Creative problem solving through methods of collaborative improvisation

Alex J. Girard

Follow this and additional works at: http://scholarworks.rit.edu/theses

Recommended Citation
Creative Problem Solving Through Methods of Collaborative Improvisation

Alex Girard

A thesis submitted to the Faculty of the College of Imaging Arts and Sciences in candidacy for the degree of Master of Fine Arts

24 May 2007

Rochester Institute of Technology
College of Imaging Arts and Sciences
Graduate Graphic Design MFA Program
Creative Problem Solving Through
Methods of Collaborative Improvisation

Deborah Beardslee
Professor Deborah Beardslee
School of Design
Department of Graphic Design
Chief Advisor

M. A. Howard
Professor M. Ann Howard
College of Liberal Arts
Department of Science, Technology and Society / Public Policy
Associate Advisor

Kari Horowicz
Art and Photography Librarian Kari Horowicz
RIT Wallace Library
Associate Advisor

Patti J. Lachance
Professor Patti Lachance
School of Design
Chairperson

I, Alex Girard, hereby grant permission to the
Wallace Memorial Library of the Rochester Institute of Technology
to reproduce my thesis in whole or part.
Any reproduction will not be for commercial use or profit.

Alex J. Girard
MFA Candidate

Date

Acknowledgements

To the first and greatest team of which I was a member: my family. My parents, Jeff and Ann, my brother, Tony, and my sisters, Abby and Jill – your love, encouragement and support made this thesis possible.

A special thanks to my thesis committee: Professor Deborah Beardslee, Professor Ann Howard and Kari Horowicz. Your collective patience and insight helped to guide and propel this project forward.

To my friends, Tara Kelly, Christina Fisher and Ben Snider – your kindness, friendship and laughter grounded my sanity during this process.

To my friends and peers in room 3510 – there is no one else with whom I would have wanted to share this experience.

And lastly a special thanks to Aaris Sherin, who planted the seed and believed I could do it.
Creative Problem Solving Through
Methods of Collaborative Improvisation
# Table of Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Project Definition</td>
</tr>
<tr>
<td>9</td>
<td>Key Terms</td>
</tr>
<tr>
<td>12</td>
<td>Precedents</td>
</tr>
<tr>
<td>21</td>
<td>Research</td>
</tr>
<tr>
<td>35</td>
<td>Synthesis</td>
</tr>
<tr>
<td>57</td>
<td>Ideation</td>
</tr>
<tr>
<td>68</td>
<td>Intermediate Evaluation</td>
</tr>
<tr>
<td>75</td>
<td>Implementation</td>
</tr>
<tr>
<td>97</td>
<td>Dissemination</td>
</tr>
<tr>
<td>102</td>
<td>Retrospective Evaluation</td>
</tr>
<tr>
<td>113</td>
<td>Conclusion</td>
</tr>
<tr>
<td>114</td>
<td>Bibliography</td>
</tr>
</tbody>
</table>

## Appendices

<table>
<thead>
<tr>
<th>Page</th>
<th>Appendix</th>
</tr>
</thead>
<tbody>
<tr>
<td>116</td>
<td>A: Urban Design Charrette</td>
</tr>
<tr>
<td>119</td>
<td>B: Lava Graphic Design, Exhibit Catalogue</td>
</tr>
<tr>
<td>120</td>
<td>C: Healthy Bodies, Healthy Communities Hypothetical Initiative</td>
</tr>
<tr>
<td>121</td>
<td>D: Required Poster Text, Abundance Cooperative Market</td>
</tr>
<tr>
<td>122</td>
<td>E: Required Poster Images</td>
</tr>
<tr>
<td>123</td>
<td>F: Abundance Co-Op Poster Design Charrette Participants' Initial Concepts of Collaboration</td>
</tr>
<tr>
<td>124</td>
<td>G: Design Charrette Participant Survey</td>
</tr>
<tr>
<td>125</td>
<td>H: Poster Audience Survey</td>
</tr>
</tbody>
</table>
Project Definition

The field of graphic design is an inherently creative and collaborative endeavor. The design process itself can involve a range of people and variables that are brought together for the purpose of creation through a forum of influence, exchange and teamwork. This thesis will study problem solving processes in a variety of settings, the role of parameters and constraints, and their effects on the evolution of creativity, particularly focusing on solutions that are responses to the predefined context in which they are created. One of the major goals of this thesis is to infuse the graphic design approach to problem solving with fresh perspectives from a variety of sources. This thesis involves the evaluation of methods across a range of disciplines, where the end product is brought into being through an improvisational collaborative process in which there is no singular expectation from inception to completion.

In order to shape this thesis project, the following key questions have been posited at the onset to establish initial avenues for research and investigation; they also serve as reference points to maintain the project’s focus.

What are some examples of collaborative improvisation across disciplines?

How can different models be identified, analyzed and compared?

How is each model applicable to the design process and resulting design solutions?

Have methods for improvisation, community creativity and surprise already been applied to design problem solving?

What are the benefits and limitations of structured creativity?
The interaction between aspects of a problem, people and parameters give the field of graphic design a unique richness that challenges creativity to evolve from predetermined constraints and parameters rather than through open artistic expression. Improvisational and/or collaborative structures have been established as a means through which people can interact in environments of creative exploration that do not limit participants through preconceived notions of a specific outcome. Examples of community, collaboration and improvisation can be found in many disciplines, as the need to problem solve is an intrinsic aspect of many fields. The methods involved in the creation of other areas of the visual arts, such as choreography, musical scores, and theatrical performance, can be examined and adapted to enrich the processes implemented in graphic design problem solving as well.

In an effort to gain a better understanding of the process involved in creative problem solving and potential for community development, this thesis will explore areas of study both directly and indirectly related to improvisational creative collaborative methods, such as:

<table>
<thead>
<tr>
<th>Collaborative Methods</th>
<th>Productivity</th>
<th>Cognitive Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Brainstorming</td>
<td>Time Efficiency</td>
<td>User Response</td>
</tr>
<tr>
<td>Gaming</td>
<td>Community Development</td>
<td></td>
</tr>
</tbody>
</table>

The question of whether a lack of individual ownership over the creative end product or a solidified vision of outcome will result in solutions and community dynamics that would not have been possible had an individual attempted to solve the problem alone will be explored.

The thesis application focuses on the integration of methods of collaborative improvisation into the graphic design problem solving process and how each method can uniquely enhance the process and its end product.
Explanatory Diagram

This diagram provides an initial context in which precedents were gathered and defined, and the early stages of the research process were explored. It was from this explanatory diagram that this thesis project was able to evolve.
Key Terms

This list has been developed through the research and evaluation of a variety of definitions and sources; each word is followed by the adaptation of these different interpretations so they can best explain, describe and reference aspects of this particular thesis project.

Original sources that were read, evaluated and adapted included: Merriam-Webster Dictionary, Dictionary.com, and Google.com’s define function.

It is through the evaluation and exploration of the following key terms that this thesis has been further shaped and more clearly defined.

Artboard
The Adobe software company uses the term throughout their Creative Suite to denote a boundary establishing the dimensions and maximum workable area for any particular project. The artboard represents the entire region that can contain artwork.

This term and definition have been adopted by this thesis project to discuss both the digital and physical (or manual) workspace of a designer or design team, especially as it relates to the workable area provided to participants of the Abundance Co-Op Poster Design Charrette.

Charrette
An interactive initial brainstorming process, the goal of which is to provide a stepping stone for future progress through an intense, participatory planning process that brings together a variety of individuals to observe and share ideas about a problem and ways in which to problem solve.

This process is frequently implemented in areas of design and urban planning.

Collaboration
The act of working together in a joint effort in which resources, ideas, inspirations and workload are shared by a group in order to achieve a goal.

Community
A group of individuals of any size whose members are united in effort (physical or emotional) and have a shared sense of identity.

Constraint
Any factor that regulates limits or establishes boundaries at the onset of a process (See also: Parameters).

Context
The circumstances or setting in which an event occurs. Contextual factors may include: instructions, an environment or understanding: anything that may shape a situation.
Key Terms Continued

Continuum
A defined extent, series, or whole, marked by the connection and divergence of two or more elements

Dialogue
A conversation between two or more individuals resulting in an exchange of ideas or opinions on a particular issue or subject matter

End Product or End Result
The final result of a problem solving effort, whether it is tangible or not: a dance, play, poem, painting, book, musical performance, scientific understanding, etc.

Forced Juxtaposition
A brainstorming concept and tool that encourages the development and exploration of the possible interconnection between seemingly unrelated items, characteristics, attributes, etc.

Referred to as Morphological Forced Connections by Don Koberg and Jim Bagnall in The Universal Traveler, page 72.

Groupthink
The practice of approaching problems as matters that are best dealt with by the consensus of a group rather than by individuals acting independently

Ideation
The process of forming initial ideas or images, brainstorming

Improvisation
The act of creating, writing, interacting and/or performing extemporaneously (without prior planning)

Individual
A single human being, one who is distinguished from a group

Influence
The capacity or power of persons or things to be a compelling force on or produce effects on the outcome of a situation or the actions, behavior, and/or opinions of others

The effect of one thing on another, such as a set of parameters on the end result of a project

Intuition
A direct perception, independent of any reasoning process; a response to a situation in the form of keen and quick insight

Medium
The mode of communication used to house and transmit a message from one or more senders to an audience
Ownership
The possession of something, whether it is a tangible object or something that is intangible: a concept or idea

Parameter
Any factor that determines or describes a range of limits, boundaries, guidelines and/or variations that may define a problem solving process

Precedent
An artifact, act or instance that may be used as an example in dealing with subsequent similar or related instances or areas of study

Problem
Any situation, end product or intended result requiring a solution to be uncovered through a process

Problem Solving
A process by which an individual or a team applies knowledge, skills, and understanding to achieve a desired outcome in an unfamiliar situation where the solution is not readily apparent

Purview
The range of vision, insight or understanding related to a given context, such as graphic design; the full scope of understanding of any subject

Rational
Endowed with the faculty of reason by proceeding or being a derivative from reason, or simply based on reasoning

Synectics
The study of creative processes, especially as applied to problem solving by a group of diverse individuals (as described and explored by William J. J. Gordon in his book, Synectics)

Synthesis
The informed (through research, evaluation and understanding) combination of elements or ideas, resulting in a complex whole, such as method or product
The human experience is in itself a collaborative effort. Membership in various
communities can be imposed upon a person at birth. It may take the form of
gender, ethnicity, sexual orientation, family, body type or any other number of
variables that define us as individuals but provide us access to communities
defined by like qualities. Communities can also be chosen by the individual;
membership in a group defined by religion, politics, proximity or friendship
are examples of ways in which people are brought together through a shared
sense of self-identity. A sense of community can also be brought about through
overcoming obstacles, achieving goals, problem solving and producing an end
product in conjunction with others.

Problem solving is rarely absent from any communal process; even more
rare is a clearly defined process outlining how to solve the problem at hand.
Improvisational collaborative creative structures are effective ways in which to
begin a problem solving process, and in some instances can be an active aide
from beginning to end. Since the need to problem solve is prevalent in many, if
not most, disciplines, the cross examination of structures in various fields can
bring unique insight and applications to the graphic design process.

This thesis project begins with the collection and evaluation of improvisational
creative collaborative methods across various disciplines in order to create a
backdrop for the very context in which problem solving is occurring no matter
the medium or intended end result. Through the examination of precedents and
current models for creative problem solving in the field of graphic design, this
project will serve as a bridge between fields, bringing the strengths of each to
the problem solving efforts of the graphic design community.
Precedents

Precedents for this thesis study are arranged in the following order:

Page 14

One into Another
Only language is used in the form of verbal communication with the end result simply being a shared understanding.

15

Consequences
Again language is used; in this instance it is recorded in writing and the end result is a story.

16

Exquisite Corpse
The visual adaptation of the previously mentioned Consequences where the end result is usually a drawing (however, collage, painting, and other means of visual representation are sometimes used).

17

Reverb Design: PowerPhone Poster
A modern-day design solution achieved though a self-proclaimed Exquisite Corpse-like approach, the end result of which is a poster.

18

Daedelus
A musical adaptation of the Exquisite Corpse, music and sound is layered to achieve individual tracks all of which form an album as the end result.

18

Headlong Dance Theatre
Movement is used as dancers intuitively respond to music and the surrounding environment to preform a dance as the end result.

19

AIDS Memorial Quilt
Individuals separately created sections of a quilt to commemorate an AIDS victim; to achieve the end result the sections were then gathered and joined to form a huge quilt.

19

A Day in the Life of California
Leading photojournalists were asked to document what it is to be Californian in a single photograph, to achieve the end result those photographs were arranged and housed in a book.

20

Jenga
A game where players respond to each other in sequence, using moves of subtraction and addition. While competing against one another players must work together to achieve the end result of the tallest tower possible.
One into Another

It is through language that people communicate with one another. Effective communication is essential when a group of people is assembled for the purpose of problem solving. Thus, it is no surprise that language games have been developed in an effort to exercise and explore the ways in which humans can communicate in a fun (and non-threatening) forum.

An example of a language-based game is One into Another, developed by the Surrealists as a game for three or more players. The game begins with one player exiting the room, and choosing an object, person, idea, etc. While that person is absent, the rest of the players choose another object (unaware of what the single player has selected). The first player then returns and is told what object the group has chosen. The single player must then describe his/her object in terms of the properties of the object chosen by the group. The group listens and responds to the single player by asking questions of clarity in an effort to guess the object being described. The single player makes the comparison between the objects more and more obvious as he/she proceeds, until the group is able to guess the identity of the object. The process is initiated by the single player begins by saying, “I am an (object). . .” As seen to the left, Toyen, a Surrealist artist describes a necktie in the terms of a sword. Notice how, in the opening sentence he states the object the group selected, a necktie and uses descriptors like gleaming which could be associated with his object, a sword.

A tangible end product is an inherent outcome of graphic design. However, without a clear understanding between designer and client, designer and fellow designer, or designer and production team, the tangible end product will be less than ideal, if not a total failure. In order to achieve clear communication it is important to foster a setting that encourages questions and answers and other ways in which one can feel comfortable clearly articulating thoughts, desires and needs. Therefore, methods of language-based creative collaboration where the end result is a shared understanding are applicable to this thesis study because they demonstrate how creative people can be assembled to explore and enhance their communication skills.

An approach such as One into Another may also be utilized by designers who wish to incorporate forced juxtaposition into their approach to graphic design problem solving. For example a graphic design firm may substitute the solution and content for the objects being described. If a website needs to be designed for an eyeglass company, designers may take turns describing a website using terms associated with eyeglasses during their brainstorming phase. This may allow for new and different insight into the problem and possible solutions as well as a deeper understanding of the relationship between the product (the eyeglasses) and the artifact (the website).
Consequences

While *One into Another* is an oral language-based game with an end result of understanding, the game *Consequences* is a language-based game where communication is achieved through writing in an effort to create a story. During the Victorian era (marked in the United Kingdom by Queen Victoria's rule from 1837–1901), parlor games were used by the upper and middle classes as a means of amusement at parties and were often played in the parlor of the house. Many parlor games incorporated logic and/or word-play. *Consequences*, the root of modern-day *Madlibs* is one such Victorian parlor game that. Each participant (a minimum of three) takes a turn choosing a word for one of six questions in this order: man's name, woman's name, a place, a comment, another comment, and, finally, an outcome. The story is then read: 1 met 2 at 3, and he said 4, she said 5, and the consequence was 6. This form of oral, language-based creative collaboration renders an end product that is a short story, and facilitates a lively interaction between a group of people.

As this thesis study seeks to explore the roles of parameters and constraints this method illuminates a simple way in which to limit a response while also providing a context for that response, in the instance of *Consequences* this is achieved through a question. The question itself focuses how a participant may respond. This method also demonstrates how parameters may be defined without imposing too many limitations. Through clear and careful phrasing a person may be guided in a path with seemingly limitless creative freedom. In this method, a participant may be asked to pick a place; their mind will be filled with possibilities, but these millions and millions of possibilities are limited to places, not people, things or outcomes. The response may be wildly imaginative but will always answer the question posed, creatively evolving from the context provided.

This method allows for a unique form of collaboration to unfold: one in which the participants do not know how others will be contributing. Those involved may not even know one another. Regardless, a group of people has been brought together to solve a problem; in this instance the challenge is writing a story. Every response is recognizable in the final artifact, allowing each contributor both a specific ownership and a shared ownership. Participants specifically own the phrase they submitted; but all share in the ownership of the final story.
Exquisite Corpse

The visual arts have constantly attempted to infuse their methods of creation with fresh approaches to their subject matter. In the early 1900’s, Surrealists were exploring techniques aimed at liberating the unconscious from its rational restrictions. Techniques such as the Cadavre Exquis, the Exquisite Corpse, were the impetus through which the Surrealists were able to escape the artistic conventions of their time.

The Exquisite Corpse is the visual adaptation of the Victorian parlor game Consequences (page 15), and is achieved through similar blind sequential collaboration. While each participant draws only a portion of the final drawing, all are aware that the goal of the method is to draw a body (head, torso or legs). It is through this understanding of the intended end result that all participants are unified in concept and effort. Each adds their assigned portion (head, torso, or legs) to the composition in sequence. While completing their section, the other contributions are concealed. It is through the understanding of the project that participants are unified in concept but blind in collaboration due to the concealment of previous contributions. It is not until all have completed their contributions that the entire Exquisite Corpse is revealed. Each participant is able to see their section, the entire body and the role their contribution plays within the end result.

A unique aspect of this method is the way in which community is formed around the project. It does not come from the contributors interacting with one another as they are creating, but rather once they have finished. Community is formed through the joint ownership of the end product. Once finished, there is no individual that owns the end product; rather, the community of artists who created it share a sense of ownership and responsibility for the work. Community is formed though shared concept (the need to create a body: head, torso and legs) and end result.
ReVerb Design: PowerPhone Poster

One modern design solution, the development process of which was similar to that of the Exquisite Corpse, can be found in the design work of ReVerb, a Los Angeles design firm that was formed in 1990. The firm approaches design solutions almost exclusively through collaboration. In 1997 ReVerb was charged with the task of developing a poster for the launch of a new interactive telecommunications device, PowerPhone.

ReVerb achieved the design for the PowerPhone poster by breaking the designers working on the project into two separate teams. For this poster, the first team was assigned the task of creating the background, a “sea of chaos” as a metaphor for existing telecommunications technology. The second team simultaneously created the “window of simple sophistication,” a metaphor for the product’s new technology. The two separate files were then merged to create the final poster (Harper 110).

As is the case for the Exquisite Corpse, contributors worked independently of each other under a unifying problem; in this instance the design concept was a poster for the PowerPhone product rather than the creation of a body. Group ownership was also similar in this design firms’ interpretation of the Exquisite Corpse process; the group of designers owned the end result. The way in which parts of the final project were combined was different. In the Exquisite Corpse, contributors (except the first) are able to see connecting elements (usually the end of a drawn line) that they are asked to build upon to create a unified body. In the PowerPhone poster, the second team simply placed their work on top of the first; connecting elements or visual reference points were not used.
Daedelus
As did the designers at ReVerb, the recording artist Daedelus took cues from the Exquisite Corpse as a means through which to creatively collaborate. The CD *Exquisite Corpse* is an album to which various artists and DJs contributed by overlaying tracks in an Exquisite Corpse-like approach to music creation.

Similar to the Exquisite Corpse, each contributor was asked to develop a specific track on the album: vocals, rhythm, bass line, etc. All were given a time limit for each track as well as the track title to provide unity in format (length in time) as well as unification through concept (the title explored). The end product is the individual tracks of the CD which all come together to create the experience of listening to the CD as a whole - not unlike unfolding the pages of the Exquisite Corpse to reveal the whole of the body.

Headlong Dance Theater
While Daedelus used the Exquisite Corpse as an inspiration to explore music, *Headlong Dance Theatre* uses their own approach to explore music and the surrounding environment through movement. Movement is another medium through which creativity can evolve. *Headlong Dance Theater* is a Philadelphia-based dance company whose work is largely improvisational. In each performance the dancers respond to various spontaneous elements such as music, space, audience and other dancers, all while maintaining overall coherence in the dance as a whole.

Dancers must respond intuitively to the parameters established by the music, space, audience and each other, yet still present a coherent performance. Their dance is a collaborative effort because there are multiple dancers on the stage at any given time. While the dancers are trained in movement and form, there is no preconceived notion of the dance before it begins; the end product is a dance experience rather than a tangible artifact.
AIDS Memorial Quilt
While dancers for the Headlong Dance Theatre converge upon a stage to perform a dance through intuitive movements, contributors to the AIDS Memorial Quilt converge upon the larger project with quilt sections constructed in advance. Founded in 1987, the AIDS Memorial Quilt is an ongoing and ever-evolving memorial, a powerful tool intended to unite victims and advocates, and spread information in an effort to prevent new HIV infections. It is the largest ongoing community arts project in the world. Each section of The AIDS Memorial Quilt measures approximately twelve feet square, and a typical block consists of eight individual three-foot by six-foot panels sewn together. Virtually every one of the more than 40,000 colorful panels that make up the Quilt memorializes the life of a person lost to AIDS.

The most obvious end product for this collaborative endeavor is the overall quilt itself. However, other goals for the project include awareness, understanding, remembrance and hope. Parameters are established in the form of a concept (remembrance of life, recording a disease) and medium, each block consists of eight individual three-foot by six-foot panels sewn together. As the epidemic continues claiming lives around the world, the quilt continues to grow in overall size and while reaching more communities through traveling fundraisers with its messages of remembrance, awareness and hope.

A Day in the Life of California
The process that resulted in the book A Day in the Life of California has similarities to the AIDS Memorial Quilt project in the sense that it, too, had a predefined input. Rather than a quilt block, the contributors were asked to provide a photograph. The, A Day in the Life of California, project was a much more formal and clearly defined endeavor. Participants were asked a specific simple question and given only one way to answer that question. As was the case for Consequences, this method also starts with a question. Rather than posing an individual question to each contributor, the same question was asked to all. On April 29, 1988, one hundred of the world’s leading photojournalists were asked to document what it was to be Californian through a single photograph. Collins Publishers compiled the resulting pictures into a book. Timing was set as another parameter; the photograph had to be taken within a 24-hour period of time: April 29, 1988.
Jenga

Games can also be great resources for brainstorming and community development. Jenga is a game where players must respond to each other in sequence, using moves of subtraction and addition while working together to maintain a balance within a block tower. Jenga is played with 54 wooden blocks; each block is 3 times as long as it is wide, and slightly smaller in height than in width. The blocks are stacked in a tower formation; each story is three blocks placed next to each other along their long side, and each story is placed perpendicular to the previous one. A move in Jenga consists of taking one block from any story except the completed top story of the tower at the time of the player’s turn, and placing it on the topmost story. Any block that is moved slightly out of place may be left out of place if it is determined that it will knock the tower over if it is removed. The game ends when the tower falls.

This game provides an interesting and different opportunity of community building and problem solving. Players are technically competing against one another, however, all participants must work together to build the tallest tower possible.

The precedents gathered in this section provide an initial context and overview of some of the ways creative problem solvers have come together in the past. These precedents provide the author with a starting point and initial direction from which to begin researching.
Research

The research for this project began with a sampling of collaborative methods across a range of disciplines that include an even wider range of intended purposes and desired outcomes. Theories, methods, structures and other creative endeavors were found through classical methods such as library and database searches, as well as less formal means like informal discussions and word-of-mouth (the way in which the author identified the Oklahoma City Bombing Site Fence as applicable to this thesis, see page 31).

Humans have always gathered, means of drawing people together have constantly been sought and explored; perhaps the campfire is the original improvisational collaborative structure for problem solving. Historically, the campfire provided an environment where people could gather and exchange stories, each participant contributing their interpretation of the day's events, while twists, turns, exaggerations and omissions each played a role in the improvisational quality of the story as a response to the audience and environment. The end product could then be as intangible as a sense of brotherhood or as tangible as the establishment of shelters surrounding the campfire in order to house the community.

The research therefore is not a retrospective of collaborative methods, but rather an exploration of the implications various methods have on the graphic design problem solving process. For this thesis, research has been separated into several approaches. The initial research phase of this study involved gathering methods of collaboration. Research was also done to explore and understand how and why people come together.
The Power of Play

This thesis does not seek to evaluate creative problem solving from a variety of fields as a means for image generation in the design process alone. Instead, this project seeks to understand the ways in which people are brought together, the dynamic of various types of teamwork and the potential and power of groupthink. As such, it may seem that some of the methods evaluated are unrelated and therefore not directly applicable to the design process. However, as William J. J. Gordon discusses in his book Synectics, it is through play and (at times unrelated) gaming that energy can be generated and applied to any problem solving process, in the case of this thesis, energy generated would be applied directly to the graphic design problem solving process (Gordon 119).

Gordon describes energy as the end product of play, and as the title Synectics implies, he deals with teamwork, group dynamics and play. Pleasure and play are further described as being synonymous, both resulting in energy which may be applied to problems even if the problems are in possibly unrelated categories. Energy and focus are needed to undertake any problem; therefore, play – even if seemingly irrelevant - may be used to generate energy that may then be directed toward the problem solving process. It is with this acknowledgement of the potential power of play that different structures of creative collaborative problem solving are evaluated and considered. Incorporating methods and structures not limited to direct (and apparent) relationships to the specific field, problem or end product are essential to this project. Therefore this thesis embraces the potential of outside influences to inspire and enhance the graphic design problem solving process.
Looking Outside the Field of Design for Inspiration

Imagination and creative processing are some of the most important and unique aspects of the human experience. Albert Einstein observed that “Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world.” It is imperative to continuously explore new ways to stretch the imagination. It is through the exploration of outside and tangent fields that the imagination may be stretched the furthest. As was the case with unrelated play yielding energy (see page 22), fresh insight may be uncovered through the observation and exploration of fields outside of graphic design.

It is no surprise that designers (and creative people in general) are continuously exploring new methods for inspiration. In the book *Inspiration = Ideas*, Petrula Vrontikis discusses the work of nineteen top graphic designers in an effort to reveal and explore their sources of inspiration. While the range of inspiration is broad—vegetables to classic art, national flags to restroom graffiti—the theme of finding inspiration outside the field of design remains constant. Top designers rarely look to design annuals and reproductions of others’ award winning work for inspiration; instead, they leave themselves open to be inspired when and where they least expect it. Vrontikis calls for designers to remain open to the possibility of finding inspiration and sources within “pure influences: travel, music, community, architecture, art, teaching and learning. Sources can be unorthodox, edgy or controversial, or blatantly simple and beautiful” (Vrontikis 139). Designers seem to find inspiration everywhere, gathering impressions in their conscious, subconscious and in all that is perceived. Designers find inspiration in the places they live as well as those they have only dreamt about. Inspiration for them can be found in the people with whom they interact, as well as people they have heard about but not met. The list inspirations is seemingly limitless: film, music, media, culture, books, language, dreams, emotions, movement and stillness (Vrontikis 7).
Defining Community
To gain an initial understanding of the concept of community the Merriam-Webster Dictionary was consulted and numerous definitions were offered:

Community
a unified body of individuals

people with common interests living in a particular area; the area itself

a group of people with a common characteristic or interest living together within a larger society

a group linked by a common policy

a body of persons or nations having a common history or common social, economic, and political interests

a body of persons of common and especially professional interests scattered through a larger society

society at large; a social state or condition

joint ownership or participation

common character; likeness

social activity; fellowship

The definitions of community as well as its implications are as varied as the people forming them (communities) in practice. A definition of community has been developed for this thesis through a synthesis of multiple definitions. Community is defined in this thesis as a group of individuals of any size whose members are united in effort and have a shared sense of identity.

As is true for many concepts an intellectual understanding of a concept is much different than a first-hand experience with the concept; membership to a community is far more complicated than a simple definition implies. There are countless factors that allow a person to feel a part of a community as well as feeling ostracized from a community. There is also the question of community importance. Why are communities sought out? Are communities sought out? What comes from community? What are the implications of communities?
Communities are often intimately linked to core identity, that from which we, as humans, draw our defining characteristics. Sometimes membership in such communities is not sought, but rather inherited as birthright. The bodies we inhabit, the languages we speak, the places from which we originate; all powerfully influence our life experience and the ways in which we view the world. Other communities form from a desire for connection and shared meaning - such as those formed by religions, sociopolitical groups, academia, etc. Members seek and find one another, and gather in support of a common ideal, cause, or area of interest. There is also another kind of community to which no one would willingly seek membership: those communities borne out of tragedy and suffering. Indeed, survivors of the Holocaust, those in New York on 9/11, and the families and friends of the victims of the recent shooting at the Virginia Polytechnic Institute on April 24, 2007 are members of communities that have arisen from atrocity, loss and grief. While these members would rather that their communities didn't exist, they are often able to share pain, understanding, and sometimes solace within the confines of the group.

Different professions value community with different regard, the final result, end product and/or tangible artifact is often the most weighted of discussion topics when dealing with graphic design. However, this thesis study seeks to explore the human experience within the graphic design problem solving process, how people interact, and how community may be formed as a by-product of the process of collaboration. The various ways in which people define themselves within a community is ever-evolving and always changing. In an effort to understand the implications of communities and how they are formed in the modern era those exploring, defining and seeking community have been researched and incorporated into this thesis.
Imagined Communities

In the age of instant communication, communities are not always clearly defined by proximity. Communities may be more abstract and developed through interactions, idea exchange and unity through similarity of purpose. It would appear that establishing a definition of community and the meaning of membership in communities would be a simple task, but this is not the case. Artists involved in the traveling exhibit *Imagined Communities* (1995) grapple with the task of exploring and defining communities in the modern era. The artists were asked to explore the topic of *Imagined Communities*; this is a term that was originally coined by Benedict Anderson (Professor Emeritus of International Studies, Cornell University, born 1936) in an effort to explain the clustering of individuals on a global scale. According to Anderson, the imagined community is a concept which states that a nation is a community that is socially constructed and ultimately imagined by the people who see themselves as part of that group (Anderson *Imagined Communities*).

Among the images compiled by Richard Hylton for the introduction to *Imagined Communities*, one by Vanley Burke serves as a starting point for discussion. The image suggests that an individual can belong to multiple communities at once. A striking example: a boy proudly displays a British flag while also a member of the community of African descent. The little boy depicted in this photograph may potentially belong to both communities. However, characteristics he shares with other communities may keep him from becoming fully integrated into a community whose members only view themselves in one specific way. He may in fact belong to neither. By belonging to neither the boy is an outcast of both; however, he is not alone and thus is a member of a new community formed by outcasts. Those who do not belong seeking others who are similar in that regard may be the most willing to explore new ways in which to create community bonds.

The global community emerging from instant communication and ease of re-location does not encourage membership and community development. People may not reside in one physical location for a duration of time long enough to develop bonds with those around them; there are instances where next-door neighbors in an apartment building do not know one another. Instead, through technology, people are able to explore new possibilities for communities that are defined by interests, values and ideas. These new communities reside in a place that does not physically exist – the Internet – a truly abstract and imagined venue for community building.
Internet-based Communities
The Internet is a vehicle through which people are establishing and defining themselves in electronic communities that have no boundaries based upon specific geographic location. Both Facebook.com and Myspace.com have seemingly limitless options when it comes to developing communities. Facebook.com includes a feature that allows a user to create a group that other members can be invited to join or discover based on an interest search. The administrator for each group establishes privacy options: whether or not others can freely join, if a user is required to have administrative approval to join or if a user must be invited to join. The degree of public visibility for these groups is also an option administrators must consider. Member profiles display the various groups to which that member belongs.

Myspace.com has a digital feature similar to a community message board. Bulletins allow users to post thoughts, announcements and surveys that appear to all of the friends of that user. These appear in the bulletin section of each individual's homepage and are not viewable by outside users.

While there are many benefits to the community offerings of Internet services, there are also limitations and even negative aspects. The most apparent is accountability: anyone can sign-up for an account on the aforementioned sites. There is no formal system in place to check the accuracy of information that each user provides. It is through the interconnectivity of members that each is able to determine the sincerity and truth of the others. When a user views the profile of someone they are unfamiliar with, the friends of that user are shown; in the case of Facebook.com mutual friends (see page 29) are displayed providing an informal check of the profile through their connections to that user. Myspace.com has a similar feature, the top list: a user determines who they would like to display as their top four, eight, twelve, sixteen or twenty-four friends (see page 29). This is done in an effort to show connections and relationships to others as well as real time relationships.

A formal barrier established in an effort to provide safety and security, both Facebook.com and Myspace.com have a system in place that does not allow those over eighteen years old to initiate contact with someone who is under eighteen years old. There is also a way to block users if harassment takes place.
Research Continued

Facebook.com

Facebook.com describes itself as a "social utility that connects you with the people around you." Networking and communication facilitation are the self-proclaimed purposes of Facebook.com. The utility allows participants to interconnect based on company, religion, high school, college, or other group categories. College networking was the initial purpose to which the site catered, requiring participants to have a university email address to join; it was later opened to the public. Other goals of Facebook.com include: the sharing of information, social timelines and the ability to know what (when and where) your friends are doing, as well as directory services. There is a myriad of search options to contact people you already know or to find people with whom you share various qualities and interests. These searches include, but are not limited to, name, age, gender, hometown, religious views, favorite television shows, favorite music, academic major, or any combination of categories.

The search utility that Facebook.com provides to its users to find others based on specified information.
Myspace.com
Myspace.com is another electronic, internet-based community. While Facebook.com has established itself as a mode for networking and interconnectivity based on interest, Myspace.com is more of a purely social network, with limited ways in which people can find and then link to one another based on interest. All online friends are linked together, and the only way to differentiate is through ranking the list. While Myspace.com is limited in its networking capacities, it allows users more opportunities for customizing as compared to Facebook.com. Each participant can modify their page to reflect their personality (this option is not available through Facebook.com); this can be done with motion graphics, music, colors and images. It is through this ability to upload and download files that Myspace.com has provided the opportunity for creative collaboration (See Prospero’s Daughter, page 30) that is only limited by an individual’s access to the internet.

Displaying Friends, Determining Interconnectivity
The following are examples of a user’s mutual friends (A) and group listing (B) through Facebook.com. A person’s top eight list (C) and bulletin section (D) are features of Myspace.com.
Prospero’s Daughter
The band Prospero’s Daughter, located in Cedar Falls, Iowa, utilized a unique opportunity for creative collaboration available through Myspace.com as the means by which to connect with other musicians on a musical collaborative endeavor. The theme for this particular collaborative work was anti-war. The theory behind the project was that once removed from politics and specific circumstance, no person could ever be pro-war, since the end product of war is death and destruction. Disconnecting from circumstance allowed musicians from any political background to relate to and collaborate with other musicians with vastly different perspectives. Prospero’s Daughter used Myspace.com as a hub allowing other users to download the lyrics to a song written by members of the band. The contributors were then able to create music, a backbeat, rhythm, etc. and upload their creations back to Myspace.com. After the submissions were completed, the members of Prospero’s Daughter then mixed the album and were left with various iterations of songs with the same lyrics.

This project allowed musicians to creatively collaborate without the constraints of geographic location; it also allowed for musicians to find one another based on common interests and musical goals. Lastly, this effort demonstrated the potential for these internet-based communities and their services to act as more than a simple social network, but a tool that can be used to unite individuals in a collaborative endeavor.
The Oklahoma City Bombing Site Fence
Communities that have been brought into being by those seeking membership into a group are very different than those that arise in the form of a response to a specific situation. In the previous sections, communities were formed based on a desire to belong; however, a sense of community can spawn from a group of individuals with a shared sense of need. For the citizens of Oklahoma City who experienced the bombing of the Alfred P. Murrah Federal Building on April 19, 1995, a need for community healing was quickly apparent.

While a formal memorial was established, community members (not limited to citizens of Oklahoma City, but anyone affected by the tragedy) also informally adopted a fence as a physical structure for collaborative problem solving. The problem for this group of individuals was the need to recover from tragedy. This method had no formal set of parameters and constraints that were established at the onset of this problem solving process. Those wishing to contribute do so by attaching personal artifacts to the fence. Contributors may also respond to location, and items already affixed to the fence may affect proximity and fastening approach.

Note: While the Oklahoma City Bombing Site Fence was uncovered, evaluated and discussed in the research portion of this thesis, it will be referred to as a precedent and evaluated as such.

Urban Design Charrette: Rochester, New York
While the Oklahoma City Bombing Site Fence was a need-based collaborative effort with a goal of emotional healing, the community surrounding Dewey Avenue in Rochester, New York initiated a need-based community effort focused on healing in a different way. The community in this area, referred to as the Maplewood Neighborhood, was suffering economic hardship and recognized the need to address physical (buildings, streets, sidewalks, businesses, parking lots, etc.) healing focusing on economic and community survival. With the downsizing and destruction of Kodak-related buildings, Maplewood area citizens and other interested parties gathered in a formal, structured effort to brainstorm ways in which to revitalize their commercial district and preserve the community economic foundation and quality of life.

For more information on this effort please refer to Appendix A: Urban Design Charrette, page 116.
Communicating and Listening
In developing communities and forums that allow for an open exchange of ideas, sharing a common interest, goal or problem to solve is only the first step: it is through open and effective communication that communities will develop and solutions will be discovered. As is the case for problem solving, effective communication has its own methods that have been researched, developed and established with the intent that those who follow their guidelines will reach desired outcomes and become effective communicators.

Dean Rusk (1909-1994), the 54th United States Secretary of State, observed that, “One of the best ways to persuade others is with your ears—by listening to them” (qtd. in Patterson et al. 141). In the book, Crucial Conversations, the act of listening is highlighted as one of the most important aspects of effective communicating. In this book authors Kerry Patterson, Joseph Grenny, Ron McMillan and Al Switzler discuss various ways in which to increase the effectiveness of any person’s communication skills. The authors further discuss the need to have an attitude of curiosity and patience when listening.

Patterson et al, suggest the following as steps necessary to actively listen and explore others’ paths:

Ask  
Start by simply expressing interest in the other person’s views.

Mirror  
Increase safety by respectfully acknowledging the emotions people appear to be feeling.

Paraphrase  
As others begin to share part of their story, restate what you have heard to show, not just that you understand, but also that it’s safe for them to share what they are thinking.

Prime  
If others continue to hold back, prime. Take your best guess at what they may be thinking or feeling.

As views are being expressed and ideas exchanged, the authors remind those involved to:

Agree  
Agree when you do.

Build  
If others leave something out, agree where you do, then build.

Compare  
When you differ significantly, don’t suggest others are wrong; compare your two different views.

The following page outlines the relevance and importance of these concepts to this thesis study.
Research Continued

The act of listening is an important aspect of this thesis in both the figurative and literal sense. Figuratively, graphic designers need to listen to their surroundings. The fully integrated designer must be aware of his or her environment. This listening is a skill that takes time and cultivation to develop. The designer needs to understand the context of the design problem in order to create a solution that relates to and transmits information to the audience effectively. For example, a design that is intended to educate young teens will be developed differently than something aimed at toddlers or senior citizens. The broader the audience, the more attentive the designer needs to be in listening to the community.

In order to communicate a designer must be willing to listen and understand. Looking outside the field of graphic design for inspiration (as discussed in detail on page 21) is one way in which a graphic designer can listen to what others are saying or doing.

In the literal sense, listening is an important consideration for this thesis due to the nature of collaborative problem solving: people working together. Communication is an intrinsic aspect of this endeavor. All members of a team must be willing to share their ideas. Team members must feel safe, have self-confidence and be willing to vocalize their ideas. The group, as a whole, must be respectful and allow everyone to share information. The general rules of polite society must be engaged. Listening is an ageless statute when it comes to open communication. A blank stare is not enough. All team members must be engaged in active listening. The speaker’s words become part of the listener’s thoughts. Questions that request clarity and extend insight are helpful as the speaker becomes the listener in an effort discern what the audience wants to know through their answers. The speaker’s listening skills give rise to useful answers, displaying the speaker’s respect for the listener’s needs.

In order for people to work together effectively they must first be able to communicate effectively.
Lava Graphic Design
A forum of open communication is an important aspect of the process of Lava Graphic Design. Lava Graphic Design is a design firm located in Amsterdam, Holland whose creative process for any design problem is a continuous collaborative endeavor. Open communication is paramount to their process and their mealtime is used as an open forum for gathering, exchanging ideas and socializing. In an effort to facilitate open communication, staff hierarchy has been eliminated at these informal gathering times. Based on the seating arrangement, casual conversation and sharing of food, it would be impossible for one to discern any hierarchy. Visiting clients sit beside Lava interns and designers, and anyone who happens to stop by the studio at the appointed time is welcomed with the offer of a chair and a plate. This open forum provides an environment for idea exchange and camaraderie.

Lava Graphic Design further explores ways in which to facilitate communication and reinforce the need for informal relationships through the design of certain artifacts. Appendix B: Lava Graphic Design, Exhibit Catalog, page 119 details a specific instance of this way in which community has been addressed.
A fundamental aspect of this thesis project involved the organization and analysis of content gathered in the research stage. After research was conducted, it was necessary to determine ways in which to assess the breadth and depth of information collected, and specific strategies for addressing and exploring the problem statement.

**Degree of Improvisation**

*Continuum: Degree of Improvisation* shown below evaluates the level of improvisation utilized while attempting to solve the problem and how that improvisation relates to the number of parameters and constraints imposed at the onset of the problem solving process.

While methods may share the same categories of parameters and constraints (for example: The AIDS Quilt and the Headlong Dance Theatre have medium, concept and administrative body listed as shared attributes) this continuum does not imply that they share the same specific parameter and/or constraint. The AIDS Quilt and the Headlong Dance Theatre both require a single medium to be used in their process, although the medium itself is different in each. The similarity is that both methods establish a medium in which the participants must operate.

The Daedelus album lies at the end of the continuum marking minimal improvisation because each track was pre-recorded and then overlaid onto other tracks; changes could not be made after completion. In contrast, the Oklahoma City Bombing Memorial Fence is at the opposite end with a high degree of improvisation because it is constantly evolving, and participants can add to and remove from the fence at any time.

**Continuum: Degree of Improvisation**

<table>
<thead>
<tr>
<th>Minimal Improvisation</th>
<th>Maxima Improvisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daedelus</td>
<td>A Day in the Life</td>
</tr>
<tr>
<td>Powerphone</td>
<td>Exquisite Corpse 1993</td>
</tr>
<tr>
<td>Time for Project to Occur</td>
<td>Medium</td>
</tr>
<tr>
<td>Medium</td>
<td>Size of Submission</td>
</tr>
<tr>
<td>Concept</td>
<td>Administrative Body</td>
</tr>
<tr>
<td>Size of Submission</td>
<td>Team Hierarchy</td>
</tr>
<tr>
<td>Number of Participants</td>
<td></td>
</tr>
<tr>
<td>Administrative Body</td>
<td></td>
</tr>
<tr>
<td>Team Hierarchy</td>
<td></td>
</tr>
<tr>
<td>AIDS Quilt</td>
<td>Headlong Dance</td>
</tr>
<tr>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Concept</td>
<td>Concept</td>
</tr>
<tr>
<td>Administrative Body</td>
<td>Administrative Body</td>
</tr>
<tr>
<td>Team Hierarchy</td>
<td></td>
</tr>
</tbody>
</table>

With fewer parameters and constraints comes a greater possibility for improvisation. Parameters and constraints are an inherent aspect of the graphic design process. After an examination of the listed precedents, it is obvious that more parameters and constraints inhibit improvisation. Thus, the question becomes how can designers improvise and collaborate to a greater degree while working within the parameters and constraints of a given project?
Degree of Collaboration

While it is possible to have a highly collaborative effort with a minimal number of people, *Continuum: Degree of Collaboration* below compares the degree of collaboration in terms of the highest possible number of contributors each structure can accommodate. At the minimal end lies the *Exquisite Corpse*, as its opportunity for collaboration and effect on community are limited; the number of people involved is usually three to five. At the other end of the continuum, with the maximum possible degree of collaboration, lies the *Oklahoma City Bombing Memorial Fence* that is a collaborative effort on a city-wide scale, and lastly the *AIDS Quilt*, which is a global effort with a limitless number of possible participants.

**Continuum: Degree of Collaboration**

<table>
<thead>
<tr>
<th>Minimal Collaboration</th>
<th>Maximum Collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exquisite Corpse 1993</td>
<td>A Day in the Life OKC City AIDS Quilt</td>
</tr>
<tr>
<td>Exquisite Corpse 1925</td>
<td></td>
</tr>
<tr>
<td>Number of participants constrained to single digits</td>
<td>Number of participants constrained to tens of people</td>
</tr>
<tr>
<td>Consequences, Daedalus, One into Another, Powerphone, Headlong Dance</td>
<td></td>
</tr>
<tr>
<td>Number of participants opened to hundreds of people</td>
<td></td>
</tr>
<tr>
<td>Number of participants opened to any number of people</td>
<td></td>
</tr>
</tbody>
</table>

In order to successfully synthesize methods for graphic designers to incorporate into their group process, it is important to recognize the capacity each method may have to accommodate a large population, a small population, a fixed population or a varied population (in terms of numbers of participants). Cues from this analysis will be used when addressing aspects of population accommodations. If the goal of a method is to accommodate a specific number of participants, like the *Exquisite Corpse*, a specific format may be needed with cells for each person's input. However, if the goal is to allow for variability based on attendance, an open-ended structure may be needed. Rather than cells for input, adaptability – the need to unify an undetermined number of results – may be a more important focus.
Method and Medium Employed
Determining similarities between methods can be an important way to study relationships, as well as explore possible interconnectivity between the various models. Matrix: Method and Medium Employed (see page 38) relates the collaborative method to the medium through which the method unfolds.

If one is to compare the end result or artifact generated by a collaborative method, it may be easy to fall into the habit of discussing differences in product, as examples of differences are readily available. At face value, two examples from the matrix on page 38, the Oklahoma City Bombing Memorial Fence and A Day in the Life of California may seem so different that they do not warrant comparison. However, acknowledging basic characteristics that unify two dissimilar things may allow for the discovery of more subtle similarities that would not have been found had the evaluator dwelled solely on the differences.

Within the matrix Matrix: Method and Medium Employed, the mediums employed – sound, motion, language and visuals – have been arranged from least directly applicable to the graphic design problem solving process to the most readily applicable. As the title of the field implies, graphic design solutions are often inherently visual. In addition, language and other forms of communication are also important aspects of most graphic design problems and their solutions. This thesis study has sought to explore various creative fields and study their methodologies irrespective of how directly or indirectly they may inform the graphic design process. In the purview of this thesis, there is greater import in understanding how methods work, than there is in their end results.
It is through this comparison of the basic nature of each collaborative method (i.e., the mediums in which it evolves), that an understanding of some of the root similarities across the disciplines is brought to the forefront. In two of the examples previously discussed, the *Oklahoma City Bombing Memorial Fence* and *A Day in the Life of California* are both noted as methods that incorporate imagery. The similarity of imagery as a medium employed by these two different methods allows for a comparison between the methods. This similarity (and others sought out across different methods) may be gathered to inform the synthesis of a new hybrid method applicable to the graphic design process and intended for the exploration of imagery as it relates to graphic design problem solving.
**Medium Employed and Intended End Result**

To further understand the relationship between method, medium and end result, *Comparison: Medium Employed and Intended End Result* below was developed. This matrix cross-references the methods used, arranged by medium employed, with the intended end result.

*Comparison: Medium Employed and Intended End Result* attempts to demonstrate the direct relationship between what is desired (the intended end result) and how it is achieved (medium employed). If a group of people is seeking to develop a written story and uses *Consequences* as the method to achieve their result, then the written word will be their medium. There is a direct connection between medium employed and intended end result since written words are used to develop a written story. This trend of direct correspondence between medium employed and intended end result is apparent throughout the chart due to the diagonal nature of the plotting.

While this matrix demonstrates the strong connection between method and end result, it also displays gaps in the methods evaluated. These gaps raise questions: can the medium of drawing result in a dance? Graphic design uses various visual elements and text to communicate an idea or concept; thus, the medium of graphic design may be described as one of combinations and synthesis. This provides an opportunity to develop new methods that may fill in some of the gaps on this chart.
Often, diagrams can be more readily accessible than words when trying to relate and describe complex, abstract elements. Diagrams have been developed in an effort to break apart each method previously described in this thesis into its most basic elements. This is done in an effort to gain a clearer understanding of each method, as well as to allow for the comparison of methodology, instead dwelling on the differences in how each structure unfolds.

Process diagrams were developed as a visual representation of the way in which each collaborative method is structured and executed. These may be viewed as simple instructions for someone wishing to participate in the method. An understanding of how each process unfolded informed the methods developed for graphic designers in this thesis project.

Effort diagrams were developed as a diagrammatic analysis of effort and energy flow related to the participants involved in each collaborative method. As previously discussed the human factor within the graphic design process is being explored. Through the study of the effort diagrams, a clearer understanding of the ways in which creative people are brought together emerges; with this understanding these flows may then be re-interpreted and applied to the graphic design process.

**The Exquisite Corpse**

**Process**

**Effort**

Each participant steps-up to complete their portion of the project alone (further details on page 16).

Ideas flow in a linear pattern with little interaction between participants until the entire work is completed (further details on page 16).
ReVerb Design: PowerPhone Poster

Process

Each group is assigned a task; the task is completed apart from other groups, and all are combined to create a poster (further details on page 17).

Effort

Individuals are drawn together to form a group, together the group creates their assigned portion of the design solution (for example, the compositional field or background), the elements are layered to create the end result (further details on page 17).

Daedelus

Process

All participants are given a concept, medium, and time in which to create an aspect of the track, in the form of vocals, beat, rhythm, etc. Those elements are then combined to create a song (further details on page 18).

Effort

Participants are drawn together, and contributions must conform to a specific series of parameters and constraints (further details on page 18).
Headlong Dance Theatre

Process

Effort

Each dancer is formally trained prior to the performance; moves are modified on stage while each dancer responds to the others as well as the environment (further details on page 18).

Individual dancers are combined on a stage creating a dance. While the dance is perceived as a whole, each component (dancer) remains independent (further details on page 18).

AIDS Memorial Quilt

Process

Effort

Each death prompts an individual or group to take action in the form of creating a portion for the quilt (further details on page 19).

Participants are brought together, first through tragedy, then by the development of their portion of the quilt and finally by physically joining the quilt together (further details on page 19).
A Day in the Life of California
Process

Contributions are unified in medium (photography) and the concept of describing what it is to be Californian in a single photograph (further details on page 19).

Effort

Contributions follow a set of parameters and constraints, and the results are housed together in a book (further details on page 19).

Jenga
Process

A tower is constructed through moves of subtraction, then addition (further details on page 20).

Effort

Players are drawn together through game participation and must work together while also competing against one another in an effort to build the tallest tower possible (further details on page 20).
Synthesis

Continued

Oklahoma City Bombing Memorial Fence

Process

Effort

Individuals contribute unique items of their own choosing to memorialize a tragedy (further details on page 31).

A shared experience unifies a diverse group of people who are further brought together through an overall structure and individual contributions to the fence (further details on page 31).

While the process and effort diagrams on the previous pages were being developed, trends, similarities and relationships were noticed between many of the different methods. These trends related to aspects of both the process and the effort diagrams. The following section, beginning on page 45, tracks the exploration of these trends through the grouping of diagrams based on various similarities. It was hypothesized that though the understanding of similarities between methods from different fields new methods could be synthesized. Various aspects of those methods could be used to inform new methods developed specifically for the graphic design problem solving process.

For example, on page 47, process diagrams relating to methods where a participant takes action and the action of the next participant must be in response to the first are grouped. Once evaluated and clustered, the methods on page 47 may then inform a new hybrid method intended for designers. To inform a new method for graphic designers with a goal of having the contributions of each designer come as a response to previous contributions, the methods on page 47 may be looked-to for inspiration. The methods clustered on page 47 may inform the way designers are prompted and/or arranged, or may affect the way in which tasks are delegated in this new hybrid method.
Comparison of Process Diagrams

Methods were evaluated and diagrams were developed in an effort to deconstruct each of the methods into its most basic elements. This was done to gain a clearer understanding of the method. Each diagram allows for comparisons of methodology, process and effort.

When comparing process diagrams, not all methods lend themselves logically to all of the comparisons. Due to this fact, not all methods are included in each of the clustering comparisons.

Predefined Input Selected Examples

The following grouping of process diagrams is based on the input of each participant as established at the onset of each process. This was done to gain an understanding of how a predefined input may effect the end result, challenge creativity to evolve from clearly defined parameters and inform a graphic design problem solving method. In the following methods parameters and constraints are imposed upon the input in the form of either size, medium, time or form.

![AIDS Memorial Quilt](image1)
![Jenga](image2)
![A Day in the Life of California](image3)

![Headlong Dance Theatre](image4)
![Daedalus Album](image5)
**Synthesis Continued**

**Single Person Response** Selected Examples
Rather than allowing for the possibility of group-work, these methods limit each action or creative response to a single person and call upon their specific talents, experiences and/or expertise. While a single person response is often an aspect of the graphic design problem solving process, these methods serve to demonstrate various ways individuals have been arranged within a group to achieve a common goal. This understanding of participant hierarchy may inform the arrangement of participants in a graphic design problem solving process.

![Jenga](image1)
![Exquisite Corpse](image2)
![Daedalus Album](image3)

![Headlong Dance Theatre](image4)
Action and Response Selected Examples
The following process diagrams compare methods where creation is a response to previous actions: each new action is interpreted and modified based on previous input. Creative action is also not limited to a single submission; there is a built-in tolerance for re-evaluation and re-submission based on the way in which other contributors respond. The end results of these methods are in a constant state of evolution and flux. They may serve to inform a graphic design method that challenges designers to allow their end result to evolve from process rather than a specific concept and preconceived notion of end result.

Note: The Oklahoma City Bombing Memorial Fence is included in this set for less obvious reasons than Jenga and Headlong Dance Theatre. It has been included due to the way in which items are placed on the fence. Someone responds to the tragedy by placing a personal item on the fence, the next person who places something on the fence will respond to how and where the previous person placed their item. The first person may then, revisiting the memorial, find that their item has been covered or moved; in these cases they are free to replace their item if they so choose.
Layering Selected Examples
The cumulative layering of each contributor’s effort allows for a collection of simple actions to yield a seemingly complex result. This is done through the traditional physical layering of items and images, the conceptual layering of movement and the layering of tracks in music production. This not only informs graphic design methods geared at image generation through layering, but supplies insight into how other efforts and concepts may also be layered to achieve a desired end result.
Comparison of Effort Diagrams
In addition to the process diagrams shown on pages 41-44, effort diagrams were also developed for each individual method. As was done with the process diagrams shown on pages 45-49, effort diagrams have been similarly grouped. Effort diagrams serve as a diagrammatic analysis of effort and energy flow related to the participants involved in each collaborative method. The following groupings shown on page 49-54 allow for a better understanding of the various effort flow models creative individuals incorporate into their collaborative process. Beginning in this section of the thesis document, and carried through implementation, these models may be applied to the graphic design problem solving process in order to gain an understanding of the effort behind previous methods. With this understanding effort flow informed by previous methods may be applied to new methods for graphic design problem solving.

Fully Informed Collaboration Selected Examples
The following examples compare the energy flow diagrams of methods in which the participants are fully informed of the efforts of other contributors at the onset of the process. Each contributor is aware of the other participants and what they are contributing; in this fully informed process the actions and contributions of each affects the others’ (no contributor is in a void), and no response is without a comprehensive knowledge of the situation and context.

A Day in the Life of California
Jenga
Headlong Dance Theatre

Oklahoma City Bombing Memorial Fence
Blind Collaboration Selected Examples

In contrast to the fully informed approach, the set of diagrams shown on page 49, a blind collaborative process involves participants who are unaware of what the others are contributing to the same project. Their response is to the structure, assignment, description, or circumstance and not to the other people involved and their respective contributions. In many cases of blind collaboration the workflow is: assign, separate, create, collect and layer or compare. The contributors are assigned a task, then separate into subgroups (or as individuals) and create while unaware of what other subgroups are doing. Each creation is collected and assembled to form an end result in which each separate part is an essential element to the whole collaborative response.
**Synchronic Creative Evolution** Selected Examples

This set compares the energy flow diagrams of methods in which there is a synchronous effort in the creative evolution. The contributors create simultaneously. While they may not be operating in the same space, they are creating at the same time. This allows for an overlap in influence of the environment and events surrounding their creativity due to the fact that they are working and creating at the same time. In Headlong Dance Theatre, for example, all dancers occupy the stage at the same time. If something were to occur in their environment of creativity all would be affected and the end result would likely be altered. The resulting end product, in this case the dance, would evolve based on all participants being aware of, and affected by, a single factor.

---

**Oklahoma City Bombing Memorial Fence**

**Daedelus Album**

**Headlong Dance Theatre**

**A Day in the Life of California**

**AIDS Memorial Quilt**
**Sequential Evolution Selected Examples**

In the following examples, each contributor to a specific project does their part in the creative process, and once finished passes their work on to the next contributor. Participants do not get the opportunity to revisit or modify their portion based on the other contributions or participants. However, as the process unfolds, those involved later on have more accumulated content to which they can respond, as well as more considerations to make based on the evolving complexity of previous efforts.
Movement and Rhythm Selected Examples
This set consists of methods that incorporate movement, pacing and rhythm as major influences and components in their collaborative creative effort. Participants must be aware of the timing of their contributions and the implications those decisions and judgements have on the contributions of the other participants.
Convergence Selected Examples
Bringing people together is an inherent and intentional aspect of many of the methods included in this thesis study. In the following examples, all methods bring the contributors to a specific point or end result. The goal is a convergence through the unification of understanding, product, space or desired end result.

AIDS Memorial Quilt
Jenga
Headlong Dance Theatre
Reverb Design
Exquisite Corpse
Daedelus Album
Oklahoma City Bombing Memorial Fence

Determining the similarities and relationships between methods relating to both their process and effort has established a starting point for further exploration leading to the development of new methods for graphic design. The ideation portion of this thesis document (beginning on page 57) will expand upon these concepts in order to develop methods for collaborating in graphic design. This development is influenced by the methods evaluated, explored and grouped in this section. To better prepare for this process, the matrix on page 55 cross-references participant response with various constraints in an effort to understand the relationship between the two.
Participant Response and Constraints
In the organizational matrix below, Participant Response and Constraints, precedents and constraints are cross-referenced with attributes of the participant response. This is done in order to illustrate how parameters and constraints may be affected by participant response and vice versa. This matrix allows for a quick reference to see where there are patterns of precedents that have already been developed and where new method development may be possible.

<table>
<thead>
<tr>
<th>Participant Response</th>
<th>Constraints</th>
<th>Time</th>
<th>Size</th>
<th>Number of Contributors</th>
<th>Medium</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surprised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate response</td>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to specific event</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehearsed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practiced prior to</td>
<td>ReVerb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Headlong Dance Theatre</td>
</tr>
<tr>
<td>method</td>
<td>PowerPhone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poster</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic</td>
<td></td>
<td></td>
<td></td>
<td>ReVerb</td>
<td>A Day in the Life of California</td>
<td></td>
</tr>
<tr>
<td>Having a specific</td>
<td>Reverb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>goal in mind</td>
<td>PowerPhone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blind</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware of the</td>
<td>Daedelius</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>responses of others</td>
<td>Album</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exquisite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corpse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informed</td>
<td></td>
<td></td>
<td></td>
<td>Exquisite Corpse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware of the</td>
<td>AIDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>responses of others</td>
<td>Quilt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jenga</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Based on human</td>
<td>A Day in the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>feelings and intuition</td>
<td>Life of California</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AIDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quilt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jenga</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Headlong Dance Theatre</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the development of new methods cues should not only be taken from the similarities and accomplishments of previous methods, but also be informed by what those methods have not been able to achieve. As was discussed on page 39, Medium Employed and Intended End Result, the gaps in the matrix provide an opportunity for the methods for collaborating in graphic design developed by this thesis project to fill in and expand where previous methods may have left off. For example, on the above matrix there is no entry for a surprised response and a method with a size constraint. A method may be developed to explore what this relationship has to offer to a collaborative, creative problem solving process.
Collaborative Method and End Result

As has been uncovered through the explanation of the various precedents in this document, end results can be both tangible and intangible, planned and unplanned. For example the AIDS Memorial Quilt (full description on page 19) yields both planned tangible (the quilt) and intangible (community healing and awareness) end results.

This thesis project seeks to develop methods graphic designers can use as part of their collaborative problem solving process with a special interest in the community that may develop around the designers as they create through dialogue, an open exchange of ideas, laughter, joint ownership of end product and general camaraderie. A method that results in a design solution as well as community development means both tangible and intangible end products. Studying both the intentional and unintentional ways that intangibles develop around a method will inform the synthesis of methods for designers. An unintentional occurrence is basically an accident and, as was the case for such world-altering discoveries as rubber, we can learn much from accidents.

Comparison: Collaborative Method and End Result

<table>
<thead>
<tr>
<th>Collaborative Method</th>
<th>Tangible End Result</th>
<th>Intangible End Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Music</td>
<td>Dance</td>
</tr>
<tr>
<td>One into Another</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consequences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exquisite Corpse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ReVerb Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerphone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daedelus Album</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Headlong Dance Theatre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIDS Quilt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Day in the Life of California</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jenga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oklahoma City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bombing Site Fence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unintentional: not defined as a goal at the onset of the method
Intentional: clearly defined as a goal at the onset of the method
The Synthesis section of this thesis document involved developing a deeper understanding of the methods as well as establishing relationships between the methods explored. The effort was further focused to understand how creative problem solvers have worked together in the past. The Ideation section of this thesis document tracks the translation of these findings into applicable concepts so they may inform future graphic design problem solving processes. Research and content were transformed into various visual forms through the use of sketches, brainstorming, diagramming and cataloging. This was done to ensure that the final application project would break new ground.

In order to fully demonstrate the findings and potential of this thesis project it was determined by the thesis committee and author that the application would have two purposes. The primary application of this thesis project is the development of adapted methods for collaboration in graphic design informed by other methods previously outlined in the Precedent section (see page 12) and discussed in the Research section (see page 21) of this thesis document. A reference piece would then be developed providing those interested with instructions as to how they may infuse their graphic design problem solving approach with new methods for collaboration.

In order to demonstrate the methods developed in this thesis project and described in the reference piece for graphic designers, a secondary aspect of this thesis application was developed. This includes a charrette where designers use the methods described in the reference piece to solve a graphic design problem. Their resulting end product would be a tangible illustration of the method and one group's interpretation of how the described method may be used.

The following section includes the exploration of various ways in which to illustrate and formalize these concepts and goals.
Sketching is an invaluable tool when in the brainstorming phase of a problem solving process. As such, in this thesis project, sketching is used to incubate ideas and concepts that later develop into clearly defined methods as well as an effective design application.

The initial sketches of these three potential applications visually explore the process by which the application will be approached as well as the physical structure of the document (poster, book, page spreads). The goal for each of these potential applications is to integrate collaborative methods discussed in previous sections into a graphic design problem solving process, with an emphasis on demonstrating how each method can uniquely enhance the process, develop community through the process, and affect the end result.

Three potential applications are explored in initial sketches. The first (sketched in the top band above) is a poster series generated from a round-robin approach to the design process. This potential application is developed further on page 59, Potential Application A: Rotating Poster Series. The second (sketched in the middle band) is a book where the design of each chapter is approached by the method it is describing. This potential application is developed further on page 60, Potential Application B: Collaborative Book Chapters. The third and final series of initial sketches (sketched in the bottom band) is a book project where the content would remain the same but the method by which the designers approached the content would vary. This potential application is developed further on page 61, Potential Application C: Collaborative Full-Book Iterations.
Potential Application A: Rotating Poster Series

This potential application, a rotating poster series, yields four posters. It involves four stages with a different designer contributing at each stage of the process. Each designer is assigned a method and a particular way to contribute to the poster they are working on. Once their contribution is complete the designer rotates the poster to the next designer, receiving a new poster themselves. This rotation and contribution process repeats until each designer has contributed to each poster in the way their method dictates. The intent for this poster series was to incorporate many different aspects of this thesis project, such as layering, unification of concept and format, time restriction, blind collaboration and sequential contributions, into a single end result.

Outside content focusing on communities in action would be used in this poster series. Initial ideas included civil rights and keeping art in schools. Each of these would allow for an overarching theme (i.e.: keeping arts in schools) as well as specific content for each poster (the specific art form: dance, theater, choir, band or painting).

In evaluating this potential application it was determined by the thesis committee and author that while ambitious, the results of this montage-like process may actually dilute the findings due to the overabundance of variables. A viewer would not be able to differentiate methods used in the poster's creation by simply observing the end result. The comparison of methods and how they influence both the process and final end result is an important aspect of this thesis. Since this application did not facilitate such comparisons it was not selected as an idea application. An idea application would exercise each method and allow for the observer to discern relationships, differences and similarities between methods based on end result.
This potential application is a collaborative book where each chapter is designed by a different team of graphic designers. This application would yield a reference piece for graphic designers where each chapter describes a collaborative method a designer may use to approach a graphic design problem. A different team of designers would design each chapter of this book, and the method those designers use to collaborate is the same one described in the section they are designing. It is the intent of this potential application to allow a viewer to experience a method’s end result (the design of the chapter) while educating themselves as to how to use the method in their own graphic design problem solving process.

In evaluating this potential application it was determined by the thesis committee and author that while the opportunity for an interesting experience for the reader is available (observing a method’s end result while reading about the method), this potential application (much like Potential Application A: Rotating Poster Series, page 59) lacks finite points of comparison. Each chapter, while similar in concept (each describes a method), would have inherent differences: length of manuscripts, image number and proportions, need for diagrammatic elements, etc. This thesis application incorporates variables that would disassociate each chapter from one another. These different variables would not allow for immediate comparison of methods.
As was the intention of Potential Application B: Collaborative Book Chapters (page 60), the potential application shown above seeks to act as a reference tool for graphic designers wishing to explore new methods of collaboration. Whereas Potential Application B uses different content for each section in the book, this application will have the content act as a constant and remain the same across each entire book iteration. Different teams of designers, each with an assigned method, design an iteration of the entire book. It is the intent of this potential application to allow the reader the opportunity to observe what each specific method can bring to the graphic design problem solving process: the only difference between iterations will be the way in which the content is approached. It is hypothesized that this application will demonstrate how process affects the end result due to the fact that the content remains the same with the only variable being the way in which the content is approached.

The thesis committee and author note the inherent strength of this potential application is the allowance for comparison between and across methods. The only two variables with each iteration are the method employed and the team of designers involved. To maintain focus on the implication of method on end result, it was determined that the designers should each have as similar a background and demographic as possible.
Final Thesis Application: Collaborative Reference Book

After evaluating each of the potential applications: Potential Application A: Rotating Poster Series, Potential Application B: Collaborative Book Chapters and Potential Application C: Collaborative Full-Book Iterations one which closely resembles Potential Application C: Collaborative Full-Book Iterations (page 61) was determined to be the most effective direction for this thesis project. The final application is a synthesis of the three potential applications discussed, and while it most closely resembles Potential Application C, selected strengths from the other two potential applications were also incorporated into the final solution.

The application for this thesis study is a collaborative book project. Each of the six sections within the book describe a new collaborative method a graphic designer may use to problem solve. Furthermore, to elaborate on the overall purpose of this application and to generate additional useful content, a charrette will be coordinated where six different teams of graphic designers approach a single graphic design problem. Each of the six teams of graphic designers uses one of the six methods described in the book. Each of the six team's problem and content will remain the same, the method used to problem solve will change. The end result generated from the charrette along with the description of process will be housed in the reference piece.

It is the intention of this thesis application to instruct, illustrate and compare. Each section of the book will instruct the reader as to how to use one of six collaborative methods. Paired with the general instructions will be the end result generated from the specific charrette, illustrating the method in action. With the content across the six-part charrette remaining constant, a reader will be able to compare the final design solutions, determining for themselves how each method informed the process and affected the end result.
Process Diagram for the Collaborative Reference Book
The following is a visual, diagrammatic representation of the intended charrette process for generating the final application.

Parameters and Constraints
Timeframe in which to complete the project, physical format of the book, and overall content will be established as common parameters for each team.

One Team Uses One Method
Each team (membership number as set by method) will consist of undergraduate graphic design students. Each team will design based on the method assigned to that specific team.

Evaluation and Comparison
Each book will demonstrate the relationship between method and outcome. Differences between iterations will arise through process.

Team one iteration of content on established format.
Team two iteration of content on established format.
Team three iteration of content on established format.
Team four iteration of content on established format.
Determining Demographic and Population Scope

Once an application was determined it was important to decide who would be selected as the graphic designers and for whom they would be designing. Since an integral aspect of this thesis project has to do with fostering community, this concept would be taken into consideration throughout the entire process including the selection of designers for the charrette, the intended audience for the design outcome and the content toward which the designers will apply their assigned method.

Undergraduate graphic design students at the Rochester Institute of Technology were readily available as designers for the charrette. To insure quality participation instructors within the School of Design were asked to make recommendations for qualified students. A university setting has the potential for a unique dynamic within the greater context of a city. A university is part of a city, a school is part of a university and a student is a member of a school. In the instance of the Rochester Institute of Technology, a graphic design student is associated with the School of Design, which is one of the schools that comprise RIT, which is located in Rochester, New York. The following diagram, The Individual within Three Realms of Community, visually represents these relationships. These varying levels of community and membership were taken into consideration in an effort to further reinforce the community aspect of this thesis application. Individuals (graphic design students) would be designing for a local community (RIT students) which would encourage them to engage in a greater community (Rochester, NY). It is the intention of the methods to facilitate community between the designers during the process and as they work. Each method would yield both a poster and a sense of community as two end products.

The Individual within Three Realms of Community

![Diagram](image)

It is common knowledge throughout the Division of Student Affairs at RIT that there is a tendency for students not to seek out and explore the greater Rochester area. In some cases students may even be reluctant to interact with other peers on campus. With this in mind, a hypothetical group initiative Healthy Bodies, Healthy Communities was developed to act as the client for the charrette. Refer to Appendix C: Healthy Bodies, Healthy Communities Hypothetical Initiative (page 120) for the mission statement given to each design team.
Thesis Application: Content for Charrette
Once the collaborative book was determined as the thesis application and readily available undergraduate graphic design students at the Rochester Institute of Technology were identified, it was important to incorporate content that lends itself to the thesis study on multiple levels. To better understand undergraduate college students who are both the intended audience and the graphic designers creating the posters, mindmapping was done by the author of this thesis.
A mindmap is a brainstorming tool which starts with a central node or concept as a focal point allowing for a free-flow of associated thoughts. Mindmaps are based on associations (where no entry is wrong), the first level is an association with the central concept, associations are then made with the second level, and the mindmap expands outward from there.

Once a mindmap is complete it is important to read and reflect on what has been written. Color coding may be useful in tracking trends and connections.

Mindmap: College Undergraduate Students

Stimulations and outside distractions
- Emotional strains on a college student
- Ways in which information is disseminated
- Modes of instant gratification

On the following page, concepts from this mindmap, stimulation, emotion, information dissemination and instant gratification are discussed in relation to content selection for the upcoming charrette phase of this project.
Addressing Stimulation, Emotion, Information Dissemination and Instant Gratification

Mindmap: College Undergraduate Students (shown on page 65) tracks a variety of factors that are an everyday part of the life of a college student. The factors tracked in this mindmap are emotion, stimulation, information dissemination and instant gratification. Determining and understanding these factors aided in the finalization of content for the collaborative reference piece project.

Stimulating the interest of a passerby is an important consideration to keep in mind when designing a poster to be displayed in a public arena. It was hypothesized that using graphic designers of the same demographic as the intended audience (all RIT students) will help to immediately connect these designers to a certain visual culture, and an understanding of the audience will already exist prior to the charrette, eliminating the need for those layers of contextual research.

The human quality as it relates to graphic design and community building is an important aspect of this thesis project. While a highly charged and emotional lifestyle is not always positive, it is important to this thesis project that human emotions come through in an obvious way in the poster series. It was hoped that the energy generated from design team dynamics and methods employed be apparent in the resulting application to mirror the energetic nature of collaboration and the emotional quality of a student's life.

Acknowledging the constant information overload that the typical college student experiences was a factor in determining the size of the posters within this thesis application. With 12x18" as a typical size for posters distributed throughout RIT, a larger size (18x24") was selected as the artboard on which the designers would create.

A healthy lifestyle is often associated with an increase in cost, effort and time in proportion to an individual's current choices. The desire of the college student to satisfy their needs of instant gratification must be taken into consideration when asking them to adhere to a more healthy lifestyle. Rather than speaking broadly and abstractly to a healthy lifestyle, the content for the posters focused specifically on healthier food choices, and the benefits of buying local food, particularly at the Abundance Cooperative Food Market. The simplicity of this message (Go to the Abundance Cooperative Food Market and buy local, organic food) provides a reasonable scope for designer and viewer alike, neither will be overwhelmed with information to either design for or process as a viewer.

For the duration of this document the charrette portion of the thesis application will be referred to as the Abundance Co-Op Poster Design Charrette.
Thesis Application: Collaborative Reference Piece Design

It was important to develop a design solution for the final collaborative reference piece that would showcase all aspects of this thesis application, including the methods as well as the results of the Abundance Co-Op Poster Design Charrette. Each section of the physical format of the application describes one of six collaborative methods and displays the poster outcome as designed by the undergraduate graphic design students at the Rochester Institute of Technology. The final artifact will act as a reference tool for other graphic designers who may want to infuse their process with one or more of the described methods.

In order to accommodate all of the goals for this thesis application, the physical structure of a tri-fold pocket folder with removable inserts was determined as most suitable. The housing, the tri-fold pocket folder, would allow for the complete storage and easy removal of each of the six inserts. These qualities would allow a viewer to spread out all of the methods on a table and compare and contrast instantly rather than having to flip back-and-forth between sections as would happen in a classically bound book. Each insert houses both the description of a method for collaboration as well as the poster generated at the Abundance Poster Design Charrette using the method described. A single fold in the insert allows for the separation of method description and poster design while also providing the viewer an exciting opportunity for discovery when the description of the method is unfolded to reveal the poster.

Tri-Fold Pocket Folder

With the final selection of the physical format of the application, for the duration of this document the portion of the final thesis application designed by the author will be referred to as a tri-fold pocket folder reference piece.
Full Thesis Committee Feedback

With the physical format selected, a full thesis committee meeting was held to discuss the initial stages of design for the tri-fold pocket reference piece, *Methods for Collaborating in Graphic Design*, the artifact designed by the author that would house the description of the methods as well as the results of the *Abundance Co-Op Poster Design Charrette*. Verbal feedback covered both the proposed tri-fold pocket folder designs as well as the logistics of the charrette. During the meeting, the approaches to the design solution were discussed and evaluated in terms of their overall strengths as well as their limitations and various weaknesses.

The development of the final application, *Methods for Collaborating in Graphic Design*, followed a separate, yet parallel time schedule to the development and execution of the *Abundance Co-Op Poster Design Charrette*. Placeholder text and imagery were used in the design of the book when necessary until the charrette was completed.

Feedback for the designer came in the form of suggestions and concerns from the committee members and were key in providing guidance and focus for the implementation of this thesis project and resulting design solution. This feedback has been outlined along with images of initial concepts on pages 69, 70 and 71.
Proposal A: Tri-Fold Pocket Folder was identified at the full thesis committee meeting as a decent solution that had potential with further exploration. The designer was encouraged to incorporate some of the positive aspects of Proposals B and C (noted on pages 70 and 71), such as the image handling and color bands usage in Proposal B and the larger imagery in Proposal C, into the future iterations of this proposal.
This proposal was criticized as looking too corporate for the selected content. The vibrant color choices in Proposal A were noted as being more successful and true to the energetic nature of the content. These colors also subtly referenced the energy behind any collaborative human effort. Incorporation of certain aspects of Proposal B, such as the icons of participants along the top edge of the center pocket, was suggested to be incorporated into future iterations of Proposal A.
While trying to communicate overarching project concepts such as collaboration, variables and parameters, the expressive and experimental typographic elements found in Proposal C were cited as being dense and overly complicated. Future exploration of this design solution as a whole was not encouraged. However, exploration of the photographic treatment at the bottom of the center and righthand panels was encouraged to be incorporated into the design of Proposal A.
The intermediate evaluation for the Abundance Co-Op Poster Design Charrette came in the form of an open dialogue with the full thesis committee. With limitations on time and availability of participants it was impractical to administrate the charrette, evaluate all of the results, modify the parameters of the charrette and then re-administer it. With this realization it was important that the specifics of the Abundance Co-Op Poster Design Charrette be thoroughly discussed, selected and outlined with great care. It was through a dialogue with the thesis committee that the following decisions were made: first outlining the specifics of the poster created as a result of the charrette; and second, the logistics of Abundance Co-Op Poster Design Charrette.

**Poster**
A poster was determined as the most practical end product of the charrette. Considering limited participant time a poster provides a challenging design problem without being overly complex. Designers would not have to make decisions dealing with multiple sides, folding or binding.

**Poster Size**
The 18x24" dimensions were established as the poster size for reasons described on page 66. This larger size allows for a greater surface area in which multiple designers may work both digitally and manually. This size also addresses the need to have the poster stand apart from the visual culture already present at RIT.

**Poster Orientation**
After a brief visual survey of the various printed elements posted along the Quarter Mile at RIT, on bulletin boards at the Student Alumni Union and along hallways at Residence Halls it was noted that most posters were vertically oriented. Landscape (horizontal) orientation was established to further the new poster’s ability to stand out at RIT, as well as quietly reinforce the content. The landscape orientation relates conceptually to food production and the landscape associated with farming.
Poster Content

In an effort to provide as real an experience as possible for the student designers during the Abundance Co-Op Poster Design Charrette three tiers of information were provided from which the designers had to generate a poster. A hypothetical client was established, the full text for this initiative may be found in Appendix C: Healthy Bodies, Healthy Communities Hypothetical Initiative (page 120. This information was provided as a background, aspects could be selected by the designers to actually include in their poster, but this was not required content.

Second, the Abundance Cooperative Market, Rochester, NY was determined as an excellent example of a community hub that allows local farms to connect with the greater Rochester area. The required content (which may be found in Appendix D: Required Poster Text, Abundance Cooperative Market, page 121) includes hours of operation, store location, store mission and brief statements on the benefits of buying local, organic food. It was explained to the designers that the poster was to inform RIT students as to the benefits of buying local and organic food, as well as where they may purchase such food. Furthermore, it was explained that the posters needed to inspire RIT students to leave RIT’s campus and venture into the greater Rochester community.

Lastly, photographs were taken by the author during a visual survey and visit to the Abundance Cooperative Market. Four images from this survey were selected (these images may be viewed in Appendix E: Required Poster Images, page 122) and included as required elements of the final design solution. Images were selected to provide various textures, visually demonstrate abundance through the produce found within the market as well as provide an incongruent aspect (three of the images are predominantly green, while one is predominantly orange). It was explained to the student designers that the images may be adjusted, cropped and/or manipulated as they saw fit.
Intermediate Evaluation Continued

After determining the parameters of the poster that was to be generated at the Abundance Co-Op Poster Design Charrette through careful evaluation and thesis committee feedback, it was equally important to establish the parameters of the charrette itself. The following parameters were established to focus the efforts of the participants, streamline the process and allow for as comparable an end result as possible across the six methods.

The following parameters are constant across all six methods used in the Abundance Co-Op Poster Design Charrette. These established constants provide a way in which the variables brought to the forefront may be compared and further evaluated. Each of the six specific methods also have their own set of parameters to operate within unique to that specific method. Those six methods and their parameters will be discussed within the implementation section of this thesis document, beginning on page 75.

Charrette Approach
The goal of a charrette or interactive brainstorming process is to provide a stepping stone for future progress through intense ideation that brings together a variety of individuals to solve a problem. The intention of a charrette is to share ideas about a problem and ways in which to problem solve and is focused on process, brainstorming and ideation rather than the fine-tuning and practicality of an end result. This concept alleviates the stress and need for the designers to generate a polished end result (poster) in such a short span of time, allowing their effort and energy to be spent on exploring their assigned method rather than worrying about what the method will yield.

Charrette Participants
For comparability reasons it was determined that all participants should come from the same demographic. Graphic design students seeking to expand their portfolio and design experience were decided upon as ideal candidates. After discussing access to undergraduate students at the State University of New York at Fredonia (Fredonia, NY), St. John's University (Queens, NY), St. John Fisher College (Rochester, NY), the University of Northern Iowa (Cedar Falls, IA) and the Rochester Institute of Technology (Rochester, NY), the immediate access to a quality undergraduate program at RIT seemed sufficient. Instructors of junior and senior-level graphic design students were asked to make recommendations of their top students. Juniors and seniors were selected to ensure appropriate knowledge of, and experience with, graphic design fundamentals.

Charrette Time Limit
In an effort to keep the experience within the realm of a charrette as well as not overwhelm volunteer participants with a large time commitment, four hours was determined as an appropriate length of time to assign and explain the methods, distribute content and design a poster.
Implementation

The guidance provided by the Intermediate Evaluation allowed for a smooth transition into the implementation of this thesis. The final design solution, Methods for Collaborating in Graphic Design, is a six section tri-fold pocket folder reference piece for a graphic designer wishing to incorporate new methods for collaboration into their problem solving process.

There are two implementation involvements for this thesis. The first encompasses the six methods developed for collaborative graphic design, and posters resulting from these methods as used during the Abundance Co-Op Poster Design Charrette. The second portion of the implementation is the tri-fold pocket folder reference piece, Methods for Collaborating in Graphic Design designed by the author.

The following are the six methods developed through the process of this thesis, employed during the Abundance Co-Op Poster Design Charrette, and used as the basis for the final application, Methods for Collaborating in Graphic Design.

Six Methods

Blinded
The blinded approach to collaborative graphic design problem solving involves designers who do not know with whom they are working nor what fellow participants have already contributed.

Confined
The confined approach to collaborative graphic design problem solving involves designers who are restricted to a specific physical area and designated medium in which to work.

Layered
The layered approach to collaborative graphic design problem solving involves designers who must sequentially take turns contributing, working in a layered digital environment while making design decisions in response to fellow participants' contributions.

Personalized
The personalized approach to collaborative graphic design problem solving involves designers who, once they arrived at the charrette, were only allowed to use what was on their person for image generation and design elements.

Unprompted Group
This control group was established for a basis of comparison. The group participants were simply asked to solve the problem with each participant contributing equally to the effort. This was done in an effort to see how a team of graphic designers may develop their own method(s) for collaboration when one is not assigned to them.

Unprompted Person
As another basis for comparison, an individual designer was assigned the task of solving the problem on their own with no particular structure imposed on their graphic design approach.
**Implementation Continued**

**Blinded**

In the blinded approach the designers involved in the method do not know with whom they are working and only interact directly with the facilitator (in this instance the thesis author). The blinded approach to collaborative graphic design problem solving uses three designers; however, the art board may be divided to accommodate more designers if necessary. The art board is divided into sections based on the number of available designers; thus, three sections were established in this instance. The required content is also divided into the same number of sections. All designers are aware of the comprehensive content, as well as the selection from that content that they are to include in their section.

For the Abundance Poster Design Charrette, the content was divided into three sections for the three designers: a header (the title, Healthy Bodies, Healthy Communities), content specific to the Abundance Cooperative Market (location, contact information and hours of operation), and the peripheral content (the listings of the benefits of buying local, organic produce).

Each designer was provided with an Adobe Illustrator file that is partially blocked or hidden; the only visible part of the file is the section on which they are working. In addition, each designer is given two digital folders. The first folder has all of the content the group will be including in the poster; this allows the designer to be aware of the full concept and scope of the poster. The second folder contains the selection from the content that the designer is to include in their section. Each designer is instructed to have their design elements overlap into the section of the designer that is to follow them. This provides each designer (except the first) connecting elements and an opportunity to build upon what has come before them.

An equal amount of time is allotted to each designer. In this instance, each designer has 1.5 hours in which their task is explained to them and they must execute the design of their section. This allows for the entire time commitment of the group to fall within the time constraint of the charrette. Once a designer has completed their section, the file is passed back to the facilitator and prepared (with appropriate sections blocked out) for the next designer. Once all sections are completed, the end result (in this case, a poster) is revealed to all the designers involved in its creation.
Healthy Bodies.
Healthy Communities.

Buy local.
Eat local.
Live local.

You’ll be glad you did.

This poster was created by Kate Starr, Scott Morales and Phil Boudoin using the Blinded Method from April 27th through May 13th, 2007.
Confined

The confined approach to collaborative graphic design problem solving uses four designers although, based on facilities and available designers, the method may accommodate more designers if desired. However, due to the manual nature of this method, an overabundance of designers may cause crowding and frustration.

The designers are confined to a specific space; for their design, they are only allowed to use what is already in that space and may not leave until the task is completed. A computer is not used in this method. The designers are provided with a physical art board and instructed to create at 100% of the actual size. The designers are provided with all content in printed form which they may manipulate as they see fit either manually or with a supplied photocopier.

For the Abundance Poster Design Charrette, the designers were given printed versions of the required poster content (images at varying sizes and text in both a serif and a sans serif font), and a white board measuring 18” x 24”, on which they were to create their poster solution. Manual manipulation supplies included a photocopier, double-sided tape, black markers, cutting instruments and cutting mattes. The entire physical room space in which the designers were confined was roughly 6’ x 6’.

No specific contribution sequence was established for this method.
Confined Method: Poster Result

This poster was created by Simone Kelly, John Chiappone, Kristen Bell and Michelle Brook using the Confined Method on April 21st, 2007.
Layered
The layered approach to collaborative graphic design problem solving involves four designers, although the method may accommodate as many designers as necessary. However, a larger number of designers will result in each participant having a fewer number of turns to contribute. The designers are provided with an Adobe Illustrator file that has all of the content the group is required to include in their design solution placed indiscriminately on the artboard (a screen-shot of this file is shown below). Furthermore, the content is distributed across a number of separate layers, with each layer constituting a turn.

Sequence of contributions is imperative to this method. One-by-one, a designer approaches the computer, selects a layer in which they would like to work, moves that layer to the top of the document and modifies the layer as they see fit. During a turn, the designer may only work in the layer they selected. Once satisfied, the file is turned over to the next designer, who repeats the process. This sequence continues until all are satisfied with the end result, or the allotted time runs out.

Once the first file has been opened, the sequence of turns must begin. Designers are not allowed to sketch or plan their design solution in advance. This encourages the contributions to be spontaneous with their responses to one another’s decisions, and allows the design to evolve from process rather than prior planning.
Layered Method: Poster Result

This poster was created by Tony Zanni, Mariel Keppler, Dezirae Rague and Jessica Skorich using the Layered Method on April 22nd, 2007.
The personalized approach to collaborative graphic design problem solving involves three designers, although based on facilities the method may accommodate more designers if necessary. This instance uses one computer and one scanner; if the method is expanded to incorporate more designers, additional computers and image capturing devices may be needed so that all are able to contribute without experiencing any downtime.

The group of designers is provided with a computer and an image capturing device; in this instance, a scanner is used. Designers are given all of the required content and are instructed to enhance their design solution using only those items in their possession when they arrived at the charrette. This may include items in a backpack, purse or pockets, clothing, jewelry, etc. Designers are not informed that they will be contributing in this way prior to the charrette. This prevents participants from screening what they have in their possession prior to arriving at the charrette.

For the Abundance Co-Op Poster Design Charrette, the designers were instructed that they were limited to using the personal items in their possession to communicate to fellow college students the need to undertake a more healthy, well-rounded lifestyle focusing on balance rather than instant gratification. Their challenge was to somehow use their own possessions to ask their peers not to get caught-up in the desire to acquire items they don’t need.

No specific contribution sequence was established for this method.
Personalized Method: Poster Result

This poster was created by Bryan Kenny, Jade Whaley, and Shirley Sawyer using the Personalized Method on April 22nd, 2007.
Unprompted Group
An unprompted group of three graphic designers was established as a control group with the intention of acting as a basis of comparison between prompted and unprompted team dynamics. This was done in an effort to see how graphic designers may develop their own method for collaboration when one is not assigned to them.

The group of designers was provided the same content, instruction, task and timeframe as the other groups. As a tool they were provided with a single computer. The group was simply charged with the task of solving the problem, with each participant contributing equally to the effort. No constraints or parameters were established as to how this was to be done; it was open to the participants’ interpretations.
Implementation Continued

Unprompted Group: Poster Result

This poster was created by Laura Walczak, Lauren Dellaquila, and Stephanie Vastakis, without an assigned method to use as part their design process on Sunday, April 21st, 2007.
Unprompted Person
An unprompted individual designer, without a method assigned to them or team with which to work was given the same content and design problem as the other groups. The individual was asked to solve the graphic design problem as another basis for comparison. An individual’s process is as equally a viable problem solving approach as group work. With the intention of this thesis to provide comparisons across methods it was determined important by the author and thesis committee to also have an individual participate in this charrette. This inclusion allowed for comparisons not only to be made from group to group but also from individual to group, to see how an individual’s process may influence an end result.

The designer was provided the same content, instruction, task and timeframe, and was charged with creating the poster on her own. No constraints or parameters were established as to how the poster was to be designed. The individual designer was encouraged to establish their own approach to a graphic design problem.
Tired of campus food?

- Pizza and garbage plates are what college is all about.
- I don't know where to go to get healthy food, or what to get.

Try something healthy. Eat local.

Buy local. Live local. You'll be glad you did.

Local organic agriculture is...

- a good way to prevent chemicals from getting into the air, earth and water that sustain us.
- is a lifeline for small farms because it offers an alternative market where sellers can offer fair prices for crops.

Local organic food is...

- is grown and handled according to strict procedures: no persistent toxic chemicals.
- tastes great!

Healthy Bodies. Healthy Communities.

This poster was created by Valerie Ouellet, without an assigned method or group with which to work on April 23rd, 2007.
Final Design Solution: Tri-Fold Pocket Folder Reference Piece

Upon the conclusion of the Abundance Co-op Poster Design Charrette, the resulting posters and evaluations were examined and synthesized, so that the final design solution for the tri-fold pocket reference piece could be implemented. Ideation and thesis committee guidance and feedback (beginning on page 68) aided in an effective final application for this thesis project.

The final application for this thesis, *Methods for Collaborating in Graphic Design*, is a tri-fold pocket reference piece. It is, in effect, a designer’s comparative guide to approaching a graphic design problem through six collaborative methods influenced by the observations and study of other creative endeavors. The tri-fold pocket folder accommodates six folded, removable inserts, each containing a method for collaboration, an example of an end result generated using that method (from the Abundance Co-op Poster Design Charrette), and a section for observations from both the participants who created the poster using the method and the facilitator (the author of this thesis) of the charrette.

Shown below is the cover and first reader spread of the final application. On the following page (page 89) is the fully expanded folder, first displayed empty and then housing the method inserts. The following pages (beginning on page 91) display the method inserts.
A three-panel inside spread revealed when the tri-fold pocket folder is fully opened. This folder is shown without the inserts.
When the piece is fully folded and turned over this is the back cover spread.
Implementation Continued

Tri-Fold Pocket Folder Reference Piece (Confined Method Insert)

The first panel of the insert seen when removed from the tri-fold pocket folder.

When the insert is unfolded, the poster generated by the graphic design students at the Abundance Co-Op Poster Design Charrette is revealed along with a brief reminder of the method employed to generate the poster.

Observations

Participants

The designers noted the fun nature of this method as being a very positive experience. Given the time of year it was created, the designers expressed the desire to pursue a more permanent way of generating this content. They kept working not only to foster enthusiasm and refine their ideas, but also because they were quite enjoying themselves.

The team did not experience any fear of lack of ideas and noted the shared nature of the method as an effective way to foster the flow of their expressive nature of the design.

Facilitator

The laughter resonating throughout the facility as the team worked was a clear indicator of the success for this method as a continuous building activity. Clearly, what was most generated by the team was the shared experience of the small space. The laughter was an indicator of the meaningful context the team was in a shared experience of interaction and the resulting design.

The final spread when the insert is re-folded and turned over. Poster designers are named. Observations about the process are also included from the perspective of both the facilitator and participants.

Confined

Designers are confined to a specific space, only allowed to use what is already in the space and not allowed to change a computer or any equipment is not used in this method. The designers are provided with a whiteboard and a kit of materials, including paper, pens, and a marker. They are given a small area with all materials in front of them to manipulate as they see fit. Manual materials, marking, copying, etc., are required.

Instructions

Photocopy paper, white markers, cutting board, scissors and glue, a whiteboard eraser, pens, printed versions of the content in small space, and may leave unlined for the duration of the session. Notebooks are provided with guidelines for the method to be used. A computer is not used in this method. The designers are provided with a small marker and a kit of materials, including paper, pens, and a marker. They are given a small area with all materials in front of them to manipulate as they see fit. Manual materials, marking, copying, etc., are required.

Communication Skills

Verbal and physical communication is used. Participants are limited to a small space and must explore each other's personal space, working within the shared space while also collaborating and problem-solving.

Poster Designers

Samantha Kelly
John Chisipone
Kristen Ball
Michelle Sears
Blinded

Designers involved in the method do not know who they are working with nor which other designers they are working with. The self-blinding is divided into two parts based on the number of designers working on the project. The proposed method is to also divide into an equivalent number of sessions. All designers pair up with one of the project members, as well as the seats at the table that contain Desks are to be divided into their sections.

References

Each participant is provided with a folder containing information about the project. The folder contains a small file that contains the poster generated by the graphic design students at the Abundance Co-Op Poster Design Charrette is revealed along with a brief reminder of the method employed to generate the poster.

Observations

Participating artists.

The final spread when the insert is re-folded and turned over. Poster designers are named. Observations about the process are also included from the perspective of both the facilitator and participants.
Layered

Tri-Fold Pocket Folder Reference Piece (Layered Method Insert)

The first panel of the insert seen when removed from the tri-fold pocket folder.

When the insert is unfolded, the poster generated by the graphic design students at the Abundance Co-Op Poster Design Charrette is revealed along with a brief reminder of the method employed to generate the poster.

Observations

Participants

The facilitator is the only one who can make decisions for future iterations. A suggestion was made to empower the facilitator to make decisions as the process is so fast-paced. In order to facilitate a true response and awareness, designers need to see each other and understand their own areas.

Workshop

Participants worked together to produce visual mock-ups of the poster. Facilitators created a visual brainstorming session to help participants contribute. Designs were developed and shared throughout the process.

Process

Participants were divided into four teams. Each team was given a poster design and were asked to create a visual representation of the design. The facilitator then led a discussion on how the process worked. A final spread was created to demonstrate the process.

The final spread when the insert is re-folded and turned over. Poster designers are named. Observations about the process are also included from the perspective of both the facilitator and participants.
The first panel of the insert seen when removed from the tri-fold pocket folder.

When the insert is unfolded, the poster generated by the graphic design students at the Abundance Co-Op Poster Design Charrette is revealed along with a brief reminder of the method employed to generate the poster.

**Observations**

**Participants**
The design students

**Facilitator**
The design students

The final spread when the insert is re-folded and turned over. Poster designers are named. Observations about the process are also included from the perspective of both the facilitator and participants.
The first panel of the insert seen when removed from the tri-fold pocket folder.

When the insert is unfolded, the poster generated by the graphic design students at the Abundance Co-Op Poster Design Charrette is revealed along with a brief reminder of the method employed to generate the poster.

Observations

Participants
These designers were to make a design to solve a design problem, including a frog. They were instructed to keep their designs simple, to make them as different as possible, and to keep them simple. These were then reviewed with the designers and were asked to comment on what they thought about the process.

Facilitator
The role of the facilitator was to encourage the designers to think about the process and to think about how they thought the process should be done. They were asked to think about the process and to think about what they thought about the process.

The final spread when the insert is re-folded and turned over. Poster designers are named. Observations about the process are also included from the perspective of both the facilitator and participants.
The first panel of the insert seen when removed from the tri-fold pocket folder.

When the insert is unfolded, the poster generated by the graphic design students at the Abundance Co-Op Poster Design Charrette is revealed along with a brief reminder of the method employed to generate the poster.

**Observations**

**Participant**

The designer took great pride in being asked to represent the typical process of a graphic design student. While not able to develop a sense of community while designing alone, the designer felt very much a part of the design process and was aware of the instructors' experience and instruction with the goal of becoming a better designer.

**Facilitator**

The role of the unstructured individual at this experience was explained to the designer. They were told that they would be acting as a team for comparison against teams using a variety of methods to solve the same graphic design problem. They were instructed to approach the problems as if they were an undergraduate graphic design student, typically working on a group project.

**Unprompted Person**

An individual was provided the same context, instruction, task and time frame, and also had the opportunity to see the posters on their own. The perspective of the Prompted Person was maintained as to how the poster was to be interpreted. The question was left open to the interpretational employment of the graphic design problem.

Unprompted Person

Tired of campus food?

I know that I eat healthy, but I don't have time to cook.

Healthy. Eat local.

Try something healthy.

Eat Local.

Buy local. Eat local. You'll be glad you did.

local organic agriculture is...


Organic gardening is a path to healthy, sustainable food.

organic food is...

Supports and sustains our community's health, economy, and the environment.

Healthy. Eat local.

Abundance Cooperative Market

The unstructured person was asked to be a team of creatives. This was done to see what a graphic designer may produce in a city college's community design studio.
Dissemination

Bevier Gallery Exhibition
The research and synthesis process leading up to the implementation of this thesis project was featured in an exhibit in the Bevier Gallery at the Rochester Institute of Technology, Rochester, New York.

The goal of the thesis exhibit was to provide viewers with a concise and clear overview of the project, through information that could easily be processed in a short amount of time. Underlying aspects of the thesis study were incorporated into the design to enhance the experience for the viewer. The concept of convergence was incorporated into the entrance of the exhibit, the entry started wide and narrowed as a viewer entered the space (see floorplan below). The exhibit was also juxtaposed against the gallery windows which overlooked the campus of the Rochester Institute of Technology. This was conceptually useful because, while reading about community and collaboration, viewers could overlook the RIT community.

A method for collaboration was incorporated into the exhibit. A chalkboard-like panel was installed on one of the walls, posing the question *What is Community?* Throughout the exhibit viewers applied their responses by mark making on the board with chalk. The result provides diverse answers to the question as interpreted by students, faculty and visitors alike (see page 95 for the chalkboard-like panel).

Careful considerations were made when choosing colors for the thesis exhibit. Green and purple were selected because they are both combinations of other colors. Yellow and blue when combined create green, and when blue and red are combined they create purple. The intention of the specific green and purple used was to select highly charged colors, implying the energy needed and generated when people collaborate. The brown is the result of the combination of the green and purple, all three colors were generated through a collaboration of sorts.

Bevier Gallery Exhibition Floorplan
Bevier Gallery Exhibition Context

Exhibition viewers from exhibit entrance.


**Dissemination** Continued

**Bevier Gallery Exhibition Informational Panels**

**Collaborative Book Project**

**Parameters & Constraints**

- The project is a collaborative book project that involves multiple contributors.
- Each team member is responsible for a specific aspect of the book.
- The project is designed to be interactive, allowing for real-time collaboration among team members.

**1 Team = 1 Method**

- Each team uses a unique methodology to develop their portion of the book.
- Team members are encouraged to share their methods and findings with the group.

**Evaluation & Comparison**

- Each book will be evaluated based on the individual methods used and the overall effectiveness of the collaboration.
- Differences between the methods will be highlighted to identify strengths and weaknesses.

**Application**

- The application for this project includes a collaborative book project.
- The book features essays by different authors, each providing a different perspective on the subject.
- The book also includes a series of images and diagrams to illustrate key concepts.

**Synthesis**

- The project is a synthesis of individual contributions, emphasizing the integration of different perspectives.
- The synthesis process involves convergent and divergent thinking to create a cohesive whole.

**Convergent Effort**

- In the following panels, the contributions by specific individuals are synthesized into a cohesive whole.

**Synchronic Evolution**

- This section explores the ways in which the individual essays and images evolve into a cohesive narrative.

**Proportioned Response**

- The response to specific events is proportioned and adapted to fit the overall framework.

Application and Synthesis exhibit panels.
Bevier Gallery Exhibition Context

What is Community?

Collaborative chalkboard with overall question and individual, audience-supplied answers.
Retrospective Evaluation

Retrospective evaluation occurred at the conclusion of each of the three stages of implementation for this thesis project: the Abundance Co-Op Poster Design Charrette, the posters generated at the Abundance Co-Op Poster Design Charrette, and the tri-fold pocket folder reference piece.

In order to evaluate the methods developed through this thesis project, the participants of the Abundance Co-Op Poster Design Charrette were asked to complete an initial evaluation in which they answered the question: What is Collaboration? This was done in an effort to gain insight into their understanding of collaboration and to track (based on their answers to the final survey) how that understanding might have changed during their experience at the charrette. Once the charrette was completed, the participants were asked to fill-out a more detailed survey of their experience (a copy of this survey is located in Appendix G: Design Charrette Participant Survey, page 124).

Once the Abundance Poster Design Charrette was completed and the posters were generated, the intended audience of the posters was surveyed to determine the effectiveness of the design solution. Six different groups (one group for each poster) comprised of five non-graphic design students at the Rochester Institute of Technology were asked to view one of the six posters generated at the Abundance Co-Op Poster Design Charrette. They were then asked to complete a survey of their initial reaction to the poster and their interpretation of what the poster is trying to communicate (a copy of this survey is located in Appendix H: Poster Audience Survey, page 125). In the following section of this document, the participant evaluation of the charrette method is paired with the audience evaluation of the final poster generated (beginning on page 105).

Lastly a practicing, professional graphic designer was sought out, provided with a copy of the tri-fold pocket folder reference piece, and asked to provide feedback on both the design of the piece and the content it houses, page 106 outlines this feedback. A webdesigner was selected to provide feedback based on a trend in webdesign that uses a workflow that is not typically collaborative as defined and explored in this thesis project. More specifically the firm the designer works for does not incorporate collaboration in their usual workflow. This was done to ensure that the evaluator would have a similar perspective and experience with collaboration as the intended audience. Like the intended audience for which the reference piece was designed, this designer has limited direct experience with collaboration but is interested and may wish to integrate collaboration into his design process in the future.
Initial Survey: What is Collaboration?
A preliminary survey was developed and distributed to the eighteen graphic design students who were recommended by their instructors and willing to participate in the Abundance Co-Op Poster Design Charrette. A variety of formats was encouraged by the thesis committee. Open-ended questions allow for participants to put experiences into their own words, rather than trying to fit their answers into a single conforming expression. Scaled, quantitative questions were also included to distinguish concrete, measurable patterns in the responses of the participants.

The question What is Collaboration? was asked prior to participation in the Abundance Charrette to seek out information related to the participants’ upfront understanding of collaboration. The complete list of answers to this question may be found in Appendix F: Abundance Co-Op Poster Design Charrette Participants’ Initial Concepts of Collaboration, page 123.

In evaluating the answers of this diverse group, certain concepts appeared multiple times:

<table>
<thead>
<tr>
<th>People Related</th>
<th>Effort Related</th>
<th>Community Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>Problem</td>
<td>Together</td>
</tr>
<tr>
<td>Individual</td>
<td>Produce</td>
<td>Share</td>
</tr>
<tr>
<td>People</td>
<td>Work</td>
<td>Multiple Sources</td>
</tr>
<tr>
<td>Group</td>
<td>Effort</td>
<td>Common</td>
</tr>
<tr>
<td>Team</td>
<td>Contribute</td>
<td></td>
</tr>
</tbody>
</table>

It was clear that the participants had a basic conceptual understanding of collaboration prior to their participation in the Abundance Poster Design Charrette. The previously highlighted terms found in the definitions of collaboration by the charrette participants are concepts that are found throughout this thesis. However, as discussed in the Defining Community section of this document (page 24) an intellectual definition of a word is a very different understanding than the direct experience of the concept.
Survey: Participant Evaluation of Method

Once their participation in the Abundance Co-Op Poster Design Charrette concluded, the participants were asked to complete a survey outlining their experience and perspective as a method user in the process.

To view the entire survey administered to the participants, refer to Appendix G: Design Charrette Participant Survey, page 124. The survey is split into sections which include:

The individual within the group

Process as it relates to group dynamic

Process as it relates to the design solution

Prior experience

Reflection

The completed surveys of the eighteen participants were processed by the author and are described along with the evaluation of the poster the participants created (by the audience of the poster) beginning on page 105.
Participant Evaluation of the Blinded Method

With the scheduling that was needed to achieve the end result using the blinded method, all participants noted their awareness of the other participants’ reliance on them for the project to be a success. Due to the nature of the sectioned working environment on which the designers created their posters (also known as the artboard, for definition see page 9) the participants easily distinguished their contribution within the whole. The participants were also very comfortable working in this way, and noted that it was similar to their workflow when working alone.

All of the participants chose not to answer the questions in the section regarding group dynamic and instead wrote N/A (not applicable). This in itself evaluates the ability of this method to develop community. The participants indicated, through their lack of answers, that they did not feel that this method developed community. However, the participants did note that they all felt like owners of the final solution and cited this as a highly collaborative method. The participants interpreted the group ownership and collaboration as arising from the artifact generated, rather than the process in which they were involved.

None of the participants had been part of this sort of workflow prior to the charrette, and stated that the resulting poster would not have evolved in this way had they attempted to solve the graphic design problem as an individual. The participants felt that the solution is an effective one, resulting from a process that is both mysterious (they did not know with whom they were working) and exciting. Once each participant submitted their contribution, they expressed their excitement for the unveiling of the final poster.

Audience Evaluation of Poster

The Rochester Institute of Technology students asked to evaluate the poster felt that it would stand out on the walls at RIT, and would cause them to stop and take the time to look at the poster. The students generally liked the poster, thought it was visually interesting, and said that it grabbed their attention. None of the students had been to or heard of the Abundance Cooperative Market, so the poster provided them with new information.

Some of the evaluators were aware of the three sections in this poster, and guessed that three different designers had worked on it.

In their own words, the evaluators conveyed that the poster was encouraging viewers to buy, eat and live local, especially by patronizing the Abundance Cooperative Market. Healthy Bodies, Healthy Communities was noticed as the title, but the evaluators were not entirely sure what that meant.
Participant Evaluation of the Confined Method

All participants described the confined method as being fun and highly energizing. This lively environment fostered a comfortable work setting in which ideas were easily shared. Participants were able to see conceptual elements they contributed (for example: broccoli as trees or carrots as the trail), but all participants were involved in the physical creation of the poster and the execution of individual concepts. None of the participants felt that they could remove their contribution from the poster and claim it as their own. As such, all felt that the group shared ownership of the end result.

As recorded by the participants, this method allowed for an open dialogue throughout the process, in which topics both related and unrelated to the design problem were discussed. As a by-product, this method fostered a sense of community and allowed the designers to get to know one another.

All participants felt that they generated a highly-collaborative, successful graphic design solution that they would not have been able to achieve on their own. This method was further described as feeling very natural, efficient and effective as far as image generation, team building, and idea sharing were concerned.

Audience Evaluation of Poster

The Rochester Institute of Technology students asked to evaluate the poster felt that it would stand out on the walls at RIT, and would cause them to stop and take the time to look at the poster. Outside of the written survey, the students cited this as a very unique and cool poster, thinking it would draw much attention in any environment of which it was a part of. The students were very responsive to the poster, thought it was extremely visually interesting, and said it grabbed their attention. Only one of the students had been to or heard of the Abundance Cooperative Market; the poster provided the rest with new information.

The evaluators did not think that the number of designers involved in the creation of the poster was apparent simply by viewing it. Two of the evaluators guessed four designers were involved based on the number of heads in the bus.

In their own words, the evaluators conveyed that the poster was encouraging viewers to buy, eat, and live local by traveling to the Abundance Cooperative Market. The evaluators perceived this as an advertisement for the store. Healthy Bodies, Healthy Communities was not mentioned by the evaluators in their interpretation of the message.
Participant Evaluation of the Layered Method
The participants enjoyed the concept of the layered method, but were frustrated at times during the process. This method and its free-flowing evolution of the end result went against the participants’ preconceived notions of the graphic design process: an end result is the execution of a fully developed concept. However, the participants cited the method as providing a collaborative work environment where each was able to contribute equally. All were very aware of the others’ reliance on them for the group’s (and poster’s) success.

The participants felt that this method facilitated an open dialogue; furthermore, they felt an open dialogue was required for the poster to be a success. This dialogue included topics both related and unrelated to the project, and participants said they were laughing and having fun throughout the process. When frustrated, the participants were glad to have other designers to work with in order to keep the task fun and the process energized.

Upon completion, the participants were not convinced that they had generated a completely finished, successful design solution; they felt the design of the poster needed further development. With that in mind, the participants still cited the method as an efficient mode of image generation, effective for team building, and generally a great way to share and exchange ideas on a live artboard.

Audience Evaluation of Poster
The Rochester Institute of Technology students asked to evaluate the poster felt that it would stand out on the walls at RIT, and would cause them to stop and take the time to look at the poster. The students generally liked the poster, thought it was visually interesting, and said that it grabbed their attention. None of the students had been to or heard of the Abundance Cooperative market, so the poster provided them with new information.

The evaluators did not think that the number of designers involved in the creation of the poster was apparent simply by viewing it. The attempts at guessing were widely varied, and were noted as simply guesses; the evaluators did not see any clues in the poster on which they based their guesses.

In their own words, the evaluators conveyed that the poster was encouraging viewers to live, buy and eat local. The evaluators noted the information regarding the Abundance Cooperative Market, but thought the text was hard to read due to its size and color. A viewer would have to get very close to the poster to read the information, and even then it may be missed. Healthy Bodies, Healthy Communities was noted as being a central concept of the poster.
Participant Evaluation of the Personalized Method

The small group and time constraint were both cited as contributing to the feeling of being needed and committed to the success of the project by the participants in the personalized method. Participants were able to see the role their contribution (through the application of personal objects) plays in the final design solution.

Conversation arose from the sharing of personal objects to achieve this design solution. The group noted that they often got off topic in their discussion because they got caught up in sharing stories associated with their personal objects. However, the sharing of stories and laughter created a fun and energetic environment, in which ideas about the project were easily and respectfully shared.

Due to the time constraint, the group did not feel they had an entirely finished, successful design solution. They desired further time to develop their ideas but were pleased with what they were able achieve in the time allotted to them. The participants cited the method as being an efficient and unique mode of image generation, and a relatively streamlined process for idea sharing.

Audience Evaluation of Poster

The Rochester Institute of Technology students asked to evaluate the poster felt that it would stand out on the walls at RIT, and would cause them to stop and take the time to look at the poster. Outside of the written survey, the students described their feeling that this poster clearly and effectively spoke to the demographic of students at RIT, and thus would clearly communicate to them. The students generally liked the poster, thought it was visually interesting, and said it caught their attention. Evaluators noted moments of discovery when trying to determine what the images within the letters were representing. None of the students had been to or heard of the Abundance Cooperative Market, so the poster provided them with new information.

The evaluators did not think that the number of designers involved in the creation of the poster was apparent simply by viewing it. The attempts at guessing were widely varied, and were noted as simply guesses; the evaluators did not see any clues in the poster on which they based their guesses.

In their own words, the evaluators conveyed that the poster was encouraging viewers to log off and reconnect with themselves, and the community around them. Furthermore, they cited reasons to live, buy and eat local and noted the Abundance Cooperative Market as a place to possibly accomplish this goal. This poster was seen as a call to RIT students to develop a healthy body and healthy community.
Participant Evaluation of the Unprompted Group Method

The participants in the unprompted group method had a unique challenge: within the same amount of time allotted to the other groups they had to develop their own method for collaboration, as well as generate a poster. The pressure to do so served to unify the group. The time constraint was noted as a factor which forced the participants to work and respond quickly, and to delegate tasks. Once the group members determined their approach, all felt comfortable contributing by modifying an agreed upon image (a frog). Each participant easily recognized their contribution (in the form of a frog) and its role in the finished poster.

There was a strain on group dynamic during the design process, albeit not a result of the method. Two of the participants were good friends prior to and outside of the charrette, and the third had never met the other two. Even with this initial strain, all three designers were able to work closely, have fun, laugh, and discuss topics unrelated to the project. The laughter and open dialogue arose from the experience during the method, and fostered the development of a small, friendly group dynamic.

The participants noted that if they had been working alone they would not have yielded the same end result. All were satisfied with the final poster, citing it as an effective design solution. Again, these participants desired more time to further develop their concept.

Audience Evaluation of Poster

The Rochester Institute of Technology students asked to evaluate the poster felt that it would stand out on the walls at RIT, and would cause them to stop and take the time to look at the poster. They were very intrigued by the frogs. The students generally liked the poster, thought it was visually interesting, and said it caught their attention. None of the students had been to or heard of the Abundance Cooperative Market, so the poster provided them with new information.

The evaluators were aware of the three distinct frogs in this poster, and several of the evaluators guessed that three different designers had worked on the poster.

In their own words, the evaluators conveyed that the poster was encouraging viewers to eat organic food and patronize the Abundance Cooperative Market. Healthy Bodies, Healthy Communities was noted as the overarching concept behind the poster, and that eating organic food would develop a healthy body and/or healthy community.
Participant Evaluation of the Unprompted Person Method
As was hypothesized, the experience of the individual acting alone did not warrant evaluation in regard to community building or group dynamic. The individual simply acted alone and, without others to interact with, did not develop relationships, community or energy from other group members.

However, as part of the charrette, this participant took great pride in being asked to represent the typical process of a graphic design student. While not able to develop a sense of community designing alone, this designer felt very much a part of the charrette and was aware of the importance of their experience and end result as a comparative element within the greater project.

Audience Evaluation of Poster
The Rochester Institute of Technology students asked to evaluate the poster felt that it would stand out on the walls at RIT, and may cause them to stop and take the time to look at the poster. The students generally liked the poster, thought it was visually interesting, and said it grabbed their attention. While the poster received generally positive reviews, it was viewed by evaluators as more of a typical design solution. None of the students had been to or heard of the Abundance Cooperative Market, so the poster provided them with new information.

The evaluators did not think that the number of designers involved in the creation of the poster was apparent simply by viewing it. The attempts at guessing were widely varied, and were noted as simply guesses; the evaluators did not see any clues in the poster on which they based their guesses.

In their own words, the evaluators conveyed that the poster was encouraging viewers to try something new and healthy, by purchasing and eating local food at the Abundance Cooperative Market. While this poster may have seemed a more typical and safe design solution, it was noted as looking the most finished, as well as having the clearest message based on the information the designer received and the subsequent relaying of the message as understood by the viewer of the final poster.
The overwhelmingly positive feedback given in the surveys provided great insight into the experience, acceptance, and potential of the methods developed in this thesis project. Participants frequently cited comfortable settings and ease of contribution provided by the various methods. It was also noted that, when working together, laughter occurred, topics unrelated to the project were discussed, and energy was gained from those working in proximity to one another. All of these imply the incubation of community through the experience surrounding the method. All cited the overall group as the owner of the end result, and that references to the experience were made even after the charrette was completed.

Shortcomings of the charrette were noted, generally related to limitations of time and facilities, and did not deal with specific aspects of the methods explored. The need to refine the solution could easily be addressed with more time. The limitation of time was imposed on this particular charrette as a constant for comparison of the end results, and is not an intrinsic aspect of any of the selected methods. Time is only limited by what the participating designer is willing to commit to any given project.

The feedback from those experiencing the methods firsthand was an asset in the final understanding and evaluation of this thesis. The surveys allowed the author to gain insight into the methods from those experiencing them for the first time. As previously discussed, an intellectual definition of something (in this case, a method) is very different from the understanding achieved through the direct experience. These evaluations provide a framework for improvement should these methods be explored and developed further outside of this thesis.
Evaluation by a Graphic Design Professional

A graphic design professional was sought out and asked to provide feedback on the tri-fold pocket reference piece from the standpoint of a potential user. The evaluator was provided with a copy of the tri-fold pocket reference piece, asked to explore it on their own without prompting, and then engage in a telephone interview to discuss their reaction to the design and content.

The telephone interview was initiated by open-ended questions such as:

Was the content clearly presented?

Do you consider the piece resourceful?

Is the content applicable to your practice?

Any additional and/or general feedback?

Steven Muller, brand manager and designer for T8DESIGN in Cedar Falls, Iowa, was asked to evaluate this piece. T8DESIGN is a FLASH-based webdesign firm, whose work is typically not collaborative as defined by this thesis. While the studio facilitates an environment of feedback and idea exchange, a typical workflow consists of a single graphic designer developing a solution from ideation to completion based on client feedback. The design of the website is then passed on to a single FLASH developer, who translates the provided design into a fully functional website. A designer whose work is not typically collaborative was an ideal candidate to evaluate the piece from the perspective of someone who may want to incorporate collaboration into future projects.

The feedback was very positive; Muller appreciated the size of the piece, and noted that it could easily fit on a desk or shelf as a valuable information-filled resource. He also cited the removability of the inserts for each method as a strength of the work, and enjoyed laying the posters next to one another for comparison.

While he appreciates the spirit in which the methods were developed, Muller is not sure they could be fully integrated into the design of a website (from start to finish) due to the technical nature of website production, and the need for varying degrees of expertise in software. However, he thought the methods could easily and effectively be employed to initiate the design process for the front-end design of a website, while utilizing a more traditional process for back-end development.

While appreciating the manual quality of this piece and its emphasis on the people and posters generated, Muller wondered if there was a way to make the cover a little more exciting, like a preview of things to come. He felt that the current cover may be a little timid for the power of this piece.

In closing, he reiterated how much he appreciated the piece and the potential it has to bring designers together, and out of potential isolation or solitary problem solving.
Conclusion

The development of this thesis, *Creative Problem Solving Through Methods of Collaboration*, involved research, synthesis, ideation, implementation, dissemination and evaluation. The collective incorporation of these processes into this thesis project aided in the successful development of an effective and useful application: a tri-fold pocket folder reference piece for graphic designers wishing to infuse their problem solving approach with collaborative methods influenced by the observation and study of other creative, collaborative endeavors. Not only are the methods developed through this thesis described in detail, but through the coordination and execution of the *Abundance Poster Design Charrette* and its ensuing poster solutions, interested parties are provided with an example of the methods in action, as well as the results of six comparable design solutions.

One of the major goals of this project has been to provide a framework for the exploration of collaborative methods that have yet to be tapped in the field of graphic design; this is clearly illustrated in the Synthesis section, as well as the Implementation section of this thesis document. By embracing the fresh perspectives precipitated by this thesis, one may infuse the graphic design problem solving process with insight, energy, and creative synergy. Further, it presents ways in which designers may evaluate these collaborative methods in the context of their application to individual design problems.

The investigation leading to the project synthesized collaborative problem solving approaches from a diverse range of creative fields, which proved to have far reaching potential for their application to graphic design problems. Specifically, it was discovered during the *Abundance Co-Op Poster Design Charrette* that teamwork serves to flood the problem solving process with fresh ideas and can greatly enhance the end result of a design challenge, as evidenced by the posters produced at the charrette. When implemented correctly, the methods used at the charrette can facilitate an energetic, motivating, and fun working environment in which participants are eager to join in an open and respectful exchange of ideas, thus engendering a small community of creative thinkers.

The author has fulfilled not only his initial goals as outlined by the project definition and key questions for developing new methods of collaboration, but has also cultivated an application that serves as a model for the implementation of his research findings. This was achieved by developing a reference piece for graphic designers describing new methods for collaboration and displaying the results of those methods as used by designers during the *Abundance Co-Op Poster Design Charrette*. Further, he has presented a new generation of designers with the opportunity to take part in the creation of a process that may very well be used in their future careers. The author feels as though this thesis experience has been an invaluable part of his graduate study, and is hopeful that it may help other designers to invigorate their problem solving processes, thus benefiting the larger graphic design community.
Bibliography

Books

Precedent Sources


Games


Design


Community Theory


Bibliography Continued

Media


Periodicals

Sherin, Aaris. “Content is Served.” *Step Inside Design*. May/June, 2006:


Websites


Online Communities


Appendix A: Urban Design Charrette

On Saturday, 11 November 2006 from 8:30 am to 4 pm at the Aquinas High School in the Maplewood neighborhood of Rochester, New York, a community-based design charrette sponsored by the Rochester Regional Community Design Center and the Maplewood Neighborhood Association took place in an effort to address the community concerns over the decline of Dewey Avenue, a major thoroughfare through downtown Maplewood. Concerns addressed by this charrette included: pedestrian safety and comfort, condition of public realm and streetscape, retail growth and development, residential development, environmental contamination, sprawl development, traffic speed and flow, parking and Kodak demolitions.

After registration, snacks, introductions, outlined goals and a brief overview of the past and hopes for the future of the Maplewood neighborhood, volunteers were divided into teams, each with facilitators from the sponsoring body. The entire group was made up primarily of Maplewood community members, but interested members of the greater Rochester area were also welcome to participate. Each of the twelve groups formed were given specific areas to explore, from specific intersections along Dewey Avenue to themes spanning the entire street. All groups were charged with the task of creating physical plans outlining guidelines and strategies for future development of, along and around Dewey Avenue.

One such group was labelled B3: With a focus on the Ridge Road intersection at Dewey Avenue, as well as the potential development site bounded by Eastman Avenue at the Kodak Park. The primary goals for this group, as outlined by the facilitators (in the instance of this group there was an Eastman Kodak representative and architect from the Maplewood neighborhood both acting as facilitators), were to strengthen connections and improve pedestrian crossing at this intersection, enhance commercial buildings and streetscapes, and explore ideas for development of what is currently the Kodak parking lot (and future demolition site).
Each group was provided a list of goals. The goals outlined for Group B3 have been directly transcribed from the literature provided to the volunteers and have not been modified or adapted for this thesis document by the author.

**Goals for Group B3**

Development of Kodak open space due to demolition
Visual enhancement of buildings and development strategies for facades
Lighting enhancement
Signage
Landscape
Identity for "Arrival Announcement"
Balance of pedestrian, traffic relationship
Adjacent neighborhood interconnectivity
Gateway structure
Development and incorporation of neighborhood identity
Parking strategies
Pedestrian environment
Building and street appearance
Traffic flow
Bicycle access

Considerations were also outlined as a context for which to explore ways to achieve these goals. The considerations outlined for Group B3 were:

Residential district
Mixed-use buildings
Existing signage and awnings
Sidewalk furniture
Existing landscape and restrictions
Pedestrian crossing
Lighting style
Safety
Expressway 104
Adjacent neighborhoods
Traffic
Parking
Existing successful businesses
A list of rules was given to each focus group in order to encourage the creative process and alleviate any stress about each person's individual role. Those rules were:

Work as a team.
Be respectful of each other’s ideas.
Begin with a large number of ideas.
Concentrate on the physical: What should it look like?
Don’t get bogged down with details, no matter how practical.
Use your imagination.
Stretch the boundaries.
Don’t just say it; write it down or draw it on paper.
Look at the negative, but stay positive.
Use your time well.
Plan together!

Teams first visited their assigned sites so as to physically explore the space, take pictures and discuss the dimensional aspects of their problem in order to gain a more clear understanding of the task at hand. They then worked together, writing and drawing overlays on existing maps of Dewey Avenue in an effort to develop various ways to address the problem. At the conclusion of the session, each team chose a representative (not the facilitator) to present their findings and ideas to the larger group. The Rochester Regional Community Design Center then gathered all of the artifacts (drawings, notes, sketches, etc.) to compile a file and a springboard from which to address the development of Dewey Avenue in the future.
While artifacts that inspire and reinforce community are not a focus of this thesis study, the following exhibit catalog demonstrates Lava Graphic Design’s commitment to the need for informal communication and networking. Interaction based on food and casual communication is taken into consideration when designing this exhibit catalogue of Lava’s own work. With the simple addition of a strap to their exhibit catalogue, those who purchase the Lava catalog are not gaining another item to juggle; rather it simply hangs over their shoulder. This leaves hands free to wave, eat, drink and shake hands.
Appendix C: Healthy Bodies, Healthy Communities
Hypothetical Initiative

The following text was provided to the student graphic design participants of the Abundance Co-Op Poster Design Charrette as the hypothetical client and background sponsor for the poster. No text from this document was required to appear in the poster generated from the charrette, however, the designers could use content from this statement if they so desired.

“There’s nothing to do in Rochester.”
“Pizza and garbage plates are what college is all about.”
“We’re RIT students – we never leave our computers.”
“I know I should eat healthier, but I don’t have time for that.”

There’s no doubt about it: life at RIT isn’t always conducive to healthy living. Between the weather, the food, and the social scene, many students settle for fast food fixes and spend the majority of their time as couch potatoes in a dorm room. While the evolution from isolated, lax muscled screen beans to health guru/marathon runners may be a bit of a stretch, RIT students can take advantage of some local, time thrifty options that will expand both their culinary and social horizons. Healthy Bodies, Healthy Communities is a new initiative sponsored by the RIT Division of Student Affairs that is geared toward keeping our students in the loop on the myriad opportunities to improve their health, and that of their community, in and around the City of Rochester. Fresh, local, organic produce, better on-campus dining choices, monthly recipes and cooking demonstrations are essential ingredients for healthy bodies. The best part is while students explore their options, they’re increasing their exposure to, and interaction with, the City of Rochester, and that helps keep our communities growing and healthy, too. So enjoy a day out in the city, visit a farmer’s market, or discover cooking flair you never knew you had. Whatever you choose, it’s time to log off and reconnect with yourself and the world around you.

Buy local. Eat local. Live local. You’ll be glad you did.
Appendix D: Required Poster Text
Abundance Cooperative Market

The following text was provided to the student graphic design participants of the Abundance Co-Op Poster Design Charrette as a neutral manuscript format in order to simulate a typical graphic design problem. Designers were allowed to make adjustments to spacing, weight, etc. as long as the information was left intact. The text below is shown in the format the student graphic designers received.

Healthy Bodies. Healthy Communities.

Abundance
Cooperative Market

Hours
Monday through Friday
8am-8pm
Saturday
9am-7pm
Sunday
10am-7pm

Abundance Cooperative Market is Rochester, New York’s only community-owned natural grocery store. Abundance product selection promotes healthy and sustainable food practices.

Local, organic food has been grown and handled according to strict procedures without persistent toxic chemicals.

Local, organic agriculture is one way to prevent chemicals from getting into the air, earth and water that sustain us.

Local, organic agriculture can be a lifeline for small farms because it offers an alternative market where sellers can command fair prices for crops.

Local, organic food tastes great! Well-balanced, chemical-free soils produce strong, healthy plants that are nourishing food for people.
Appendix E: Required Poster Images

The following four images were provided to the student graphic design participants of the Abundance Poster Design Charrette. It was explained to the participants that each must be included in the poster in some way, but that the images may be adjusted, cropped and/or manipulated as the designers saw fit.
Appendix F: Abundance Co-Op Poster Design Charrette Participants’ Initial Concepts of Collaboration

In an effort to gain an understanding of the participants’ concepts of collaboration prior to the Abundance Charrette, each person was asked the question: What is collaboration? Their answers are as follows.

**What is Collaboration?**

When a group or team of people work together to obtain a final goal or solve a problem.

Where you work with various people of different, similar, or same professions to complete a project. Each contributing their views and ideas to more strongly bring across what is needed.

A group of individuals sharing their respective talents to reach a common goal.

Collaboration is working with individuals or groups from various backgrounds to find solutions for problems.

Working together to get something done.

Working together with several people to achieve one common goal.

Continuous contribution coming from more than one source.

When people work together toward a common goal.

Efforts created or made possible by a group of two or more beings.

Using each other’s own unique strengths toward a common goal.

Working together in a team effort to solve a problem and come up with the best innovative ideas and means to tackle the problem at hand.

More than one person working together toward a common goal.

When more than one mind helps produce something.

Teamwork; group of one or more people contributing hopefully equally.

The best (hopefully) pieces from multiple sources, joining together to form a cohesive finished product (much like Captain Planet).
## Appendix G: Design Charrette Participant Survey

### Evaluation

**Methods of Collaboration in Graphic Design**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Name</th>
<th>Major/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual within the group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was committed to the success of the project</td>
<td>5</td>
<td>strongly agree</td>
</tr>
<tr>
<td>I was actively involved throughout the entirety of the process</td>
<td>4</td>
<td>agree</td>
</tr>
<tr>
<td>My contribution to the project is easily recognizable in the end result</td>
<td>3</td>
<td>neutral</td>
</tr>
<tr>
<td>It was easy for me to contribute to the group effort</td>
<td>2</td>
<td>disagree</td>
</tr>
<tr>
<td>I felt comfortable in the working environment</td>
<td>1</td>
<td>strongly disagree</td>
</tr>
<tr>
<td>I was aware of the others reliance on my input for the group success</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process as it relates to group dynamic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There was an open dialogue throughout the process</td>
<td>5</td>
<td>strongly agree</td>
</tr>
<tr>
<td>This was a fun process</td>
<td>4</td>
<td>agree</td>
</tr>
<tr>
<td>Topics unrelated to the project were discussed</td>
<td>3</td>
<td>neutral</td>
</tr>
<tr>
<td>Laughter occurred during the process</td>
<td>2</td>
<td>disagree</td>
</tr>
<tr>
<td>References to the project have been made in conversations post completion</td>
<td>1</td>
<td>strongly disagree</td>
</tr>
<tr>
<td>I gained energy and/or inspiration from the others as we worked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process as it relates to the design solution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project developed in a way that would not have occurred on my own</td>
<td>5</td>
<td>strongly agree</td>
</tr>
<tr>
<td>This process yielded an effective design solution</td>
<td>4</td>
<td>agree</td>
</tr>
<tr>
<td>This was an efficient process as far as image generation</td>
<td>3</td>
<td>neutral</td>
</tr>
<tr>
<td>This was an efficient process as far as team building</td>
<td>2</td>
<td>disagree</td>
</tr>
<tr>
<td>This was an efficient process as far as idea sharing</td>
<td>1</td>
<td>strongly disagree</td>
</tr>
<tr>
<td>This process allowed for collaboration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Prior experiences

- Have you collaborated with other designers on projects prior to this charrette?  
  - Y N  
  - If yes, please explain:  

### Reflection

- Did this process yield anything other than a poster for you or your group?  
  - Y N  
  - If yes, please explain:  

- Who owns the end result?  

- Did your concept of collaboration change after working in this way?  
  - Y N  
  - Please explain:
## Appendix H: Poster Audience Survey

### Evaluation Poster Series

**Evaluator**

**Name**

**Major/Year**

<table>
<thead>
<tr>
<th>Evaluator</th>
<th>Name</th>
<th>Major/Year</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>strongly agree</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>agree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>neutral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>strongly disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### The Poster

This poster would stand out against RIT's visual culture (other posters)

I would take the time to look at this poster on a wall

I like this poster

This poster is visually interesting

This poster grabs my attention

This poster provides me with new information

<table>
<thead>
<tr>
<th>The Poster</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>strongly agree</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>agree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>neutral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>strongly disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I can tell from looking at the poster how many designers were involved in making it?

How many people do you think worked on it?

<table>
<thead>
<tr>
<th>The Message</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>In your own words, what is this poster trying to communicate?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 125 |