Vessel of folly:  
Derangement-imagination-design

by

Michael Burdette Young

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF ARCHITECTURE

Major: Architecture

Program of Study Committee:
Mikesch Muecke, Major Professor
Jamie Horwitz
Dennis Raverty

Iowa State University

Ames, Iowa

2002
Graduate College
Iowa State University

This is to certify that the master's thesis of

Michael Burdette Young

has met the thesis requirements of Iowa State University

Signatures have been redacted for privacy
# TABLE OF CONTENTS

**ACKNOWLEDGEMENTS**

**ABSTRACT**

**CHAPTER 1. INTRODUCTION** 1

**CHAPTER 2. REVIEW OF PRECEDENTS** 8

- 2.01 The Surrealists 8
- 2.02 Le Corbusier 15
- 2.03 Claes Oldenburg 17
- 2.04 Frank Gehry 18
- 2.05 Phillippe Starck 20

**CHAPTER 3. PROJECT DESCRIPTION** 22

**CHAPTER 4. EXPLANATION OF DESIGNS** 29

- 4.01 Losses Sail 34
- 4.02 Excess Sail 34
- 4.03 Main Sail 35
- 4.04 Simple Sail 35
- 4.05 Transports Sail 36
- 4.06 Figurehead 39
- 4.07 Captain’s Quarters 42
- 4.08 Truth and Appetite 44
- 4.09 Table of One-Half 47
- 4.10 Smell Where You’re Going 50
- 4.11 Restraining the Vessel 53
- 4.12 Reluctance to Tip 57
- 4.13 Hydra’s Plumber 60
- 4.14 Garden Variety 63
- 4.15 Earplug Glasses 66
- 4.16 Before They Were Constellations 68
- 4.17 Bovine Refrigerator or Appliances That Chew Their Cud 71

**CHAPTER 5. CONCLUSION** 74

**REFERENCES** 77

**BIBLIOGRAPHY** 79
ACKNOWLEDGEMENTS

Thank you to:

Jamie Horwitz

Dennis Raverty

And

Mikesch Muecke

An outstanding educator and mentor.
ABSTRACT

This thesis examines the topic of imagination and creativity in design. I examine the methods and motivations of artists and designers who have succeeded in creating works that are both unusual and thought provoking. By incorporating the careful analysis of neurological disorders into a design method transferred from a design method used by some artists, I am able to develop ‘design tactics’ that aid and inform architectural design. The end result is the ‘Vessel of Folly’; a ship composed of various parts created using design tactics developed from different case studies of people with neurological disorders.
CHAPTER 1. INTRODUCTION

Imagination and creativity are highly valued characteristics in anyone who is involved with architecture and other design fields. Achieving a free flow of ideas helps develop multiple possibilities in solving design problems. Unfortunately, there are some obstacles in the path to new ideas. Psychological, social, and economic forces can both advance and stifle the imagination and creativity.

Picture in your mind's eye, a flower. What did you think of? Statistics show, when people are asked to do this, odds are, their first thoughts are of a rose. (Gardner, p. 154) There is a good chance you thought of a rose. For those of us who consider ourselves free thinkers, it is hard to accept the idea that much of what we think, say, and do has been ingrained in our minds, making what we think predictable. What happened to free will?

Patterns of thought, such as preconceptions, stereotypes, and generalizations play a large role in how we learn, and how we cope with the flood of information from the dynamic world around us. Along with the remembrance of particulars, people's minds automatically abstract and categorize information. The new abstract information is added to existing information of a similar type, forming a generalization. The mind uses generalizations as foundations for the interpretation and understanding of new things. They help us quickly cope with our surroundings by letting us know what to expect. Imagine not having this ability. You would become a prisoner of details, lacking the freedom to move in general, conceptual thought. While generalizations, preconceptions, and stereotypes are a necessary part of life, it is creativity and imagination that suffer the most.
When we approach a design problem, we usually think about the ‘thing’ that needs designing instead of just solving the problem. As soon as we think about a generalized thing, we immediately imagine a stereotype. While stereotypes can be useful starting points for developing design solutions, they also set mental parameters that limit the possibilities for creative design.

There are also social pressures inhibiting imagination and creativity. Societies use punishments and rewards to pressure people into conformity. It is automatic. People who decide to live outside of the norm must have a strong will to resist assimilation. Strangely enough, even those who specifically try to be antisocial, for example members of the ‘punk’ movement in music, have their own set of social rules that are reinforced through reward and punishment. For those who don’t like confrontation, there is comfort in conformity.

While designers and artists typically possess the will to resist social expectations, at least with regard to their own work, conformity still affects the design field. Clients and the general public play a large role in the realization of a design, especially in architecture, and they may not be willing to take the risks as easily as a designer. For a classic example, one has only to look to the suburbs. Our cities are surrounded by legions of houses that are low risk, non-confrontational, easy to sell, and uninteresting. As if social pressures to conform weren’t enough, communities have established regulations to ensure sameness.

Economic forces greatly affect freedom of imagination and creativity in design. In many cases innovative new designs are very profitable and therefore desirable. However, once a successful formula has been established for creating profit, it is much easier to simply copy or slightly alter what has already been done. Typically, once a well-known designer or
manufacturer sets a fashion trend, cheap imitations are made available for public consumption. This phenomenon happens in many fields.

Architecture and other design fields deal with problem solving. In a time when it is common practice to refer to catalogues of predefined fixtures, doors, facades, etc. in order to solve a problem, originality suffers. Efficiency is paramount in the business of architecture. Time constraints are caused by many factors, the largest of which is budget. The larger architecture firms have turned into architecture 'companies' where workers labor to produce as quickly and efficiently as possible in order to increase profit.

Mass produced items, cheaply made to increase profit, and conservatively designed to appeal to the bulk of the population, result in limited choices for those who seek more than bare necessities from their environment and personal effects. The desire for aesthetically pleasing products, furniture, environment, etc. can be fulfilled. Specialty shops or 'design stores' offer everyday items with unusual, interesting, and often beautiful physical attributes, sold at unusual, interesting, and often ridiculous prices. Justifying the purchase of an $80 manual juicer may be easier for some than others, and rightly so. At any cost, it is nice to know such things exist.

And yet, many designers use their products, furniture, or buildings to do more than fill a need and look pretty doing it. They create pieces with the goal of provoking thought in the viewer or user. This added dimension has the power to change the lowly toilet plunger from an unsavory necessity of modern life into a work of art. It stands exhibited in the corner of your bathroom gallery, possessing the gaze of those in its presence, evoking quiet contemplation and personal reflection, and then it becomes the preferred topic of conversation of the most refined and intellectual elite. It could happen.
Nowhere else has the struggle against the onslaught of unimaginative, and mind numbing design been waged than the art world. Many painters and sculptures have long toiled to do little more than mimic objects, people, nature scenes, and so on. In reaction the impotence of the art world at the time, movements such as Dada and the Surrealists, conceived and defined by groups of artists, developed effective tactics for the creation of unusual, challenging, and thought provoking works. In some cases, especially in the case of Dada, the members of such movements didn’t even consider their work to be art, because they saw works of ‘art’ as products to be possessed by the wealthy and powerful.

Today, and almost immediately after their debut, the works created by members of these progressive movements are considered to be ‘art’ regardless of the creator’s intentions. Much of their success and popularity lies in the fact that these artists worked to find ways to
create art that could communicate, disturb, provoke thought, and connect on a personal level with the viewer. In this way, the artists created work that more resembled poetry than the outside world.

"The poet makes himself a visionary through a long, a prodigious and rational disordering of all the senses. Every form of love, of suffering, of madness; he searches himself, he consumes all the poisons in him, keeping only their quin estences. Ineffable torture in which he will need all his faith and superhuman strength, the great criminal, the great sick-man, the accursed, - and the supreme Savant! For he arrives at the unknown!” (Rimbaud, p. xxx)

Max Ernst, who was closely associated with Dada and Surrealism, developed a method for creating images called 'frottage' or rubbing. By judiciously rubbing to reveal the imprints of objects and materials beneath a canvas or page, Ernst was able to produce sophisticated images. The work produced from this method seems be automatic, or come from a process of collection as opposed to the sense of genesis that is associated with the production of traditional paintings. As a result, Ernst succeeded in shifting the implied value of a work of art from being based on the one who created it to the work itself. “Needless to say, this has been a great blow to art critics, who are terrified to see the importance of the "author" being reduced to a minimum and the conception of “talent” abolished.” (Ernst, p. 25)

Rene Magritte was a painter claimed by the Surrealists. His method of painting was traditional, but the motivation behind his work was very unique. Magritte took the position of a philosopher who questions the things we often take for granted. Even though his painting style incorporated a high level realism, Magritte used painting not as a method of imitating the world, but as a way of communicating his thoughts and provoking the thoughts
of others. His paintings are often enigmatic. They can leave a viewer with a complete understanding of what they are looking at, but not knowing why they exist as they are.

"He considered his work successful when no explanation of causality or meaning can satisfy our curiosity... [I]f one has been trapped by the mystery of an image which refuses all explanation, a moment of panic will sometimes occur. These moments of panic are what count for Magritte. For him they are privileged moments, because they transcend mediocrity."(Goblik, p. 10)

The goal of this thesis project is to develop a method for creating tactics that can be used to produce imaginative designs. The method for creating design tactics will be transferred or adapted from precedents from the world of art. The designs will be created with the aspiration of offering something new, both physically and experientially.

This project uses neurological disorders as a source of inspiration for imaginative design. The individuals with neurological disorders share this world with the rest of us. However, they all find themselves in very different places and spaces, than we do. It is these alternate experiences and perceptions that will be analyzed and adapted in order to create design tactics that will hopefully lead to imaginative and thought provoking results. The designs are not intended to simulate the sensation of having a disorder, nor are they meant to create healing spaces for those afflicted.

Neurological disorders affect the ways that people function in social and emotional aspects. An overlap exists between the fields of psychology and neurology. In some cases, people with neurological disorders are considered to be mad or insane. As a result of the overlap, information on the mentally ill was considered relevant during the research phase of this project.
The designs generated for this project will represent a varied and unusual set of circumstances, and they themselves will be varied and unusual. In an attempt to organize the collection of disparate objects and environments, the design tactics will be used to create individual elements that will be brought together in the form of a larger whole. The end result will be a construction that can be viewed both as a series of exhibits and as a museum imaginative architecture.

There will be a review of precedents from the art and design world with the purpose of understanding the strategies, intentions, and realizations of artists and designers who have worked with goals similar to those of this thesis. In doing so, a more informed understanding of the measures of success in this type of endeavor can be used to develop and refine the parameters of this project. Next, the process behind the development of the ‘design tactics’ will be described. Followed by the implementation and explanation of the individual tactics. This thesis will conclude with a reflection on this project, and any potential effects it may have.
CHAPTER 2. REVIEW OF PRECEDENTS

2.01 THE SURREALISTS

Throughout its history, much of art has been created as visual representation or imitation of its subject. The commemorations of historic events, portraits, nature scenes, and religious allegories have kept artists occupied throughout time. Artists took great care to develop methods to represent their subjects as accurately as possible. However, not all art adhered to mere representation as its thematic core.

The surrealists, for example, consciously pushed art into new frontiers. Instead of exclusively looking at the world outside to create their art, the surrealists found inspiration in what exists inside people. The artists strove to create works that challenged the viewer and made them the subject of an art form that was unlike anything anyone had ever seen.
"To understand the surrealist artists one must be aware that they all believed that art was not an end in itself, but a method of creating an awareness of all that is most precious, most secret and most surprising in life. They wanted to be neither craftsmen nor aesthetes; they wanted to be 'inspired ones' and gamblers." (Alexandrian, p. 8)

The surrealists felt that art no longer needed to slavishly imitate the world outside as its main purpose. One might assume the surrealists were accepting of any unusual works of art. However, this was not the case. For all of their rejection of the idea of art as imitation, the surrealists had qualifications for what they deemed worthy of art. The pioneers of surrealism thoroughly examined and defined the motives, methods, and desired results of their own movement. To help them reach their goals, the group developed strategies to guide their efforts.

Key formulae were developed by the founders of the movement to inform the creation and intended effects of surrealism. The formulae include 'convulsive beauty'; the ability of a work of art to be read as multiple images, but no more than one at a time. (Ernst, p. 23) 'Objective chance', that is the sum total of the coincidences which control a destiny; 'black humor' and 'poetic terrorism'; 'amour fou' (extravagant love). (Alexandrian, p. 118)

Figure 2.02 Dialogue at the Carmel by Trouille.
The concept of connection between artist and the art, or the art and the viewer, is essential in the way the surrealists approached their work. To them, the creation of the bizarre and fantastic held no value unless they had the ability to offer people a view that they may otherwise never see. Surrealists realized that art created from an understanding of the human being from a psychological standpoint offered more than artwork representing fantasy alone. Fantastic art may be interesting, but it exists outside the viewer. Surrealism originated from within the human, and could more easily strike a cord in the viewer, evoking emotion and thought.

“Surrealism has no room for the fantastic when it is elaborated without inner need: it is not so much the description of the impossible as the evocation of the possible, supplemented by desire and dream. Thus, there are painters of strange universes who have no connection with it at all.” (Alexandrian, p.9)

Surrealism as a movement clearly took a new approach in the way art was created and experienced. As inventive as the movement was, though, its themes and methods weren't entirely new. To strengthen their foundations the Surrealists looked to the past to find historical precedents with themes similar to their cause. They considered so called “primitive art”, visionary art, and psycho-pathological art as forerunners to their movement. (Alexandrian, p. 10)

“Primitive” artworks represented the original purpose for art, the communication of ideas. Besides being interesting or beautiful to look at, painting, sculpture, and other types of art tell stories. The portrayals of everything from history to the metaphysical were represented in “primitive art”. “What the surrealists loved in this art was the fact that conceptual representation was more important than perceptual.” (Alexandrian, p. 2)
The Surrealists wanted art to return to a form that gave people something to ponder. Society, religion, relationships, and life itself were all discussed through art. Most of all the Surrealists wanted people to be forced to think about themselves, their place in the universe, their actions, and the things they take for granted. With “primitive art” helping to define the true purpose of art, the surrealists looked elsewhere to strengthen their standpoint.

Visionary art provided surrealism with a historical precedent for the idea of art as a game. While not always conceptually complex, visionary art exercised the power to entertain, and interest people with its unusual subject matter. Everything from people comprised of various objects to the portrayal of bizarre worlds created alternate realities to confront the viewer.
One of the favorite precedents for the Surrealists was Hieronymus Bosch. Although the themes of his paintings were common for gothic art, “Bosch’s meditative genius reinvents them and offers an obsessive spectacle of the prodigality of nature, of humanity’s feverish squandering of life, and of the universal triumph of unreason.” (Alexandrian, p. 11)

This idea of the “universal triumph of unreason”, folly, or madness, is another major theme embraced by the Surrealists. They felt that unreason could be found anywhere. That which appeared reasonable would be shown to be not so, and that which seemed unreasonable could be grounded in perfect logic.
“[F]olly also has its academic pastimes; it is the object of argument, it contends against itself; it is denounced, and defends itself by claiming that it is closer to happiness and truth than reason, that it is closer to reason than reason itself;” (Foucault, p. 14)

Nowhere else was this point of view displayed more clearly than in psycho-pathological art. Here the Surrealists saw the manifest logic in the form of art of those living with mental disorders. Those people called insane, madmen, or fools created art from entirely different realities from ‘normal’ people.

“...the surrealists attached more importance to the evidence of the mentally deranged, who proved that the least cultured being possessed genius, once it abandoned itself to the promptings of the unconscious mind.” (Alexandrian, p. 26)

Psycho-pathological art spoke from other places, alien worlds created from within. There is purity in the motivation of psycho-pathological art’s creation. As in primitive art, psycho-pathological art originated from a need to communicate, the same need shared by surrealism. “Here there was an inexhaustible reservoir of authentic works, motivated neither by a desire to please, nor by material interest, nor by artistic ambition, but by the irrepressible need to pour out a message from the depth of the being.” (Alexandrian, p. 25)

It is no coincidence that the development of surrealism and psychoanalysis blossomed at approximately the same time. Psychoanalysis provided new insights into the human mind, and attempted to explain the relationships between the individual and the world. The surrealists quickly took advantage of the concepts pioneered in this new field as “they set out to demonstrate that the mind could put every known form of madness to work in the cause of poetry.” (Alexandrian, p. 99)
Psychology was a gold mine of conceptual explanations of mental phenomena of all types. Through psychology and other related fields the complex workings of the minds of healthy people as well as the mentally ill could now be examined, understood, and used in the name of art. The surrealists didn’t set out to illustrate the field of psychology, or simulate the sensations of mental illness. They used psychology as a tool to reveal unseen truths from within.

“Madness deals not so much with truth and the world, as with man and whatever truth about himself he is able to perceive.” (Foucault, p. 27)

*Figure 2.05  Woman with Wig by a mental patient untrained in art.*
Michel Foucault, in *Madness and Civilization* puts forth the idea that in madness there is the potential for clarity. The madman is somehow fitted with a different pair of eyes in order to see the world as it truly exists. It is as though the tedious details of the everyday world along with its limitations are somehow pushed aside in order to clear a view and a limitless reality. "By a strange paradox, what is born from the strangest delirium was already hidden, like a secret, like an inaccessible truth, in the bowels of the earth." (Foucault, p. 23)

This concept may be more poetic than rational. Nevertheless, surrealism, in some cases, provided the viewer with a mad reality, a world previously invisible to normal people. Ideally, from this new view, regular people, like the madman, could now see a truer reality.

**2.02 LE CORBUSIER**

The De Bestegui apartment can be viewed as built surrealism. It was a penthouse apartment in Paris designed by Le Corbusier. The apartment had no electric light. Instead, the only light, living light, came from candles and the flickering of a film being projected on a wall. There were walls and chandeliers that could be pushed along rails to change the spatial layout, and a spiral staircase appeared to hover because the central pole was covered in glass beads. Control of the view from the apartment was exercised in unusual ways. A camera obscura, with its periscope projecting above the roof, offered the only complete view of Paris, projecting the distorted city's image onto a glass table.
To see the outside, visitors had to be inside. There was a rooftop garden surrounded by hedge walls that obstructed the view of the city, which is a natural curiosity when on a rooftop. The hedges could be slid aside to reveal the panoramic view.

A rooster topiary appeared to be frozen, sitting on top of the hedge. There was grass covering much of the roof. The upper most space was a roofless room with sky blue walls, grass in place of carpeting, traditionally interior furniture, and a fireplace mimicking the
Arch de Triomphe, with the real one visible through an empty mirror frame above the fireplace.

Figure 2.08  Detail of roofless room.

This apartment is an example of surreal architecture because it sets up different situations for people to experience things in a different way. It was done in such a way as to bring into close proximity several different functions. The normal function of an object or work of art, or architecture, is usually thought to be self-evident. And yet, while the De Bestegui apartment accommodates conventional functions of living, it also makes them strange.

2.03 CLAES OLDENBURG

The sculptures of Claes Oldenburg incorporate shifts scale to make everyday objects seem like they came from another world. By enlarging objects to an enormous degree, and by changing their materiality, Oldenburg creates an opportunity for striking interaction between the work of art and the viewer. Standing in a field among huge sculptures of shuttlecocks can have the power to alter a person’s sense of reality.
Figure 2.09 Shuttlecocks by Oldenburg.

Much like “Gulliver’s Travels” or “Alice in Wonderland” the viewers may wonder whether they themselves have shrunk, or if everything else has grown in size. While people are sure to recognize Oldenburg’s sculptures for what they are, it is their ability to offer a new reality that makes them successful.

2.04 FRANK GEHRY

Frank Gehry may be best known for his characteristically abstract and sculptural building designs. Not all of his work, however, falls into the same category. Some of Gehry’s work is similar in many ways to that of Claes Oldenburg. In fact, Gehry and Oldenburg collaborated on the Chiat/Day/Mojo building in Venice, California. The building has a three-part façade consisting of an abstract boat form (Gehry), abstracted trees (Gehry), and a realistic but enormous pair of binoculars (Oldenburg). Oldenburg actually designed the binoculars for another project, but they were adapted to become the centerpiece of Gehry’s building.
Another example of a Gehry-designed building with a similar approach to strangeness and familiarity is the Nationale-Nederlanden building in Prague. The building has become affectionately known as the "Fred and Ginger", after Fred Astair and Ginger Rogers, because the pair of façades appear to be dancing with each other.
The Chiat Day/Mojo building and the Nationale-Nederlanden building succeed in the same way as Oldenburg's sculptures. The Nationale-Nederlanden building, in particular, adds something else. A visitor not only experiences the effects of the shift in scale, but that there is also a sensation that the building is alive, that it wants to dance. Animating a building in this way creates the sense that the building has feelings, wants, and desires. Suddenly, what would otherwise be a lifeless object is instilled with the personality of a friend, pet, or two amazing dancers. Simply by controlling the built form, Gehry creates a new and exciting reality for people to enjoy.

2.05 PHILLIPE STARCK

“In no case do I create for the sake of creating: I don’t have the imagination for that, it doesn’t interest me. I prefer to take the everyday things we all have to do, like washing or keeping out of the rain, and give these simple necessities a fifth dimension, a depth that gives an ordinary, necessary object the opportunity to speak of other things.” Phillipe Starck (Morgan, p. 21)

Phillipe Starck is one of the most prolific and well-known designers of our time. His work includes household items, food packaging, clothing, furniture, buildings, and much more. As pointed out by the quote above, he seeks to create something special for that which is normally mundane.
Figure 2.12 Dr. Skud by Phillipe Starck.

His flyswatter design, Dr. Skud, turns an object that is normally hidden away until needed, into a work of art. Starck turned the ordinary toothbrush into a sprouting plant form designed to brighten people's mornings. (Morgan, p. 11)

Figure 2.13 A toothbrush by Starck.
CHAPTER 3. PROJECT DESCRIPTION

The examples of imaginative design discussed in the previous section stand out from the mundane masses of images, products, and structures that dominate our world. They are all regarded as out of the ordinary in their thematic content, method of origination, and overall purpose. In accordance with the surrealist rejection of the 'fantastic' without inner need, the examples above offer the viewer or user unique perspectives on both the world and themselves. This gives art and designs the power of enlightenment and revelation.

In order to achieve their unique perspectives, the artists and designers used frameworks adapted from different aspects of real life. The surrealists used dreams, psychology, and madness as starting points and models for their work. The samples of work from Le Corbusier, Claes Oldenburg, Frank Gehry, and Phillipe Starck achieve their unique perspectives through shifts in scale and context, as well as through the use of visual and conceptual games.

The goal of this project is to create imaginative designs that achieve many of the same effects as the works from the designers and artists from above. Just as the surrealists used various aspects of psychology in their artwork, this project uses neurological disorders as its starting point. The designs for this project are not meant to try to simulate the sensation of having the disorder, nor are they meant to create healing spaces for those afflicted.

Neurological disorders differ from purely psychological disorders in the source of the problem. While psychological disorders can have a wide variety of causes, many of which are external to the individual, neurological disorders start with problems in brain function. These disorders can stem from birth defects, head injury, chemical imbalances, tumors, and
degenerative diseases, to name a few. The effects on those with neurological disorders range from minor disruptions to life-altering disabilities.

Considering the human mind as a type of complex machine, that is, to use a machine as a metaphor for the mind, normal people can be considered as machines that work correctly in more or less the same way. The minds of people with neurological disorders represent machines that don’t function properly. In this case the machine hasn’t stopped working but it continues to function and follow logic, only in a different way.

If the logic followed by the machine of a normal working mind were used to produce designs, then those designs will probably be quite regular. However, if the logic of the machine of a mind with a neurological disorder were used to produce designs, then the designs would probably be anything but normal. Uncovering and making use of the logic or “illogic” of those with neurological disorders form the foundation of this project.

“In madness equilibrium is established, but it masks that equilibrium beneath the cloud of illusion, beneath feigned disorder; the rigor of the architecture is concealed beneath the cunning arrangement of these disordered violences.” (Foucault, p. 34)

The book “The Man Who Mistook His Wife for a Hat” by Oliver Sacks is a collection of case studies of individuals with neurological disorders. Oliver Sacks is a neurologist and has spent many years in close contact with people suffering from neurological disorders of various types. Instead of focusing on the disorders alone, Sacks tells the stories of the afflicted individuals. Each case study paints a picture of the world in which the patients exist.
The idea for this project is to examine the tactics or the logic that is found within individual cases from "The Man Who Mistook His Wife for a Hat". The goal is to take the logic embodied within each disordered individual and refine it in order to produce a 'design tactic', and use that to produce a design. There are many case studies in "The Man Who Mistook His Wife for a Hat", and therefore several opportunities to develop different design tactics. The design tactics will aid in the decision making process and can help lead the way to unexpected results.

How should these different design tactics be applied? The thrust of this project is not to redo some existing building, such as an old mental hospital, and turn it into something else. The focus of this project is to actually utilize the design mechanisms that are derived from the tectonics of the neurological disorders to create a variety of solutions. The collection of disparate designs is considered to be an exhibit of strange design that can be moved from place to place.

During a discussion with my major professor about the question of site, the "ship of fools" was brought up, as a description for the collection of objects designed. The idea of the "ship of fools" dates as far back as the fifteenth century. Das Narrenschiff (The Ship of Fools) is the title of a book by Sebastian Brant, written in 1494. The book is an allegory illustrating the follies of man, and is considered by some to be historically significant in its influence on society.
Stultifera Navis (ship of fools), in reference to the book by Brant, is also the title of the first section of Michel Foucault’s book, *Madness and Civilization*. In the book Foucault tells a story of how in the past, people who were thought to be mentally ill, fools, were handed over to sailors and forced to become shipmates. Essentially, those that were mentally ill were put on boats and sent away, cast out of society.

*Figure 3.01 Cover for Brant’s Das Narrenschiff.*
Like those fools, the designs created in this project will be contained on a ship, separate from the rest of a grounded society. While the “ship of fools” may be no more than a metaphor, the concept represents an enduring attitude of societies towards anything out of the ordinary.

“[T]o hand a madman over to sailors was to be permanently sure he would not be prowling beneath the city walls; it made sure that he would go far away; it made him a prisoner of his own departure.” (Foucault, p. 10)
In light of the strong connections between designs stemming from neurological disorders and the “ship of fools”, using an actual ship as the site is a logical and exciting solution to the problems of choosing a site and a framework for this project. Ships and their crews must be self sufficient, resulting in a wide variety of functions condensed in a small area. This presents the opportunity to design for diverse programmatic needs.

“He did not come from the solid land, with its solid cities; but indeed from the ceaseless unrest of the sea, from those unknown highways which conceal so much strange knowledge, from that fantastic plain, the underside of the world.” (Foucault, p. 12)

The “Ship of Fools” plays a significant part in the concept and structure of this project. As described in the introduction, the designs generated for this project will represent a varied and unusual set of circumstances, and they themselves will be varied and unusual. In an attempt to organize the collection of disparate objects and environments, the design tactics will be used to create various elements that can be brought together in the form of a larger whole. The end result will be a construction that can be viewed both as a series of exhibits and as the museum itself. Salvador Dali explained the concept well when he professed, “Museums will become full of objects whose uselessness, size and cumbersomeness will make it necessary to build special towers to house them in the deserts”. (Alexandrian, p. 148) The museum in this case is not a building anchored on dry land, but a ship ungrounded and drifting on the sea.

The title for this thesis project comes directly from synonyms of the word ‘ship’ and ‘fool’. In place of the word ‘ship’ I use the word ‘vessel’: meaning a craft for traveling on water, especially a fairly large one: a ship or boat; a person regarded as a holder or receiver of a particular trait or quality. (The American Heritage Dictionary) In place of the word
'fool' I use 'folly' meaning: the state or quality of being foolish; lack of understanding or sense/ a foolish action, practice, idea, etc.; absurdity; a whimsical or extravagant and often useless structure built to serve as a conversation piece, or lend interest to a view. (The American Heritage Dictionary)

Vessel of Folly:

Derangement - Imagination - Design

Figure 3.03 H.M.S. Lo Mein
CHAPTER 4. EXPLANATION OF DESIGNS

This section is dedicated to the explanation of the individual design elements that come together to make up the Vessel of Folly. In all cases other than the sails, a case study will be reviewed. Then, the analysis of the case study will help clarify the elements from the case study that will be used to create a design tactic. Finally, a design tactic will be applied to a design problem, and the rustling solution will be discussed.

As a foundation for the creation of the Vessel of Folly, the Chinese junk serves as a rudimentary form giver. The junk was chosen for several reasons: its name, its flat bottom, its individual compartments in the hull, its simple yet elegant form, and its role as a lumbering coastal vessel.

Figure 4.01 Chinese Junk.
Figure 4.03  Vessel of Folly, plan view, wire frame.
Figure 4.04 Vessel of Folly, front elevation, wire frame.
Figure 4.05 Vessel of Folly, port elevation.
4.01 LOSSES SAIL

The sail situated nearest the bow represents the “Losses” section of “The Man Who Mistook His Wife for a Hat”. The “Losses” section of the book is a collection of nine case studies of people with various neurological disorders. One thing they all have in common is the general cause of their disorders. As the name of the section suggests, all of the people in the case studies have suffered a loss of some specific brain function. The “Vessel of Follies” is based on a Chinese junk boat, which has cloth sails containing rigid battens to hold their shape. The Losses sail is made up entirely of battens with no sailcloth. The sail cannot function in any normal way. However, the battens are hinged, and can be closed like a shutter, providing both shade and propulsion. In this way, the sail can overcome its deficit, and still serve its purpose.

4.02 EXCESS SAIL

The second mast from the bow signifies the “Excesses” part of “The Man Who Mistook His Wife for a Hat”. While neurological disorders are connected to losses of brain functions, an excess or over-abundance of function produces equally dire results. Much like the way a person’s normal functioning suffers from excess, the excess sail serves little purpose as a conventional sail.

The general shape of the sail as well as its placement on a mast on a ship gives it the legibility of a sail. It has clear plastic sailcloth and is given a large number of battens, which serve as “perches” for various objects printed on the plastic sail. Accompanying these
images of objects is an audio recording of a flock of roosting crows. As the viewer looks up at the perched objects they will notice the sound and sensation of droplets falling on them as water is pumped up to the sail and made to slowly and endlessly drip. The falling water not only serves to symbolize bird droppings and evoke some emotional response (it is good luck in some parts of the world), but it also waters a garden located directly beneath the sail.

4.03 MAIN SAIL

The largest sail on the ship is located third from the bow. This sail is not derived from any single section of the “The Man Who Mistook His Wife for a Hat”, it represents the lives of those living with neurological disorders. The towering form is made with an S-shaped cross section, and acts as a type of rotating windmill. The sail is metaphor, meant to show the effects (spinning or disorder) of unseen forces (wind, disease, nature, etc.). The shape of the sail could be called a parallelogram, in that the top and bottom edges of the sail aren’t horizontal. One edge of the sail is closer to the deck than the other, creating a change in depth as the sail spins overhead. The power generated from the spinning sail may be used to drive mechanical apparatus on the ship, generate electricity, or possibly drive a propeller.

4.04 SIMPLE SAIL

The sail located fourth from the bow represents the section of “The Man Who Mistook His Wife for a Hat” called “The World of the Simple”. This section of the book is a collection of case studies about people who are mentally retarded. According to Sacks these
people live in a world of concrete ideas, that abstraction has no place in their thoughts. Still, they are shown to be people with rich lives.

“I believe all this to be true of the simple, also – the more so as, having been simple from the start, they have never known, been seduced by, the abstract, but have always experienced reality direct and unmediated, with an elemental and, at times, overwhelming intensity.” (Sacks, p. 175)

Taking its cues from the work of Claes Oldenburg, the sail has the form of an enormous kite. When the kite is tethered close to the mast, it functions much like a regular sail. However, on a breezy day, when the ship is at rest, the kite could be flown out over the sea providing an opportunity for play.

4.05 TRANSPORTS SAIL

The sail nearest the stern of the ship represents the “Transports” section of “The Man Who Mistook His Wife for a Hat”. This section of the book is dedicated to case studies of people who all experience some type of hallucination. Many of the people experiencing hallucinations attach some significant meaning to them. They feel as though they have traveled through some sort of portal, and have gained a privileged view.

“If God, or the eternal order, was revealed to Dostoievski in seizures, why should not other organic conditions serve as ‘portals’ to the beyond or the unknown? In a sense, this section is a study of such portals.” (Sacks, p. 130)

The sail for “Transports” has the basic overall form of a regular sail. However, there are doors scattered across its surface. The doors span the distance between battens, and are
free to swing open and shut in the wind. Written on the surface of each door, as kind of ornament, is the name of a condition that is known to be the cause of hallucinations.
Figure 4.6 Vessel of folly, perspective view.
This case tells the story of a man who suffers from a disorder in the visual parts of the brain. The man views the world around him as a series of individual abstractions. When presented with a rose, the man can describe it in great detail, but still can’t say what it is. He confuses his foot for his shoe, a clock for a person, and his wife for a hat, to name a few. Much of his disorder lies in the fact that he can’t see things as a unified whole, instead seeing them as unrelated elements. The man makes frequent mistakes in an attempt to get through the day, and never seems to learn from his mistakes. He is said to have a Picasso like power to see, but doesn’t have the luxury of turning it off. (Sacks, chapter 1)

The system in this case lies in the relentless abstraction and fragmentation. Abstraction is no stranger to art and design. The difference here lies in the radical misinterpretation. The system must go beyond abstraction and fragmentation to a collection of recognizable objects, or one single object. The collection of objects or the single object must be able to be read as what they stand in for.

This story gives the name to the book “The Man Who Mistook His Wife for a Hat.” Since this one story stands in to signify the entire collection of cases, the design exercise
derived from this case should signify the entire ‘Vessel of Follies’. The figurehead of a ship historically stood to represent the spirit of a ship, and will do so for this project.

The form of the figurehead leads the vessel with arms spread wide and back arched. In this case, the arms are replaced with ores. The image is taken directly of a drawing made early in the project. In the drawing, a man stood in a rowboat with arms, morphed into ores at mid-length, extended in despair, and the remainder of his arms dangling in the sea, hung from shackles meant for the ores.

Figure 4.07  Man and a Rowboat
4.07 CAPTIAN’S QUARTERS

Case

This case is based on an uncommon type of memory loss. The afflicted person’s short-term memory is effective for only a few minutes, after which time everything but the distant past is forgotten. As a result of having no anchor in memory or time the subject is radically lost. The immediate environment and situations continually seem new and unknown.

Analysis

The system in this case is based on the appearance of continuous changes. These changes cause confusion in the subject.

Tactic: Captain’s Quarters

The design tactic for this case is applied to a cabin for the ship’s captain. The Captain’s quarters are located above deck. They include a chamber for sleeping and studying, personal lavatory, and a closet. Each individual section is in the shape of a cylindrical room. The cylinders all fit into a larger room. There are several doors into each chamber. Moving about in the room is difficult due to the fact that the chambers are continually spinning. The user is forced to deal with endlessly changing pathways to a nearby destination.
Figure 4.09 Captain's Quarters, plan diagram.
Case

This case is basically the story of a man who accidentally killed his girlfriend in an act of violence caused by a psychomotor seizure. The man had no memory of the event, nor could he recall any details when questioned under hypnosis. In court he was found to be not responsible for his girlfriend’s death. Feeling both a need to be punished as well as no longer being fit for society, the man was relieved to spend the next four years incarcerated in the state hospital for the criminally insane, despite being neither a criminal nor insane. While at the hospital, the man adopted the task of tending to the ragged grounds. In this way, his sudden, uncontrollable violence was replaced with calm. He is said to have achieved equilibrium in his life. Eventually, he was released on parole.

One day while riding his bike down a hill, the man lost control in an attempt to avoid a car and crashed. He sustained severe head injuries, and went into a coma. As he eventually came out of the coma, the man experienced vivid and uncontrollable memories of the act of his girlfriend’s death. The man was questioned about the details of the event to see if the memories were genuine, and they were found to be so. Now, with the intense memories of this terrible act invading the man’s conscience, he needed to be sedated, and twice tried to commit suicide. (Sacks, chapter 19)

Analysis

So, there is a history, not necessarily violent, that is “known” only indirectly at first. Through some change or catalyst the history or knowledge becomes known or experienced
directly, and it is made more real and intense for the subject. The system is changed because of the nature of its understanding of its own history.

Tactic: Kitchen

The case relates loosely to the way many people deal with the concept of eating meat. The design tactic is applied to a kitchen.

Most people in modern society no longer slaughter their own livestock. Long gone are the days of loping off a chicken's head, and throwing the flightless yet still determined carcass into large pot of hot water while under the shocked stare of a solitary chicken head. When people want to eat meat, they may simply choose a neatly prepackaged product from among the aisles at the local grocery store. Of course that means they would have to handle the animal flesh when they cook it, so if at all possible, many will choose to eat out, leaving the personal history of their fajitas safely out of mind.

The kitchen functions like any other. It is a place where a cook combines basic ingredients to create food that is somehow greater than the sum of its parts. The only difference is in the glass wall that would normally provide diners a tantalizing glimpse into the kitchen as they pass on their way to their meal. This wall actually functions as a rear projection screen filled with video images of the meat production industry. The imagery, complete with sound, is projected from within the kitchen itself creating the opportunity for a distorted chef silhouette to interact with a veal calf struggling inside its tiny cage.
4.09 TABLE FOR ONE-HALF

Case

This case is the story of a woman who only sees the right half of what a normal person sees. This affliction creates many obstacles for a normal life. Since she sees only half of what is put in front of her, she does things half way, and assumes she has finished. She eats only the right half of her plate of food. This left her feeling hungry on many occasions, so she found a way to overcome the problem. She rotates the plate, or herself, until she sees the right half of the remaining portion. The woman continuously bisects her meal until only a sliver remains. When shown a video of the left half of her face, which she doesn't normally recognize (and neglects to apply make-up to), she is horrified by the site of it, and considers it to be dead.

"Knowing it intellectually, knowing it inferentially, she has worked out strategies for dealing with her imperfection. She cannot look left directly, she cannot turn left, so what she does is to turn right – and right through a circle. Thus, she requested, and was given, a rotating wheel chair. And now if she cannot find something which she knows should be there, she swivels to the right, through a circle, until it comes into view." (Sacks, p. 78)

Analysis

The design for this case seems to translate into action. There is a continual reduction or division of the world by half. This action is then coupled with a spinning action. The two actions combine to present the whole, but never all at one time.
Tactic: Dinner table

The dinner table is located on a deck cantilevered from the stern. There are multiple positions for sitting, but each works in the same way. The table, which is mechanized, gets its power from the wind. A type of windmill, that is best described as half spheres on spokes, spins no matter what the wind direction. The wind energy is sent through a gear and belt driven mechanism. The resulting action is the rotation of a circular platform at every seating position. The platform is just large enough to accommodate a dinner plate, and is half covered by a sort of lid or open-ended box. As diners try to eat, their meal is constantly rotating and only half displayed. This system will require extra effort and perhaps new strategies to complete the meal.

Figure 4.11 Conceptual sketch for table.
Figure 4.12 Table for One-Half
4.10 SMELL WHERE YOU’RE GOING

Case

This case is the story of a medical student who experimented with drug use, and experiences some significant changes. The result for him was an incredibly acute sense of smell. Actually, all of his senses were enhanced, but smell was the most significant. The change in him lasted for about three weeks. In this new state everything took on a new level of clarity, and he no longer took interest in the abstraction or intellectualization of things. For him nothing was complete until he smelled it. Both pleasure and displeasure were increased as a result. He claimed to have smelled his way through the city where he lived. Eventually the man woke up to find his senses back to normal. Losing his acute sense of smell left with a feeling of blindness. (Sacks, chapter 18)

Analysis

Various human senses are relied upon to complete tasks formerly in the domain of a different sense.

Tactic: Smellingpost

The man in the case is said to have smelled his way through the city. Customarily, people rely mainly on vision for navigation. People use landmarks and signs to make decisions about where they are and where they are going. By replacing signage of pictures or words with signage of smell, people are forced to use their nose were the eye usually reigns. Keys to rooms may have scented tags, matching the scent of the “sign” on the appropriate
door. A dinner invitation would give a location not as a place, but as a scent to be sought out. As a matter of way finding, signposts would be replaced with smellingposts. These would look roughly like a regular signpost, but with perforated containers filled with an aromatic substance.

Figure 4.13 Smelling Post, elevation.
4.11 RESTRAINING THE VESSE.

Case

This case is the story of a man who had near fatal meningitis as an infant, and suffered retardation, impulsiveness, seizures, and some spasticity on one side. (Sacks, p. 187)

The man was raised by his father, a famous singer, and developed an incredible musical intelligence himself. The man was said to have an eidetic memory. All of his experiences were recorded in his database like mind, but they didn’t have any emotional meaning for him, except for music, which evoked emotional memories of his father. As a result, it seemed that music was the only thing in the man’s life that kept him going.

“Such prodigious hypertrophies of eidetic memory, especially if employed or exploited ‘professionally’, sometimes seem to oust the real self, or to compete with it, and impede its development. And if there is no depth, no feeling, there is also no pain in such memories- and so they can serve as an ‘escape’ from reality.” (Sacks, p 189)

This type of memory is described as a “super-reality”. (Sacks, p. 189)

“Eidetics apart, what of his world generally? It was, in many respects, small, petty, nasty, and dark- the world of a retardate who had been teased and left out as a child, and then hired and fired, contemptuously, from menial jobs, as a man: the world of someone who had rarely felt himself, or felt regarded as, a proper child or man.” (Sacks, p. 190)

Analysis

In this case there is on the one hand, endless and emotionless memorizing of experiences, and on the other hand the apparent refuge from turmoil that the subject finds in music.
Tactic: Anchor

For the man in this case, music serves as an anchor in his life. Therefore, the design for the anchor on the “Vessel of Follies” is designed with this man in mind. The anchor is usually found near the bow, and that will be the case here, too. To use music as an anchor means that the anchor may serve little purpose in holding the ship still. The form of the anchor could be anything related to music, an old record player, speakers, or musical instrument, to name a few. In this case, the anchor retains the basic form of an ideal anchor; the kind you would expect to see tattooed on a sailor’s arm. The new anchor differs in that it has many of the characteristics of a brass instrument. Winding tubes, valves and flared bells glisten where cold cast iron anchors once miserably waited for their next violent plunge to the ocean floor.

Figure 4.15 Conceptual sketch for anchor.
Figure 4.16.1 The Use of Numbers.
Figure 4.16.2 Anchor
4.12 RELUCTANCE TO TIP

Case

This case is the story of a man with Parkinson’s disease. He walks about tilted to the side, almost to the point of falling. The man doesn’t realize he’s not walking straight. When the man sees his tilted image on video, he is determined to correct the problem. In the end, he is able to straighten himself by fixing a spirit level on his glasses. He uses an external level instead of the internal one in his ear. (Sacks, chapter 7)

Analysis

The system from the case above starts with a tilting, and ends in a self-induced correction to the upright position. Vision plays a critical role in the coping with the disorder.

Tactic: Lantern

Ships frequently find themselves being pitched about on rough seas and in high winds. Sailing ships are especially prone to leaning while tacking in order to travel against the wind. Lanterns designed according to the design tactic from this case must have the ability to correct their lean, and return to an upright position. The lanterns are basically weighted brass pendulums with a torch at the top. They are free to rotate on their base, allowing tilting, or non-tilting, in every direction. No matter which way the ship pitches, the lanterns will remain upright.
Figure 4.17  Conceptual sketch for lantern.
Case

This case deals with ‘phantoms’; the name given to the persistent sensation one has of a body part after it has been removed. Phantoms are described as being dangerously life-like and real. Sometimes phantoms can serve a purpose. In the case of limb prosthetics, a phantom must be incorporated for the person to manage the lifeless limb. Therefore phantoms can make things easier. However, that is not always the case. There are bad phantoms that can cause a person pain that is felt in a part of the body that doesn’t exist. (Sacks, chapter 6)

Analysis

The system set up by the case can go several different ways. In one case, a design process could focus on something that is missing, but give every impression that the ‘something’ is present. Another way to use this case would be to have an environment designed in such a way as to only function when the user has the knowledge of the ‘phantom’. A third way to use this case is to manifest several phantom objects that serve no real purpose other than to confuse and torment the user.

Tactic: Shower

The design tactic developed from this case study is used to design a shower facility for the ‘Vessel of Follies’. The shower is not just a stall for a single person, but it is an entire room. The walls are riddled with handles for turning on hot or cold water. Over head, is a
medusa of plumbing and showerheads. There is no clear relationship between any of the handles or the showerheads. The user may have a difficult time adjusting the water temperature for a specific head, since there is no clear way of knowing which handles control what. The user is faced with the very real possibility of many uncomfortable showers. Only after extensive trial and error with the shower will users be able to enter and control things as they wish.

Figure 4.19 Conceptual sketch for shower.
This case focuses on an autistic man with a well-developed drawing ability. When he draws something, or reproduces a drawing, he includes fine detail as well as adding character to what he draws. After some investigation, it was discovered that when the man was young, before he suffered brain damage from a fever at age eight, his father took him out sketching. But, after the fever “[h]e was considered ineducable, untreatable and generally hopeless. At the age of nine, he ‘dropped out’- out of school, out of society, out of almost all of what for a normal child would be ‘reality’.” (Sacks, p. 221) The man basically spent the next fifteen years of his life in his cellar room. He enjoyed drawing scenes from magazines like National Geographic.

“These drawings were perhaps his only link with the outside world, and especially the world of animals and plants, of nature, which he had so loved as a child... and this only, he was permitted to retain, his one remaining link with reality.” (Sacks, p. 221)

Eventually, at the hospital, the man was once again allowed to go out into nature, where he focused his attention on the details of nature, and accurately drew them.

“The abstract, the categorical, has no interest for the autistic person- the concrete, the particular, the singular, is all. Whether this is a question of capacity or disposition, it is strikingly the case. Lacking, or indisposed to, the general, the autistic seem to compose their world picture entirely of particulars. Thus they live, not in a universe, but in what William James called a ‘multiverse’, or innumerable, exact, and passionately intense particulars. It is a mode of mind at the opposite extreme from the
generalizing, the scientific, but still 'real', equally real, in a quite different way.” (Sacks, p. 229)

“The autistic, by their nature, are seldom open to influence. It is their 'fate' to be isolated, and thus original. Their 'vision', if it can be glimpsed, comes from within and appears aboriginal. They seem to me, as I see more of them, to be a strange species in our midst, odd, original, wholly inwardly directed, unlike others.” (Sacks, p. 230)

**Analysis**

One key element to this case is the 'multiverse', seeing everything as individual or particular. The concept conjures up images of snowflakes or fingerprints. They are at the same time common and completely unique. There is a sense of infinity in the absence of generalization or categorization.

**Tactic: Garden**

The design tactic for this case is applied to a garden space on the ship. The garden is placed below deck, to give it a feeling of isolation from the world, the way an autistic person is in isolation. The garden contains only one type of plant, a fern. However, each plant has an individual name. A caretaker for the garden is given the task of monitoring the tiniest details of each plant. The details are compiled, described (embellished), and presented on a plaque next to each individual plant. The garden gets a continuous sprinkling of water falling from the 'Excess' sail directly above. The supply of water combined with a minimum of direct sunlight make this garden the ideal place for growing ferns.
Figure 4.21 Garden Variety.
Case

This case is the story of some deaf people who were amused while watching the President give a speech on television. Because of their hearing disability, the deaf people developed a powerful ability to understand people through their actions. This ability allows them to tell when someone is being honest or insincere. In the case of the President's speech, the hearing-impaired may not have been able to hear what he was trying to say, but they saw a truth that may have gone unnoticed by the hearing population. (Sacks, chapter 9)

Analysis

The system that is set up by this case deals with the relationship between deficiency and proficiency. When an option or ability is removed, there is compensation through other means that allows for superior results or greater insight.

Tactic: Anechoic Chamber

The cabin created from this design tactic is designed to offer the user heightened visual perception. This is accomplished by greatly reducing the sound stimulus within the cabin. This can be accomplished by turning the cabin into an anechoic chamber; a room lined with sound-absorbing material. Accompanying the user in the cabin are any number of objects, left to be experienced through unbalanced senses. Spending a silent hour face-to-face with a parrot is sure to offer some illuminating moments.
Figure 4.22 Anechoic chamber.
Case

People can experience visual hallucinations or visions for many different reasons. Often, visions are associated with migraine headaches or epilepsy. Most of the time, these visions are understood simply as symptoms of some ailment to be endured and dismissed. In some cases though, a person experiencing visions may give them some extraordinary significance. In such cases, major decisions or judgements can be made, based on the subjective interpretation of ‘visions’ caused by disorder. One famous case in history is Hildegard of Bingen. The analysis of her visions reveals that they were caused by migraines. However, she gave them some allegorical significance, and chose to live a life of holiness as a result.

Analysis

Using Hildegard as the prime example, there is some sort of “random” sensory input that must be interpreted by the subject. Since the input is nonspecific, the interpretation could lead to almost anything, but may have more to do with the subject than the stimulus. The ‘visions’ could be attached to some unrelated event, and could later be used as a system reference.

Tactic: Navigation Room

The design tactic for this case is used to create a navigation system for the ‘Vessel of Follies’. To the novice, ship navigation is a mystery. Modern mariners have the luxury of
global positioning systems to pinpoint their location anywhere on the globe. They rely on a network of satellites orbiting the earth to send signals to sophisticated equipment aboard the ship. Sailors of old had no satellite system, but they did use objects out in space. By carefully studying the stars, ancient mariners could navigate the ocean plane by looking to the heavens, a skill that must have taken considerable time to develop. The random scattering of stars throughout the universe has been put in order through the concept of constellations. The history of constellations goes hand in hand with ancient mythology. Allegorical tales surround clusters of light in the night sky.

The navigation system for the Vessel of Follies consists of a faceted globe containing both a platform and rudder controls. The navigator must enter the globe to steer the ship. Vision of the outside world is restricted. The surface of the globe is covered with random imagery projected onto the glass. A computer possibly containing a global positioning system controls the placement of the images. As the ship moves the images change in correlation to location. The images may not simply rotate about, but shift dramatically to different locations on the globe. The images would not always have the same neighboring images. This system makes navigation extremely difficult, but since it is based on relationships to location on the planet, it could eventually be learned and used effectively.
Figure 4.23  Navigation room.
4.17 BOVINE REFRIGERATOR OR APPLIANCES THAT CHEW THEIR CUD

Case

This case is the story of a woman who immigrated to the United States from India in her youth. Late in her life, while still living in the U.S., things around her begin to appear as they did to her back in India. She had visions of distant scenes that were easily recognizable for her. The woman was experiencing memories as hallucinations caused by a malignant brain tumor. The experience for the woman was pleasant and perhaps even welcomed.
(Sacks, chapter 17)

Analysis

An object, or in this case a human being, is removed from its native environment, and placed in a foreign setting. Eventually, the estranged object realizes a change, either real or imagined, in its new environment.

Tactic: Refrigerator

Since a refrigerator is commonly used in a kitchen, the manifestation of this design tactic is closely linked to ‘Truth & Appetite’. Many of the things people use in their daily lives have traveled far from their native environments. The magnitude of travel can be measured in distance, as well as in the amount of processing required to reach the final state. What would happen if objects could induce changes in their immediate environments? In the case of a refrigerator full of beef, the appliance acquires several bovine qualities. The exterior surfaces are be covered in the hide of a Holstein, and they have horns protruding
from the sides. Though most refrigerators rest on the ground, this one has spindly legs complete with hooves. Last but not least, like any good cow, the refrigerator wears a cowbell, to signal the opening and closing of the door. This same approach could easily be used with any number of products or objects on various appliances, containers, etc. within the kitchen.

Figure 4.24 Conceptual sketch for Bovine Refrigerator.
CHAPTER 5. CONCLUSION

To what degree were the design tactics applied?

Like many other ways of working, using design tactics developed by analyzing case studies of individuals with neurological disorders can be implemented with varying degrees of rigor. A complete willingness to proceed with every route developed from the process, regardless of the implications for the result, could very likely lead to spectacular and strange designs. However, this way of working would leave success and failure up to chance, and makes the process seem too much like a formula for design rather than a tool for design.

In this case, the design tactics were used more as strong suggestions towards solutions rather than instructions to be followed. In using the method in this way, the design process permitted many choices to be made. This allowed for a more personal expression through design.

When should a design tactic be used?

The use of this design process provided new perspectives for looking at and finding solutions to design problems. However, none of the case studies appeared to translate into design tactics that could fit every need. Combinations of certain design tactics and specific programmatic elements emerged more naturally than others did. As a result, the use of certain design tactics on particular design problems was not attempted. This may have been a mistake.

One could argue that every combination of tactic and problem could work in some way. If determined enough, someone could use any design tactic to aid in finding a solution
to a design problem. If the combinations of design tactics developed from the various case studies were randomly applied to design problems, or if multiple design tactics were used on a single problem, then there is a risk that the results could be unsuccessful.

On the other hand, by working in a way that does not initially appear to make sense, there is a good chance for unexpected results. After all, the conquest of the unusual and thought provoking in design is the purpose of this project. Every time we design, we run the risk of being unsuccessful. By quickly judging what will and will not be a successful use of a design tactic, the things that stifle imagination and creativity win a small victory.

Final Thoughts

The need for the liberation of imagination and creativity from psychological, social, and economically derived constraints was the motivation for this thesis project. Finding a way of working that creates opportunities for unusual and thought provoking design solutions seems to have emerged. There is no doubt, the type of objects and environments that were created for the Vessel of Folly would have had little chance of being realized without the design method used in this project.

The Vessel of Folly was designed with certain goals in mind: aesthetic beauty, the communication of unfamiliar reality, and the ability to provoke thought. Whether or not these goals were reached can be debated. Never the less, the most significant ramifications of this thesis project lie elsewhere, in the education of an architecture student. This project has provided an opportunity to develop and use a design method that may be employed in some form or another on future projects.
People with neurological disorders were used as a starting point for the development of design tactics used to create the Vessel of Folly. The choice to examine case studies about the lives people suffering from neurological disorders came from a desire to create unusual, and in some ways surreal design solutions. Likewise, the use of the field of psychoanalysis by the Surrealists led to a similar source of inspiration in this case. One might think unusual design could only be born out of unusual conditions. This is not so.

One important outcome of this project is the realization that unusual and thought provoking design need not come from an extreme or marginal example of human existence. This understanding will allow future design problems to be approached and solved using the same design method employed in this project. The difference lies in the careful examination and use of the particular context surrounding a design problem to create a design tactic to help solve the problem, instead of using an extreme source of inspiration like neurological disorders. Designing not through the hasty introduction of superfluous information, but through the careful examination and deliberate manipulation of existing information, wonderful creations can emerge.
REFERENCES


BIBLIOGRAPHY


