

## Visual Hierarchy and Mind Motion in Advertising Design

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### ABSTRACT

*Visual hierarchy is a significant concept in the field of advertising, a field that is dominated by effective communication, visual recognition and motion. Designers of advertisements have always been trying to organize the visual hierarchy throughout their advertising designs to aid the eye to recognize information in the desired order, to achieve the ultimate goals of clear perception and effectively delivering the advertising messages. However many assumptions and questions usually rise on how to create effective hierarchy throughout advertising designs and lead the eye and mind of the viewer in the most favorable way. This paper attempts to study visual hierarchy and mind motion in advertising designs and why it is important to develop visual paths when designing an advertisement. It explores the theory behind it, and how the very principles can be used to put these concepts into practice. The paper demonstrates some advertising samples applying visual hierarchy and mind motion in a representation of applying the basics and discussing the results.*

**Keywords:** visual communication, advertising, design basics, visual hierarchy, mind motion.

### Introduction

Visual hierarchy is the order that the human eye follows when recognizing what it observes. Given a field of perception, the visual contrast between forms is involved in creating the order in question. The human mind begins by identifying the objects that have the highest contrast compared with their environment. Although the term visual art is most commonly applied in graphic design, the same concept can be used to explain perceptions in advertisements. Gestalt psychological theory is the basis upon which the concept of hierarchy is construed. This 20<sup>th</sup> century German theory recommends that the human intellect has an instinctive organizing propensity that “structure individual elements, shapes or forms into a coherent, organized whole” (Ian, 2008). The word Gestalt in English means “form,” “shape,” or “pattern” (Rune, 2010). Ideally, when a visual component set its self apart from the ‘whole’ shaped by a person’s intellect perceptual organization, it becomes very conspicuous in the eye of the observer. Usually, the shapes that are the most conspicuous are those that highly set themselves apart from their surroundings and identified by the viewer through mind motion.

As a matter of fact, the human brain uses distinctive physical characteristics to differentiate objects from others. These characteristics can be categorized into four aspects including character, alignment, size and color. The aspect of color, which perceives texture, includes saturation, hue, and value. Size explains the surface area of a structure while alignment is the aspect that describes the array of structures with regards to their orientation, direction, or pattern (Feldsted, 1950). Character is the “curvilinearity” and “rectilinearity” of structures. In view of this, a distinction between structures can be drawn from the differences in these characteristics.

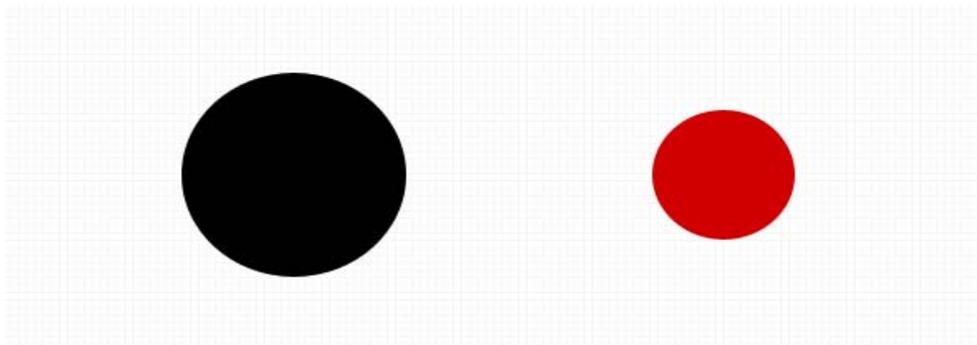
Visual hierarchy is a significant concept in the field of advertising, a field that is dominated by visual recognition and motion. Designers of advertisements try to organize the visual hierarchy to aid the eye to recognize information in the desired order in an attempt to achieve a specific goal. Just the way grammar is organized with respect to the significance of each concept, the visual hierarchy in almost all advertising media is organized in a similar manner (Groeger, 2002).

**Research Objective:**

This paper will study why developing a visual hierarchy and mind motion is important when designing an advertisement, exploring the theory behind it, and how the very principles can be used to put these concepts into practice.

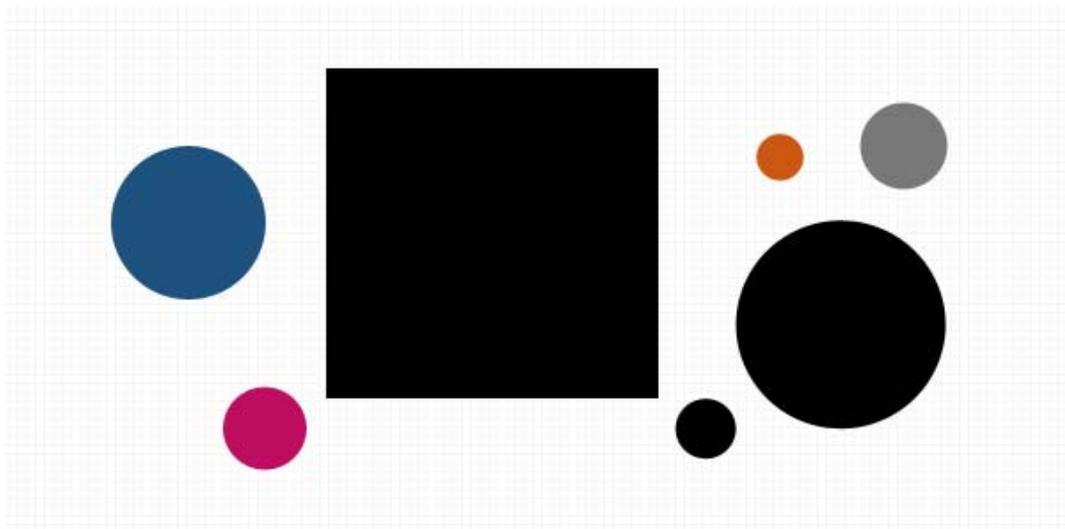
**Design is equal to communication**

The basic idea behind an advertising design is visual communication. As such, an effective advertisement designer should be able to evidently communicate their thoughts to the audience failures to which they can lose their attention. Interestingly, most people are visual thinkers rather than data processors, and that is why they do not pay attention to huge blocks of information. This happens because people categorize what they see based on visual relationships instead of taking visual information and processing it uniformly.



(Figure1)

In the above illustration (figure1), chances are that a certain person may fail to notice the two circles but rather notice one red circle and one black circle. The reason why this happens is because, when a person is presented with simple things like two circles, they tend to find a way of differentiating them rather than just observing the two circles. Therefore, people use such differences to make a distinction between objects at attach unique meanings to them.



(Figure 2)

In the above figure, since the level of complexity has been increased, the viewer's desire to categorize the images in respect to the relationship has become even higher. The basis upon which the shapes are viewed through includes the similarities and the differences. The differences in scale imply that one image is nearer to the viewer than the others or that another image is more overriding than the other. Differences in color might

imply that one image has a distinctive characteristic that differentiates it from the other image. Ideally, very basic instruments can be used to communicate a lot of information in just a single object (Jacobs, 2001).

#### **Designing a more effective advertisement**

Since advertisements are essentially concerned with communicating of visual information, it is very important to note that the audience will perceive adverts in terms of relationships. As discussed, although it may appear as if it is sufficient to supply the audience with a lot of information, advertising designers have a responsibility to break down unrefined information into scrumptious modest amounts of visually relevant information that are significant in delivering the message and easy on the audiences' eye (Hatcher, Alexander, & Abrar, 1998).

#### **The crack of dawn of hierarchy**

The fact that people view designs in terms of relationships has been described in very many dimensions. For example, if it is to be tracked anthropologically, it can be observed that a hunter-gatherer mind obliged humans that it would be a matter of survival skill to recognize relationships. In other words, it would be right to say that it is the manner in which the human's mind categorize information that require viewing designs in terms of relationships. This involves grouping of common visual components and organizing them into patterns that possess important effect, which is actually an inherent characteristic that is the human's mind just like the way they drink or eat. All in all, the information that is organized in a hierarchy in mind despite being in its most basic form will at all times ensure effective delivery of the intended message than an information that is not organized. This hierarchy principle continues today and forms the basis of all media advertising. The human brain does not view individual items on their own merit and will instead organize them against the items around them. Items are instantly judged and ordered and size, shapes and colors inform us that the items may have more dominance than others. Understanding these principles allows us to form hierarchy within designs and use this to control the user's pathway through the design. (Sawyer, 2012)

#### **Visual paths + learning**

Faraday (2000) conducted an eye tracking study in order to better identify with the variables that influence hierarchy. In his findings, he cited factors such as text style, images, size and position as the major factors responsible for hierarchy. The substantiation of the manner in which people process information when they view advertisement posters shows the significance of visual characteristics in regards to the precise passage and comprehension of information (Nilson, n.d).

The first factor that was identified is size. It was realized that larger text overrides over smaller texts, hence this can be used as a winning entry point. To act as an entry point, the author suggested that images must be to a large extent larger than text, but looking at the images on the first instant should not be relied upon. The second factor is scanning. He found that top-bottom, left-right was found for bullets and texts, but not between links, titles or images. Also, it was found that sporadic areas of similar color from the background could not lead to progression. For examples, subjects did not swing between the bottom and the left regions in spite of their background color being the same. It is therefore important to use a bordering; matching colored area if content is to be associated (Jirousek, 1995).

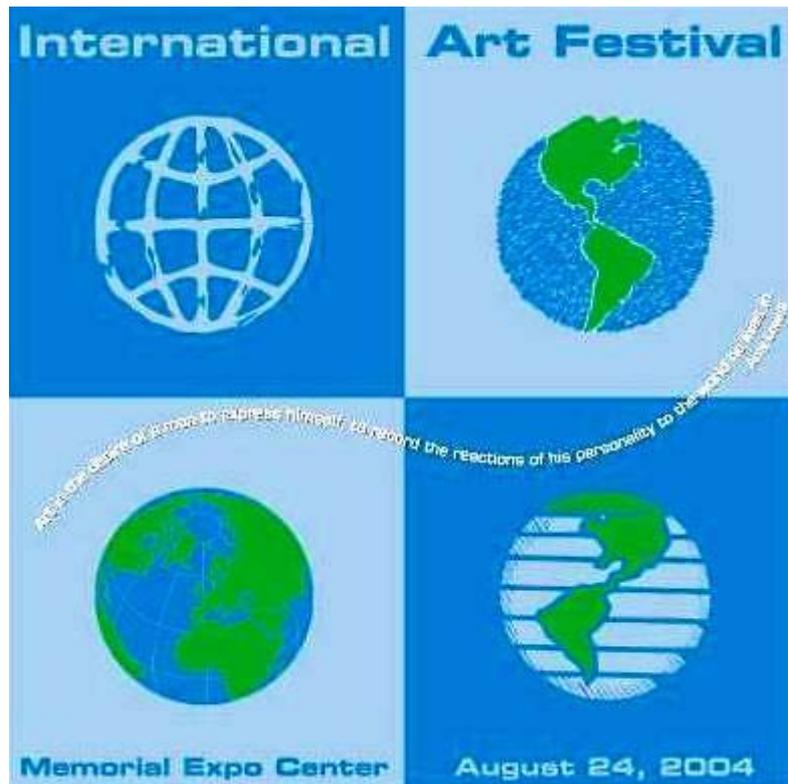
With respect to images, Faraday (2000) found that if images and text share a common size, then the entry point is more likely to be the text. In such a case, image content should be treated cautiously because, for example, logos may not be the best here. He also found titles as a better entry point than images. Text style was found to be less important than size. This means that normal sized text can hardly get preference as an entry point, albeit being bold. Therefore, important details should be emphasized by the use of large fonts. Finally, the position of the paper should be put into account. In this case, the middle or top of the page is usually dominant while the bottom and left hand columns are secondary. The designer should be aware that the text at the bottom of the screen is hardly viewed and hence the important content should be placed at the top of the page.

#### **Repetition**

Another way to create mind motion in a design is to repeat colors, shapes, and values. When design elements are repeated severally in different parts of a design, then the eye of the viewer tends to follow them, and even using visual imaginations to create relationships with them even if they are not clustered together. One of the simplest ways a designer can make use of repetition is to design repeated shapes of patterns especially in the

background of the poster. A visual interest is usually created by a tiling effect in the background coupled with structures that links the foreground components together.

In this type of a design, repetition is a secondary element and hence cannot be treated as an entry point. In addition, a line of repeated components is another good way of using repetition to lead the eye to a crucial logo, information, or even an image. The following poster is an illustration of a successful use of repetition to direct the eye of the audience.



(Figure 3)

Components that are repeated can form a course that directs the eye hence creating a sense of anticipation since the viewers are left asking themselves questions such as: where is this heading? Furthermore, this is a method of narrating a story and compelling the audience to inspect the object the designer wants them to focus on (Saw, 2000).

#### Style and Texture

Style is potentially one of the most indefinite tools that can be used to express visual hierarchy in a poster. For example, an asphalt textured background appears different from a flat gray background. Styles as expressed by the designers usually help in showing a variety of visual relationships in a poster. Also, it is notable that style is not a very safe tool to use because if not handled carefully it can cause a lot of harm. Just like the way a constructor can harm themselves with a construction hammer, a designer can possibly send the wrong message to the audience especially by focusing on certain components through style. For example, a profoundly textured component in the design can attract a lot of attention such that it could divert viewers rather than informing them. Similarly, this concept is applicable to tabs, typefaces, and buttons among other elements. Designers should put into account the effect on a general design when they decide to polish a certain component of toad extra style. The movie poster shown below is a sample that is designed in an eye-catching style though the designer has desisted from going overboard such that at the end of the day the desired message is delivered to the audience (Tillett, 1996).



(Figure 4)

### Visual Hierarchy & leading the eye through visual paths

Several layout patterns are often recommended to take advantage of how people scan or read through a design. Three of the more common are the Gutenberg diagram, the z-pattern layout, and the f-pattern layout. Each offers advice for where to place important information, but these patterns are often misunderstood and followed without thought to what they really describe.

#### 1- The Gutenberg Diagram

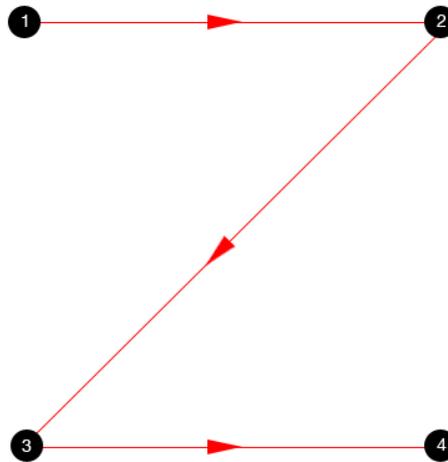
The Gutenberg diagram describes a general pattern the eyes move through when looking at evenly distributed, homogenous information. This pattern applies best to text-heavy content, like pages in a novel or a newspaper, as this pattern isn't meant to describe every possible design.

The Gutenberg diagram divides the layout into 4 quadrants (figure 3);

- **Primary optical area** located in the **top/left**
- **Strong fallow area** located in the **top/right**
- **Weak fallow area** located in the **bottom/left**
- **Terminal area** located in the **bottom/right**

The pattern suggests that the eye will sweep across and down the page in a series of horizontal movements called axes of orientation. Each sweep starts a little further from the left edge and moves a little closer to the right edge. The overall movement is for the eye to travel from the primary area to the terminal area and this path is referred to as reading gravity.





(Figure 6)

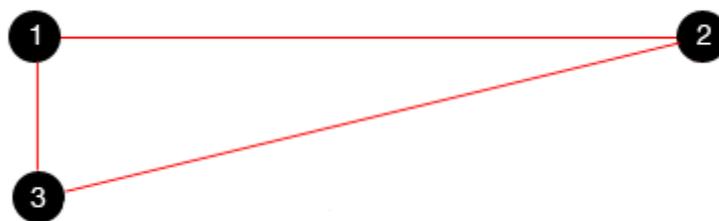
The main difference with the Gutenberg diagram is that the z-pattern suggests viewers will pass through the two fallow areas. Otherwise they still start and end in the same places and still pass through the middle.

As with Gutenberg a designer would place the most important information along the pattern's path. The z-pattern is good for simple designs with a few key elements that need to be seen. Any storytelling aspect of the design would follow the path of the z.

#### - Golden Triangle Pattern

The z-pattern also leads to what's called a golden triangle pattern. If you take the first horizontal and first diagonal movement and then close the shape you end up with a right triangle whose right angle is the top/left corner.

This triangular area at the top of the page will be the area most seen and the pattern suggests your most important information needs to be placed inside of it.

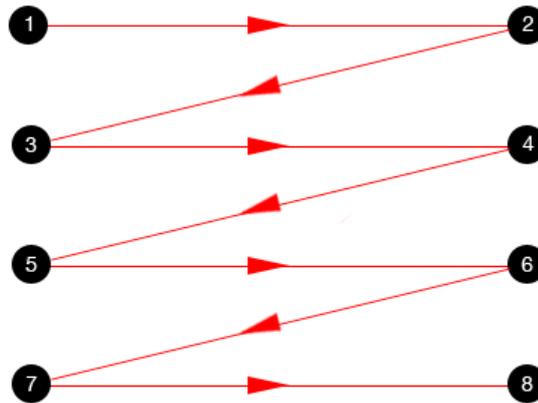


(Figure 7)

#### - Zig-Zag Pattern

We can extend this pattern a little by seeing it more as a series of z-movements instead of one big z-movement(Figure 5). Common sense would dictate this is more realistic as the reader will continue to move to the right and then a little down and back to the left before starting another horizontal movement to the right again.

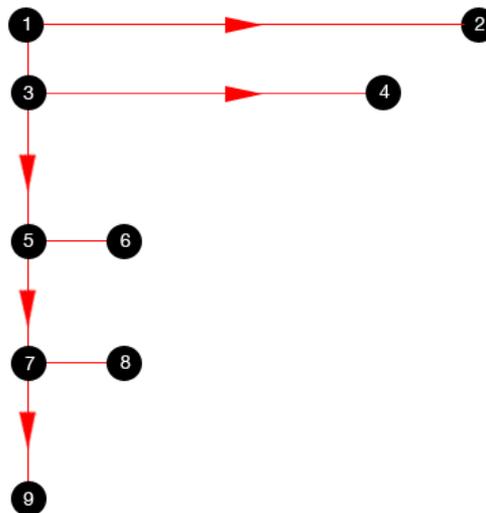
It's how we naturally read large blocks of text. This series of z-movements is sometimes referred to as a "zig-zag" pattern. If we continue to add more zigs and zags to the pattern we ultimately end up with a series of near horizontal right and left movements as the diagonal portion of the z gets shallower and shallower.



(Figure 6)

### 3- F-Pattern Layout

The f-pattern gets mentioned on the web and as you would expect it follows the shape of the letter F. Jacob Nielsen first suggested the pattern after eye-tracking studies his company performed. What often gets lost in the f-pattern is that these original studies were done on online text heavy designs and search results.



(Figure 7)

As with the other patterns the eye starts in the top/left, moves horizontally to the top/right and then comes back to the left edge before making another horizontal sweep to the right. This second sweep won't extend as far as the first sweep.

Additional sweeps move less and less to the right and for the most part after the second major sweep the eye sticks close to the left edge as it moves down.

The f-pattern suggests that:

- Important information should be placed across the top of the design where it will generally be read.
- Lesser information should be placed along the left edge of the design often in bullet points where little horizontal eye movement is required to take everything in.
- People don't read online. They scan.

Fortunately the pattern seems to get applied to everything online instead of only text-heavy content. When applying the f-pattern the designer thinks scanners and places content these scanners would most likely be interested in along the F. Placing important information at the top, and information designed to pull someone further into the page down the side.

However in this case a designer must keep in mind that if someone scanning the page finds it interesting, they will read more, so placing information in places outside the F for those people who will read will be of a great effect.

It's important to understand these patterns describe where the eye naturally goes when there's a lack of hierarchy in the design. They describe natural patterns for evenly distributed and text-heavy content. So these patterns can be used to induce visual hierarchy to most designs and designs that include more than just text.

**Focal Points**

The pattern of focal points says that people will first look at the most dominant element; the element or area with the greatest visual weight on the page.

From there the eye will follow paths from the dominant element to other focal points in the design. The order will depend on the relative weights of these focal points as well as any visual cues indicating where to look next.

Kandinsky's Composition (figure 7) while it is art and not design, it's a good example of all three patterns. Your eye will get pulled in to the upper left and start to move from one point to the next. The lines in the painting help direct your eye to the different focal points. However, the eye will not follow an F or Z patterns or reading gravity through the design. The painting should make it clear that creating hierarchy and flow overrides any of the patterns we've been talking about here.

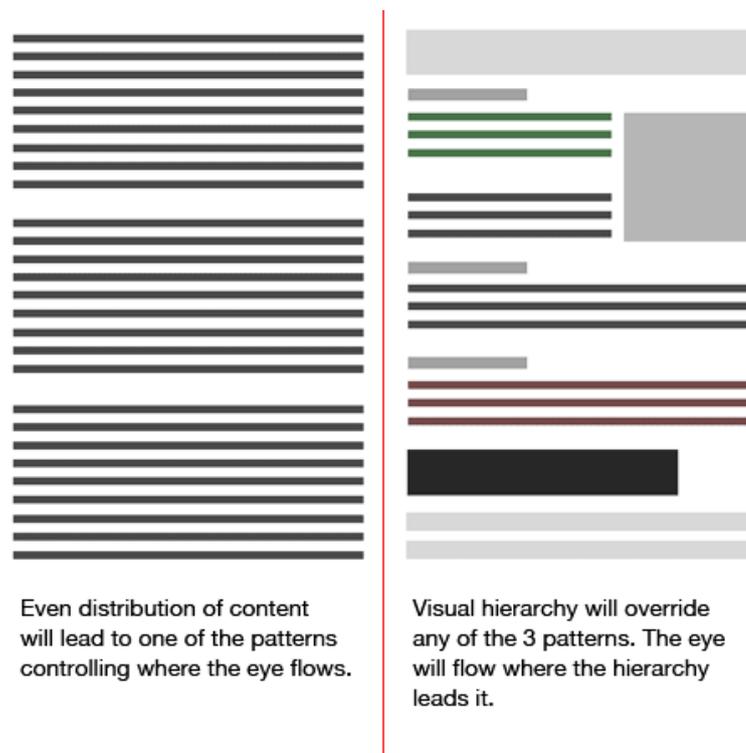


(Figure 8)

While patterns like the Gutenberg diagram, the z-pattern, and the f-pattern layout suggest that there is a natural path the eye will take through a design, they refer mostly to designs dominated by large blocks of text with little to no hierarchy.

If that describes a design then any of these three patterns might suggest where to place important information. We might also want to consider these patterns for people scanning a design, and place elements meant to pull people further in along their paths.

As soon as we begin adding elements of varying visual weight, the path the eye will take through a design is the one we create, which eventually creates visual hierarchy. We can choose to reinforce Gutenberg, F, or Z patterns if we want, as these patterns present an overall conception of how the eye and mind move throughout a design, but they are in no way a limitation.

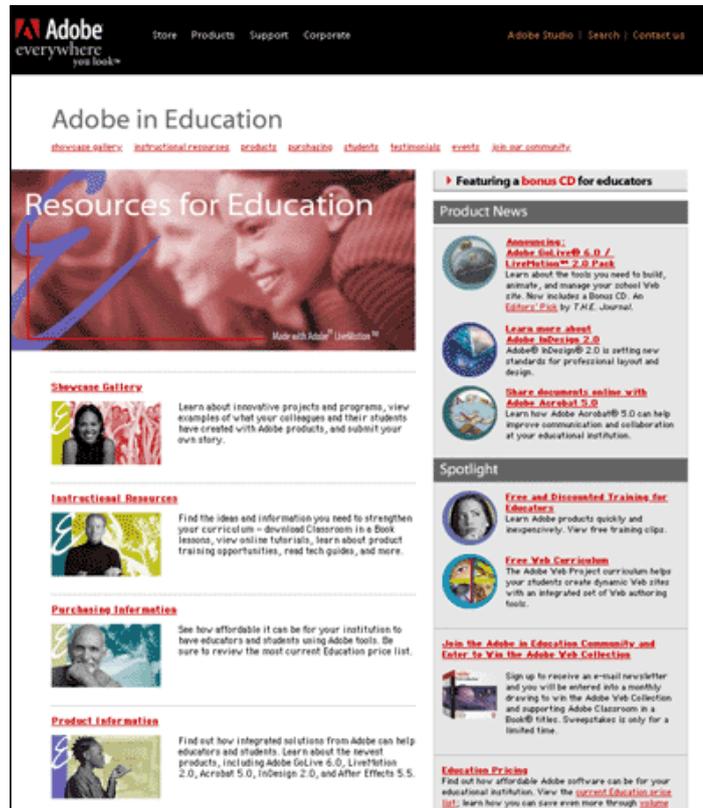


(Figure 9)

It's logical that in the absence of other visual cues people will start in the top/left and move across and then down the page. It is how we've been taught to read. The key phrase though is "the absence of other visual cues". When those cues are present they'll always control the path the eye takes. Instead of trying to force a design into one of the patterns described, a designer should decide what information he wants the viewer to see and through a series of focal points and design flow lead their eyes through the hierarchy of information.

#### **Advertising design samples applying visual hierarchy**

The coming part presents some samples of advertisements for different advertising media applying visual hierarchy in attempt to demonstrate how this leads to an effective advertisement concerning visual perception and leading the eye and mind of the viewer.



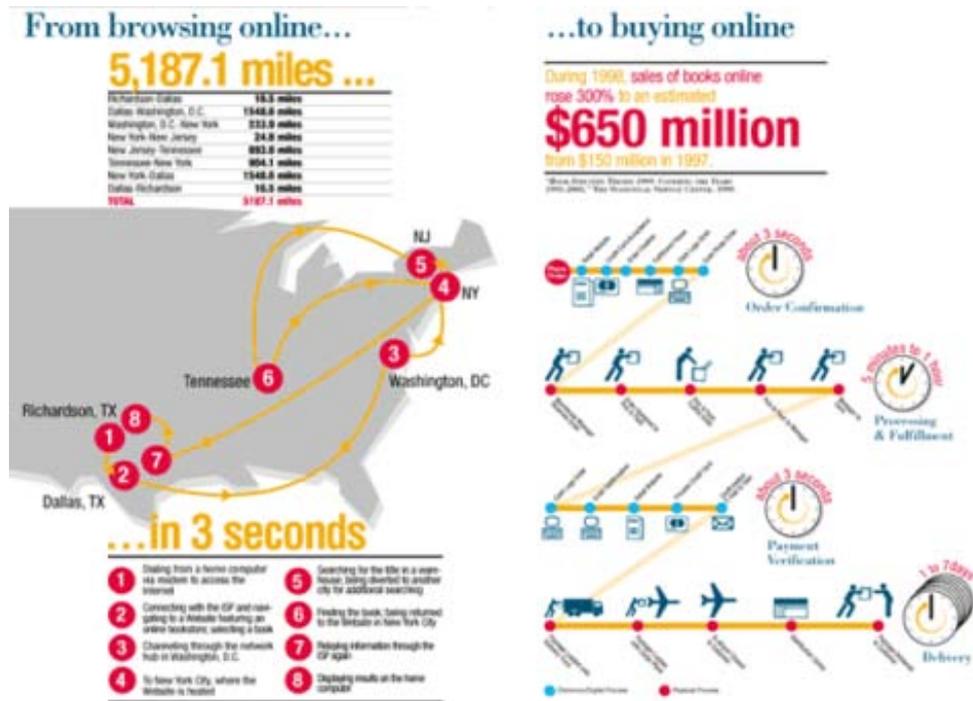
(Figure 10)

In the e- poster illustrated above, five factors can be discussed including size, scanning, images, text style and position. In regards to size, the page title is “Adobe in Education”, which appears to be larger than the body text, while the space in the title sets it apart and hence making it more visible. It is clear that this design applies the “f pattern” in placing the design elements, where the eye moves in the f path starting from the large picture at the top of the design and slightly downwards with the rest of the text and graphic elements. This serves the purpose of additional information, which welcomes the viewer to the content that can be found on the poster outside the f area. Besides catching the eye, this animated image offers significant information regarding the poster’s contents. The eye is then directed through the poster by the smaller images.

The other important factor in text style is concerned with the amount of space around paragraphs, which aids the eye to scan for certain information. Apparently, only the key phrases are underlined, which means that the visual qualities of the underline serves a functional rather than a decorative purpose. The viewer’s eyes can quickly search for these important spots that lead to additional information, by making the key phrases red.

#### Online purchasing ad by Richard Saul Wurman

The advertisement illustrated below (Figure 4), was designed by Richard Saul Wurman, which focused on two concepts including visual hierarchy and graphic components. This guiding poster shows how statistics explain buying online and of browsing as well as a visual depiction of the process of purchasing products online.



(Figure 4)

In this poster, visual hierarchy has been created largely through the use of color using the focal points. For instance, the color red is a very conspicuous color and hence it can be used to mechanically pool the attention of the viewer. Furthermore, the use of the color red in very important parts of the information such as “\$ 650 Million” creates a visual hierarchy and directs the eye to crucial parts of the poster. Apparently, a bright shade of yellow is contained in the design, which grabs the attention of the viewer, especially when combined with the application of a bright red draws shades – this is a very unique design that operates through this vivid and noticeable color combination. In addition, the poster is awash with a wide range of graphic components which additionally contributes to the accomplishment of the posters’ role of clearly passing on the information, to the audience. It becomes very easy to read, since the lines have been designed to separate different parts of the information on the poster. Throughout the ad, there are arrows and icons, which are used to illustrate the process of buying products over the internet, which also results into a comprehensive visual diagram

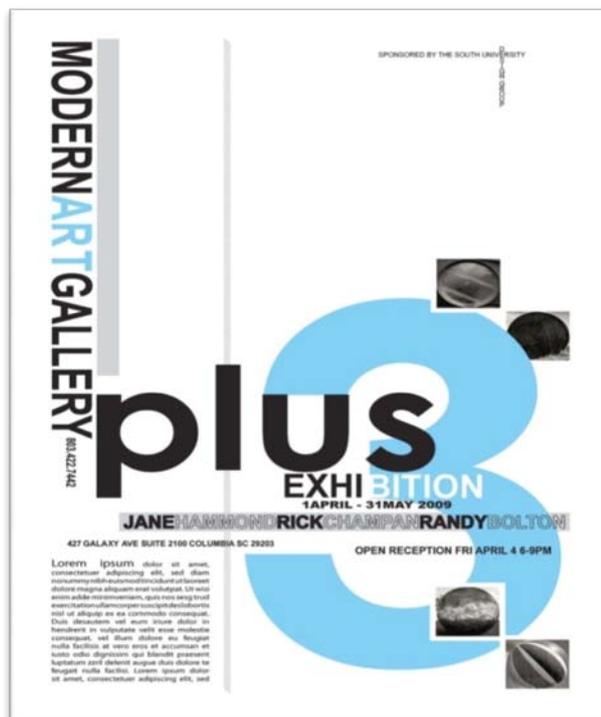
**Airport Signage by Paul Mijksenaar**

The public is highly in need of “way finding” in airports, since it helps them to access their place on a timely basis. Furthermore, Airports are usually a beehive of activities and faced with confusing planes, hence making it very important to establish a visual medium to act as a sign. Paul Mijksenaar has designed such a group of signs effectively, as shown in the (figure 5) below. When these signs are looked at in the first instance, it is evident to see how it is easy to use them because they are bold, large and very legible. The factors that lead to the success of these signs include the use of color mixture and contrast to create a visual hierarchy.



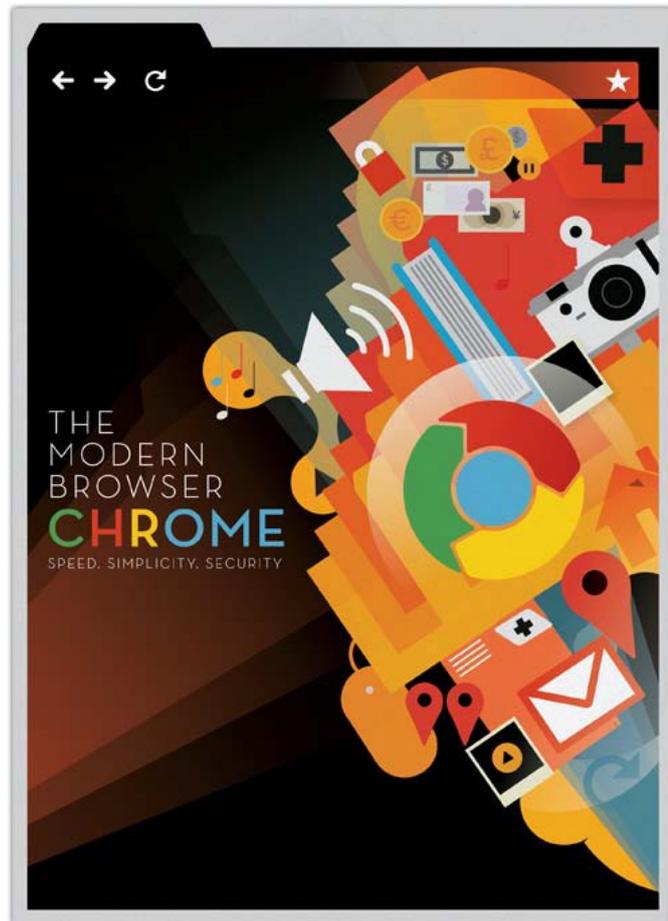
(Figure 5)

The yellow background is very conspicuous, which makes the sign easy to spot. In addition, the black text is extremely legible and bold and comes out very clear on top of the vivid yellow background. The amount of text on the poster is reduced, making the important parts such as the numbers and the directions to successfully deliver the information to the public. The lessons learnt from this post is that poster design is an extremely significant part of graphic communication and that designers must make sure that the factors discussed earlier are well-balanced in order to ensure that the information design is clear and successful(Davies,2012)



(Figure 5)

The design above presents a poster that was designed by “Nathan Loeser” in 2009 for the Modern Art Gallery to promote the “plus three exhibition”. The designer uses design elements including glyphs, typography, and body copy to compose this poster. Here we can see that the designer utilized font size to create the visual hierarchy and lead the eye through the poster, stressing on the number “3” which is the main concept of the advertising message in this design. The visual hierarchy of information was essential to the purpose of this design; thus placement and layout of elements were positioned to guide the reader throughout the composition. The designer used white space abruptly while not making it too overwhelming. Most elements are positioned towards the bottom to give the composition a defining base in overall format.



(Figure 5)

This design was done for celebrating the 2nd birthday of Google Chrome by designer “Mike Lemanski” (Figure 5). It is seen that creating visual hierarchy and mind motion clearly depends on color & color combinations. Though the use of excessive color relationships, the eye directly catches the word “CHROME” located at the middle left of the design. The dark background together with the accumulation of graphic elements at the right side of the poster strongly forces the eye of the viewer towards the more simple and obvious word at the other side of the poster. And although the use of successive and overlapping layers of graphic items with different and variant colors, the designer succeeded in leading the eye throughout the design through the use of focal points created by using contrast in color, shape, and size of the graphic items used.

## Conclusion

In view of this discussion, Visual hierarchy plays a greater role in influencing the minds of the viewers to organize their perception in respect to the content of a poster in a certain manner. The most important aspect of this concept is that different factors that influence the viewers' organization can be designed in a certain manner so that their eyes can be directed to focus of the important components that will lead to successful delivery of the desired message (Bear, 2002). Creating visual paths and using focal points largely help create visual hierarchy and induce mind motion throughout a design. When designers fully understand each component's place in a hierarchy, they can be able to focus on important components including interaction point or the content, and suppress other components especially those that supports the information.

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