MUSE: Integrated Information System of Twenty-four Art Museums in New York City

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Abstract: Numerous renowned art museums are located in New York City, attracting a large number of visitors annually. The most decisive element that shapes one's plan for a museum visit is the availability of and access to information. However, due to the absence of an integrated museum website under proper management, it is difficult to acquire necessary information without committing substantial time and effort. That is, the absence of such a system causes information dispersion detrimental to user convenience. Accordingly, there exists popular demand that museums enhance efficient interaction with the user by implementing an integrated system through a well-organized information design. Twenty-four art museums are selected in this study by the standards of prestige, quality of the website, clear identity, and the number of visitors. This study thereby constructs a new identity system tailored for the twenty-four museums that can perform the function of a navigational tool based on geographical information for potential museum visitors. The new interactive design that this study introduces is an integrated system for optimization of communication, and is extended to diverse formats including a website, kiosk, advertisement, poster, and museum passes. The integrated information system service functions as a bridge between the user and the museums, assisting easier acquisition and utilization of information. Moreover, it attracts the general public to the cultural assets of the museums by facilitating meaningful museum experience.

Key words: Art Museum, Information Design, Identity, Interaction, Location

I. Introduction

1.1 Research Background and Necessity of the Study

Art museums, adopting the marketing strategies developed in the business realm, are engaged in promotional campaigns, expanding and enriching their domain of cultural influence and expressing their own characteristics through a unique identity and theme. Ironically, however, these promotional campaigns that have been sprawling disorderly have backfired, as they have only created wide dispersion of the information. The Web lacks a webpage or a system in which the user can easily obtain and understand the information on art museums, but instead is currently occupied by disarray of information. When people plan to visit a museum, they, in order to find the information they need, cannot avoid laboring to navigate through numerous individual museums' websites that are scattered across the Internet, and this inevitably incurs them time and frustration. The lack of information on museums is also putting a distance between visitors and museums.

Figure 1. Current Problems When Searching Art Museums' Information through the Web



1.2 Purpose and Methods of the Study

This study aims at enabling the general public to find and use the museum information they are after by collecting and integrating the scattered information about the art museums in New York City into an organic whole. The study assumes that the museum experience already starts at the information searching process, and the experience should be aided by an efficient and user-friendly system. Museum information, when processed and developed to be more accessible, leads to an easier museum visit. A convenient access to the information regarding the collection, exhibition, lecture, and events in which one is interested reduces the distance between art museums and the public, and builds intimacy between them. As a result, the public is invited to a new and meaningful museum experience. Conclusively, the ultimate objective of this study is to bridge the gap between the public and museums and establishing a closer relationship, through an organized information design.

With the objective in mind, the study is conducted in the following way: First, twenty-four art museums located in New York City were selected. Second, new identities were developed based on the museums' geographical location. Third, an integrated image was constructed by exploiting the organic relationship among the individual identities. Fourth, the information on the museums is organized based on the integrated identity system. Fifth, interaction for efficient communication and access was studied through extending the system to a variety of media including a website and the kiosk service.

1.3 Research Scope of the Study

The twenty-four New York City art museums that are used as the building blocks of this study are selected by taking into consideration (1) a website of a high degree of organization and perfection, (2) a clear identity, and (3) the number of visitors. A survey on the composition of the website, the number of visitors, the degree of activeness, and prestige was conducted for a strict selection process. The following is the list of the selected museums.

Table 1. Twenty-four Art Museums in New York City

Manhattan	Brooklyn	Long Island City	Queens
1) American Folk Art Museum, 2) Chelsea Art Museum, 3) Cooper-	18) BRIC	20) Fisher Landau	24)
Hewitt National Design Museum, 4) Dia Art Foundation, 5) El Museo	Arts, 19)	Center for Art, 21)	Queens
del Barrio, 6) Grey Art Gallery, 7) Guggenheim Museum, 8)	Brooklyn	Sculpture Center,	Museum
International Center of Photography, 9) International Print Center, 10)	Museum	22) Museum of the	of Art
Museum of Art and Design, 11) Museum of the City of New York, 12)		Moving Image, 23)	
New Museum, 13) The Drawing Center, 14) The Frick Collection, 15)		MoMA PS1	
The Metropolitan Museum of Art, 16) The Museum of Modern Art			
(MoMA), 17) Whitney Museum of American Art			

2. Literature Review

2.1 Value of Museum Experience

Steven Yessick notes "Museums are an excellent place to learn about art as it relates to history and culture. The art in museums represents the evolution of our understanding of society. These innovative works are symbols of how humans have learned to perceive their world." An art museum, therefore, is a public sphere for cultural communication and exchange through artistic diversity, and a repository of inspiration. Suzanne Keene, in her *Fragments of the World*, emphasizes the importance of museums: "Museums can play a powerful role in society and in building memory and identity." Museums are also a place for education that makes life more fruitful and meaningful. The ultimate goal of museums could be defined as following: "As a museum whose primary purpose is to help its community move toward a better life" (Newsom, 1978). It is a meaningful undertaking to enlighten the public about the value and importance of museums and encourage them to be familiar with the benefits of museums. The visit to museums as such requires a complete museum information system that is easy and accessible to the general public. Museums, on the level of information, should form and provide an information delivery environment that can invigorate user participation.

2.2 Organization and Integration of Information

The desirable interaction between the visitor and integrated and well-organized museum information furnish the user with convenience, satisfaction, and emotional content, accomplishing its ultimate goal of producing a "museum experience." For that purpose, the effectiveness of information delivery is maximized when the dispersed "museum data" are processed into an interesting and comprehensible "comprehensive information." "Designers create and organize the information so as to channel viewer's attention to features that create the story or message" (Jacobson, 1999). Accurate and easy information delivery demands a process of ordering chaotically scattered data by sorting, arranging, and organizing so as to adjust the data to the user, his or her usage, and using environment. When the information of various museums is structured in a form that is conducive to easier comprehension and placed at a single place, the value and utility of the information rise, and the difference in the way information is represented, breeds difference in the story the information is telling. The new visualization through organization and integration of information enhances comprehension, and, therefore, reduces the amount of the unnecessary information that the user must sail through and increases the utility of necessary information. This study attempts to achieve such visualization by developing a new identity design for the twenty-four museums. The integrated logo system MUSE came into being with the issue of identity at the center, and the MUSE maximizes the efficiency and accessibility of information delivery and helps the user search information more efficiently with an integrated information design that collects all the information regarding the New York City art museums at one place. The application systems of the MUSE include a website and kiosk service. The MUSE poster, post card, and magazine advertisement promote the museum to the user.

3. Identity Design Development

3.1 Integration of Logo System

The development of a new identity for building an integrated art museum information system is the core of this study. The integrated information system consists of the identity based on geographical locations. The locations of

the twenty-four New York City museums, dispersed across the different areas of New York City, are represented as dots on the map and connected with straight lines. This process is an attempt to create a new identity by exploiting the difference in position when the museums are aligned by their geographical attributes. When all the dots are connected with 529 lines, these interlinked nodes with numerous edges form a large network of the museums. This network's image is transferred to the letter M, which is the first letter of museum and the MUSE. The logo of the MUSE is thus composed of the 529 fine lines. This is how the logo of the MUSE is created after the connection and integration process of the twenty-four museums.

Figure 2. Integration of 24 Art Museums Based on Geographical Locations

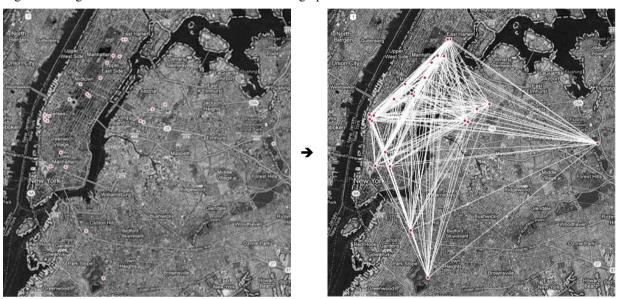
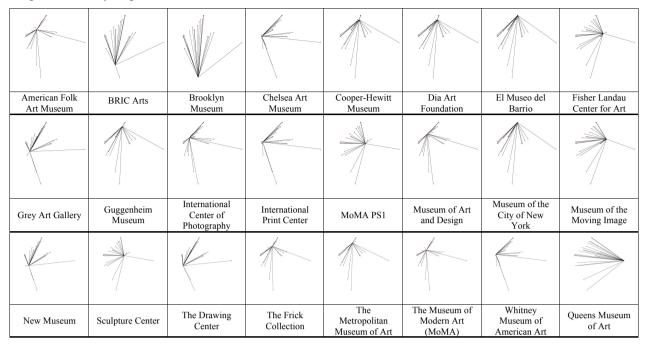


Figure 3. Integrated Logo of the MUSE: 24 Art Museums' Network Image Transferred to the Letter M



The MUSE is the overarching concept with the substructure of the twenty-four museums, integrating them into a new identity. The Muses are ancient Greek goddesses of arts, music and literature. The "muse" in the word museum originates from the Muses. The Muses were also believed to be the source of creative inspiration for artists. Differentiation of the color between "M" and "USE" contrasts the practical and informational nature of the MUSE to the artistic nature of the Muses. The MUSE provides interactive resources that help people plan their visits to a collection of the twenty-four museums in New York City.

Figure 4. Identity Logos of 24 Art Museums



Each of the museum's identity is designed in the shape of lines converging to a single dot. The shape of the twenty-three lines heading to a single dot is uniquely differentiated from museum to museum due to their different locations. An important characteristic of the narratives in the integrated information system is the fact that by the descriptive conveyance of information, the information becomes more amenable to interpretation and thereby the receiver completes the narrative by actively participating in the message delivery process. It is imperative that the user can perceive the sequence of the visual language that transforms concrete information into a narrative. The twenty-four identities, moving like constellations on the black background, convey the MUSE's unique story. The organic relationship that governs the connection among the museums is represented in motion so that the user can understand and interpret the totality of the images that describe the museums, and can gain a quick access to the information of the individual museums. The colors for the lines consisting of each individual museum's lines reflect the trademark color of that museum, were sampled from the color of its logo and building.

3.2 Integration of Application System

The MUSE, an integrated art museum information system, is a new way of interactive design, created to serve the optimization of the communication between the museums and the user willing to visit the museums and all those related to the museums. The website is the important method of communication for the MUSE to communicate with the user. The introductory page shows a moving image in which the different identities of the art museums are linked together, spreading the integrated image of the MUSE. The website features a museum search engine by name and by location. The user can enjoy an unobstructed access to the information regarding current exhibitions and collections, and the interactive map viewer provided by the MUSE allows the user to compare the locations of the museums. The user can also learn the information regarding the museum pass and print it out immediately after payment. Kiosks are placed in the major locations of the downtown so as to be exposed to people's use. Kiosks share all the serviced functions at the MUSE website, and make easier and clearer

search, selection, and confirmation available. The museum pass is designed to in such a way that it accommodates the user by discount benefit in proportion to the number of museums the user pays to visit, and conveys the information regarding the exact location of the museums and distance calculation. The poster to promote the MUSE, in which the twenty-four museums are arranged, propagates the message in a condensed and concise form. Attached at the walls of the airport, train stations, and subway stations, the poster would stimulate the public's interest. The magazine advertisement was designed after the line image linked to the original design, and the included phrase "ART MUSEUMS IN NYC" delivers the message of the MUSE.

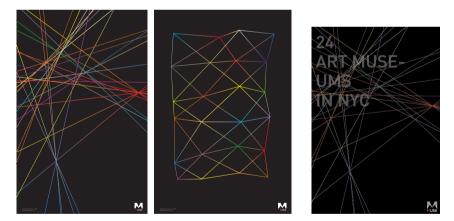
Figure 5. Interface of the Website MUSE



Figure 6. Kiosk Service Screen Pages



Figure 7. Posters and Advertisement for Magazine



3.3 Navigational Identity

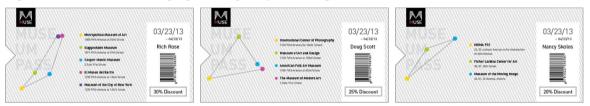
In visiting a museum, movement from one place to another is inevitable. The symbolism and images of the place are inserted into and stored in the visitor's mind. The information on location and place significantly affects the decision-making process regarding the museum visit. The spatial impression related to how to use the knowledge acquired from location, place, and environment lays the groundwork for interpreting and understanding individual pieces of information. The new identities are derived from the locations on the map, and the location information is expressed in the relative relationship of the visual elements that the dots and lines of the museums make. Therefore, they can perform the function of a navigation tool, and this function is performed from the moment when the museum pass is being printed out. The user can also obtain information on the exact

location of and distance to the museum through the Web and the kiosk. Such system assists the user's convenient movement and efficient planning for a museum visit.

Figure 8. Process of Getting a Museum Pass through the Kiosk Service



Figure 9. Museum Passes: Helping to Navigate by Indicating Locations



4. Conclusions

This study produces a new image that puts together the dispersed museums as represent them an organized whole, and builds a system to promote the museums in a simple and intuitive way by utilizing location-based organic identities. The MUSE is distinguished from other systems in that its integrated identity system weaves disorderly and heterogeneous strands of information into a single story. The brand power of art museums achieves a new level of power when they are combined to be a single integrated brand, leaving a strong impression exercising strong influence on the user's perception. This study also leads to effective communication with the user and creates efficient interaction by collecting and organizing the fragmented pieces information to rearrange them on a unified platform made of easily understandable language. In a museum experience, easily accessible information contracts the distance between the user and museums and invigorates participation on the part of the user, as it makes information searching more convenient and efficient and, in turn, makes participation in museum activities easier. It is the author's wish that this study serves as a guideline to provide information to the user in a simple and user-friendly fashion within an environment where systematic organization of information is largely absent.

A further study may be conducted by combining "contents" with the identity as a navigation tool. The future study will investigate into the possibility that the unique identities of the twenty-four museums would transcend twenty-four separate images and become an interactive identity as an integrated information icon that reflects the detailed information and characteristics of each museum. It will be a progressed identity that contains each museum's unique story. When one can learn the information on a museum including the location, type, artistic classification, and hours solely through the museum's identity, easier comprehension of the museum's characteristics and a quicker access will be accomplished. Another study, in line with this study, is hoped to be carried out to develop an application for mobile devices and tabulate computers.

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Twenty-Four Art Museums' URL

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- [2] BRIC Arts http://bricartsmedia.org
- [3] Brooklyn Museum http://www.brooklynmuseum.org
- [4] Chelsea Art Museum http://www.chelseaartmuseum.org
- [5] Cooper-Hewitt, National Design Museum http://www.cooperhewitt.org
- [6] Dia Art Foundation http://www.diaart.org
- [7] El Museo del Barrio http://www.elmuseo.org
- [8] Fisher Landau Center for Art http://www.flcart.org
- [9] Grey Art Gallery http://www.nyu.edu/greyart
- [10] Guggenheim Museum http://www.guggenheim.org
- [11] International Center of Photography http://www.icp.org
- [12] International Print Center http://www.ipcny.org
- [13] MoMA PS1 http://momaps1.org
- [14] Museum of Art and Design http://www.madmuseum.org
- [15] Museum of the City of New York http://www.mcny.org
- [16] Museum of the Moving Image http://www.movingimage.us
- [17] New Museum http://www.newmuseum.org

- [18] Sculpture Center http://www.sculpture-center.org
- [19] The Drawing Center http://www.drawingcenter.org
- [20] The Frick Collection http://www.frick.org
- [21] The Metropolitan Museum of Art http://www.metmuseum.org
- [22] The Museum of Modern Art (MoMA) http://www.moma.org
- [23] Whitney Museum of American Art http://www.whitney.org
- [24] Queens Museum of Art http://www.queensmuseum.org