

Individual Assignment 1: Data Visualization Foundations and Theories

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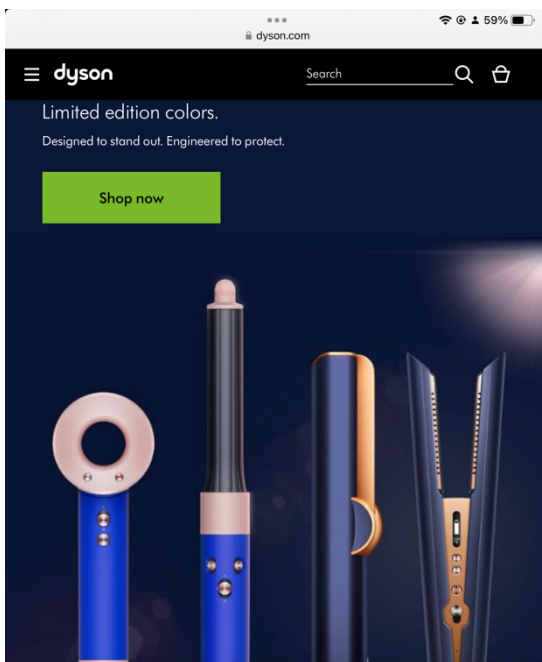
Gestalt's principles of visual perception help us understand how individuals perceive the world, and from a visual analytics perspective is useful in identifying which elements are signal and which elements are noise for audiences. The six main principles include *proximity, similarity, enclosure, closure, continuity, and connection*.

Proximity is that people tend to think of objects close together as belong to part of the same group. Similarity is that objects of the same color, shape, size, or orientation are perceived as related and belonging to the same group. Enclosure is when we think of objects that are physically enclosed (whether in a box or shaded area) together as belonging as part of the same group. Closure as a concept shows that people like things to be simple and fit the constructs that are already in their mind. For example, when parts of a whole are missing, we fill in the dots in our mind. Continuity seeks the smoothest path and naturally create continuity in what we see even where it may not explicitly exist. Connection is a concept where we think of objects that are physically connected a part of a group, and often connection has a stronger associative type that similarity in color, shape, or size. However, objects that are enclosed are more strongly associated with each other than those which are connected.

Pre-attentive cues are powerful tools which help direct the audience's attention and create a visual hierarchy of elements to direct the audience's attention depending on the size, color or position of an object. For example, text highlighted in yellow directs an audience's attention to the text. Designer principles when communicating with data and include affordances, accessibility, aesthetics, and acceptance. Affordance indicates to audiences how to interact with visualization by highlighting the importance, eliminating distractions, and creating a clear hierarchy of information. Accessibility includes not complicating data not overcomplicating and using text well to get the message across. Aesthetics include making the text pretty and using white space well. Finally, acceptance is for visualization to be effective, it must be accepted by its audience – they usually go with what they're used to, and it takes time to replace the old with the new.

I have identified the following websites which use Gestalt's principles of visual perception to strengthen customer's visual experiences.

#1 DYSON: <https://www.dyson.com/en>

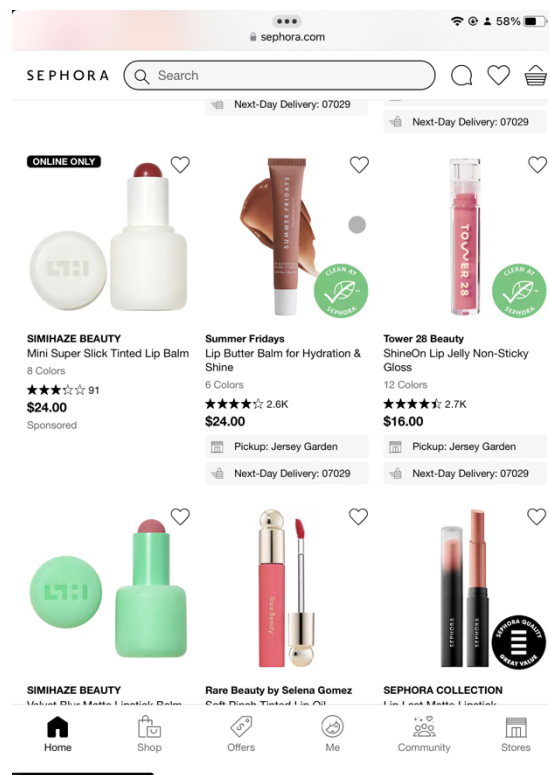


The website's use of blue color in the background and for the hair dryer and straighten products (though in different shades) is effective because it connects all 4 different products to the brand of Dyson. The products are displaced in a continuous line hence relating each. From a sales perspective, it may appeal to the audiences by potentially creating a desire to buy each of them.

There is minimal use of text on this website with only important information displayed for audiences. This includes the brand name "dyson" at the top of the webpage, the selling features of the product which are "designed to stand out" and "engineered to protect". This shows that there is effective science behind the hair dryers and aims to protect users' hair which would be appealing to people who blow dry their hair frequently and are more likely to face hair damage. Dyson products look different to other competitors and indeed stand out in comparison by shape and color.

Most importantly, the "shop now" button is highlighted in green and enclosed in a green rectangular box with the aim of encouraging browsers to push it and purchase Dyson products therefore increasing product sales. The proximity between each dyson product in the image is symmetric making it aesthetically pleasing and appealing to the audiences. The use of color – similarity, continuity, enclosure and proximity is effective to enhance customers' visual experience and encourage them to make the purchases.

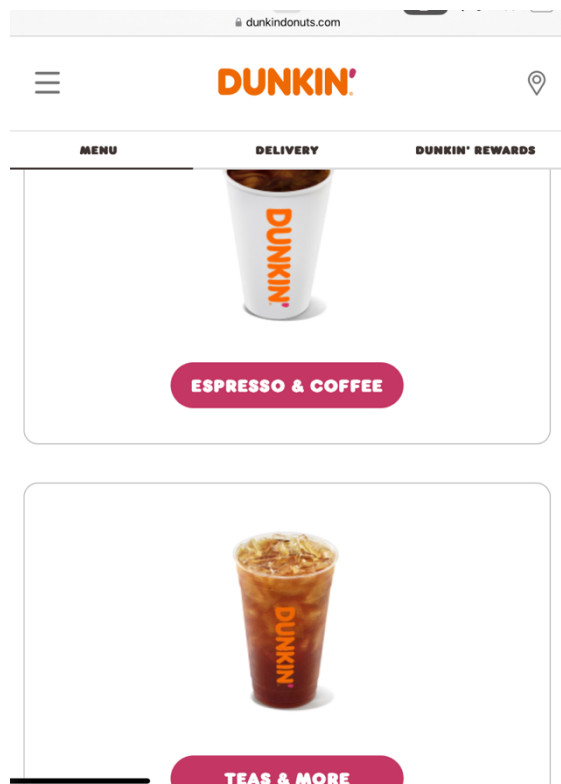
#2 SEPHORA: <https://www.sephora.com/shop/lips-makeup>



On Sephora's website, various Gestalt's principles of similarity (color, shape, product, item), enclosure, proximity and continuity are used to make its products more visually appealing and prompt audiences to keep scrolling. Pre-attentive features such as color are used to make the products and brand simple and appealing to audiences and aesthetically pleasing. The products are enclosed in similar white rectangular boxes that are only a slightly different color to the background enabling them to merge in well with the background. This makes shows that all products are from the same category - makeup and also separates them from other products displayed on the same page. The distinction can make customers feel good, allowing them to easily differentiate each product and look at differing details which may create a more appealing shopping experience than in-store. Color is used well. A white/light background is effective because the cosmetics have a range of different colors and shapes – whether it be the makeup or the packaging. A light background highlights the color of the cosmetic products and make them stand out. The sign “clean at sephora” is highlighted in green and enclosed in a green circle. This highlight not only show to audiences that the product is environmentally friendly but makes a statement that Sephora is green brand thus appealing to environmentally friendly buyers. The pick-up locations and delivery are highlighted in grey rectangles under the product thus making the shopping process easier for customers.

The principle of continuity is used to enhance the customer experience by allowing them to easily differentiate products and continue to scroll. The nearness of the text under the images also shows audiences that the text is related to the image. The products are displayed in rows of three and continue downward thus Sephora communicates that each product below is similar and related to each other, and that similar products are available for purchase on Sephora's website. The vertical and horizontal patterned display guides customers to continue to browse by scrolling downward.

#3 DUNKIN DONUTS: <https://www.dunkindonuts.com/en/menu>



The enclosure principles is well-used on this website because each Dunkin Coffee or item of food is enclosed in a box which separates it from other products. The food item categories are highlighted in red enclosures, thus prompting customer to click on those buttons to view all the products hat Dunkin has to offer. Continuity is also ued well in that each enclosure following another e.g. the “Espresso and coffee” enclosure is followed by “Teas and More”. This makes the food categories easier for customers and encourages them to scroll down to browse all the products that Dunk has to offer. Again, the use of white is appealing in that it is simple and allows the various colors of the product Dunkin offers to stand out. The symmetrical layout and simplicity of the website is visually appealing and offers and easy to navigate experience.

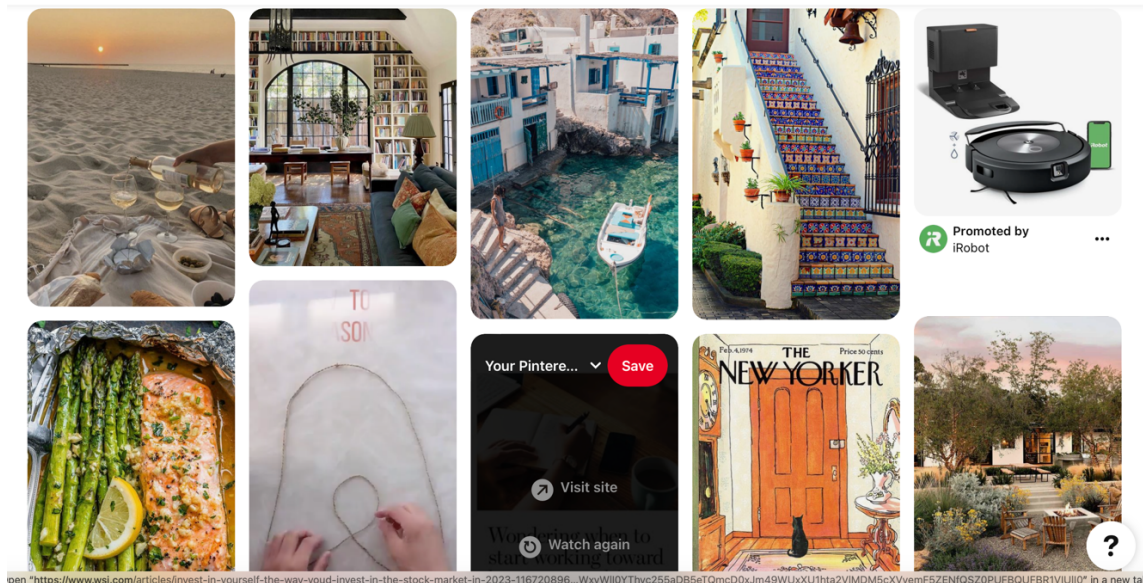
#4 JAJA: <https://www.jajajamexicana.com>



JAJA's, a Mexican restaurant's website is visually appealing and uses color and highlighting well. Compared to the other websites it is a little fancier and creative which has proven to be effective in creating a cool and fun vibe, appealing to customers looking for this vibe and experience.

Images of tasty and well plated food on the mosaic background add to that fun vibe and are lined up horizontally making it seem to customers that there are more tasty food products like these available for customers to purchase. The proximity principle is used in that there are similar distances between the plates thus making them seem connected. The use of similar color and highlighting is also useful. The Menu which is the most important thing customers look for when on a restaurant's website is in large text and highlighted in light green which guides and directs the customers here. The values of the restaurant are written in green, purple and yellow in contrast to other text which is displayed in black. The words, "CULTURE", "COMMUNITY" and "COMIDA" show the feel it aims to give customers who visit its restaurant.

#5 Pintrest - <https://www.pinterest.ca>



The enclosure principle is used in Pinterest whereby each pin is separated by an enclosure thus separating each pin including its photo, title, description, contributor and other details from all other pins around it. Although each pin is separated, the proximity and connectivity principle is used whereby each pin is well spaced with similar spacing between them, thus making the images seem connected. The product displayed are related to the keyword "holiday" therefore despite being different they are ultimately related to an overarching search term chosen by the browser. The vertical lines are of the same length as opposed to the horizontal lines which are broken. This prompts the viewer to scroll down.

References

<https://www.superside.com/blog/gestalt-principles-of-design>