Museum Signage Design and Implementation

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Abstract

The purpose of this study was to identify the essential elements of design for creating exhibit signage and to understand how museum visitors interact with signs and wayfinding systems. A survey was administered to museum/art directors and signage designers to gather knowledge from experts in the field about the signage design and implementation process. The participants answered questions concerning elements of design, wayfinding, digital versus print, and future signage innovations. The results of this research can be used to assist creators and implementers of museum signage in uniquely displaying information to a large audience and developing the most successful wayfinding method to allow visitors to easily navigate throughout an exhibit space.

Chapter 1: Introduction

Purpose of the study

Signage is an important part of our everyday lives. From identifying a street name, to branding a specific store, to navigating through a museum, signage is any kind of visual graphic that displays information to a particular audience. Certain signs stand out from others based on the colors, typography, shape and graphics utilized. In addition to printed signs, there are an increasing number of digital signs today.

The aim of this study was to determine how signage could best be designed for museums, galleries, and exhibits to clearly and uniquely display information, create ease of wayfinding, and attract the largest audience. It is important to understand how a viewer reacts to a certain style of sign and to evaluate this response in order to implement the most effective form of signage. If a sign proves to be ineffective, a new design must be implemented. Through this research, distinct elements were discovered that make for optimum museum signage, as well as those features that should be avoided.

Significance of the problem

This research is important for signage designers, museum directors, building managers, and anyone who deals with implementing signage to convey a message to an audience, specifically people visiting museums or galleries. It is essential to understand what constitutes effective signage and what falls short of clearly relaying information. The study compared different forms of signage, from print to digital to interactive, and discussed in depth each characteristic that makes for an efficient sign in a museum setting. This knowledge should be used directly for designing signage, revamping existing signage to capture visitors' attention, and adjusting any graphical displays that are unclear or misleading.

Interest in the problem

Over the past summer, I worked at a children's museum in Los Angeles, where my main task was designing flyers, posters, and new signage. I did a fair amount of investigating and brainstorming ways in which the museum could implement signage. I am interested in discovering what elements are included in the most successfully designed signage and how people interact with or respond to different forms of signage. As a graphic communication major, I am curious about colors, fonts, shapes, etc. and how the right combination of these elements can create a successful design.

Chapter 2: Literature Review

Introduction

Graphical signs may appear so insignificant in our day-to-day lives. We are constantly absorbing their information and utilizing the knowledge without mentally processing the importance that they provide. This, according to Calori (2007), is exactly how we should interact with signs. He explained, "the best signage is almost invisible – people see it but it's taken for granted." If signage is meant to be inconspicuous, then what exactly is its true value?

This concept is very new; the term "signage" was not established until the 1980s, when it was added to U.S. dictionaries (Calori, 2007); it can fundamentally be defined as signs collectively, or a system of such signs. However, according to Uebele (2007), "the actual task of showing people the way is as old as humankind." Calori (2007) agreed, claiming that signage dates back to cavemen. These prehistoric signs were what we familiarly call cave paintings, simple symbols or illustrations depicting animals and other forms of life. In contrast, the signs we know today, that include a uniquely crafted combination of words and graphics, did not come about until the early 1900s, with the London Underground sign being one of the first of its kind (Uebele 2007).

It is well agreed that signage serves many functional purposes: it "supplies general information about organizations and structures and about security and safety regulations, as well as instructions on how to use machines and facilities," and is "directly concerned with fundamental existential human needs, like being able to travel effectively, avoid hazards, find one's way back home, let others know where one can be found, or get away safely when one is in a dangerous situation." (Smitshuijzen, 2007). Calori (2007) concured that signage "communicates warning, operational and interpretive information." And yet, signage also plays a much more meaningful role. As Uebele (2007) asserted, "A sign can do more than just point towards a place. It can set the tone. It can give the place an identity. It can tell us something about the product, the people and the building." For example, if a company building has a

distinct font and/or logo incorporated into their signage, it "sends out a friendly signal." There is a French term, *signaletique*, which roughly translates to signage; this word denotes that it is more about the *feel* and the *signal* it sends than the physical sign (Uebele, 2007). Calori's (2007) similar take is that "well-designed sign programs serve to visually unify a site." He stated, "Signage can perform a placemaking role by creating a unique identity and sense of place, thereby effectively creating a brand image in environmental form."

Although it must communicate a brand or a message, the authors agreed with the late German-American architect Mies that "less is more" when it comes to signage. Calori (2007) thought "if a message is too big or too visually loud, if it overwhelms and negates other things…then the message is not quite right." He explained, "Finding your way around should require little effort and hopefully minimal signage." This action of finding your way around can best be expressed in a concept called wayfinding, which is signage plus well-defined pathways and other visual cues "such as prominent landmarks," (Calori, 2007) "in which you are being "guided, informed and helped" (Uebele, 2007). The San Jose Public Library defines wayfinding as "a comprehensive system of signs, space planning, landmarks, art, color, flooring design, lighting, and other architectural elements that assist visitors in self-navigating through an environment" (Signage design guidelines, 2009). Calori (2007) elaborated that "a key objective of wayfinding is to enable each person to form a mental map of a site or environment, so the clearer the physical layout of a site, the clearer those mental maps will be." Because the concepts of signage and wayfinding are very new, there is still much research to be done to discover the best methods of implementing systems that work effectively and efficiently.

Elements of effective signage

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Revisiting the expression "signaletique," the authors collectively observed that the feeling a sign provokes is much more important than the actual sign itself. For this reason, the signage design process is very critical. Those responsible for designing must really be in tune with what message they wish to convey and how a viewer will react to the elements they choose to include. If designed successfully, with "careful attention to details, color, compatible materials, and most importantly good typography that is easy to read and has character" signage can greatly add to "the excellence of any built environment" and "reinforce the style and standards of the place, institution, or company which stands behind it" (Calori, 2007).

Typography

"The written word is an accompaniment to the erected stone, and well-chosen typography enriches the architecture" (Uebele, 2007). Arguably the most important aspect of a sign is the chosen typography. The lettering must be carefully selected with the location in mind because it must be suited to the architectural context (Uebele, 2007). In addition to the edifice, does it fit in with the image a company is seeking to portray or message that someone is trying to deliver? There are three main factors that aid in selecting a typeface for a signage program: legibility, formal suitability and stylistic longevity (Calori, 2007).

When it comes to legibility, the ease with which a viewer can read, understand and act upon the information (Calori, 2007), a typeface should be plain, functional, neutral and discreet (Uebele, 2007). Overly ornate typography may cause a confusion of letters with numbers or symbols. It is agreed that a clean, sans serif type design is the most effective (Hermann, 2012). Uebele (2007) explained that the stems and strokes of serifs clash against the stiff rectangles of many signs. Sans serif styles, which are straight and solid, work well because "purely functional systems need to be as straightforward and direct as possible." Typefaces with open counters and

a rather large x-height are recommended, as are those with a medium weight and stroke widths neither too thick nor too thin (Calori, 2007). Hermann (2012) suggested defining the stroke width and x-height for the boldest style of a typeface, based on crucial letters such as a, e and s. The German designer created a new design approach called the Legibility Test Tool; it is an OS X application that offers real-time simulations of different viewing conditions to test how readable a potential sign is; after all, designing for signs is *much* different than for print. Uebele (2007) observed that large fonts should be used for a far viewing distance. Hermann (2012) elaborated: "a typeface on a sign that is read from 300 yards has different requirements than a typeface read in a magazine, from your armchair." Calori recommended avoiding tight letter-spacing, because it impairs legibility, and all caps, because "lowercase letters form a more distinctive word footprint that is easier to read." Ultimately, what matters is the skeleton of the letterforms; a designer should create a generic letter skeleton that is easy to recognize, but stress the individuality of each letter to create differentiation (Hermann, 2012).

Hermann (2012) declared that he could not recommend a single typeface for signage in every situation. Differing contexts call for varying uses of typography. Sometimes serif typefaces, which have traditional connotations, are more appropriate than sans serif choices, which have contemporary connotations. This is referred to as formal suitability, or how well a typeface suits a given project (Calori, 2007). Often, designers who are focused on branding use specific typefaces to create and maintain a consistent graphic or identity at a client's various facilities (Calori, 2007). Hermann (2012) introduced the notion of variances in languages and cultures and how that affects signage design, pointing out that certain fonts work better for specific languages. In addition, because signs are most often designed for long-term use, it is important to take into consideration the stylistic longevity of typography when working on a

signage project. Calori (2007) explained that trendy or novelty typefaces usually become quickly dated, which is why the majority of typography on signage is clean, simple and timeless.

The aforementioned signage design considerations are important because the typeface selected plays a large role in the ease of a wayfinding system. Textual information is at the heart of all wayfinding and instruction (Smitshuijzen, 2007), and for this reason "texts for a wayfinding system must be designed with as much care as for any other task" (Uebele, 2007). A designer must take a step back and look at a project as a whole because letters of a wayfinding typeface may look ugly by themselves, but work well as a system (Uebele, 2007). The typeface must produce a "clear, sophisticated, refined and consistent visual order" (Smitshuijzen, 2007) so that it aids in a person's formation of an explicit mental map and helps them find their way around.

Layout

The layout of a sign goes hand in hand with the typography. Smitshuijzen (2007) stated that you must pay proper attention to word spacing, leading and margins if there is a large amount of text on a sign. While trying to steer clear of clutter, it becomes a balancing act between the blank spaces and the spaces occupied by the type. To create a family look for different types of signs within a project, Smitshuijzen (2007) recommended keeping sign panel proportions identical, basing them on a modular grid that will create visual order and ease of use. A square module is often utilized for this reason. The overall layout of a sign can vary from clean and straightforward to complex and rich (Calori, 2007). The format should reflect the architecture or environment in which it is located.

Color

In addition to typography and layout, color plays a vital role in signage and wayfinding design. The main roles of color are to contrast or harmonize with the sign environment, to augment the meaning of sign messages, to distinguish messages from one another, and to be decorative (Calori, 2007). When selecting a color, a designer must pay attention to both its emotional value and its legibility when combined with other colors.

 "Color is one of the most empathetic parts of a design," said Smitshuijzen (2007). Uebele (2007) added that colors have particular cultural and historical meanings that differ greatly from country to country. When a person views a sign, just the color can often evoke a powerful emotion or bring to mind a certain meaning or regulation. In the United States, for example, we are accustomed to the color yellow for warning signs, blue for mandatory signs, a red band for prohibition, green for safety, etc. Assigning meanings to certain colors is known as color coding and is most often used for traffic, health and safety at work or in public places, such as footpaths (Smitshuijzen, 2007). Using color coding as a means of wayfinding can be effective because it helps arrange information hierarchically. For example, color can be used to codify a section or level of a building, with each level displaying a different color. However, relying *solely* on color can be challenging because the system has to be learned. A better option is to combine a color with a motif – a decorative design or pattern – that does not require any special knowledge (Uebele, 2007). Uebele (2007) offers an alternative stance on the subject: colors can sometimes have *too* much of a psychological attachment and are therefore confusing to other cultures; it is better to regard colors as values in themselves.

Smitshiujzen (2007) revealed that there is no such thing as good or bad colors. That being said, a good designer has general knowledge of what colors tend to work well together and will test these colors before implementing them in a signage project. Sometimes the designer has freedom to choose colors, but other times they are restricted to the colors mandated by official

bodies (Calori, 2007). The authors agreed that the overall goal was to create harmonious color combinations, which can range anywhere from "bold and playful" to "subtle and sophisticated" (Calori, 2007). The best combinations were found to be analogous colors – those adjacent to one another on the color wheel. One color is dominant and the others serve as complements. It is best to have either contrasting colors or contrasting brightness; optimally, this means white against dark colors or black on bright colors. Colored lettering is decorative and should be used sparingly because it is less expressive than black or white (Uebele, 2007). For projects where navigation decisions must be quickly made, such as on the road, a designer's goal is to make a sign stand out from its surroundings so that it can be "easily distinguished, read, and acted upon." The Department of Transportation established that the contrast between foreground letters and the background of a sign should at least 50% and preferably 70% (Calori, 2007).

There are many color palettes available for signs, such as the Natural Color System and the better-known Pantone Matching System. All of these color systems have been devised by individuals or teams, not all of which physically produce the colors they develop (Uebele, 2007). No matter the context, a designer must take into consideration that the colors they design with need to be translated into paint colors. Hence, it is best to start designing with color libraries from manufacturers of paints for the sign industry (Calori, 2007).

Digital vs. print

In today's tech-savvy culture, it is not surprising that there is a noticeable shift from printed signs to an increasing amount of electronically produced information. In fact, there is a revolution of digital signage appearing in different areas of society: hotels, shopping centers, college campuses, museums, and more. This equipment is multifaceted, combining advanced touchscreen technology, interactive wayfinding, 3D animated maps, weather, news, flight

information and more. The interactive element is beneficial because it engages the user with interesting graphics and touchable maps, allowing them to shape their own experience. This trend toward digital signage can be attributed to the enormous cost savings associated with the absence of printing and the ease and quickness of updating and distributing information.

The digital signage market was worth $455 million annually in 2011, and is projected to be $560 million by 2014 (Hayes and Bodhani, 2011). Not too many years ago, people relied on printed site maps and large posters (Porco, 2010). What seemed impossible then is now a reality. Hayes and Bodhani (2011) commented on the increasing technological innovation: "Video processing has advanced, display technology has evolved, graphics controllers have evolved. Many inherent limitations of PC graphic output have been overcome; plasma display resolution and luminosity have improved." They explained that flat screen displays are now vital to the success of digital signage.

Although digitally transmitted, the key purpose of a sign remains the same: to help visitors of a facility find their way around. Porco (2010) pronounced that digital wayfinding solutions are capable of a lot, providing easier navigation and a truly personalized, immersive experience." How so? A 2010 case study found that interactive wayfinding maps, with start and end points and animated directional arrows that indicated the path, as well as touch-sensitive or button-driven content (Hayes and Bodhani, 2011), were successful because the responsive, interactive interfaces were visually engaging and provided up-to-date information along with that certain wow factor. "People see a screen and want to interact with it," explained Domonell (2012). McClure (2011) noted that interactivity is refreshing and modern, and helps people access a facility in different ways. It also gives clients more control over what they want to show (Hayes and Bodhani, 2011). A bonus is that a lot of digital signage projects cooperate with mobile devices for added ease of use (Hyun, 2012).

Digital signage has matured from treating installations as electronic billboards to creating specialized messaging. "The most successful systems view signs as a strategic communication system," said McClure (2011). The content is equally as important as the interactivity aspect – you have to know what you are going to say and how you are going to say it so that it will appeal to your audience. The predominant goal of digital signage is to communicate important events that are occurring within a reasonably short period of time (McClure, 2011). A big factor in drawing organizations toward adopting digital signage was that it meets multiple requirements in a single solution. "Different content can be streamed to different displays at different times," explained Hayes and Bodhani (2011). Hyun (2012) further stated that because digital signage systems are connected with each other, it makes it possible to distribute content remotely and interact with the audience simultaneously. The 2010 case study, "Wayfinding in Action," found a bilingual solution in technology that can display multiple languages at once with immediate translation of text. Besides being extremely effective, dealing with this new technology is simple, too. Porco (2010) was highly complimentary of the ease of updating digital signage. In addition, it saves time and money normally spent on printing, posting and constantly updating information. Printed information can quickly go out of date and is a hassle to keep current. It can also be a source of revenue for businesses nearby that choose to advertise on the digital wayfinding maps (Porco, 2010).

Interactive digital signage allows a company to track customer responses, said Hayes and Bodhani (2011). Many new technologies are integrated with sensor software that can gather and analyze data and adapt signage content to suit the audience. This helps organizations communicate with a variety of target audiences. Hyun (2012) agreed, stressing the importance of providing appropriate and personalized content. McClure (2011), however, disagreed by saying gathering feedback can be difficult. If unequipped with such advanced tracking technology, other

options for collecting users' reception are surveys, observing the way people interact with the signs, and monitoring traffic to websites that are announced on the signs, which indicates that people are paying attention and the signage is working.

Although the information on these modern signs is produced digitally, many of the design considerations are the same as those of printed or painted signage. The typography included in digital signage should match the typography on all other sign types within a certain project (Smitshuijzen, 2007). The visuals included should draw people's eyes to the screen and make them want to touch it; placing multiple images on a screen is quite eye-catching, said McClure (2011), but Porco (2010) warned that you do not want the screen to be too cluttered or it will overwhelm the user and detract from the overall experience. Branding can be maintained by using a template that includes consistent logos and colors. A digital signage designer must determine not only what messages will be displayed on the signs, but how they fit with print and the web (McClure, 2011).

Although the benefits of digital signage are numerous, Smitshuijzen reported that traditional means are likely to remain important tools in signage projects. The 2010 case study touched on the fact that digital signage may take away from in-person customer service and relay an impersonal feel with digital greeters.

Chapter Three: Methodology

Introduction

The goal of this study was to determine how signage – commercial or public display signs – could best be designed and implemented for use in museums, exhibits, and galleries. There was general knowledge about signage projects, such as effective font and color usage; however, the context of signage in a museum setting had been little explored. Exploring this topic was important to give museums insight on ways with which to uniquely display information and create the most successful wayfinding process, allowing visitors to easily navigate throughout an exhibit space.

Objectives

The objectives of this study were to:

- Understand users' needs and preferences when it comes to interacting with signs in a museum setting

- Determine what elements of design are critical to focus on when creating signage for museums and galleries

Sample to be studied

The research was conducted among signage designers, museum directors, and managers who were familiar with implementing signage. Studying this group was essential in pinpointing the key factors of sign design and understanding the creative process involved.

Procedure

Signage designers, museum directors, and managers were surveyed to ascertain what they viewed as most important in designing signage and how to install it effectively, as well as any innovations relating to signage that they predicted for the future. These surveys, administered via email, were designed to collect opinions about the effectiveness of certain signs and to determine what improvements could be made to create easier wayfinding in a museum.

Data analysis method

The data collected in this study was qualitative, consisting of people's opinions and ideas, rather than concretely measured numbers. Responses to the survey questions were recorded and reviewed to obtain information on people's experiences with museum signage. Similar responses were grouped together to determine trends in the opinions of those implementing museum signage.

Chapter Four: Results

Numerous museum directors, managers, and designers were interviewed by means of an email survey. While the Literature Review provided general information about signage design, this research dug deeper and contributed valuable insight into the workings of signage design and wayfinding implementation in a museum/exhibit environment. Below are the questions and responses received from the survey.

1. How do you begin planning a signage project?

There appear to be two main reasons that signage projects begin in museums: to update outdated – or a lack of – signage and to accommodate for a special exhibit that requires unique signage. One such project does not start abruptly. It takes some extensive asking, meeting, and brainstorming to determine the problem or challenge and what needs to be accomplished.

The designers and directors agreed that the first step in planning a project is to ask important questions, such as "What is the goal?" and "What do we want people to do in this space?" General questions such as who, what, when, where, and why are also important in

planning for a specific context. Typically, a meeting is conducted among the director, designer, COO, and someone from facilities in which the project is discussed and planned out. Additionally, a budget is developed and the art director will get a quote from a signage vendor or designer. One Design and Exhibit Development Manager explained the step-by-step process that her museum goes through when starting a signage project:

- *Evaluating the problem/challenge (photo documentation/report)*

- *Developing plan (floor plans, elevations, electrical needs, lighting)*

- *Researching material (relative to the budget and use (indoor vs. outdoor)*

- *Design (several approaches, selection font, color palette, etc.)*

- *Review*

- *Prototype (creating samples/mock-ups)*

- *Production (making the signage)*

- *Installation*

It is important to note that context is a motif throughout the exhibit signage design process. Approaches for design and implementation will vary based on theme and setting. Some museums focus the inadequacies of their signage, such as a lack of signage or an outdated design, and strive for continuous improvement. For special events or exhibits, signage is determined by both audience need and the visual content of the display. When focusing on wayfinding, museum directors find it critical to observe the public and look for patterns of confusion, then come up with a solution.

2. Comment briefly on your process of choosing...a typeface...a color scheme...an overall layout/design.

In regards to the specific visual elements of a sign, it was discovered that there must be a balance between maintaining a museum's brand and featuring a distinct exhibit. On one hand, designers and art directors like to keep all designs on brand to retain cohesion among everything they produce. One museum's Director of Public Affairs explained their designer's choice of two typefaces, one serif and one sans-serif, that they use together in all of their directional signs. The color of the signs match the wall color and the brown font color matches the tiles that are on the outside of the building. These choices help unify all signage in the museum and create a subtle, yet strong brand image.

On the other hand, each exhibit may have its own theme that requires special signage. Colors are usually associated with colors in common with the exhibition, while the layout and design is dictated by exhibition content. One designer commented that his choices of typeface and color are based on instinct and setting. In addition, in accordance with the principles of design, the art directors and designers felt that museum signage should be kept clean and clear, with the use of bold, readable typefaces and minimal graphics.

3. What do you believe is the most critical aspect of design to focus on when creating signage?

Overwhelmingly, the signage designers and implementers believed legibility/readability to be the principal aspect of design when creating museum signage. Because museumgoers are often reading signs on the move and from a distance, they must be kept simple with minimal information to relay the message as "clearly, quickly, and effectively as possible." Directional signs should be eye-catching as well as easy to read and easy to follow. To accomplish this goal, it is always necessary to test designs at full scale by reading them from the distance a museum visitor would also be viewing them from. Considering the surroundings is also vital in making sure there is nothing that will distract the viewer.

Furthermore, as with the previous question, one designer saw it important to create a design that is "unique to the exhibit, but at the same time, clearly something that originated from the museum." Another designer felt that "concern for the first-time visitor" was the key element to focus on. If visiting a museum for the first time, would you know where to go and what to see?

4. What should be avoided when designing signage?

This question also had a unanimous answer: too much text or information should always be avoided. A design should not be too cluttered or complex so that it takes away from the message and readability of a sign. One museum manager mentioned, "Copy should be kept to a minimum. A quick read should usually convey all the information needed." However, designers also want to avoid not having enough information. This could lead to confusion and ineffectiveness of signage.

5. How big of a role do you believe signage plays in a (your) museum?

Signage was determined to be a very critical aspect of a museum that is often taken for granted. It is necessary to have signage to provide exhibit information and create ease of wayfinding for guests, but at the same time, signage should be a part of the background that does not interfere with exhibits. For one museum, signage plays a huge role in the customer service strategy. The director reveals, "It is there to help our visitors locate galleries, amenities, and information on exhibitions and events. It's as important as friendly staff or clean restrooms or benches in the galleries." For smaller museums, signage was found to be not quite as essential

due to museum staff who greet all visitors and are available to answer any questions. For large museums, signage is imperative for orientation.

6. What does wayfinding mean to you?

Touched upon in the Literature Review, wayfinding is a relatively new concept. Even so, the museum directors, managers, and designers all had their own unique perspectives on wayfinding and its importance relating to signage and museums. Survey responses indicated that wayfinding means:

- *Important signage that assists with directing guests to areas within in the museum.*

- *Helping people find their way.*

- *Providing clear and accurate information that will get the visitor to their desired location as expediently as possible.*

- *Laying down the "crumbs" throughout the museum so that visitors can easily navigate the premises.*

- *Directions/signage for gallery patrons.*

- *Directing people from point A to point B.*

These are all valid responses. Each person sees his or her duties of helping with visitor orientation within a museum in a slightly different, yet generally similar fashion.

7. How do you use signage to create ease of wayfinding in a (your) museum?

In view of the fact that all the managers and designers were familiar with the idea of wayfinding, they were all, additionally, well versed in implementing a wayfinding system. Carrying out a wayfinding system usually begins with "careful assessments and planning." One designer recommended testing mock-ups; that is, making actual signage prototypes and putting

them in the locations where they will be seen. He warned, "Don't trust the bright light of your computer monitor," and stressed the importance of involving stakeholders in the process to receive valid input before going through with a final plan.

Examples of wayfinding that occur in museums include signage in stairwells that act as corridors to museum exhibits and varying colors and iconography to differentiate floors. One director wrote:

> *Our signs are strategically located throughout the museum at those locations where you pause and wonder where you are. They are designed to be subtle, yet have just the right amount of pop to help visitors move through the grounds.*

It was found that wayfinding is not a key priority in smaller museums where there is a very slim chance of getting lost. Moreover, some museums simply prefer to not establish an extensive wayfinding system. One art director explained his reasoning for this:

> *Because our museum is so big we rely on security staff and minimal signage, too many signs are confusing. People are there for pleasure so it's OK to get lost (you might discover something you didn't expect) which is different from going to the airport.*

Certain museums, such as a science or children's museum, may need substantial signage for providing information or orienting a visitor, while art museums may opt for minimal, more subdued signage.

8. What are some unique or creative ways you can display information?

The creative directors and designers provided a multitude of unusual or noteworthy ways in which their museums displayed information. Some of these ideas included:

- Projecting graphics onto a surface, whether it be a hard surface (walls, floors) or a soft surface (fog, water)

- Three-dimensional

- Backlit graphics

- Lenticular

- Rotating signage

- Video/animation

- Vinyl signs and lettering

- QR codes

- Window cling graphics

- Printed signage using non-standard paper dimensions/aspects

- Pockets on permanent signs where information associated with temporary exhibitions can be included

The possibilities are truly endless when it comes to signage innovations. The designers emphasized that signage always depends on the content and surroundings. One designer stated that while there may be "a million ideas," it is important to learn to pick a good one. He advised, "Don't rush the decision process…sleep on it and see how it looks the next day."

9. What type of signage or elements of signage do you believe attract the largest audience or draw people in?

Though some suggestions were briefly addressed in earlier questions, the museum personnel divulged, from their experiences, what types or elements of signage have proven to be most effective in engaging museumgoers. These were their responses:

- *Typically, guests respond to bright, colorful signs.*

- *Any good design that works well in context will get noticed.*

- *Appropriately placed signs with the right messages. A cardboard sign could kick-butt if it was at the right place at the right time. Venerable materials (tried and true) are also good.*

- *Creative, original pieces*

- *Images*

- *Something that directly addresses the content*

- *Our exhibition-related building banners are the largest and most eye-catching. We install them on the outside of our building, and they can't be ignored by passers-by. And since we're on a busy street, we get a lot of those.*

10. Which is better: printed or digital signage? Why?

When is comes to printed vs. digital signage, another topic discussed in the Literature Review, the museum directors and designers had varying opinions. Most agreed that each medium has its own best use and specific target audience and that the context, the setting, and the viewing distance greatly affect one's decision for which method to select. One manager maintained that "wayfinding signs are best as printed graphics, as most signs don't need to change. Digital signage is best when conveying messages and pricing structures that change frequently." Those who preferred digital signage felt that it is environmentally forward and easy to update, while one director was a proponent for printed signage because of her museum's goal of "creating a serene and contemplative environment that digital does not fit into."

11. What signage innovations do you predict for the future?

Similar to the question about original ways in which to display information, the interviewees shared their predictions for future signage innovations:

- More GPS wayfinding for interior spaces/indoor Google Maps

- More effective ADA signage (e.g. Braille/tactile signs)

- More personalized signage that displays a message tailored for the viewer

- Digital signage that will be able to read a person's "signature" from their phone and be able to highlight certain exhibits, food options, etc. based on the information in the phone

- More refined digital and interactive technology; more and less expensive phone/handheld device apps

Chapter Five: Conclusions

The goal of this study was to explore the process of orchestrating a signage project in a museum or exhibit environment and to pinpoint the aspects of design that are fundamental when working in this setting. Unearthing this knowledge was essential in allowing museum/art directors and signage designers to strategically display information to the largest audience possible and create ease of wayfinding for museumgoers. Those implementing signs must perceive the difference between a good design and a poor design and realize why design is significant in a museum setting. This research was important to ensure that those in charge of museum signage projects understand the potential to continually update signage based on user needs and preferences as well as shifting trends and innovative technologies.

Through the research, it was discovered that the signage implementation process is not quite as easy as it seems. Although signs are often taken for granted because they lie in the background of a museum, it takes considerable examination and planning for a project to come together. While there are infinite typefaces, colors, materials, and layouts that can be used to create signs, the context and circumstances of an exhibit will determine the design needs. A museum's brand or image should also be taken into consideration to create cohesion among all signage. Context aside, a steadfast rule for all museum signage is to keep it simple, legible, and uncluttered, allowing a viewer to read it easily from a distance. This is important for wayfinding, or helping people smoothly navigate throughout a museum. Minimal text and large typefaces allow visitors to absorb information while on the move.

In today's technology-driven society, it is no surprise that digital signage is taking over the market. In a museum environment, however, digital signage may not always be the best option. The decision to implement digital signage depends on the context. Digital signage is convenient for conveying information that frequently changes, such as museum events.

Wayfinding signage, however, has proven to be better when printed, as the message does not need to be regularly updated.

　　　If time allowed, this research could be further developed by surveying museumgoers – the people interacting with exhibit signage on a daily basis. This could be accomplished by observing individuals as they utilize signage in addition to polling individuals and recording their feedback on what is useful about specific signs and which areas need improvement. Collecting the users' thoughts and reactions to signage would provide additional insight into which design elements to focus on and how the user relies on a wayfinding system to navigate about a museum. Additionally, more research could be conducted in the area of signage innovations, specifically interactive media and the use of smart phone applications to enhance museum wayfinding.

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Appendix

Interviewees:

Angela Williams: Manager, Design & Exhibit Development, Museum of Science + Industry, Chicago

Erik Andersen: Production Manager, Museum of Science + Industry, Chicago

Alec Ramsey: President and Creative Director, 2020 Creative Group

Jack Biesek, Founder, Biesek Design

Karin Hansen: Visual Arts Director, Boston Children's Museum

Leslie Denk: Director of Public Affairs, Norton Simon Museum

Michael Azevedo: Director, Center for Contemporary Art, Sacramento

Daniel Young: Art Director, Environmental Design, Los Angeles County Museum of Art

(LACMA)

Email survey:

Hello,

I am a Graphic Communication undergraduate student at Cal Poly San Luis Obispo. I am graduating in June and currently working on my senior project, which involves conducting research on signage design and implementation, specifically in a museum or exhibit setting. My goal is to collect information from those experienced in the field on components of signage design such as typography, color and layout, and on topics such as wayfinding and digital vs. printed signs. I will then synthesize my findings into a research paper.

I would really appreciate it, if you have a free moment, if you could fill out the questions that I have provided below. Your insight is very valuable and will help me immensely in completing my project. Please answer as many or as few questions as is reasonable and send me back your responses as soon as possible. If your museum hires an outside designer to create signage, I would appreciate it if you could put me in contact with them or forward this email along.

Questions:

1. **How do you begin planning a signage project?**

2. **Comment briefly on your process of choosing…**

   ...a typeface

   ...a color scheme

   ...an overall layout/design

3. **What do you believe is the most critical aspect of design to focus on when creating signage?**

4. **What should be avoided when designing signage?**

5. **How big of a role do you believe signage plays in a (your) museum?**

6. **What does wayfinding mean to you?**

7. **How do you use signage to create ease of wayfinding in a (your) museum?**

8. **What are some unique or creative ways you can display information?**

9. **What type of signage or elements of signage do you believe attract the largest audience or draw people in?**

10. **Which is better: printed or digital signage? Why?**

11. **What signage innovations do you predict for the future?**

Thank you for your time!

Best regards,
Ali Weiss
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