Mobile Exhibition System

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MOBILE EXHIBITION SYSTEM
Submitted to the faculty of the School of the Arts at Virginia Commonwealth University in partial fulfillment of the requirements for the degree, Master of Fine Arts in Design: Visual Communications.

MOBILE EXHIBITION SYSTEM

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Through the development and design of a Mobile Exhibition System (MES) in this thesis, I will demonstrate the benefits and possibilities of a flexible and mobile system within an exhibition environment. A flexible system will be able to adapt to a wide range of content, while at the same time, maintaining a synergy between its form and function. By the reuse and reappropriation of shipping containers as the exhibition envelope, the goal of mobility can be achieved, reaching out to those who might not otherwise experience learning through an exhibition environment.
I am often asked why I did not follow the career path of a degree holding architect. I am quick to reply... “that I began to be disillusioned in the latter years in school when the focus was placed on the structural and mechanical systems of a building. My passion lay in the ideation and design of a space and how it impacted the visitor.” (I was not turning my back on the field of architecture) I recognized the power of architecture to positively affect the quality of life for people at work, home and play. I realized how the smallest design choices could significantly alter human experience and perception within a space. Aspects of a design could govern where people circulated, what they saw, how they felt.
This possibility of creating “experience” and “focusing perception” held real interest for me. I began to take graphic design courses as electives and soon discovered that the physicality of architecture was not the only medium that could impact and influence people in this manner. I had earned a degree in a very well-defined and respected profession, but I chose to turn my attention towards the rapidly changing field of ‘graphic design.’ I have come to think of it, not as a switch in career paths or even interests, but of an extension, an augmentation to my way of thinking about the field of design as a whole.

Graphic design’s ability to disseminate information, and educate people captivated me, and had me yearning to further investigate its potential. This lead me to the pursuit of a master’s degree in graphic design, and to Virginia Commonwealth University where I began the process of connecting my past experiences in architecture to the new challenges of graphic design.

I view the goals of architecture and graphic design as closely related. They both intend to communicate and provoke feelings and emotions. The differences lie in their packaging and delivery. Instead of focusing on how these two professions are unique, I am interested in the fusion of the two. Given my background I see unique and reciprocal opportunities for both architecture and graphic design.

The connections between architecture and graphic design led me to an exploration of exhibition design: a story, a body of information, a message interpreted and experienced within a three-dimensional space. My next question became: How could this method of communicating to people be expanded and developed to reach more people and broaden the scope of its communication?
Exhibitions, as an alternative means of education, offer an experience different from traditional means of learning. The dynamic environments found in an exhibition allow the visitor to have cognitive and sensory engagement with the subject matter presented. The visitor is able to interface with a message or body of information presented in a single physical space and experience. Exhibitions allow for a shared learning experience that can evoke dialogue and collaboration. Exhibition design focuses on merging environment and communication or place and story/message into a single experience for the visitor.
A goal of this project is to increase the current level of accessibility and adaptability of exhibitions. How can more people learn through an exhibition experience; and how can these experiences be adaptable to fit to a wide variety of subject matters?

The advantages of using three-dimensional space as a means of transmitting information, whether in museums, trade fairs, or product venues, transforms the manner in which the visitor can interact with and relate to information. From the Great Exhibition of 1851 in London to the Newseum of modern day, exhibition design is a valuable method of communicating messages that provides unique educational experiences unlike conventional means of learning. As opposed to the space of a book, the physical space of an exhibition offers a different kind of connection to the subject matter presented. The ability to physically move through the information and to reach out and touch walls and artifacts allows for a holistic immersion into the material. The physical distribution and arrangement of content based on a concept appeals to kinetic learners. The visitor’s mind and body is synced, and become an integral element of the exhibit itself. He navigates the exhibition terrain in ‘exploratory mode’ actively involved in reading signs and making choices that determine how he will observe and interpret the exhibit content. He is involved in a ‘mapping’ process that results from his simultaneous engagement with both space and information.

The designer of an exhibition has a broad and dynamic visual vocabulary with which to build the visitor’s possibilities for experience. Scale, light, shadow, orientation, vista, circulation are some variables that are possible only in three-dimensional space.

**TOP:** diagram explaining the parts that comprise the Mobile Exhibition System

**ABOVE:** diagram showing the various research paths of exploration that contributes to the manifestation of the Mobile Exhibition System
A shortcoming of exhibition design is its inability to spread and distribute a message and information with relative ease. Exhibitions cannot reach the level of accessibility that printed and electronic media can provide. Due to their three-dimensional nature, scale, and degree of permanence, exhibition installations typically remain in a fixed space and visitors are required to travel them. Some exhibitions have moved beyond their points of origin through the advent of the traveling exhibition. The term ‘traveling exhibition,’ as understood today, is an installation designed to be transportable. It is designed to be easily dismountable and then reassembled in multiple spaces or venues.
The natural progression of traveling portable exhibitions is to become entirely mobile. Contained in an envelope of space, these mobile exhibitions can travel from place to place with no boundaries and few restrictions.

Mobility allows for greater connectedness and paradoxically a sense of rootedness, supporting the sense of community within a shared experience tailored specifically for them. Today, there are many mobile experiences that reach a broad population with relative ease. The mobilization of libraries, health care systems, and homes are just a few of these experiences. Through the mobile deployment of these facilities their uses are vastly expanded. Medical aid can be sent to developing countries, and the resources of a library can be delivered to an area lacking in those resources.

Mobile exhibitions would enable smaller towns and communities to host experiences that broaden access to culture and information. On the other end of the spectrum, larger cities could become aware of grass roots organizations and programs, that are not often encountered in an urban setting.

This project investigates the possibility for traveling exhibitions to evolve from solely portable components to an entirely mobile entity. The space and the content of the exhibit are packaged as one fully assembled exhibit experience.

By uprooting exhibitions from their present fixed state, more people will have the opportunity to visit them. The exhibits will go to the people. Believing that “mobility outweighs monumentality,”[6] exhibitions’ power lies in becoming entirely mobile, reaching out and connecting to communities, rather than remaining in the fixed space of the monumental museum.
A goal is to design a system that has flexibility but will also share a synergistic relationship with its content. The system will act as a structural framework or backbone to order and support the informational content. The system, or set of interconnected parts that form a whole, will not stop with the organization and ordering of the information, it will extend to the treatment of three dimensional form and the graphic representation of information and then to the way in which the visitor will interact with the information.

In this age of information overload and global connectivity, it is important to carefully analyze how this information is transmitted, communicated and interpreted. Richard Saul Wurman coined the term “information architecture” in 1975 sensing that the world will soon be “inundated with data but starved for the tools and patterns that give them meaning.”

This project proposes a tool and method that supports Wurman’s notion of information architecture. Through the conscientious visualization of data, messages are communicated and experiences are encountered. Everything is technically considered an experience, or has the possibility to be experienced. The elements that contribute to an experience are knowable and reproducible, therefore making them designable, ordered and systematized.

By focusing more intently on the design of the system for exhibiting rather than the information by itself, a foundation can be established in which to plug many types of information. Instead of remaining transparent and in the background, the system is brought to the forefront to be emphasized and examined. There are many facets to the design and development of an exhibition that can feel detached from one another. By concentrating on an underlying system of structure and experience, a greater unity can be achieved. With special attention paid to this system and how it could be designed to facilitate a variety of contents; a flexible system can be developed.

The idea of narrowcasting will aid in the dissemination of information to a more narrow audience not intended for the general public. These specific groups can be defined by values, interests, socioeconomic, or geographic attributes.

This system and method of exhibiting information should then be designed to adapt to a wide range of possible contents. A broader range of organizations and groups will have the ability to have their information presented within an exhibition system that has the flexibility to successfully adapt to their specified content.

**DESIGNING A FLEXIBLE SYSTEM**

How to begin to design a system appropriate for fitting a wide range content? Should form follow function, as Louis Sullivan’s modernist adage suggests, or is it wiser to follow Frank Lloyd Wright’s conviction that form and function should act as one - in a spiritual union? Can the informational content and the adaptable system in which it fits truly act as one?

**CHANGING THE EXHIBITION AUDIENCE**

Now that the exhibition has been mobilized and removed from a permanent and fixed location, it is not dependent upon the resources of an existing museum or the established audience of a given institution. Rather than seeking a broad, general audience and designing to meet the expectations of several sub-groups, a mobile exhibition can seek a more selective audience.

Given the mobility and scale of the mobile exhibitions, they can be designed to be more direct in choosing which visitor populations to target, allowing for a more poignant and effective communication and connection with the visitor populations.

**ADAPTABILITY – SYSTEM**
EXHIBITION ENVELOPE

America imports 9 million shipping containers a year and only exports 6 million, because it is cheaper for the steam lines to leave the empty containers at American ports than it is to ship them back to their points of origin. These containers, viewed as “the material residue of our trade deficit,” are an abundant resource that should be tapped into. The containers are solid, pre-insulated and waterproof. They have hardwood floors, and are resistant to mold, termites and fire. Reusing and reappropriating this existing resource will result in less environmental impact than fabricating a mobile exhibit from scratch.

The size and mobile nature of shipping containers will allow for relative ease of transport. They measure 20 or 40 feet long, 8 feet wide and 8.5 feet high, and are a blank canvas for the design of an intimately scaled exhibition space. A modular grid system already exists within shipping containers and can be expanded to incorporate the exhibition content and materials. Shipping container architecture, termed cargotecture, has viewed these containers as a valuable material resource, and has used them in a number of innovative design projects. They have already been transformed into classrooms, studio spaces, houses, temporary shelters, and outdoor pavilions.

Combining the technology advanced by mobile architecture and shipping container “cargotecture” with the idea of a traveling exhibition allows the concept of a self-contained mobile exhibition system to be realized. By reusing shipping containers as the exhibition envelope, the system will respond to the restricted spatial and structural requirements of the container.

DELIMITATIONS: This project is not an industrial design project. Logistical, structural, and mechanical issues, while acknowledged, will not be thoroughly addressed. Emphasis is placed on the development of the mobile exhibition system and how content will fit into it.
ALL: cargotecture precedents that innovatively transform shipping containers, from temporary medical stations to permanent multi-unit dwellings.
Through the course of my graduate studies I tried to create projects that would help me gain an understanding and experience in the union of three-dimensional form/space and two-dimensional information. The research, organization and development of exhibition design projects aided me in this integration. All aspects of these projects were considered; from brainstorming and idea conception, to deciding how the project would formally be organized and represented, and to how graphics would be treated.
‘Crystal Palace: An Architectural Legacy’ is an exhibition that revolves around the Crystal Palace, built for the first world’s fair in London (The Great Exhibition of 1851). In 1851 the impact and effect of the industrial revolution was truly felt and the great exhibition was a means to showcase the technological advancements of the era. The exhibition was intended to celebrate the modern industrial technology and design of all nations.

The innovative construction methods, technologies, and materials of the Crystal Palace revolutionized how buildings were designed and constructed from that point on. In continuing the theme of celebrating technological advancement, the proposed exhibit will also showcase more contemporary buildings that have been directly influenced by the Crystal Palace.

A scaled model will be the focal point of this exhibit from which everything radiates. A timeline rail surrounding the model will provide the history of the Crystal Palace from its construction to its relocation and expansion and finally to the fire that destroyed it. The central panels around the model will focus specifically on the Crystal Palace (its idea conception, architect, construction, The Great Exhibition of 1851, and the larger picture of the industrial revolution).

The central part of the exhibition will provide views to the outlying panels on the periphery, drawing the visitor outward to investigate. These panels speak to the lasting legacy and influence of the Crystal Palace by showcasing modern day buildings that identify the Crystal Palace as an architectural precedent. The outermost panels will illustrate a possible project of the future that still has its roots tied to the Crystal Palace. The visitor should be captivated by the specifics of the exhibit while also understanding its overall gestalt. The visitor should sense the movement through time while observing the progress in building and construction technologies.
Any 5-year-old clutching a transformer robot knows what this building is: Fun on a grand scale. In addition to fun, it's a full service information center that honors the book while beaming us up into technology's embrace.

Aesthetically, the building has a split personality. All the brutal chic is on the outside, its diamond-shaped steel and glass skin stretched over muscle. Had he spotted it from the sky on a dark day, Darth Vader could easily have mistaken it for his personal refueling station.

Inside, the library appears to change its character, starting with the asymmetrical steel skin. Koolhaas is famous for creative and economical use of prosaic materials. "On the outside, the building appears to be crouching. Inside, it leaps to serve you on platforms floating in cocoons of colored light."

The Crystal Palace

Built out of prefabricated and wrought-iron elements and based on a four-foot module, this 1,848-foot-long ferro-vitreous construction was erected to the designs of Joseph Paxton and Charles Fox, of Fox, Henderson & Co. Its interior volume was organized into galleries which were alternately 24 feet and 48 feet wide. The roof of these galleries stepped up by 20 feet every 72 feet and culminated in a central nave 72 feet wide. The 'ridge and furrow' roof glazing system specially devised for the occasion required 49-inch glass sheets capable of spanning between furrows 8 feet apart, with three ridges occurring every 24 feet.

LEFT: a central panel around the model of the crystal palace highlighting construction methods of the building. ABOVE: a peripheral panel presenting a contemporary building that has borrowed from the architectural methods and techniques of the crystal palace.
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Crystal Palace: An Architectural Legacy

The user will enter the exhibition directly into its center with an immediate view of the model on axis with the future building panel on the periphery. This immediate experience allows the user to view the entire spectrum of the exhibition in a single snapshot encouraging them to learn about everything in between.

The whole exhibit will be a broad timeline in essence beginning in the industrial revolution and moving up to modern day with building technology and construction at its focus. I want the user to be captivated with the specifics of the exhibit while also understanding its overall gestalt, and sense the feeling of moving through time and how building and construction technologies have built upon themselves.

The innovative construction methods, technologies, and materials of the Crystal Palace revolutionized how buildings were designed and constructed from this point on. In continuing the theme of celebrating technological advancement, this exhibit will also showcase more contemporary buildings that have been directly influenced by the Crystal Palace.

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The Treaty of Guadalupe Hidalgo defined the border between the United States and Mexico in 1848. Before that year, the region now called the American Southwest was part of Mexico. The US-Mexico border now stretches more than 2,000 miles.

Our Walls | Ourselves

‘Our Walls | Ourselves’ is an exhibition based on the US-Mexico border wall that divides the two countries, their people, stories, and struggles that occur around this division. The exhibition is intended to be assembled in a public plaza, acting as an obstruction to a heavily traversed space. People are confronted with this installation and forced to make their way around the wall.

Through an extensive collection of images of the wall, I was intrigued by its various forms. Whether an eighteen-foot high solid concrete wall or a series of upright railroad ties that end a few feet into the surf of the Pacific ocean, the wall has become a physical manifestation of a line that divides the two countries.

Through the formal construction of the exhibition, I wanted to convey the surreal nature of the wall. The sculptural wall element of the exhibition is solid and tall at its center. It then gradually deconstructs and dematerializes as the visitor moves toward the periphery. This deconstruction of the wall emphasizes its transformation from a literal to a figurative structure. The wall becomes permeable.

The ‘meat’ of the project lies in the gaps in the wall. In the exhibition, the text on the ground runs perpendicular to the wall from one side to the other, and can only be fully understood by combining the perspectives from both sides of the wall. The graphic panels are also regulated from these gaps in the wall. The images and text chosen for the panels are designed to have an impact from afar while also offering another level of information at a closer proximity. On the reverse side of the panels is a separate metaphorical set of imagery of feet walking on road lines. The wall is, in essence, just a painted line on a road.
The Treaty of Guadalupe Hidalgo defined the border between the United States and Mexico in 1848. Before that year, the region now called the American Southwest was part of Mexico. The U.S.-Mexico border now stretches more than 2,000 miles.
ALL: scaled model of the installation
Bubble Gum was invented by Walter E. Diemer. The invention was an “accident” that Diemer stumbled upon while working on an account for Fleer Chewing Gum Company. Bubble Gum was born.

‘Bubble Gum and Where It’s From’ is a small exhibit experience, consolidated into an intimate form and interpretation. A peg and hole system was utilized to allow for movement of panels and to simplify assembly.
This project was completed in the fall semester of 2008. I designed a sixteen page signature documenting our work and process from the entire semester. I was interested in how an image of a three-dimensional space could function as an organizing device for the distribution of information, and how that would affect its interpretation.
thoughts, the space of your mind, it is an intangible space
walls, floors, ceilings; your desires. change your perspective,
tilt your head, ceilings. floors...
This project's main focus is on the exploration and development of a comprehensive process rather than a finalized outcome. From mind maps and sketches to full-scale installations, this creative project includes a wide range of process work at varying scales. It was important that I work in multiple scales at any given time to insure the work's connection to the human scale. While developing the systematized components of the exhibition and how information could be organized, it was also critical that I understand how the visitor would behave and function within the space. Creating models and full-scale mock-ups allowed for a better understanding of the human scale and their connection with the information presented within the space.
PROCESS

AND METHODOLOGY
In the Fall semester of 2008 I created an independent study course with my primary advisor, Mary McLaughlin. The emphasis was on primary, first-hand research, studying the spatial conditions of a shipping container. I constructed a full scale prototype of a forty-foot long and eight-and-a-half-foot wide shipping container within a similar proportioned gallery space. This space would exhibit student work for the First Friday Art Walks in Richmond Virginia.

My intention was to gain insights into a visitor’s experience in this space. I observed the full scale, spatial relationships and visitor’s interaction with the information contained in the space. I observed how they circulated through the space, and the patterns developed. The kinds of information or works presented were also taken into consideration - their scale, density, level of detail, and placement.
AboVe LeFt: installation explaining proposal for mobile exhibitions
AboVe RiGht: feedback on all aspects of the exhibition was encouraged, resulting in some good ideas
LeFt: standing at the midpoint of the container, looking down toward the back wall of the container
LeFt: density of information presented factored into how close the visitor got to the work and how long they stayed at each piece

Above: given the narrow width of the container, visitors were observed bouncing from wall to wall.

PROCESS + METHODOLOGY | full-scale MES prototype
VCU undergraduate design work was showcased in the container prototype; linear sequential pieces were displayed opposite of hand crafted pop-up books and objects.

RIGHT: Interactive flip panels allowed the visitor to actively engage with the information.
Above: video documentation was gathered during the exhibition openings to better observe visitor actions and patterns.

Above: a blog was created to accompany the first Friday exhibition experience, used for documentation purposes and a medium to encourage feedback from visitors.
The content is divided into general overview information on the left and the detailed specifics on the right side, allowing the user to choose how they circulate through the container without disrupting the order and flow of content.
The graphic panels can be arranged in a variety of possible configurations to better reflect the content and help organize the information.

Modular wall partitions, graphic rails, interactive flip panels, and graphic panels make up the system’s kit of parts. These components will magnetically fasten to the horizontal members along the interior container wall.
LEFT: section through container illustrating initial idea for panel-fastening system
ABOVE: ideation sketches for possible panel-fastening techniques
diagram bringing to the forefront the underlying system or structure of information
LEFT: organizational content diagram for possible history exhibit—American modernism in graphic design, instructional/informative exhibit—solar cooking, and science exhibit—environmental causes of autism

ABOVE: diagram illustrating need for designers’ role in interpreting and organizing information into a better understood system
ALL: studies highlighting underlying systems in contemporary exhibition environments
This article will examine the possibility for the traveling exhibitions to evolve from a merely portable to an entirely mobile entity. The benefits of exhibition design are highlighted and illustrated as an effective method of educating. The growth and development of traveling exhibitions – from the first of its kind in London in 1850, to the modern day traveling exhibitions advanced by the Smithsonian Institution Traveling Exhibition Service (SITES) – will inform this discussion. The accomplishments of SITES and the field of mobile architecture will serve as precedents for the future potential of mobile exhibition units.

The experience of total immersion within a given body of information is invaluable. A successful exhibition involves rich sensory experiences and full cognitive engagement. The interaction of physical space and informational content offers a mobile experience.

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EXHIBITION SYSTEM

Exhibitions as an alternative means of education offers an experience unique from traditional means of learning. The dynamic environments found in an exhibition allow the user to have a cognitive and sensory engagement to

Exhibitions as an alternative means of education offers an experience unique from traditional means of learning. The dynamic environments found in an exhibition allow the user to have a cognitive and sensory engagement to the subject matter presented. A message or body of information is condensed into a single space and experience for the user to relate to. A shared learning experience can evoke the user’s cognitive and sensory engagement to the subject matter presented. It enables a body of information to be communicated in an effective method of educating. The growth and development of traveling exhibitions offer an example of how the benefits of exhibition design are highlighted and illustrated as an effective method of educating. The Smithsonian Institution Traveling Exhibition Service (SITES) – will inform this discussion. The dynamic environments found in an exhibition allow the user to have a cognitive and sensory engagement to the subject matter presented.

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ALL: explorations of panel configurations, color application, and figure ground relationships of the panels to the container’s interior
ALL: renderings of possible locations for the mobile exhibitions with minimal impact on the site - an urban public square, big box retailer, developing country, inner city school yard.
In exploring formal possibilities of how to house these mobile exhibition units, I came across shipping containers as viable resources that fit the criteria of the Mobile Exhibition System (mobility, modularity, and adaptability). These containers are abundant and their possibilities should be explored.

This Mobile Medical Triage Unit is designed for Doctors Without Borders to be distributed to developing African nations. The mobile clinic is preconstructed and transportable by train, ship, and truck.

LEFT: panel composition and graphic treatment to illustrate one possibility of the Mobile Exhibitions System for the MFA show
RIGHT: color and typographic specifications for exhibit panels displayed at the MFA show
MOBILE

arrangements and graphic treatments. Of many possible variations of panel
foot long container; displaying one It is a ten foot segment of the forty
up of the Mobile Exhibition System. This wall serves as a full scale mock

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tion. A modular grid blank canvas for the design and appropriation of

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ers allow Mobile Exhibition Units (MEU) to be
The size and mobile nature of shipping contain-

residences live/work community in Los
Approximately 40 portable house units

Angeles, California. It emphasizes on
comprise this proposal for an artist-in-

by train, ship, and truck.
preconstructed and transportable
to developing African nations. The mobile
for Doctors Without Borders to be distributed

all offer a private balcony.
student housing. 1,000 independent units
to provide an effective solution to low-cost
land, but the shipping containers proved

These boxes were only intended to serve
as a temporary structure, addressing a

material or design projects, expanding their
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throughout the world. These mobile experiences of a...
American society has become increasingly mobile, reflecting the nomadic life and culture in our genes. Mobility allows for greater connectedness and, paradoxically, a sense of rootedness. Today, there exist many mobile experiences that aim to more easily reach a broader population.

The mobilization of libraries, health care facilities, and homes are just a few of these experiences. Through the deployment of these mobile experiences, their resources are vastly expanded, extending services to populations that might otherwise have been out of reach.

**MOBILE EXPERIENCES**

Some may say that a shortcoming of exhibition design today is its inability to spread and distribute its message and information with relative ease.

Especially when compared to the printed and electronic ephemera of books, magazines and web sites, exhibitions seem to have a long way to go in overcoming the limits of their accessibility. Due to its three-dimensional nature, scale, and degree of permanence, exhibition installations are generally seen as a more complicated and involved means of spreading information than that of printed or electronic mediums.

**ACCESSIBLE EXHIBITIONS**

Exhibitions will extend educational opportunities without regard to social distinctions or geographic isolation. Believing that "mobility outweighs monumentality," mobile exhibitions will extend educational opportunities to more populations.

This movement is important to the future development of exhibition design. Mobile exhibitions will help certain groups to experience these experiences that might otherwise have been out of reach.

**Some examples:**

- **Mobile Bookmobiles**
  - Libraries are not always accessible to all people located in certain areas. Through the reduction in scale and mobilization of the bookmobile, it is able to reach a larger population and connect them to information on the bicentennial event.

- **Mobile Libraries**
  - As a means of spreading the word about the Liverpool Bicentennial, a mobile shipping container was transported about the city. Because of its mobility, this announcement was able to reach a greater connectedness. Due to its three-dimensional nature, scale, and degree of permanence, exhibition installations are generally seen as a more complicated and involved means of spreading information than that of printed or electronic mediums.

- **Mobile Health Care Services**
  - This Mobile Medical Triage Unit is designed for Doctors Without Borders to be distributed to developing African nations. The mobile clinic is preconstructed and transportable by train, ship, and truck.

- **Mobile Homes**
  - Approximately 40 portable house units were designed by HyBrid design firm out of Seattle and constructed for the early childhood of children in Los Angeles, California. It emphasizes on sustainable building materials. Shipping containers and common gardens, and the use of native Californian drought resistant plant species. An intimate space was created.

- **Portable Student Housing**
  - 1,000 independent units to provide an effective solution to low-cost student accommodation problem in Holland. These boxes were only intended to serve as a temporary structure, addressing a property application.

- **Mobile Libraries**
  - Currently, exhibitions remain in a fixed space where people have to travel to their specific location to experience them. As a means of spreading the word about the Liverpool Bicentennial, a mobile shipping container was transported about the city. Because of its mobility, this announcement was able to reach a greater connectedness. Due to its three-dimensional nature, scale, and degree of permanence, exhibition installations are generally seen as a more complicated and involved means of spreading information than that of printed or electronic mediums.

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**Some examples:**

- **Mobile Libraries**
  - Libraries are not always accessible to all people located in certain areas. Through the reduction in scale and mobilization of the bookmobile, it is able to reach a larger population and connect them to information on the bicentennial event.

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LEFT: original ideation for the MFA show installation and process wall plan
ABOVE: drawing of the gallery space aided in deciding the orientation of the container segment prototype and how it would be experienced by the visitor.
LEFT: ten foot section of panel system at full scale illustrating one possible configuration and graphic treatment

RIGHT: Mobile Exhibition System explanation, scaled model and process wall
In the development of this project I sought to find an appropriate synthesis of my interests and skills in architecture and graphic design. At the culmination of my studies, I ask myself what other possibilities could arise form this union of the two fields?

The field of graphic design is growing. Multiple design fields are beginning to see the potential in working across disciplines and collaborating with one another. There are now design studios that do not just limit their range of work to print design, web design, exhibition design, or environmental design. They instead encourage cross disciplinary collaboration. This collaborative environment often times results in unique and innovative outcomes that might not have otherwise been realized in a single design track. I want to continue my efforts in exploring multiple design mediums and what their union and synthesis could inspire and communicate.
1. Siegal, Jennifer. Mobile: The Art of Portable Architecture. New York: Princeton Architectural Press, 2002. Office of Mobile Design (OMD), founded by Jennifer Siegal is a Los Angeles based design firm specializing in green Prefab architecture. OMD is dedicated to the design and construction of responsible, sustainable, beautiful structures including urban housing developments, private residences, schools and classrooms. OMD has also employed the reuse of shipping containers into many projects, ranging from high density communities to a mobile Shakespeare theater. OMD believes in the power of mobility - resulting in greater connectivity.


4. Library of Congress. The Work of Charles and Ray Eames. http://www.loc.gov/exhibits/eames/. The Eameses had a collaborative and holistic approach to design that transcended any specific design field. From architecture, product design, exhibition design, to film they tackled a variety of projects always pushing the envelop of possibilities. The Eameses embraced the era’s visionary concept of modern design as an agent of social change. Their evolution from furniture designers to cultural ambassadors demonstrated their boundless talents and the overlap of their interests with those of their country, realizing they power and impact they can have in educating the public.

5. Virginia, University of. Elizabeth River Learning Barge. http://www.arch.virginia.edu/learningbarge/. A team of University of Virginia architecture students and faculty have designed a floating environmental education field station to engage kids in hands-on exploration and learning about the Elizabeth River. Most current environmental education is web based or communicated through classroom teaching. This educational experience mobilizes itself to better connect with the natural setting of its content and the community, the way in which I hope to see the mobile exhibition unit do so. It also reuses and reappropriates a barge to better relate to its content.

6. Samara, Timothy. Making and Breaking the Grid. Beverly, MA: Rockport Publishers, Inc. 2002. Samara outlines the power of the grid as a device in ordering information, and when it is appropriate and effective push to the boundaries of the grid.


8. Library of Congress. The Work of Charles and Ray Eames. http://www.loc.gov/exhibits/eames/. The Eameses had a collaborative and holistic approach to design that transcended any specific design field. From architecture, product design, exhibition design, to film they tackled a variety of projects always pushing the envelope of possibilities. The Eameses embraced the era’s visionary concept of modern design as an agent of social change. Their evolution from furniture designers to cultural ambassadors demonstrated their boundless talents and the overlap of their interests with those of their country, realizing they power and impact they can have in educating the public.

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