ads; generally the 468 x 60 pixel ads you see at the top of all web pages. They can be purchased throughout the Web and provide direct links to homepages.
Source:<http://www.marketingterms.com/dictionary/banner_ad/>

[6] The IAB is the only association dedicated to helping online, Interactive broadcasting, email, wireless and Interactive television media companies increase their revenues.
Source: < http://www.iab.net/standards/adunits.asp#>

by white space. The banner is too small to be aesthetically pleasing or conceptually engaging, and is too intrusive to be taken seriously." (2002)
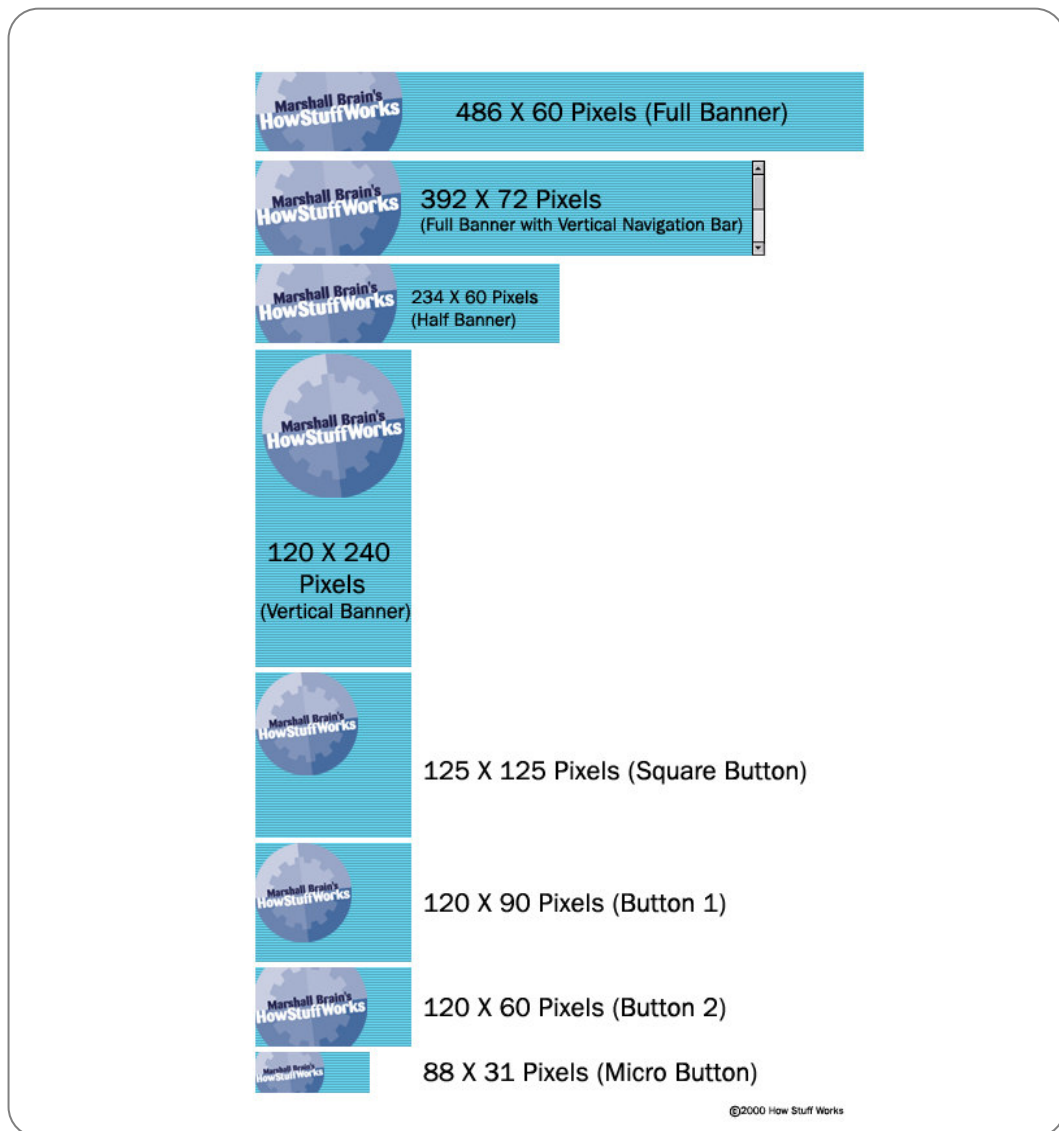
Figure2: Eight different banners sizes according to pixel dimensions
Source: <http://computer.howstuffworks.com/banner-ad2.htm>

Conversely, web advertising enables designers to create different kinds of forms which are impossible to apply in print advertisements. While surfing the web

everyone notices that actual graphic content, or creativity, varies considerably among web ads.

Take for example Figure 3, a typical floating ad for a Norton product. This ad was completely designed according to its content. These four or five moving parts – viruses-play for about 15 seconds and in that time this ad tries to persuade the viewer to click on it. By using animated viruses on the computer screen the Norton Company tries to advertise its Anti-Virus program. In addition, the content of the ad is strengthened by the attention grabbing viruses.

Figure 3: A screen shot of a typical Floating ad
Source: <http://computer.howstuffworks.com/web-advertising6.htm>

Because of its graphic element and shape, a banner ad is somewhat similar to a traditional ad you would see in a printed publication such as a newspaper or

magazine, but it has the added ability to bring a potential customer directly to the advertiser's Web site. This is something like touching a printed ad and being immediately teleported to the advertiser's store.

Also a web ad differs from a print ad in its dynamic potential. A banner stays in one place on a page, like a magazine ad, but it can present multiple images, include animation and change appearance in a number of other ways.

Naturally, it must be noted that web advertising does not only consist of banners. As an advertising medium a well- organized web site is a very good benefaction for consumers in an advertising area. Sing and Dalal argue that corporate web sites "meet the conceptual definition of advertising, they resemble ads in physical appearance and they perform the same basic functions- to inform and to persuade." (1999:92). Silk, Klein, and Berndt suggested a company's website may be its principal point of contact with key audiences (2001:129). As a result, if we take web sites as an advertising medium, we can say that the size of the web site and its content is more advantageous for the ad designers, since unlike banner ads, they have a large space in which to advertise their products to their consumers. Unlike web sites, banner ads are easily ignored by the viewer because of their small size.

In addition, the size of the banners may also sometimes affect the message of the ad. As a result of size, web messages must be shorter and more telegraphic, that is, more like billboards than ads. This translates into shorter sentences and shorter paragraphs. In addition, the fliers of the printed media resemble banner ads in a similar way.

Fliers are small information pages which try to persuade consumers to buy something. Like banners, they run the risk of being thrown away without being read.

The effect of size has been studied many times both in print and web advertising (Homer, 1995; Chtourou and Chandon, 2000). The common rule is that size usually improves memorization. As a result, large ads on the web occupy more screen space, they run better chances of grabbing attention and being seen and remembered. Studies of print advertising have also confirmed this finding. (Finn 1988; Kelly and Hoel, 1991; Naccarato and Neuendorf, 1998)[7]

2.1.2 Color

Both in web advertising and in traditional advertising one of the most important design aspects is color and the two media have different opportunities to create color. Therefore, it can be said that in web advertising and in traditional advertising the usage of color and the perceptions of color by the viewer have to be examined carefully.

As in most advertising, advertisers may only have a second or two to captivate their audience and inspire them to go into action to buy. The usage of color is one

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[7] Finn, A. 'Print ad Recognition Scores' Journal of Marketing Research 25, 2 (1988): 168-78

Kelly, Kathleen J., and Hoel, Robert F. ' The Impact of Size, Color and Copy Quantity on Yellow Pages Advertising Effectiveness.' Journal of Small Business Management 29,4 (1991):64-72.

Naccarato, John, and Neuendorf, Kimberly. 'Content Analysis as a Predictive Methodology.' Journal of Advertising Research. 38, 3 (1998):19

attention-grabbing feature in advertising. Especially in the advertising business, the first impressions of color are vitally important.

In his article *The Psychology of Color and Internet Marketing* Pam Renovato, the web master of the newly renovated "The Free Advertising Network", stresses that color is the first item by which the viewer judges a web ad or a traditional ad, before either reading its offerings or moving on (2002). It is the first thing the viewers notice and the last thing they forget. Human emotions are very often triggered by color. It is a kind of an entrance to persons' deepest thoughts and feelings, and desires. Moreover, color creates a psychological and emotional response in everyone. Therefore it is very important to choose the right color combinations in advertising. Before starting to compare the use of color in the two mediums, it is useful to remember a few basic concepts about the Color Theory.

In his book *Color and Type*, Rob Carter describes the Color Theory as a set of principles used to create harmonious color combinations (1997:18). The Color Theory encompasses a multitude of definitions, concepts and design applications. It has been developed by many artists and scientists; so it can be said that there is not only one color theory. The descriptions below referring to color are cited from Carter's *Color and Type* Book (1997).
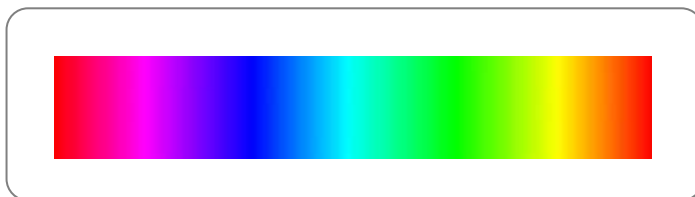
Figure 4: Color spectrum
Source: <http://old.alistapart.com/stories/color/>

According to Carter, color is also known as hue and each hue is a specific spot on the color spectrum (1997: 19). A spectrum can be as simple as a band, or wound up in a wheel (Figure 4). To work with color, there are different attributes that should be known about: value, contrast and brightness, and saturation.

The range from black to white is called value (Figure 5).

Figure 5: Measurement of value is from black to white.
Source: Color Theory December 2003
<http://old.alistapart.com/stories/color/>

"Contrast is the degree of separation between values." (Carter, 21) As seen in Figure 6, whereas brightness adds white to an image, the lack of brightness tones the image.
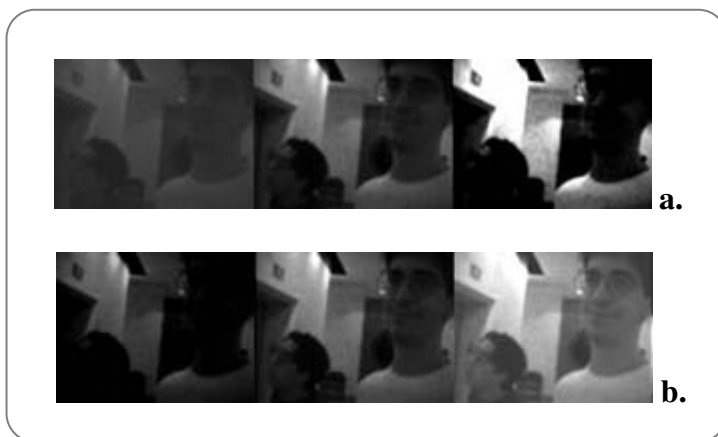
Figure 6: Contrast and brightness levels
a. Contrast levels from low (left) to normal to high (right).
b. Brightness levels from low (left) to normal to high (right).
Source: Color Theory December 2003
<http://old.alistapart.com/stories/color/>

As seen in Figure 7, "Saturation is the measurement of color intensity." (Carter, 22)

The lack of saturation should remind you of black and white television.
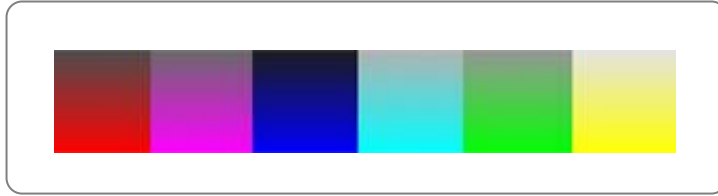
Figure 7: No saturation on top, to full saturation on the bottom.
Source: Color Theory December 2003
<http://old.alistapart.com/stories/color/>

Figure 8 shows the three additive primary colors**:** red, green, blue. As Carter explain in *Color and Type* "When the colors come together in various combinations, they produce other colors in the spectrum – with all three combining to produce white light." (1997: 18)
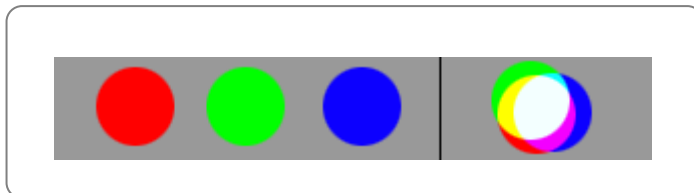
Figure 8: Additive primary colors.
Source: Color Theory December 2003
<http://old.alistapart.com/stories/color/>

Figure 9 shows the subtractive primaries. Mixing these colors, you get a color that closely resembles black. Take away these colors, and you are left with white. This is the primary system used in printing, commonly referred to as CMYK[8].

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[8] In CMYK, the K representing a fourth ink, black. The fourth ink is needed to produce a "true" dark black unlike the muddy black cyan, yellow and magenta together produce.
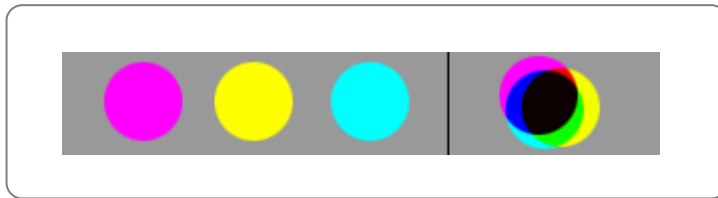
Figure 9: Subtractive primaries
Source: Color Theory December 2003
<http://old.alistapart.com/stories/color/>

Carter claims that when a color is placed near other colors, it takes on a different hue because of the way we perceive colors in relation to one another. (1997:23) Figure 10 and 11 are good examples about this aspect.

Figure 10: The brown color looks lighter on the left, than on the right.
Source: Color Theory December 2003
<http://old.alistapart.com/stories/color/>
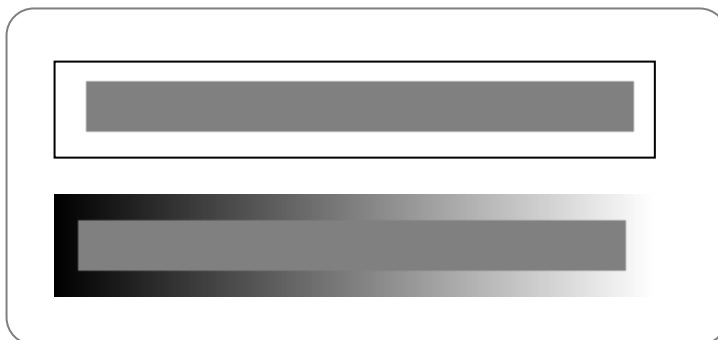
Figure 11: In this example, the top bar of solid grey seems to contain a gradient of light grey (left) to dark grey (right) in the bottom figure.
Source: Color Theory December 2003
<http://old.alistapart.com/stories/color/>

Finally he claims that value is relative (and the same goes for saturation), and value is a serious concern for Web design due to the way Macintosh and Windows machines display colors (they are always lighter on a Mac OS system). (Carter, 20)

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It must be noted that the technical details of how color is created in both media is not a subject which will be dealt with in this thesis because the attitude of this study is to compare both mediums from the design point of view .On the other hand, this subject matter needs to be mentioned because the first inconsistent aspect between the two mediums shows itself here. Therefore, it is better to explain how creating a color differs in the web and in print media. In print advertising the desired color is created by mixing cyan, magenta, yellow and black (CMYK color model). On the other hand, in web advertising color is created with using red, green and blue (RGB color model) and by mixing them with various colors of light.

Apart from the difference in how color is created, there is also another difference which occurs while viewing the printed advertising and web advertisements. Veruschka Götz, the author of *Color and Type for the Screen*, states that "As looking at the monitor the reader perceives colors more strongly than looking at the printed medium." (1998: 10). In other words some bright colors such as white or yellow are able to disturb the eye because text printed on paper is a solid object whereas text on the computer screen is based on light waves. Thus, as Götz declared, most of the screen desktop consists of light rays which after a time will become irritating to the eye as well as completely exhausting. On the contrary, the usage of color in printed advertisements hardly ever bothers the viewers. (1998:10)

In her book *Color and Type for the Screen,* Veruschka Götz, highlights that,

"Colors on the screen always appear slightly artificial. This is because colors on screen are made up of light rather than color pigments, as they are when printed on paper. Our natural color perception habits are adapted to richly – saturated

colors and the computer screen is unable to present these with the same intensity. If we compare a color from a printed color scale with the same color on the screen, the screen version always appears paler and more unreal." (1998:22)

In short, when you are working on the computer desktop and you are selecting colors that will be printed, be aware that the computer screen does not accurately represent color. However, properly converting the RGB colors into CMYK colors ensures that what gets printed looks the same as what appears on the monitor.

Color plays a major role in both traditional advertising and web advertising. It creates a mood or atmosphere which flavors the message of the advertisement. Colors are neither good nor bad in themselves, but they do have a positive or negative, conscious or unconscious psychological effect on the viewer, depending on his or her subjective experience and mood. This means that color has the power to remind us of some coded things, and this rule is current for both traditional advertising and web advertising.

It should be noted that depending on different cultures, different colors can mean different things. If you are designing advertisements for an international audience, particular attention should be given while choosing the color schemes.

Background color is another significant element in advertising. It is really important to choose the screen background color very carefully, since it is generally the largest single area of color. While designing an ad on web or in print, criteria such as, color character, color brightness, and the colors of the other elements, all need to be taken

into consideration. The screen background color is seldom the only color on the screen. It is usually combined with type, symbols, pictures, or logos.

In advertising, if a designer uses poor color combinations and renders the text unreadable, it means it is useless to wait for the readers. Whether in traditional or in web advertising, in either medium the text should be readable. For readability, in everyday use, the general rule is to use black print on plain white paper, for example in business correspondence, books and newsletters. Texts written on a pale color or on a white background are easier to follow and more attention grabbing since they are more easily adaptable for the readers' eyes. On the other hand in *Color and Type for the Screen* Götz explains that "With the computer screen using white background with black text increases alertness but uses up energy more quickly so that the viewer quickly becomes tired." (1998: 17)

David Johnson, the author of Psychology of Color, claims that black is generally considered a mournful, heavy and depressing color, but in the right context, can be sophisticated and mysterious.(2002) Studies have shown that online reading can be difficult on a black background, but many sites have done this successfully using colors which contrast heavily (white, neon green). The usage of black as a predominant color should always be carefully considered.

For instance in Figure 12; in Armani's web ad black background color is used to emphasize the images on the screen. On the other hand, some texts on the screen (at the bottom left to right; Shop on line and US only) are lost in the color of the background and almost impossible to read.
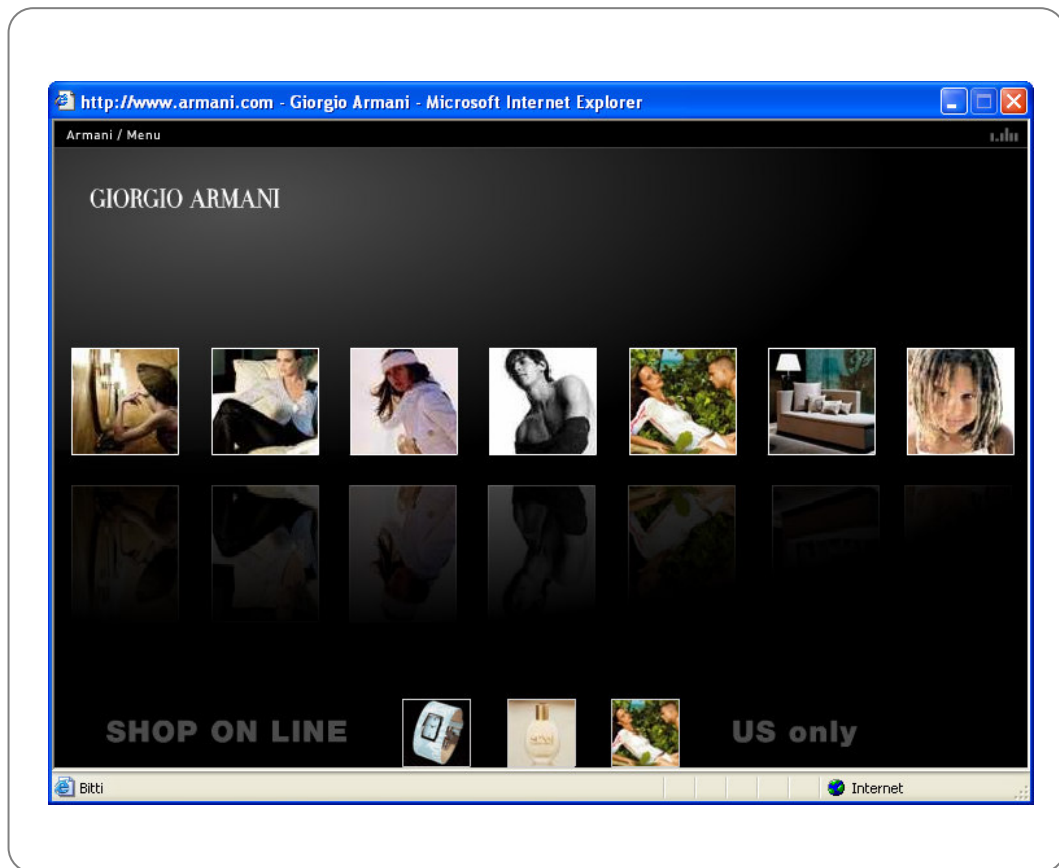
Figure 12: Giorgio Armani's web advertising example; about black background
 Source:< http://www.armani.com>

Consequently, for both traditional advertising and web advertising, it can be said that if designers do not choose their text and background colors wisely, it may mean that all their effort has been wasted.

Moreover, when looking at a computer screen, there sometimes seems to be a continuous flickering. When this happens, it means that the contrast between the background and the type needs to be reduced.

In web advertising, especially in active banner ads, some background colors change during the advertisement. This characteristic is unique to web advertisements since printed advertisements obviously do not have such a capacity. They are static with

the same color. This means that through the use of a changing background color, web ads may have the opportunity to grab the viewers' attention more easily than in printed ads. On the other hand, the same features may cause them to be irritating to the viewers.

Uzmanlarımıza Email ile soru yönelterek,	Vergi, Denetim, Muhasebe,	İthalat, İhracat, Gümrükleme,
frame 1	frame 2	frame 3
Finansman ve Sigorta konularında	Ücretsiz bilgi ve danışmanlık alabilirsiniz	KOBİFİNANS
frame 4	frame 5	frame 6

Figure 13: Finans Bank banner ad
Source: <http://www.kobifinans.com>

As seen in the Finans Bank's banner ad (Figure 13), the background color of the ad changes constantly throughout the advertisement. In this example, the color changing does not add to the product but may catch the viewers' attention.

Likewise, color can be used as an attention getting device when emphasizing important messages. A red headline on a white background, for example, can make a special sale or promotion really jump in both print and web advertising.

2.1.3 Image

In both web and print advertising, one of the most striking factors is the image, and obviously the image factor creates differences between web and print advertising.

Digital images are made up of pixels. As defined in *Understanding Digital Image Resolution,* a web source;

"Pixels are the small sections of color and/or tone that together form a digital image. Pixels form an image like pieces of a mosaic. A digital image is a grid of pixels." (2005).

If the issue is about image, the first thing that must be mentioned is the quality of the images in advertising. In her essay *Resolution Inch by Inch,* published in "Digital Publishing", Jacci Howard states that in print advertising, according to design or the size of the image, designers usually work with the resolutions of 150, 300, 600 or 1200 DPI[9] (2001). These values of resolutions allow the images to be viewed like a photographic quality. When there are enough pixels and they are small enough so as not to be individually discernible, the digital image can achieve photo quality. It means the higher resolutions in print advertising affects the viewers' image perception, and presents a clearer and smoother image to the viewers. If you want to achieve printed photo quality you generally need to print at 200 to 300 ppi (pixels per inch).

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[9] DPI; means Dot per inch

In web advertising, the quality of the image changes according to the different size of the monitors and different screen settings. As Jacci Howard points out, in *Resolution Inch by Inch,* generally most of the computers work with the resolution of 72 DPI, so in this low resolution the quality of the image decreases (2001).

In addition, Howard states that the monitor can be set to different resolutions like 800x 600 and 1024x 768. These are just width and height measurements in pixel dimensions. (2001) Whatever pixel dimensions are set as the monitor resolution, those dimensions fill the view area. So a 17 inch monitor set at 800x 600 will have less pixels per inch (less resolution) than a 15 inch monitor set to the same 800x 600 display setting, because the same amount of pixels have to be stretched over a larger area to fill the larger screen.

Consequently, while print advertising uses very high image quality especially in magazine ads and on flyers, in web advertising an average image quality or sometimes photorealistic images are preferred to attract viewers.

As a result, we can say that mostly high resolution images provide good results in design. On the other hand, it is not useful to use very high resolution images for web ads because readers are impatient and will easily lose interest if they are forced to wait for the advertisement to be downloaded. Therefore, images must be designed for the lowest possible denominator of modem especially in web advertising.
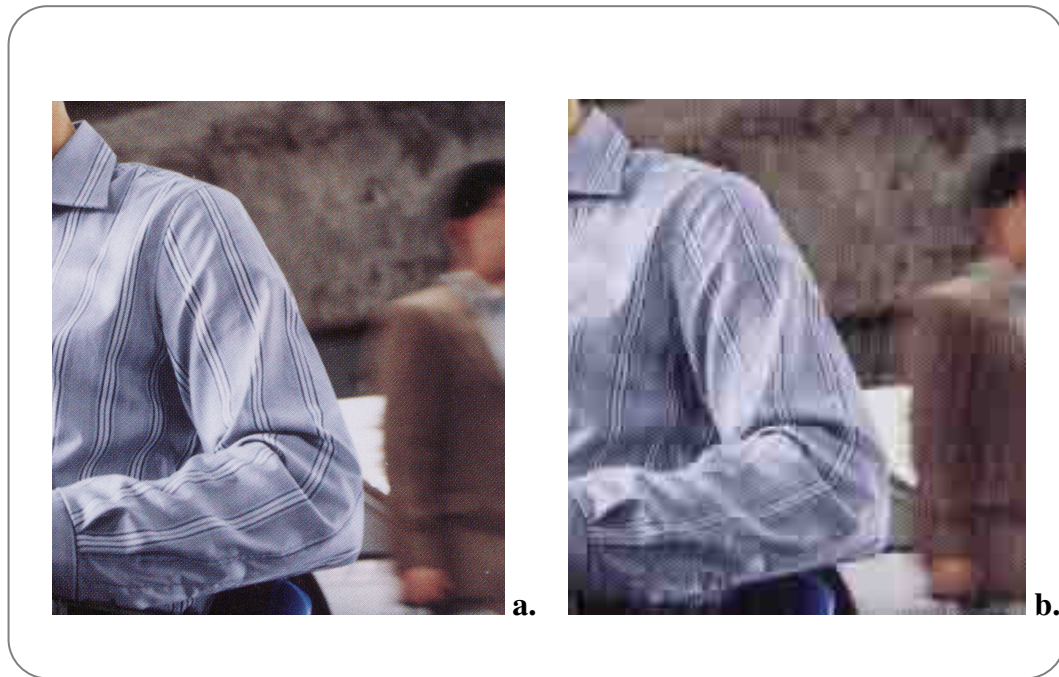
Figure 14: Close-up of an image
a. 300 DPI (Normal quality print)
b. 72 DPI (Standard PC monitor)

Brochure and newspaper readers, like visitors to a web site, are impatient. Designers have just a few seconds to capture their attention, or they are gone forever. Therefore, the visuals on the front cover of a brochure and newspaper should attract the readers into turning the page, or a web ad should provide a reason for visitors to immediately begin following increasingly detailed links. Visitors to a web ad, like readers of a printed ad, will make their decisions to stay or move on within seconds of encountering the message and the images of an ad. So in both web and print advertising the first impression is related directly to the images used.

In reality, the most important function of an image in advertising is to inform the consumers about the product or service being sold, or to create brand awareness by showing the product directly to the consumers. (Figure 15) It is obvious that without seeing the product no one will want to buy it.

Figure 15: Stallone High protein puddings Banner ads
a. Graphical ad (with image usage)
b. Text based ad (without image)
Source: <http://www.affordablesupplements.com/highproteinpudding>

Due to the size of the medium, it is generally impossible to use a large size image in web advertising. Unlike web ads, magazine ads in particular take advantage of using large size images to attract attention, and in this way advertising is becoming more and more in the viewer's face. In addition, it must be noted that using huge images in advertising triggers our purchase decisions in a positive way. The product automatically takes root in our memory.

Full page image ads sometimes are a welcome aid from the editorial content. The audience reads an article, then turns a page and is confronted with something that

prompts their mind to make a connection. The image makes us think 'why didn't I think of that before? It brings a smile to our face, or recognition of how cool the idea is.
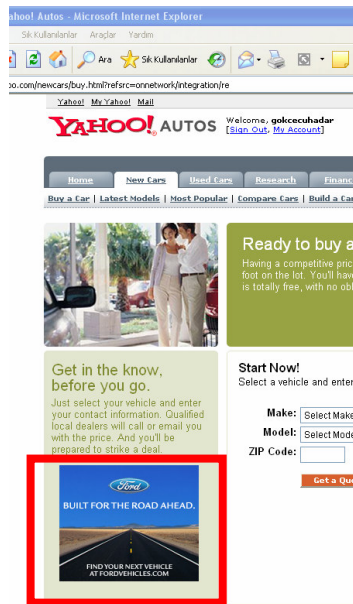
Figure 16: Ford Advertisings
a. A two spread magazine ad (with a large size image)
b. A banner ad in a web site (with a small size image)
c. Close up image of the banner ad

Prior online advertising studies have examined the web page background image's effect on advertising attitudes. (Bruner and Kumar, 2000; Stevenson, Bruner, and Kumar 2000) Stevenson, Bruner, and Kumar examined web page background complexity in a laboratory experiment. They found that background image complexity had a negative effect on attitude toward the advertisement but no effect on attention toward the advertising stimuli. That is, with a complex image background the viewer had lower attitudes toward the web advertisement but on the contrary, the background image complexity did not prevent people from paying attention to what was being advertised.

Lastly, colored images are more easily remembered than black and white images especially in advertising. That is, Gilbert and Schleuder compared black and white to colored ads and found that the colored images ads were more readily recalled and were processed with greater speed (1990:755).

2.1.4 Text

In both print and web advertising design, one of the issues requiring attention is text. Text plays a significant role in advertising. The information given to the audience, the content of the product or the service and the most important messages that are announced to consumers are reached to us by the presence of the texts. So ads that are unreadable, for whatever reason, automatically lose their audiences.

Micheal Bernard, in his essay *How Should Text be Presented with in a Web Site?* stated that "For both in web and print media, evidence suggests that the most

commonly used fonts tend to be equally legible at 10-, 12-, and 14-point size."(2003)

Text Text Text
10 point size 12 point size 14 point size
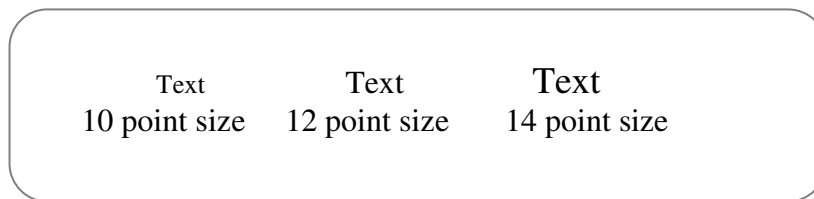
Figure 17: Most usable font sizes

In modern typography there are two basic forms of typeface: serif, and san serif. Veruscha Götz , in her book *Color and Type for the Screen*, defines serif and sans serif as;

"Serif typefaces have clearly emphasized serifs and clear differences in the thickness of the strokes that make up the letter. They are most often used for text in books and newspapers. San serif typefaces are faces without serifs, and they have no differences, or only slight differences, in the thickness of the strokes. They are most often used for titles, headings, and in advertising." (1998:56).

Serif Sans serif
Times Ariel

Figure 18: Times and Ariel Fonts

At the normal type size serif typefaces are less suitable for use on the screen than sans serif typefaces. If serif typefaces are being used on the screen, it is important to select a typeface in which the serifs and strokes are not too thin.

Displaying type on the screen requires a high degree of compromise. This is because screen display at present is based on a bitmap of 72 pixels per inch. This resolution requires special processing for small type sizes up to about 20pt, depending on the bitmap. Without this processing, distortion occurs in the bitmap. (Götz, 1998)
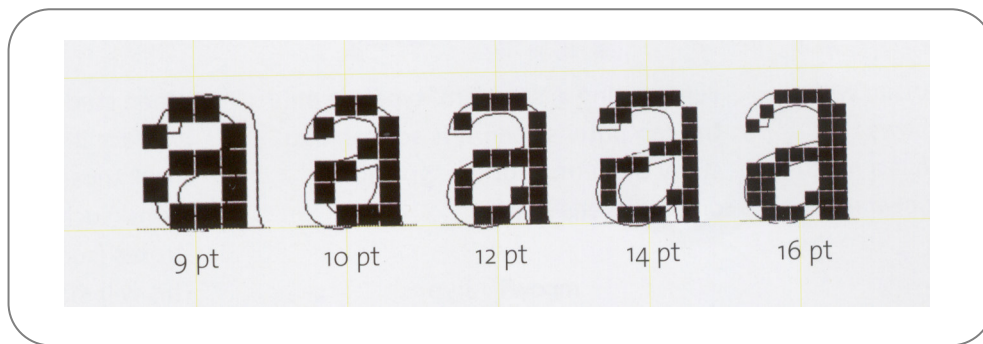
Figure 19: Different bitmaps of small type sizes
Source: Götz, Veruschka. *Color and Type for the Screen.* RotoVision; New York, 1998: 75.

In addition, another important thing which Veruschka Götz points out concerns conventional typefaces. She highlights the fact that as conventional typefaces cannot be simply transferred to the screen; there are special screen typefaces such as Chicago, Geneva, Monaco, and New York. Their type design is specially adapted to the bitmap of a 72 dpi screen and optimized for reading.

When studying the bitmaps of a typeface it is particularly important to check those letters which have round forms (such as the "o") and oblique strokes (such as the "w"). This will make it possible to decide quickly whether a typeface is suitable for use at a particular size.

It is not only the pixels that need to be studied; the letter spacing should also be inspected. If the letters are too close together, the text will be difficult to read

because the letters clump together, even if the pixel pattern of the letters is acceptable. In such a case, the typeface should be rejected or the tracking value adjusted.

As Rob Carter draws in *Color and Type,* the suitability of different type styles such as light, normal and bold for use on the screen depends on the colors chosen for the type and the background. (1997:31) With a white or very light colored screen background, the white or bright areas are much brighter than on paper because of the light generated by the color combination. This means that the edges of the type are obscured by blooming, which makes the type appear thinner than it actually is.

In all types of written advertisements the text line length is important for audiences. Text should be easy to read. The optimal text line length is dependent upon several factors, but it is obvious that we are not likely to read very long lines of text. In his essay *How Readers Read on the Web,* usability "guru" Jacob Nielsen stressed that;

> "It is commonly recommended that shorter line lengths which are about 11 words should be used in place of longer, full-screen lengths both in print and web. This is because longer line lengths require greater lateral eye movements, which make it more likely to loose one's place within the text."(2001)

He also pointed out that longer line lengths are more tiring to read. Therefore, lines should be limited to lengths of around 40 to 60 characters, which is approximately 11 words per line. (2001)

In their *Writing for the Web* essay, John Morkes and Jacob Nielsen point out that people with poor reading ability performed better when the line length was approximately seven words.(2001) This suggests that young readers who have not mastered reading online, as well as readers who have vision deficits, may benefit most from having shorter line lengths. As a result, advertisement designers should be more sensitive about the usage of font types and sizes, since these are the factors determining whether the audience read the ad or not.

The readability of a text depends on two main points; the background color and the background texture. Plain backgrounds produce faster search times than medium textured backgrounds. An important determinant, though, is the contrast between the text and the background. If the background is more textured, the greater the contrast should be between them. But, if one is to use a textured background, it is recommended that one is very careful by testing it in different color settings.
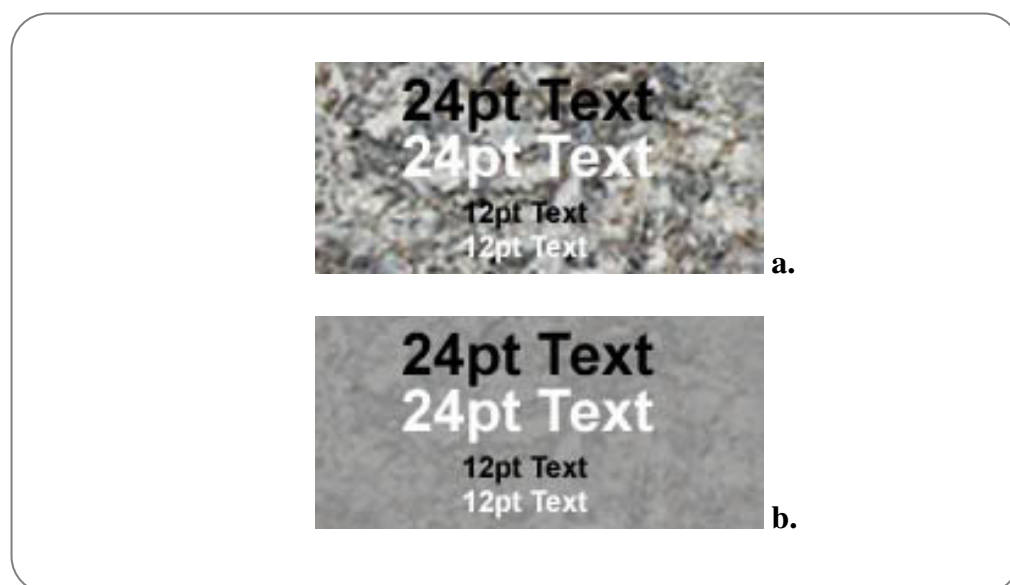
Figure 20: Background examples
a. Bad Background Example (with low contrast)
b. Better background (with high contrast)
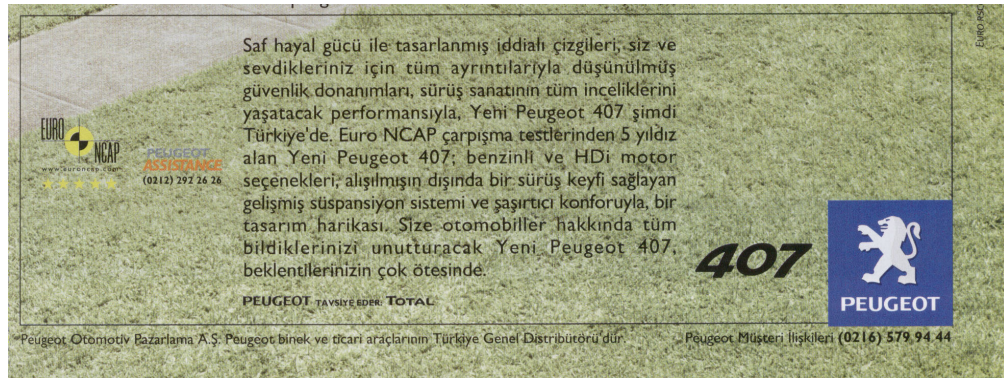
Figure 21: Peugeot's Magazine ad
a. The complete ad
b. Close-up of the text. (Background texture makes the text illegible.)

As for color, as long as there is sufficient contrast between the text and the background, many color combinations are possible. However, most studies have shown that dark characters on a light background are superior to light characters on a dark background, as seen in Figure 22.

Do	Don't
Blue on Gray	Blue on Green
Blue on White	Blue on Yellow
Blue on Yellow	Blue on Magenta
Black on Yellow	Black on Blue
White on Blue	White on Yellow

Figure 22: Place colored text on neutral background to improve legibility
Source :< http://www.sapdesignguild.org/community/design/print_colors_ii1.asp>

 If the advertising offers a lot of content, dark text on a light background is generally recommended. In contrast to this is a light text on a dark background that creates a sense of mystery and intrigue. For such ads, the text is kept to a minimum with graphics providing the emphasis.

The least readable combinations on the web are green on yellow, white on pink, red on green, and pink on blue. Also, for all combinations, (as in Figure 23 and 24) the lighter background with darker text was considered to be more readable than darker backgrounds with lighter text.

For text colors, it is important to have a good contrast between colors that need to be distinguished. Some color combinations generally frustrate users and make the text virtually unreadable. For many color deficit users, red, green, brown, or purple may look the same if these colors have the same contrast. Since color deficit users cannot distinguish between a large spectrum of colors, it is advisable to strongly contrast the

Figure 23: Banner ads
a.Dark background with light text
b. White background with dark text

Figure 24: Magazine ads
 a. Dark background with light text
 b. White background with dark text

colors (make sure one color is darker than the other) between the foreground and background, as well as between other colors that need to be distinguished.

Another important issue in advertising is to show the customer immediately the most important information (text) in an advertisement. In web advertising this kind of important texts should be seen instantly, near the top of the advertisement. In reality, mainly in web advertisements because of the size of the ad, there is not enough space left for the text. Therefore writing for the web is more challenging than writing for print.

On the other hand, generally in print advertising the most important information is emphasized by the size of the text. So here we can say that especially in printed mediums the usage of size has more alternatives than in web advertising design.

Figure 25: Magazine ad and a button ad
a. The most important information emphasized by the size of the text
b. The most important information emphasized by the color of the text

2.2 Comparing design principles in both media

In both media; print and web, designers should follow some rules in order to be successful. In other words, there are principles of design; balance, unity, emphasis, and rhythm, which can be thought of as what designers do to the elements of design. Also the application of these principles determines how successful the design is going to be.

This section will evaluate the two mediums on the basis of design principles, and put strong emphasis on how the two apply these principles in advertising.

2.2.1 Balance

Balance is an important design principle which should be applied in both printed and web advertising. We strive for balance in many aspects of our life. At times we can be so sensitive about the position of things that we might constantly change our decision about the balance of something until it looks right. This sense of balance in physics is similar to balance in design.

Very simply, balance is an equal distribution of weight. When a design is balanced audience tend to feel that it holds together, looks unified, and feels harmonious. At the same time when the design is unbalanced it can make us uncomfortable. Understanding balance involves the study of several interrelated visual factors: weight, position, and arrangement.

In both printed and web advertising, all the elements found in a design have a visual weight. Visual weight can be defined as creating the illusion of physical weight on a

decided medium. The size, value, color, shape, and texture of an element all contribute to its visual weight.

In addition, the position of this element on the medium such as bottom right, bottom left, center, top right or top left, affects its visual weight directly. In visual perception different areas of the page seem to carry more or less visual weight. For instance, in printed advertising, especially in full-page magazine ads, the center of the page is very powerful and it can carry a good deal of weight.
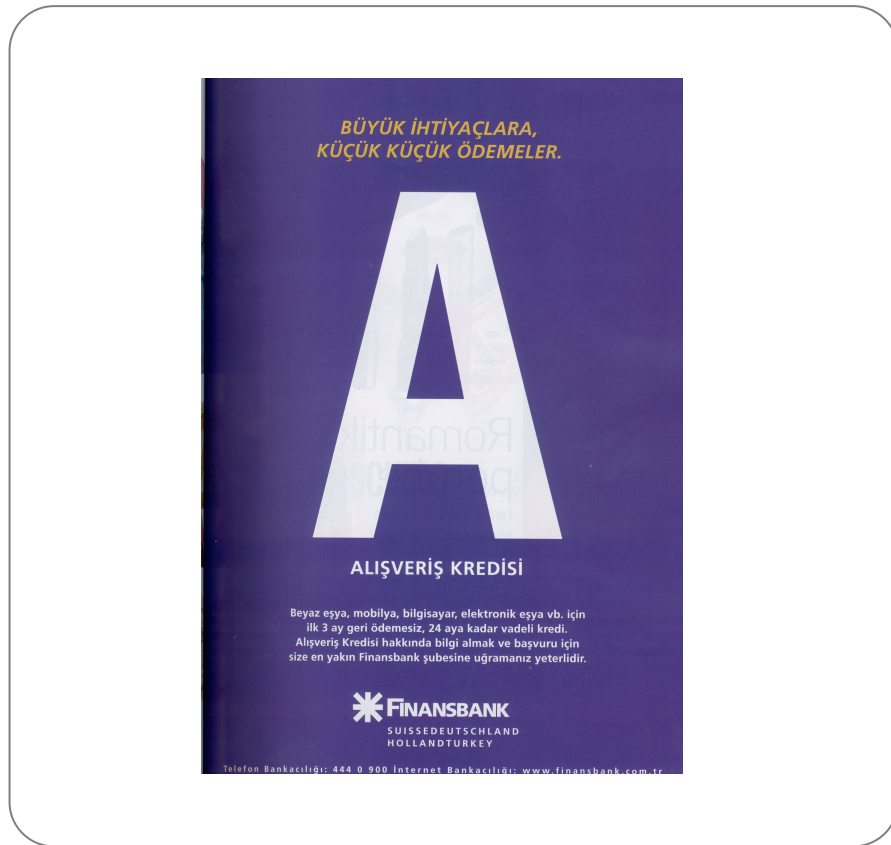
Figure 26: A full page magazine ad
(Balancing heavy weight on the center)

Sometimes, in web advertising, especially in banner ads, due to their small sizes the positioning of the graphical elements on the banner give rise to some balance

problems. Take for example half banners, button banners, and micro buttons. (Figure27) In these banner types, making decisions about balance may be impossible since the designer's options concerning the arrangement and position of the elements are limited by the size of the area.

Figure 27: Banner examples with different sizes
a. Half banner
b Button banner
c. Micro button banner
d. Button banner

There are basically two approaches to the arrangement of elements in printed and web advertising. In other words, we can create a balance which is symmetrical or asymmetrical in design. If you can arrange all the identical or similar visual elements so that they are evenly distributed on either side of an imaginary vertical axis; this is called symmetry, and it is always balanced. A symmetrically balanced layout has elements of equal weight above and below the optical center. To the left and to the right everything is the same, and it has elements of equal size and weight.

When you arrange dissimilar or unequal elements of equal weight on page, it is called asymmetry. To achieve asymmetrical balance, the position, visual weight, size, value, color, shape and texture of an element must be considered and weighted against every other element. Also, asymmetrically balanced layouts achieve a stability that is dynamic rather than static.

For example, in Figure 28(a), imagine a vertical axis dividing the ad in half. You can see an equal distribution of weight on either side of it. But in figure b, we can see an unequal distribution of weight.
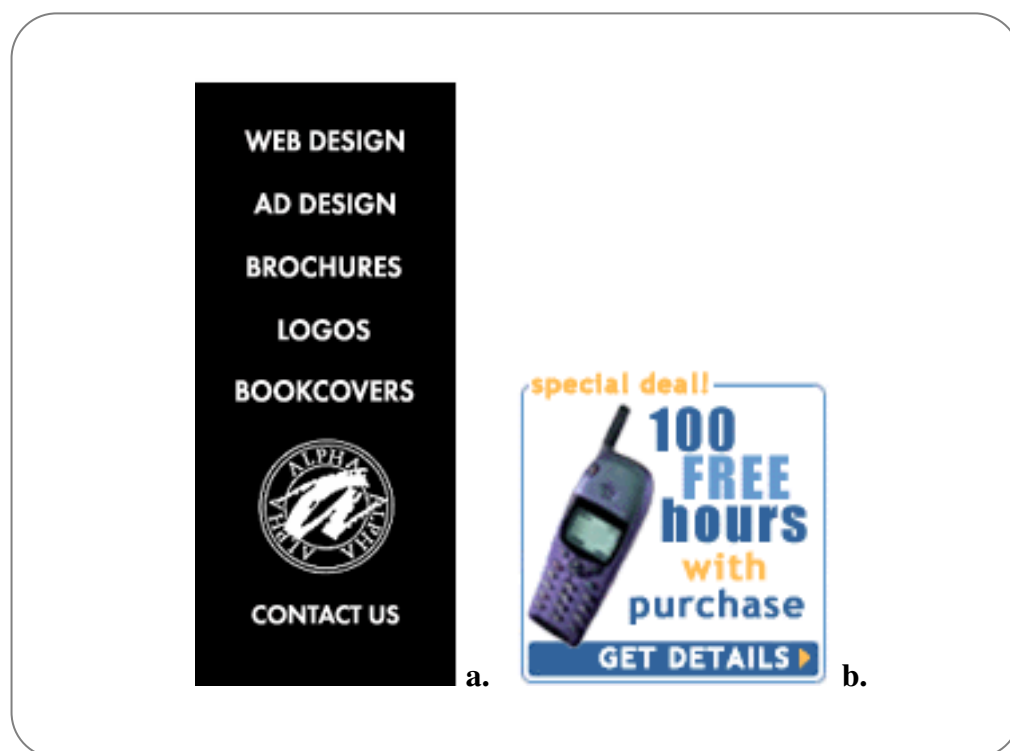
Figure 28: Web ad examples
a. Symmetrical balanced layout ad
b. Asymmetrical balanced layout ad
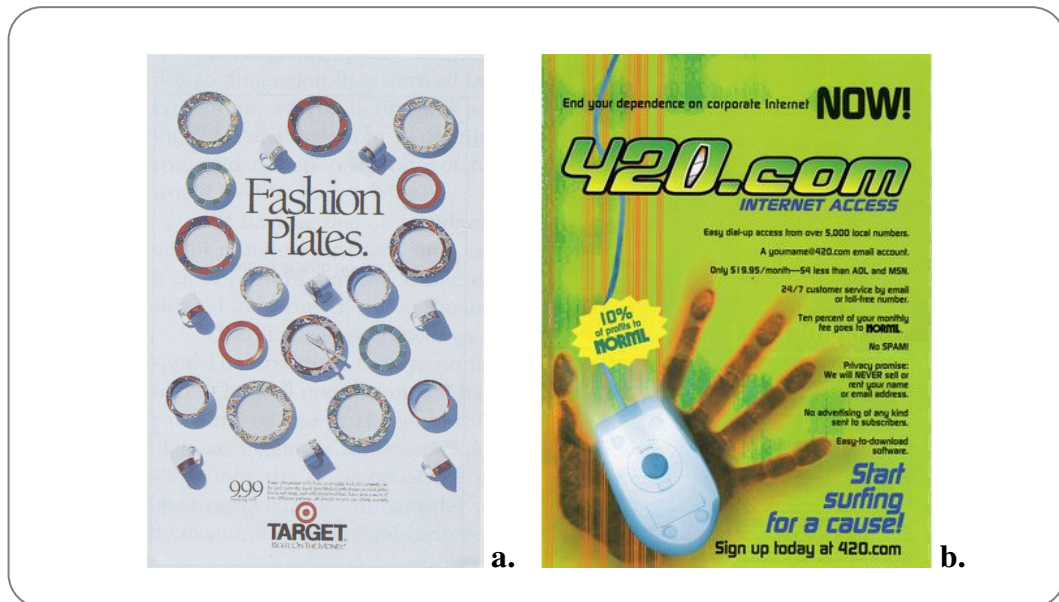
Figure 29: Magazine ad examples
a. Symmetrical balanced ad
b. Asymmetrical balanced ad

In reality, in both printed and web advertising, it is almost impossible to list ways to achieve symmetrical and asymmetrical balance since every element in design and their position contribute to the overall balancing effect in a design solution. Even the movement of one element may affect the delicate balance of design. So it can be said that the decision of whether to use symmetry or asymmetry in advertising design should be dictated by the subject matter, the message, and the feelings you wish to convey.

2.2.2 Unity

In all types of advertising, whether printed ads or web ads; the type, photographs, illustrations, and graphic elements have to work together as a unit. There are many ways to achieve what we call unity; where the elements in a design look as though they belong together. Achieving unity relies on a basic knowledge of the formal elements and an understanding of other basic design principles, such as balance, emphasis, and rhythm.

Unity is one of the goals of composition and it allows the viewer to see an integrated whole, rather than unrelated parts. We know from studies in visual psychology that the viewer wants to see unity; if a viewer cannot find unity in a design, s/he will lose interest. We borrow the term "gestalt" from Gestalt psychology to describe this concept of visual unity and wholeness. According to Amy E. Arnston, in her book *Graphic Design Basics*, unity contributes to memorability, total effect and clear communication; it is about how well a design holds together. (1988: 15)

The essential point of gestalt is that in perception the whole is different from the sum of its parts. Taking reference from Jenny Fultz's site on *Gestalt Theory*; we can investigate five laws developed by Gestalt psychologists that govern human perception; (2003)

- Law of proximity; "Elements that are closer together will be perceived as a coherent object. In the example, we instantly see two groups of objects."(Fultz 2003)
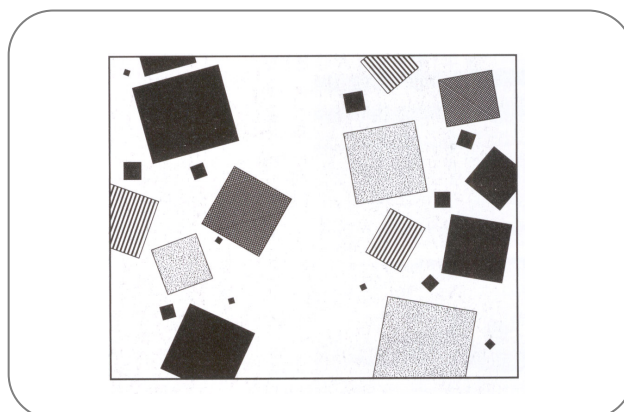
Figure 30: Example of proximity
Source: http://coe.sdsu.edu/articles/gestalt/index.htm

- Law of similarity; "Elements that look similar will be perceived as part of the same form. In figure 31, grouping similar shapes makes us see a plus sign in the center." (Fultz 2003)
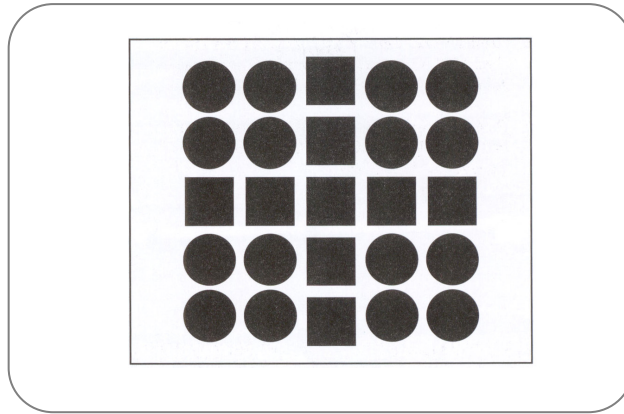
Figure 31: Example of similarity
Source: http://coe.sdsu.edu/articles/gestalt/index.htm

- Law of continuation; "Viewers tend to continue contours whenever the elements of the pattern establish an implied direction. People tend to draw a good continuous line." (Fultz 2003)
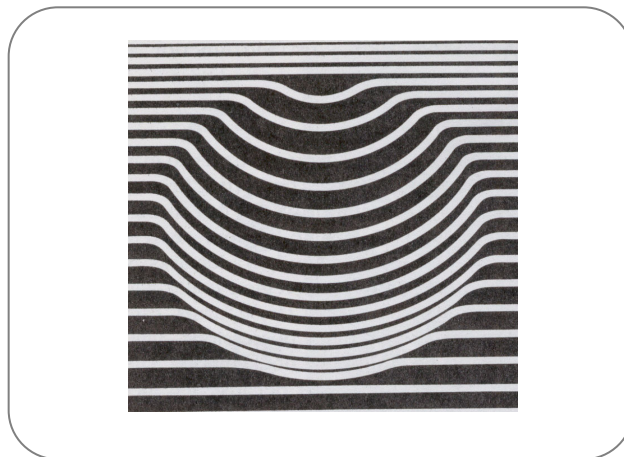
Figure 32: Example of continuation
Source: http://coe.sdsu.edu/articles/gestalt/index.htm

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- Law of closure; "Humans tend to enclose a space by completing a contour and ignoring gaps in the figure." (Fultz 2003)
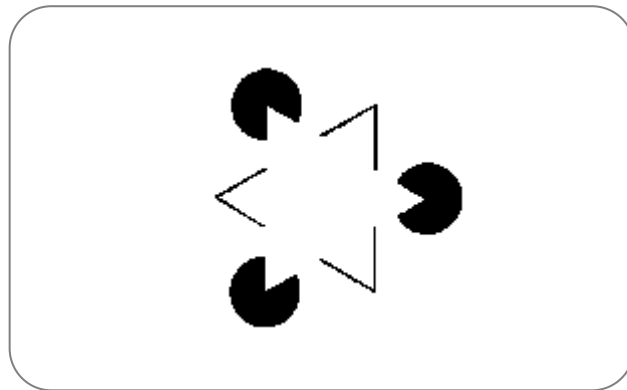
Figure 33: Example of closure
Source: http://coe.sdsu.edu/articles/gestalt/index.htm

- Law of figure/ground; "A stimulus will be perceived as separate from it's ground. The below figure appears to the eye as a square inside a circle, or as a donut shaped circle with a square hole." (Fultz 2003)
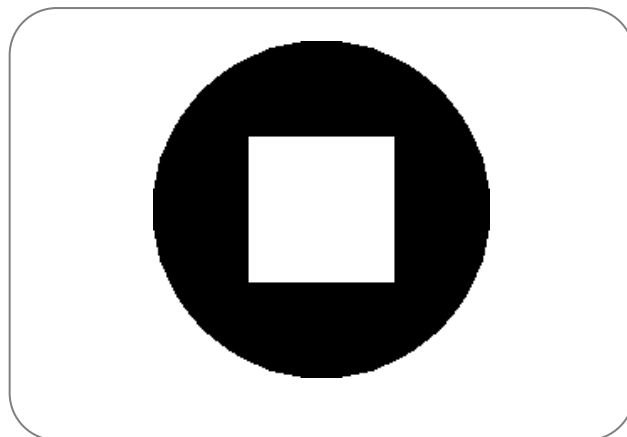
Figure 34: Example of figure/ground
Source:< http://coe.sdsu.edu/articles/gestalt/index.htm>

The most widely known visual perception study is the gestalt theory. Especially in advertising, designers do not work with graphical elements only, but with perceptual

structure. Therefore, learning these gestalt principles help them to take advantage of the way the object, eye, and graphic creation interweave.

Some principles should be employed to get the desired results concerning unity in both printed and web advertising. The first one is correspondence among elements. Repeating an element like color, direction, shape, type, or texture, or establishing a style, such as a linear style, can establish a visual connection or correspondence among the elements. In advertising, this visual connection creates a special and specific character for the advertised product, and this character is applied through the whole series of the same product. In other words, by applying a continuous style to the whole series of the same product, advertising creates a proper identity for the product.

As can be seen, Exit Exchange banners show a certain level of variety in their advertising designs, but color, typeface, and style unity grab the audience in such a way that wherever they see the same product, they can easily distinguish it from other designs of similar products.

Figure 35: Different ads of the same product

In addition, a well-built grid system creates unity in advertising too. Subdividing the format into fixed horizontal and vertical divisions, columns, margins, and spaces establishes a framework for organizing space, type, and pictures in a design. This is called a grid. The grid gives a design a unified look. However, this rule is commonly current for printed ads rather than for web ads, since the grid system is mostly used in single page or multi-page formats. However, if we categorize web sites as a more developed advertising medium, there are many successful grid applications that can be given as an example.

In addition, in web design, tables are used to create the desired grid with the simplest of web authoring tools. In her book *Web Design in a Nutshell* Jennifer Niederst states that tables serve two key functions in web page design; to align and display information in columns and rows; and to create a total page layout with the creative organization of columns, rows and cells. (2003: 189)

In Clarins' magazine ad, all the design elements are positioned according to a strict grid system. The page is vertically divided into four columns. In accordance with the grid, the text and picture give a unified look to the advertising.

Thirdly, alignment is another principle which works towards unity. Visual connections can be made between and among elements, shapes, and objects when their edges or axis line up with one another. The viewers' eye easily picks up these relationships and makes connections among them.(Figure 38)

Figure 36: Application of a grid system in a magazine ad
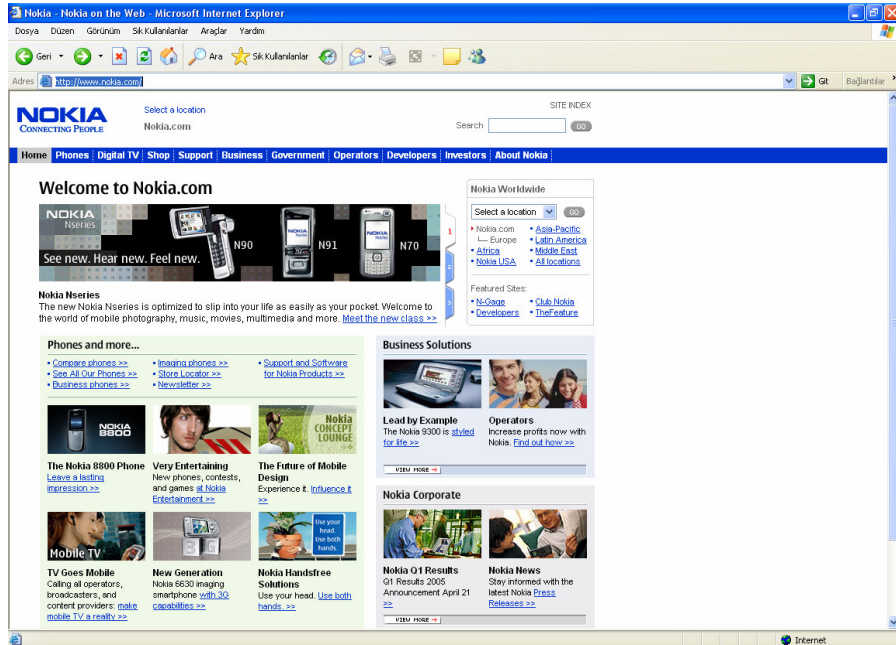
Figure 37: A web site organized with a grid system
Source:<http://www.nokia.com/>

Figure 38: Alignment in a magazine ad

Finally, by flow or in other words with movement, the elements are arranged in such a way that the audience is led from one element to another through the design.
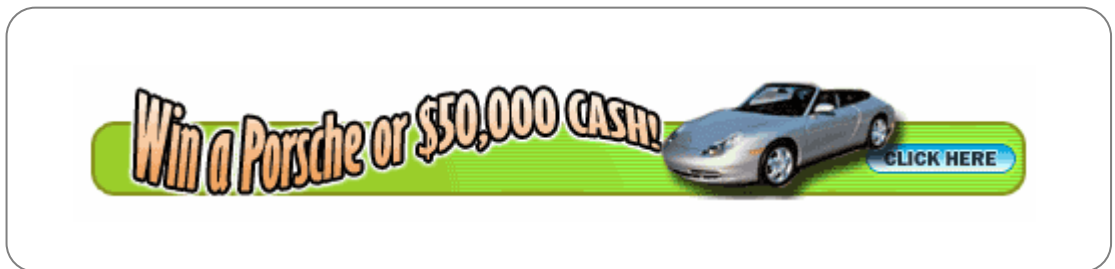
Figure 39: Flow in a banner ad

These are all principles which are applied to both printed and web advertising to achieve unity in design. However, it must be noted that size is of great importance during the application of these principles in advertising.

2.2.3 Emphasis

Nowadays, whenever we turn our heads we are faced with information on posters, brochures, magazines, etc. How does the reader or viewer absorb this information? Or another good question is, how does the audience know what is most important?

Commonly, audiences are passive recipients and depend upon the designer to direct their attention. This need for direction creates the emphasis in design. Emphasis is the idea that some things are more important than others; and important things should be noticed.

Emphasis is a very important design principle in advertising. When a viewer looks at an advertisement, whether it is a printed ad or a web ad, what s/he looks at first is what the designer thought was most important. This point of emphasis is called the "focal point". In other words, the focal point or point of focus is the part of a design that is most emphasized.

Especially in advertising, a focal point is usually determined by the relative importance of the chosen element to the message and by what the designer believes will attract the audience.

Take for example, two different sports shoe advertisements; Nike and Reebok (Figure 40). In the Nike ad the designer has decided to put the emphasis totally on the shoe, that is, the point of focus is clearly seen. In the Reeboks ad, again by using the other graphic elements, the designer has emphasized the sports shoe with a chosen message. However, when we see the shoe (focal point) in the advertisement,

we are led to all the other elements in the design since they have been arranged according to emphasis.

Figure 40: Magazine ad examples about emphasis
a. Nike sport shoe ad
b. Reebok sport shoe ad

In advertising, the designer usually has a main message to communicate. It means that a primary focal point can be established along with supporting focal points, which we call accents. Accents are not as strongly emphasized as the main focal point. For example in figure 41, the first thing that grabs the audience's attention in the design is the text written in red (Give Blood). The main message which is immediately communicated to the viewer is in this sentence. So, you first noticed it because it is colored, bigger and positioned at the top of the ad. The other typographic elements and the image are all accents in this advertisement.

Figure 41: American Red Cross banner ad

In addition, another important thing to remember in advertising is not to give equal emphasis to all the elements in the design. If you give equal emphasis to all elements, it means that none of them will have been emphasized, and you will just end up with visual confusion. Consequently, it is important to know how to establish a focal point in a design.
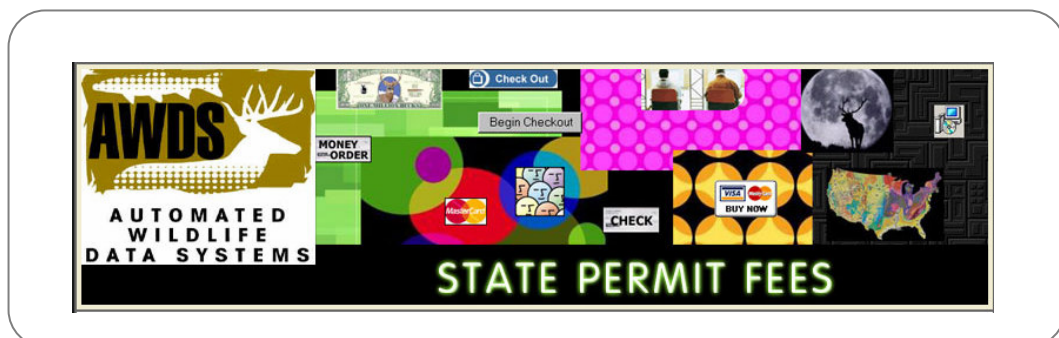
Figure 42: Visual confusion in a banner

There are some possible ways to make something a focal point, or emphasized. Here is a list of some ways: make it brightest; make it a different color; make it in color if everything else is in black and white or vice versa; make it go in a different direction; make it a different value; position it differently; give it a different texture; arrange all the elements to lead to it; make it different shape than the other elements, isolate it; make it clear and other elements blurred; make it an opaque color and the other colors transparent, make it glossy, etc.
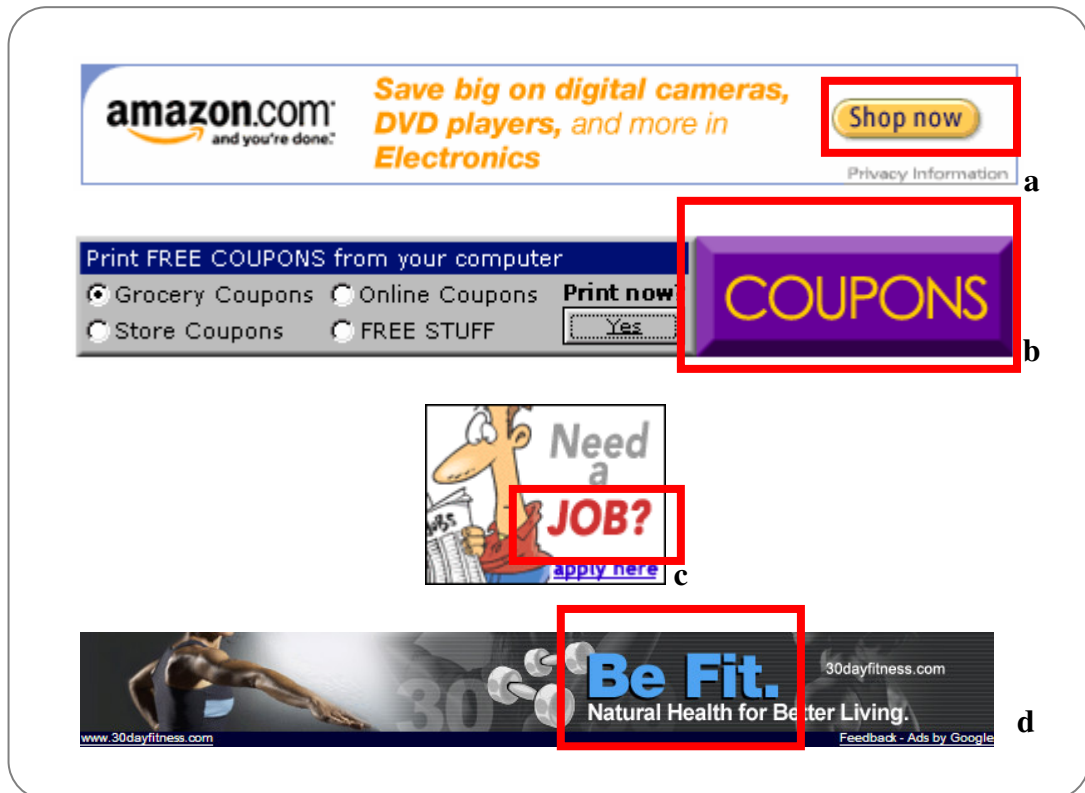
Figure 43: Example of focal points in different banner ads
a. Amazon.com banner ad
b. free coupon banner
c. need a job banner
d. 30 day fitness.com banner

So it is obvious that emphasis has a great role in advertising design, and in the main all the focal point rules for printed ads are also applicable to web ads too. However, web advertising has greater opportunities to catch the viewers' attention more dominantly than printed ads since animated elements in web ads so quickly grab attention, and fairly often designers use the advantages of this aspect.
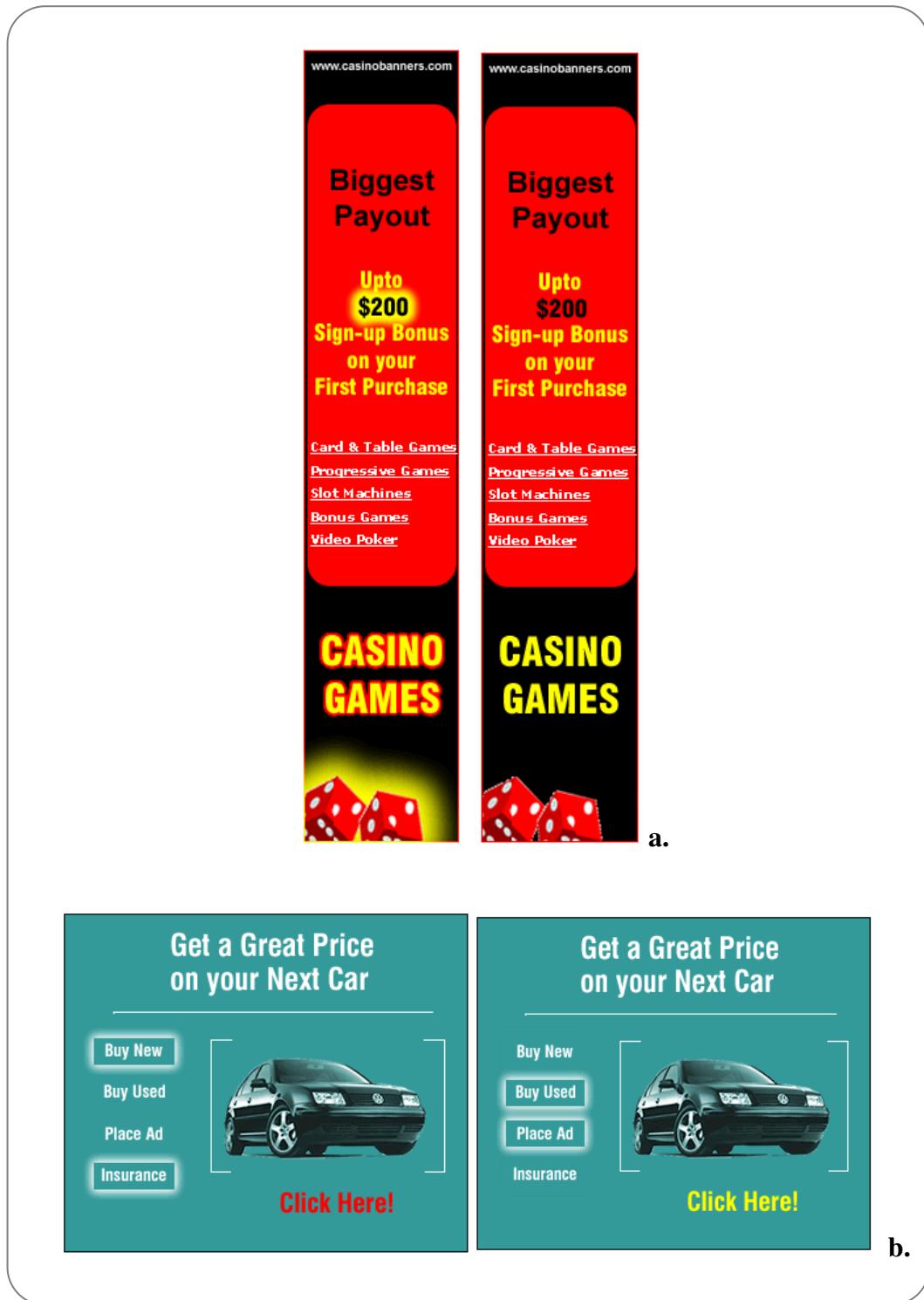
Figure 44: Animated banner examples
a. b. To take attention using animated parts in focal points

2.2.4 Rhythm

Like other design principles, rhythm is another important principle which is so effective in printed and web advertising. Rhythm is a term we most often associate with the sense of hearing. However, in design principles rhythm is established by visual elements rather than by sound. Rhythm is a pattern that is created by repeating or varying elements, with consideration given to the space between them, and by establishing a sense of movement from one element to another.

Advertisements use graphical elements and texts to create a rhythm. In reality, rhythm is based on repetition. However, rhythm involves a clear repetition of elements that are the same or only slightly modified. For instance, when we draw evenly spaced vertical lines on a page we establish a repetitive rhythm because the spaces between the lines are equal and our eyes move from one element to another consistently. If we vary the distance between the lines, we establish a different kind of rhythm, one with variation.

Basically, there are three ways to establish a rhythm in a layout. These are placing the elements naturally on the page, using repetitious typographic devices, and arranging material in a logical progression.

First of all, placing the elements in the natural path of the eye is an effective way to establish a rhythm in design. In his *Graphic Communications Today* book, Theodore Conover mentioned the natural path of the eye. Studies show that when a viewer is looking at a printed page, the eye first hits the upper left near the optical center, then it moves to the right. After that, the eye diagonally moves down the page to the lower

left and then to the lower right. In other words the eye follows a sort of Z pattern when traveling over a printed page.(1995:81) This situation is also applicable to web users too since, as with printed material, the web audience scan the screen rather than go into every detail.
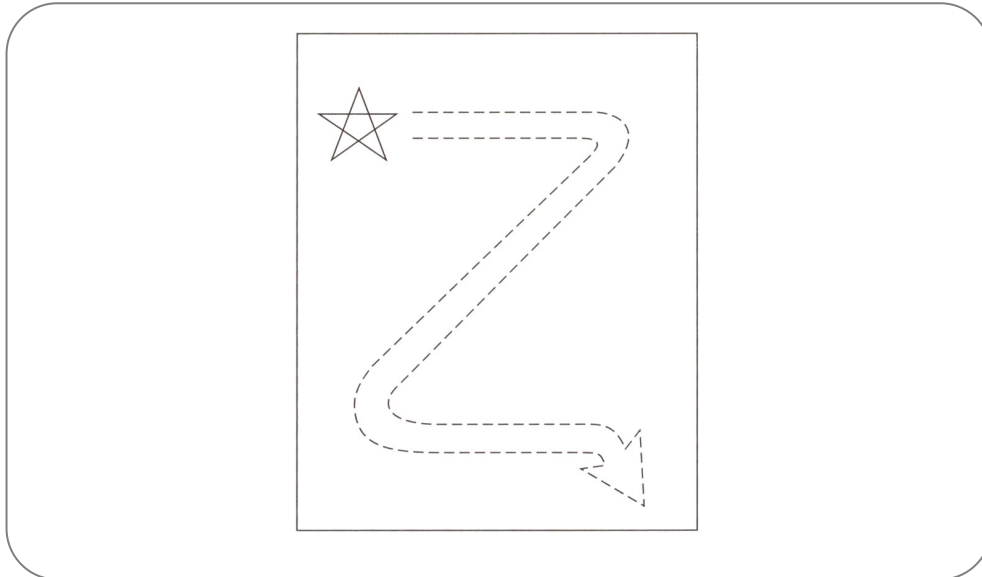
Figure 45: Z pattern which eye follows
Source: Conover, Theodore E. *Graphic Communications Today.* West Publishing Company; Los Angles, 1995 (p.181).

Therefore, if a designer arranges the elements on the page in a logical order along this Z path, s/he can maintain the movement of the layout. In addition, using some repetitive typographic devices such as initial letters, numbers or small illustrations in a logical order can show the viewer a direction through the message and create a rhythm in design.

It is obvious that in printed advertising establishing rhythm is easier by taking the advantage of white space (Figure 46). However, generally in web advertising-especially in banners- it is not easy to create rhythm because of the small area of the format (Figure 47).

Figure 46: Ads of Garanti
a.b. Repetition is used to establish a rhythm

Figure 47: Example of different banner ads
a. Floating line directs the viewers' looking path and creates rhythm
b. c. Repetition of the text produces the rhythm

2.3 Experimental design differences and similarities between the two mediums

Until this point analysis has covered the more obvious and clear aspects of the two mediums. When comparing the two, elements of design and principles of design helped us to identify the differences and similarities between them. However, there is a need not only to discover apparent aspects, but also to investigate more obscure ones. These are interactivity, time, touch (virtual/corporeal), navigation, and organization of information. The common characteristic of all these aspects is their relationship with the audience, because these aspects can be noticed through the user experience.

Therefore, this part of the study analyzes both mediums in depth with reference to the aspects introduced above.

2.3.1 Interactivity

Before entering the issue of interactivity, the first thing that should be highlighted here is the difference between the pull and push media in advertising. Push v. Pull is a way to describe people's interaction with their media experience. "Pull media is where there is an "information flow that is expected by the user"; in contrast to "push media where there is "an information flow that is not expected by the user."(Cheverst, Smith 2001)

So, the audience's interaction with the print and web media differs. Pull advertising is geared to draw visitors to your website when they are actively seeking your product or service. Prime examples of pull advertising are search engine

optimization, cost per click search engines, directory listings, yellow page ads, and shopping portals.

In contrast Push advertising refers to all efforts to get the word out to an entire group of potential customers in order to hit the few that may be currently interested in your product or service. Most traditional offline advertising efforts (magazine, billboard, newspaper, TV, classifieds, etc) as well as online banner ads and email broadcasts are considered push marketing.

Besides this, one of the most interesting and obvious differences between the two mediums of advertising is the relationship of the audience to the advertisement. In other words, the way the audience navigates through the advertisement. The structure of the advertisement creates the interaction between the audience and the advertisement.

In every part of our lives, in nearly every action some level of interaction can be seen between the person and another person or object. A variety of definitions of interactivity can be found in literature. In reality, all these definitions have mainly focused on two distinct aspects of interactivity. These are reciprocal communication and control. Thus, it can be said that interactive communication should satisfy two conditions.

In 'Networked Interactivity' Rafaeli and Sudweeks state that firstly, interaction should allow a two-way flow of information, and the information being exchanged in a sequence should be closely related. Secondly; they point out that such an exchange of information should happen quickly. It means when one communication party

sends out a piece of information, he/she should be able to receive a fast response. (1997)

Both control and reciprocal communication are important aspects in web interactivity. Combining these two aspects, Liu and Shrum defined interactivity as "the degree to which two or more communication parties can act on each other, on the communication medium, and on the messages and the degree to which such influences are synchronized." (2002:55)

Here interactive communication is defined as a communication that offers individuals active control and allows them to communicate both reciprocally and synchronously.

Whereas in printed advertising, the presentation is linear and the consumer is passively exposed to product information, for interactive advertising, the consumer instead actively traverses the information. Also the piece of information the consumer sees depends on where the consumer wants to go from one step to the next. Depending on the design of the interactive system, many modes of traversal are possible. The most possible is the hierarchical tree organization. In this organization the audiences make their decisions at branching points and these determine subsequent pathways. Traversal here means making choices at every branch point, as with asking consumers if they wish to see books or music, then fiction or non-fiction, then cheap or expensive, etc.

With print advertising or we can say in traditional advertising, the audience have no control over the order in which they are exposed to information. The traversal mode

is a simple, linearly ordered chain. Advertisements for products are presented one after the other in a linear flow with consumers reading or viewing predetermined ordered sequences of information.

As a result, it seems that the linear flow of traditional advertising media such as print stand in contrast to the design of any interactive system. Certainly, other designs for interactive advertising such as circular, networked etc. are possible design types, but this study focuses on a hierarchical traversal system and contrasts it with the linear. All interactive designs, however, stand in the same contrast to the linear. Specifically, in any interactive format, the user has great control over the traversal order.

Unlike print, in web advertising the audience is confronted with a non-linear process. The designer of the advertisement creates a certain order for the audience but this order recommendation is only an alternative since at the end the audience decides the direction to take.

In addition, the structural feature of the web enables the audience to reach other links of information, other texts and graphics. On the web the use of hypertexts enable the reader to avoid wasting time and to find any source so easily that the whole ad process becomes more enjoyable.

When the audience clicks on a web ad, generally a number of smaller web pages are displayed on the computer screen. These small pages complete a single advertisement and avoid complexity of the advertising content. Reading these small

pages one by one, the consumer has a chance to get more information about the product or service which he/she needs.

Due to the format and physical characteristics of the web, the advertiser can be far more flexible in the use of pages than in print advertising. This means that the designer can include the luxury of pages containing just a few words or graphics. For example, a small size banner ad can include many hypertexts in it, while print advertising does not have the chance to use its format in this manner, since there is a direct relationship between the cost of print brochures or newsletters and the number of pages printed. However, this is not true with the web publications.

Another important aspect that separates web ads from print ads is the web ads ability to persuade the consumer to buy at that moment. Take, for example, book advertising. A book may advertise its subject and genre through print advertising to generate awareness among consumers, so they may consider the book while going around a book seller.

The same objective, when replicated through web advertising, may be extended much beyond mere product and service awareness. The web advertisement for the book may serve as just the first step toward creating awareness. The web ad could be easily loaded with multiple hyperlinks that could enable the user to glean more information about the book, and most importantly the book ad can enable users to buy the book without going to a book seller.

A number of media developers talk about interactive advertising as being more interesting and motivating. However, some research results indicate that something unexpected may happen to people when they are exposed to advertising on an interactive system. In the context of advertising, Bezjian-Avery and Calder explain that "In the interactive system users spent less time viewing the advertisement, and they were less likely to purchase target products." (1998:28)

Persuasion is thought to be a process from presentation and attention, to comprehension, generation and retrieval of related cognitions. Apparently when a consumer uses an interactive system, the link between retrieval and yielding to the persuasion may be broken. In the linear condition, that is to say in printed advertising people had spent less time on the products that came to mind quickly. This result implies that users spent time considering the products that were presented to them. In the interactive condition, there is no relation between time and top-of-mind nature of the product. From this result it appears that, with the interactive system, the latter stages of the persuasion process may have been inhibited.

On the other hand, as Lombard and Snyder-Dutch stated in their article *Interactive Advertising and Presence* "One thing interactivity is thought to increase is the sense of 'presence' and presence is thought to lead to a variety of effects which include enjoyment and persuasion, primary goals of advertising:"(2001) Except in the most extreme cases, the audience can indicate correctly that s/he is using the technology, but at some level and to some degree, his/her perceptions overlook that knowledge and objects, events ,entities and environments are perceived as if the technology was

not involved in the experience. In that case, it can be said that the sense of presence in interactivity leads to persuasion in advertising.

As a graphical element take, for example, a button on a web ad. A button is a small design detail in advertising but it is very important for the audience since it gives the audience an idea about where to click on the ad. To grab the viewers' attention to it, an acting button or color changing button can be used in dynamic web advertisements. Unlike web ads, the printed ads do not need to use such kind of additional aspects in their design as a result of their static structures. Therefore, it is obvious that designing a web (interactive) advertisement brings many different design principles and different applications with itself. With that situation designers and advertisers should spent more time and more labor when designing web advertisements.

Interactivity is also comprised of many other attributes. Some of these attributes include: feedback, control, creativity, adaptivity, communications, etc. Many of these are also valuable experiences for people (certainly creativity and productivity) and, correspondingly, interactive experiences that contain these are highly valued when designed well. Interactivity is not necessarily better but it does, usually, correspond with higher involvement by an audience.

2.3.2 Time

The time factor is one of the most important issues for web and print advertising. It is a well-known fact that, especially in the advertising sector, timing is everything. The time factor has a dominant role in the way the ad is presented to the viewer.

In printed advertising, change is impossible once the printing press is turned on. So we can say that information is permanent in a printed document. When we are looking at an ad in the printed medium, everything on the page has its own place and may not change position or form. This permanent structure of printed advertising affects the time relation of the content and the medium. In other words, after some time, the actuality of the information in a printed ad may not seem so effective to the audience. Also, it is impossible to renew the content of a printed advertising medium without preparing it from the beginning, and this is waste of time.

On the other hand, unlike printed advertising, web advertising is dynamic. In web ads, the process of loading takes a certain amount of time, and sometimes due to the computer settings the format of the advertisement may show some differences. In addition, web ads contain many different changing elements in them. In particular, animations, sounds and clips are the most commonly used non-static elements in web advertising.

Consequently, in such a dynamic and flexible structure, it is possible to change the ads every day or even every hour, if appropriate, to reflect the current inventory or new products. In the web advertising medium, some restaurants, for instance, take advantage of the web's easy and quick design possibilities, and every week or every day they may change their daily specials or their weekend entertainments, and display them on the web.

In addition, it can be said that over a short time the web advertising medium is more effective than the printed advertising medium in creating long-term objectives

including communicating product/brand image, brand/product awareness, and communicating corporate image.

In web advertising the time factor has a strong relationship with two-way communication and synchronicity, since without losing time, the majority of web ads are able to obtain the information the consumer wants without any delay, and they are very quick in responding to consumer requests. In addition, very quickly after clicking on a link the consumer gets almost instantaneous information. In addition, web ads are effective in gathering consumers' feedback very quickly.

Another time related issue in web advertising is page loading. Page loading is one of the most boring and dangerous factors in a web ad since audiences are so impatient and they will quickly lose interest if the download time is too long. The size of a photograph does not matter too much when a reader encounters it in an ad, because larger is often better. However, the size of the graphics in a web ad can spell the difference between it being read or not read. Therefore, graphics must be as small as possible and designed for the lowest possible denominator of modem and connection speed. If the audience is forced to spend too much time waiting for an advertisement to download, they will lose interest.

Consequently, if a web ad depends heavily on photographs or detailed graphics, the designer might consider including two versions of each. These are thumbnails, or smaller versions which, when clicked, load larger versions. (Figure 48) In this way the audiences will know the photographs are available without sacrificing loading

speed, while larger versions will be available for those who are willing to wait to view them.
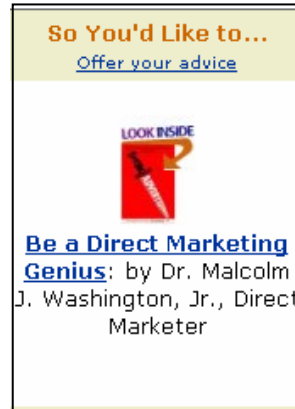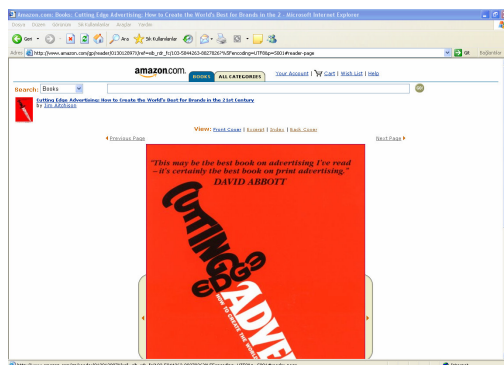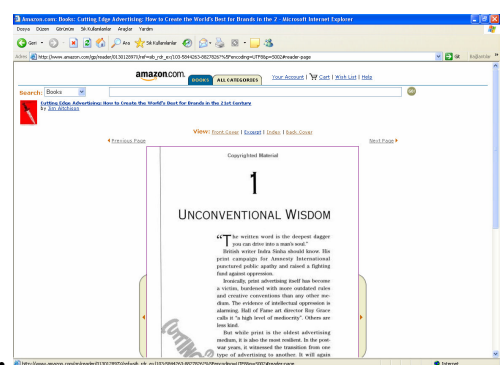
Figure 48: A book ad from Amazon.com web site
a. Thumbnail of the book   **b.** More detailed version of the book
c. Larger version of front cover **d.** Larger version of the excerpt

The time factor also affects the presentation of the pages themselves. In a certain time some elements in an ad can change the way they look or transform themselves. Take for example animated banners which use the animated GIF technology. These kinds of ads include many different frames and show them one after the other during the ad time. (Figure 49)
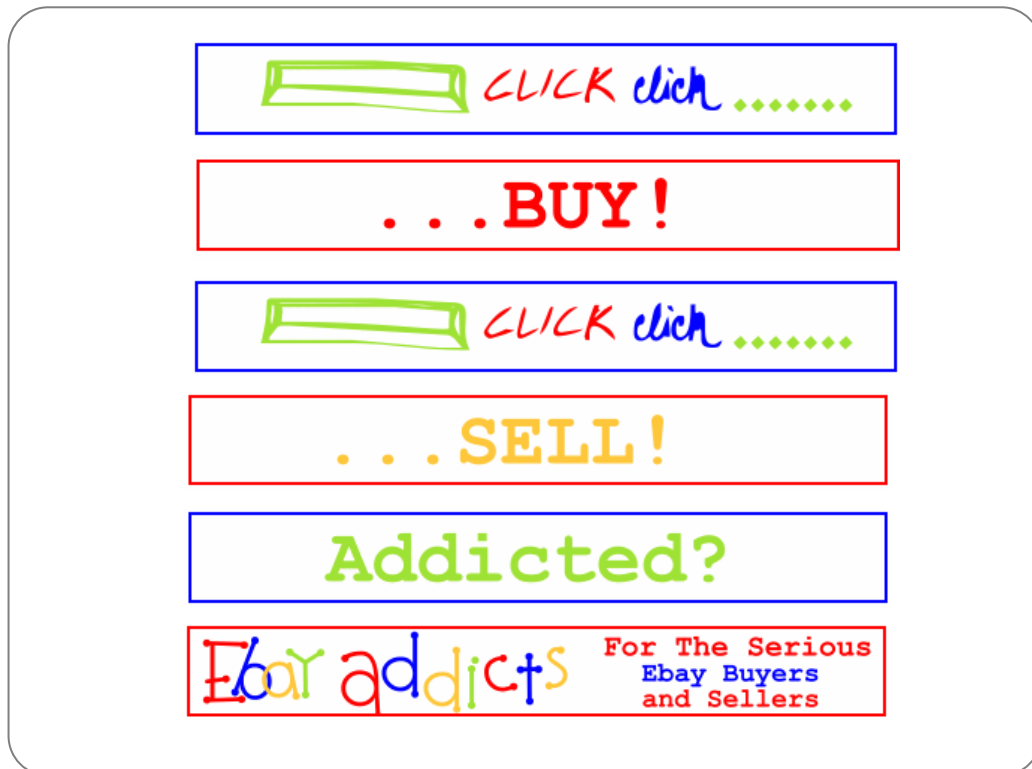
Figure 49: Animated Banner, divided into frames

Web advertising usually has a long enough duration time to make an impact. In other words, they don't go away until the audience closes them. This aspect sometimes interrupts the viewer and forces them to follow the ad, or it disturbs the viewer in such a way that they avoid it. On the other hand, some types of printed advertising have a very short time to have an effect such as advertising posters displayed on the walls in the street.

A web ad is about getting the consumer to make transactions, such as giving an order for a product, or filling in some forms for membership. So, by making the visual hierarchy clear and emphasizing the important features in an ad; consumers have a chance to find what they want without losing time, and at the end both consumers and retailers benefit from this situation. Design, which takes into consideration the time factor, understands the users, their tasks and offers the right way to present information to them.

Another important effect of the time factor in advertising is to sell. Web advertisements sell to consumers 24 hours a day, while printed ads sell to consumers for less than 12 hours a day. In that case, the unlimited time factor on the web automatically affects the likelihood of the consumer buying at that moment. However, with printed ads the audience has to wait for a specific period between seeing the ad and being able to buy the product. Additionally, web advertising is a fast and easy accessible medium at any time of the day.

2.3.3 Touch (Virtual/ Corporeal)

In general, it can be said that the audience of advertisements show more interest in the form than how they can access the advertisement physically. Every audience has their own preferences about the form of the advertisement. It means some pay more attention while reading an ad in the newspaper than looking at a poster on the wall. So it is obvious that different ad mediums have different physical contacts with the audience. This fact is also applicable to the web ads.

On the web, we can see and read the ads from the computer screen. There is a screen between the audience and the ad. The only physical contact is provided by the mouse, keyboard and other input devices. Moreover, everyone knows that it is not easy to follow a text on a screen. John Morkes and Jakob Nielsen, the best known design and usability gurus on the net, demonstrate that people rarely read web texts word by word. As an alternative they scan the text with their eyes, and pick some words or sentences out of it.[10]

New technology and developments in the net environment always try to minimize these difficulties and try to approximate the medium to real life, but still accessing and using the web can be a daunting task for audiences unfamiliar with personal computing. The tools which are designed to facilitate the medium do not succeed in every area, since there is a lack of physical contact with the medium. Unlike the web, in the printed medium the physical contact makes it more preferable, although the web offers much wider possibilities than print.

For instance, in print ads specific information can be accessed by scanning the text with the eyes, on the other hand in web ads, the information which is searched for can be annexed easily by clicking the necessary link. To access the next page, in printed ads we simply turn over, while in web ads we click on a link or "next" button.

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[10] For more information refer to:
Nielsen, Jakob and John Morkes. Writing for the Web. 20 March 2001.
<http://www.useit.com/papers/webwriritng/>

Moreover in print, correcting the display error on the page can be solved by revising the document and printing again; conversely on the web correcting the document and uploading it to the server can solve the problem. Again, if the viewers face a display error on the page, on the web clicking the reload button may solve the problem, while with printed material the audience have to acquire a new copy of the publication. These kinds of examples can be increased to view how some different tools and actions are available in print and web manipulation.

In addition to this, the print medium wins when it comes to reading in bed or in the bathroom. In reality, laptops are efficient alternatives for portability, but it is a totally different experience to see and read an ad in newspaper held in the hands than on the screen of a laptop. A magazine or a newspaper is real; on the other hand a web ad only exists on some distant server as an illusive metaphor of print. In addition, many people may not have a computer or a modem, whereas printing offers easy accessibility.

Furthermore, we know that not everyone has moved to the web. Many people are traditionalists. Customers do not always look on the web; they still look at the ads in newspaper and trade publications. These traditionalists want to read a nice feature story about the products. In my opinion this may never change at all.

Another interesting difference between the web and print is the technical ability required by the user. Magazine or newspaper reading is fairly simple, by holding them in your hands and flipping the pages. However, where the web is concerned new users would not even know how to double click a mouse. Though surfing for

ads is not technically advanced, it may preclude non-computer users from using the medium.

Eye contact is another important factor in advertising. In the web environment looking for information about a product or service is very difficult, since the web ads do not individually stay on the screen. We can view them among many other things. On the other hand, a printed ad in a magazine is totally isolated from everything, and we have a chance to read or look at it carefully without being disturbed.

Lastly, in web advertising, with the lack of physical contact, the audience may have a cold feeling towards this medium. Moreover, web ads use few emotional appeals, while printed ads use more emotionally compelling scenes in their designs.

2.3.4 Navigation

One of the differences between the two mediums of advertising is navigation. Going over the main points, it can be said that navigation in print is finding the location of the articles in a publication with the help of the table of contents. However, in printed advertising, it is difficult to talk about navigation since in printed advertising, especially in magazine and newspaper ads, all the elements of design including text, image and other graphical elements are presented on one page in a limited area. That means the audience can easily find the information being searched for. On the other hand, in some advertising brochures the process of navigation is different. In more then one page ads, like brochures, by creating a table of contents page the audience is informed about the location of the items in the ad. Having explained the navigation process of printed ads, it is time to talk about navigation in web ads.

When designing advertisements for the web, one of the most important aspects that must be considered is a navigation system. If the navigation system of a web ad (web site) is not organized well, the audience easily loses his/her attention and wastes time trying to find a direction in the ad.

Once the audience clicks on a web ad, probably the first thing to appear is the web site of the product or the service. In an appropriate web site the subject matter content should be split into smaller sections. Then again, to avoid confusion, the content of each section can be split into smaller sub-sections. Here it should be noted that splitting the content into smaller sections is an effective way to direct the audience to whatever location s/he wants to be, but sometimes too many sections and sub-sections may cause ambiguity. Therefore, before taking such decisions, the structure must be carefully designed, and tested.
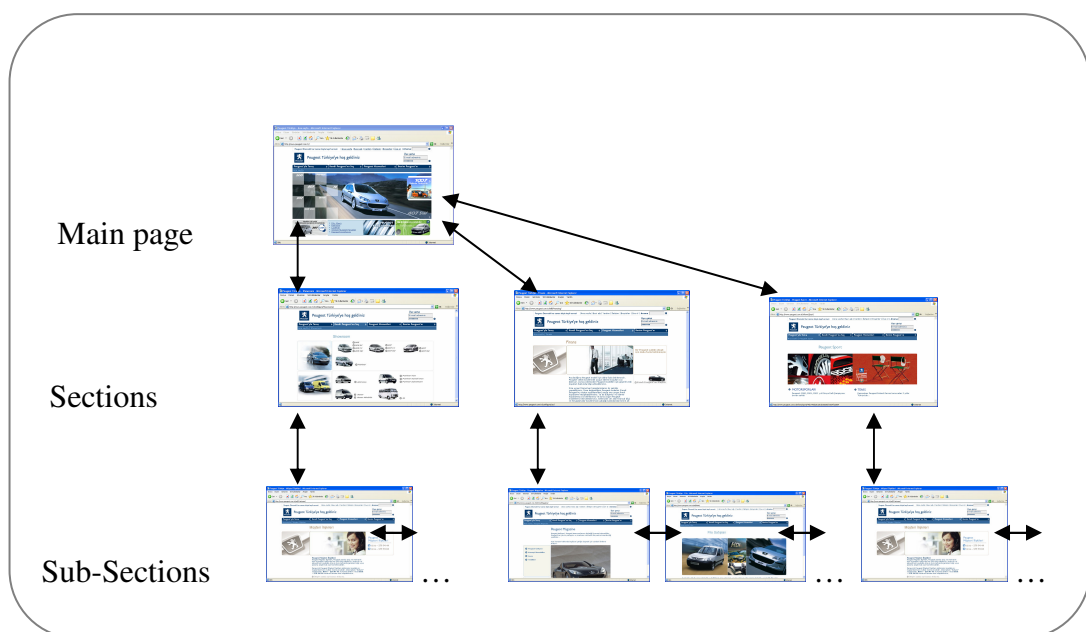
Figure 50: Peugeouts' site map

In Figure 50, in Peugeots' web site the main page is divided into three sections, then these sections branch into many others. As in this example, proper web ad navigation should offer the audience some effective aspects. First of all, the main page of an ad should include access to the section pages, and their descriptions. Additionally, in more detailed web ads a link to the sitemap should be provided. In the site map all the information should be clear and easy to understand.
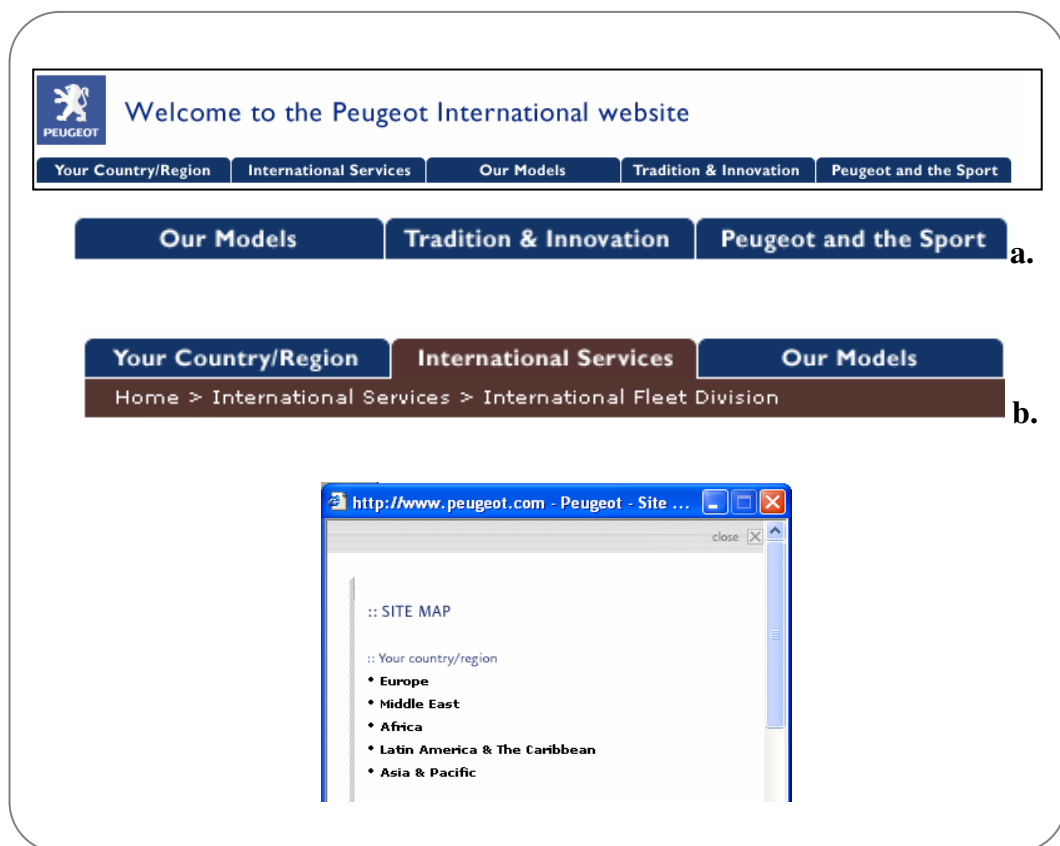
Figure 51: Peugeots' web sites' navigation tools
a. Sections of the site
b. Sub-section example
c. Site map

Secondly, each of the section pages should include a link back to the main page, links to other sections and links to sub-sections. (Figure 52) In addition a link to the site map should be provided. Lastly, sub-section pages should include a link back to the main page, a link back to the section pages, and links to the other sub-sections of

the current section. In addition, links to the next and previous sub-sections should be provided.

In web design applying fixed navigation tools in every link builds a consistent graphic identity and makes the site more memorable for the viewers. A consistent approach to navigation allows readers to adapt quickly to the design and to confidently predict the location of information and navigation controls across the pages of the site.
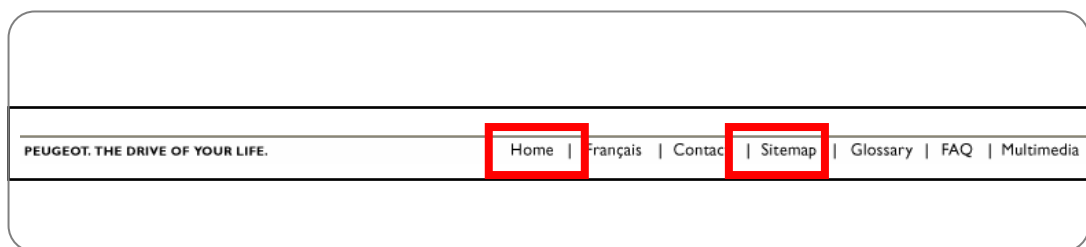
Figure 52: Peugeots' fixed navigation tools in every link; including; home and sitemap link

As well, sometimes optionally additional links should be located in the site since those additional links can supply efficient information to the audience. For example; while investigating Peugeots' web ad, coming across a link which mentions the award-winning aspects of the car has a great impact on the audience.

2.3.5 Organization of information

In both printed and web advertising information is the first level at which it is appropriate to communicate with audiences. The process of advertising is represented by organizing data into a meaningful form, presenting it in appropriate ways and communicating the context around it.

Whether we consider printed or web advertising; the first step in transforming data into information is to play with its organization. This is the most effective way of discovering something we have never seen before. As Nathan Shedroff states in his article *Information Interaction Design: A Unified Field Theory of Design*[11] "We need to realize that the organization of things affects the way we interpret and understand the separate pieces." (1999: 274) If so, especially in advertising the organization of the information has a great impact on audiences' perceptions and their completion of separate parts together.

Successful advertising does not present rough information directly. If designers do not bother to provide context and build meaning, that means if there is no organization of the context, the audience will have little patience for doing it themselves. In printed advertising the information is generally located within the same page. It usually utilizes a proper combination of the main message and additional graphical elements. It should as well contain the logo of the product or service, and for more detailed information the telephone numbers and web addresses are added. It means usually the additional information is placed carefully in the ad.

However, generally in printed advertising such information is considered useless and omitted by the audience, since this direct information does not have a straight effect on the audience to go into action. On the other hand, in web advertising, the audience can easily establish this additional information through links, but if the proper information is not provided by the designer in the correct place, one would generally not bother to find the information in the ad.

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[11] Nathan Shedroff' article *Information Interaction Design: A Unified Field Theory of Design* is now a chapter in the book *Information Design* edited by Robert Jacobson

Take, for example, Garanti Bank's printed ad and web ad to compare the organization of information. In Garanti's magazine ad, the most important information of the ad (Mesajla para yollar), the explanation of this service, and finally the added information for details (<www.cepbank.com.tr>) are all located on the same page. (Figure 53)

Figure 53: Example about organization of information
a. Garantis' magazine ad
b. Close-up of the added information

On the other hand, in Garanti's web ad, first of all the viewer comes across a demo of the service.(Figure 54) In this demo the information about cepbank is given as a

small story and it is supported by different images and clear explanations about the service.

Figure 54: Screen shots from Garantis' Cepbank demo

After showing the demo, the page offers you some additional information links about the service. Through those links you have a chance to learn how cepbank is used, and find answer to your questions about the service. (Figure 55)

Figure 55: Cepbanks' web ad
a. Main page
b.Close-up of information links

As a result, we can say that the organization of information differentiates between printed and web advertising. Generally, in printed advertising information is given through a more uncomplicated organization. That is to say, the audiences come across all the information at one stage. On the other hand, in web ads, using the advantage of its multiple levels and branch structure, the designers have an opportunity to inform audiences in a more detailed and more desirous way.

CONCLUSION

The aim of this study is to compare the design characteristics of the printed media and web media through one of the most effective visual communication tools: advertising. In his book *Advertising and the Mind of the Consumer,* Max Sutherland states that "Advertising is aimed essentially at getting people to do something or accept something, often against their will or initial inclination." (1993: 15) For this reason, advertising must use all the attributes of design to attain maximum effectiveness. Therefore, by using these advantages of advertising, this study made a comparative analysis between printed advertising and web advertising.

Throughout this thesis the core question examined has been "D*o the principles of printed advertising design apply to web advertising?"*

In this study, to answer this question the first thing that was done was to identify the design aspects of the two different advertising media. During the research, the elements of design, design principles, and experimental design differences and similarities were compared and finally it can be seen that the principles of printed advertising do not completely apply to web advertising.

The most important statement that can be made from this study is to identify the World Wide Web as a very specific medium which provides endless possibilities to designers, and which at the same time has very strict inherent limitations. It is very

obvious that the web medium is very different from the printed medium. Therefore, it is not correct to apply all the principles of printed advertising design to web advertising.

In addition, this comparison between the two mediums of advertising design proves that the computer monitor is a completely different medium from paper. Whereas text printed on paper is a solid object, text on the computer screen is based on light waves. So while screen design can, of course, be regarded as a matter of taste, there are limits to what is possible, and some solutions work better than others. Above all, it is vital to recognize that the computer is a separate medium in its own right. It should be treated accordingly- taking its weaknesses into account, using its strengths, and rethinking our approach to visual perception. Above all, design for the screen should not simply be based on what works with design on paper.

While comparing elements of design (form and size, color, image, and text) between the two media, one of the significant distinctions is reliant on the working areas of the two media; screen and print. Where the issues of image and text are concerned, typescript and images displayed on the screen are greatly inferior in quality to printed typescript and images. Furthermore, color creation differs on the web and in the print media. Naturally, all these divisions, and more, hinder some of the applications of the principles of printed advertising design on web advertising.

Certainly all these distinctions between the print and web media do not mean that none of the principles of design apply to web advertising. On the contrary, successful web advertising should be based on the same basic graphic design principles as a

design prepared for printed advertising. In other words, all the important design principles such as unity, rhythm, visual balance, etc. must be applied very carefully when designing web advertisements.

Besides all these frequently shared characters, web advertising design has to make use of some new elements because web ads provide live, timely, viewable and often storable information and entertainment when the consumer wants it. Increasingly, advertisers are coming to realize that web advertising offers a higher awareness of their product, easy methods of information distribution including speech and video presentation, improved ability to craft brand image, and an immediate direct line between customers and the product. Certainly all these opportunities are provided by some unique design elements of web advertising such as interactivity, navigation, and organization of information.

All the above analysis confirms that both printed and web advertising should use the basic design principles in their applications, while web advertising additionally needs new approaches that are different to the ones used in the printed medium.

It is obvious that printed and web advertising differ from each other in some design aspects. However, the AIDA formula which creates an effective selling message in an ad should be applied to both of the mediums, since the objectives of the two mediums, which are to affect the audience with a quick and easy message and to motivate them to buy, are common. Therefore, the similarities of design principle applications and their common advertising purposes enable the two mediums to use the same effective selling formulas in their ads.

From beginning to end, this study has analyzed the similarities and differences between printed advertising and web advertising. While comparing the two mediums, many different examples, both from printed and web advertising, have been used. However, some sections of the study case led me to concentrate more on web advertising design than printed advertising design, because by their nature it is not possible to talk about printed ads in every aspect of the research. Particularly in the experimental design section the nature of web advertising is more amenable to being analyzed.

Actually, this thesis in fact reflects the attitude a web designer should accept while working on the World Wide Web. First of all, the principles of design must be learned, then compared and applied through the web design approach.

Finally, it is obvious that the principles of printed advertising design do not apply in their entirety to web advertising. Although successful web advertising design should be based on nearly the same basic graphic principles as a design prepared for printed advertising, advertisers should not use printed advertising design randomly on the Web. Advertising on the Web has to be specially designed for the medium. Based on the characteristics of the medium, and its suitability for different types of communication, advertising for the Web should be designed specially to take advantage of the medium's unique interactive characteristics and capabilities. If one wants to design web advertising, by following the basic design principles s/he should discover a proper understanding of the WWW and the ways of working with it. Moreover, the most important thing is that s/he should realize that web advertising design requires new attitudes and principles.

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