

ANALOGIC DESIGN EXPERIMENT:

An Overview of the Use of Analogy in Design and as a Basis for a Design Team Experiment

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Education

MS, Communications Design, Pratt Institute, NY
BA, Graphic Design, Hampton University, VA

Current Position:

Creative Director, Comcast Interactive Media – Philadelphia, PA (2006-present)

Responsible for leading a creative team for Comcast Interactive Media initiatives, as part of the nations leading provider of cable, entertainment and communications products and services which is Comcast. This includes property site creation that ranges from customers interactive products to entertainment portals. Tasks include concepting, creative strategy and creating a clear vision for all products that touch various media points. Maintaining and directing a team on creating high end interactive and creative solutions for a major portal site, online promotions, advertising partnerships, content partner sponsorship and brand integration with major partners and networks, while managing a team of art directors, designers, writers and animators. Responsible for development of new product ideas as they relate to creative for an online audience of over 28 million users.

Former Positions:

Creative Director, Refinery, Inc. – Philadelphia, PA (2002 – 2005)

The Creative visionary for one of the top interactive agencies; managing a team of 20 art directors, designers, content managers, copy writers and user experience architects while providing top clientele with innovative online solutions that paralleled their business objectives. Clients ranged from the industry of sports, pharmaceutical, retail, entertainment and consumer brands. Responsible for providing clients with user-focused solutions in a digital environment, while maintaining best design and technology integration practices. As leader of the creative team, world class clients such as GSK, Comcast, Motorola, Campbell's and Warner Bros. are delivered marketing websites that speak to their offline brands. As an expert in design and site architecture, seamless cross-media experiences are developed, executed and refined. Other duties include mentorship to team, educator to company and consultant to clients, both current and potential. Company won over 40 design awards under my creative leadership.

Director of Online Marketing/New Media Creative Director, BMG Entertainment/Arista Records and Laface Records – Atlanta, GA and New York, NY (1999-2002)

As visionary of New Media team, developed the creative direction, managed interface development and content management of label and artist websites. Responsible for developing online marketing strategies for artists, including online chats and promotions with major partners such as AOL, Yahoo and MSN. Producer of interactive promotional media, enhanced CD's and online celebrity shows with partners in various industries. Acquired new internet business and technologies, managed over 150 partner sites/portals and expanded labels' online exposure for recording artists such as Pink, Babyface, Outkast and Toni Braxton. Employed design and creative direction of the major record labels' site properties. Responsible for partnerships with major music sites such as Launch.com, BET.com, MTV.com and Vibe.com while maintaining consistent artist online promotions and label online advertising.

Speaking Engagements | *Presenter*

School of Thoughts III– Art Center College of Design, Pasadena, CA, 2007
“What’s so graphic about graphic design? Educating in the age of ubiquitous media.”

Speaking Engagements | *Panelist*

- + *AIGA Revolution* Philadelphia, 2004 “Diversity in Design”
- + Caribbean Music Fest, Jamaica, WI, 2001, 2002 “Music and the Internet”
- + Kid Power Marketing Expo, CA, 2001
- + Art Institute of Atlanta, Design Forum 1999

Teaching Experience | *11 years as an adjunct professor (until present)*

- + Art Institute of Philadelphia (present)
- + Pratt Institute, NY, NY
- + Moore College of Art and Design, Phila. PA
- + Drexel University, Phila PA
- + Art Institute of Atlanta

Adjunct Professor | *courses taught:*

Typography, Editorial Design, Design Fundamentals, Color Theory, Design Business, Senior Project/Self-Promotion, Advertising Layout, Art Direction, Portfolio Development

Academic Administrations Experience | *position:*

Worked for one year (2005) as the Academic Director of Design for the Art Institute of Philadelphia-managed over 500 Graphic Design students and 30+ faculty members. Designed new curriculum for two new programs: Digital Print Production and Advertising. Enhanced department curriculum to reflect modern design topics in order to better prepare students and represented design program in speaking engagements.

Other

Principle, mocacreative, inc. [design, interactive marketing, creative thinking] 1998-present

Professional memberships

- + DMI
- + AIGA

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A comparison will be made on how analogies are used in design and related industries and practices as an approach as well as how an analogic process (experiment) in order to strengthen a design team can be implemented. When we think of analogies, we think of how visually and verbally (or non verbally) as creatives we can convey messages, induce meaning, evoke response and influence trends. What we can further explore is how analogy as a method of generating ideas and as a process base is also prevalent in multiple creative as well as non creative industries and business models. That level of thinking is not new, but what is new is how we approach development of ideas in new models for the profit of the organizations which we support and how an in-house design team can strengthen itself and bring solutions to problems that break boundaries, remain memorable to our audiences and establish a creative team empirically as a team of strategic thinkers and contributions to the business at hand.

It is believed that the use of analogy can be one of the “new models” from which we as design influencers base our ideas and how we can then use that same sense of visual references in how we approach design problem solving. Analogy is defined as *a similarity between like features of two things, on which a comparison may be based.* (dictionary.com) If one explores analogy from merely a graphic design angle, analogy allows the creator, on behalf of the client, to communication with an audience segment via a comparison based on similarities or parallel qualities. By making inferences, visual analogies allow us to clarify our ideas. (Landa 2004) A visual analogy may be used to illustrate speed of an automobile by the use of one of the fastest moving animals known to man. A verbal analogy may be used in copy/messaging of an ad perhaps, that is based on a favorite and familiar expression paired with wit or may reference an event or situation that the audience can relate to in a personal way and therefore are more prone to respond to. The appropriate use of “visual referencing” and verbal and non-verbal “reminding” is what makes analogy effective in design solutions.

We see the use of analogy not only present in design problem solving but in various business models and industries. By exploring found examples of the use of analogy in connected industries such as advertising, fine art and architecture, one will be able to connect how some of the foundation teachings in these industries are very similar to traditional graphic design educational theory. It is believed that analogy plays a significant role in problem solving, decision making, perception, memory, creativity, emotion, explanation and communication. It has been argued that analogy is "the core of cognition" and discovered

that the last few decades have shown a renewed interest in analogy, most notable in cognitive science. (Hofstadter in Gentner et al. 2001) This connection from creative models to scientific models can be bridged from the practice of user experience/experience design groups in the field of interactive design to iterative processes in science, analogy being used a model of discovery and purpose can be explored, examined, compared and utilized. Examples can be reviewed in these multiple industries as a parallel study for how this process enhances product delivery.

Margaret Boden of the School of Cognitive and Computing Sciences out of the University of Sussex, England believes that human creativity can be dissected by the use of computational concepts. She explains that there are two types of creativity: improbabilist and impossibilist. Improbabilist creativity involves (positively valued) novel combinations of *familiar ideas*. A deeper type involves METCS: the mapping, exploration, and transformation of conceptual spaces. It is impossibilist, in that ideas may be generated which – with respect to the particular conceptual space concerned – could not have been generated before. The more clearly conceptual spaces can be defined, the better we can identify creative ideas. Defining conceptual spaces is done by musicologists, literary critics, and historians of art and science. Humanist studies, rich in intuitive subtleties, can be complemented by the comparative rigor of a computational approach. Boden suggests that creativity involves “recognizing analogies” “unusual juxtaposition of ideas” “produced by reference” “solving problems, exploration and evaluation.” (1994) Is this computational approach that which makes this theory “analogic” in its nature? Does creativity have a more substantial purpose when the familiar is referenced to a specific audience? Is our challenge to be improbabilists and to be aware of its relevance not only in design but in music and literature as well?

In practice, it has been enlightening to discover the use of analogy in these multiple industries mentioned above, as it is specifically prevalent in architecture, furniture design, fine art, especially surrealism, political cartooning, and iterative design models in science. For example, in cartooning, political cartoons are animated through visual analogies (satire) that imply a likeness between the event portrayed in the image and the issue on which the cartoonist is making comment. Visual analogies are the heart of cartoons and what then animates thought and emotion. They consist of simplified situations, characters or objects designed to stand for more complex issues. (Walt Werner 2003) Like in fine art, surrealism bases its themes on what could be considered analogy, as it relates to creating art that defies reality and reveals its content in a dream like and unconscious situation. The surrealist approach to art, which can also be viewed as visual referencing, used references that were focused to stand for issues surrounding a cultural movement that impacted the world.

In architecture, it is quite interesting and apparent how the teachings and approaches are similar to traditional graphic design methodologies and teachings. In a paper by professors Ellen Yi-Luen Do and Mark Gross, entitled *Drawing Analogies: Supporting Creative Architectural Design with Visual References*, of the College of Architecture at Georgia Institute of Technology in Atlanta (1995), a statement is being made about how “creative architectural designers often employ forms from other domains, retrieving, adapting and including them in designs in whole or in part” affirm that notion again of visual referencing. The paper proposes the use of sketching to help (architectural) designers find images as visual references for creative design by seeking forms from outside their design domain and incorporating those found forms in their designs. This whole concept of creativity and the role of visual *reminding* focuses on “accounts of human creativity where several processes are frequently described: 1) combining ideas from different domains; 2) the use of visual imagination, metaphor, and analogy, and 3) expanding and varying the search space of alternatives. Our system for providing designers with images is predicated on the hypothesis that creative design in architecture employs these processes.” (Do and Gross) This notion is then further defined as the use of analogy ‘seeing as’ – playing a key role. “The use of analogy (and metaphor) features prominently in many discussions of (architectural) design methods and processes.”

The paper goes on to quote another architect and author Broadbent (1973) who stated, “Analogic design is the most potent source of creative ideas in architecture. Architects are visually oriented and are taught to think graphically.” Instructors of architecture are encouraging students to use analogy in developing creative ideas (“think of your building as a string of pearls”), applying analogy to influence the physical form. (Do and Gross) This has also been referred to as “shape borrowing.” (Goldschmidt 1992) Graphic design and advertising instructors are challenging their students with the same theories (as in, thinking of this ad, concept or layout as a “beautiful and tranquil place”) in order to sell products to an influenced audience.

Le Corbusier, known as one of the thought leaders and forefathers of modern architecture, urged architects to develop their imagination by studying and drawing natural organisms, such as a class of shells. (Guiton 1987) As a Swiss born pioneer in theoretical studies of modern design in Europe and beyond, he wanted to create more suitable living conditions for individuals based on their needs and physical proportions. Corbusier’s famous book *The Modular 1&2* (Corbusier 1958) focuses on methods used in urban planning and modern furniture design that provide a basis for architects and designers to

design dwellings and spaces that are efficient. This text also is frequently used in the classroom for advanced graphic design courses to introduce the methods of efficient design via the mastery of the grid, proportion, and structural systems in relation to compositional layout. The intermingling of the same theory being used between the two industries of graphic design and architecture solidifies that the use of analogy and visual *reminding* is indeed effective in design problem solving period. Research into architectural design proves that this method is not new but used by many architectural giants for quite some time. “Reminding may be visual, as when a shape sketched in the emerging design (perhaps doodled on a cocktail napkin) recalls a reference form, or it may be linked through a concept about the design. Examples of visual (shape) reminding include a horseshoe crab shell for the roof of Le Corbusier’s Ronchamp Chapel (Corbusier 1958), palm trees for the columns of Santiago Calatrava’s BCE Place Gallery (Blaser 1989), a head in agony with an open mouth for Michelangelo’s Porta Pia (Chimacoff 1982) and yachts in Sydney Harbor for the shell shapes in Utzon’s Opera House (Arup 1967) (Figure 1).” (Do and Gross) These examples show clearly how ideas and inspiration in architecture can firmly be based on the foundation of analogy—they show how historically *reminding* and *referencing* in order to create design that is truly intended for its audience can be profound, practical and a learning tool for today.

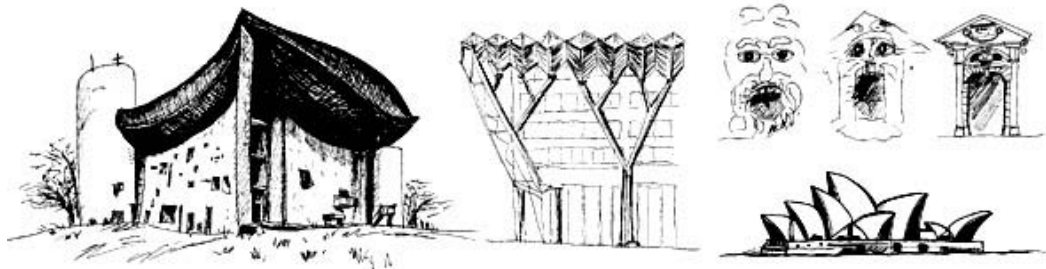


Figure 1
© Google Images 2007

Design writer and theorist, Natalia Ilyin sums it up clearly that “the choices that designers and architects have made in the last hundred years silently mold us, silently direct us through the tunnels of Penn Station or up to the fifty-third floor of the Sears Tower. But they direct more than our movements. They direct us to notice one thing and not another, to value one thing over another, to identify with one thing rather than with another. Modernism—the guts of it, the strength of it, the egotistic beauty of it—carries with it effects we did not expect, and fosters attitudes about ourselves and others that may have been dandy in a utopia but do little good in our world. Why have we not changed this idea, moved on with our thinking? For even after the disbanding of the Bauhaus, the disintegration of the International Style, the exhausting of postmodernism, we’re all still chasing the perfect.” (Ilyin 2006)

In visual design and advertising in order to meet the demands of today's marketplace, and gain exposure within a competitive circuit, whether it be a print ad campaign or an interactive experience, remains a challenge for today's creative professional. Ideas that stand out from the crowd require imagination and risk. Analogy can be that bridge. If one observes some of the most successful ad campaigns of all time, some of the most stunning print visuals and some of the award winning website experiences, many rely on the use of analogy to communicate their ideas with more gusto and to influence consumer buying behaviors. The use of analogy has the power to make a connection to the audience that is persuasive because it is recognized and/or believable. This viewpoint from wikianswers.com states that "by using analogies an advertiser (or designer) can give more examples on the benefits of their products or services in either a witty or more easily absorbed explanation. By causing the reader, listener, or viewer to be intellectually entertained it allows for the message to sink in to the thought pattern more than if you just stated a benefit. An analogy in short encourages participation or amusement that is more memorable when getting an advertising message across." (2008) We can illustrate this point further in an example for a commercial for let's say- XYZ vitamins: "Just as motor oil is important to the proper maintenance of your car's engine, XYZ vitamins are vital to your body's health." (AllBusiness 2007)

It has become the duty of the visual problem solver to make these connections and references valid, as they are appropriate to the brand for which they sell. Infinite Innovations, LLD out of London offers brainstorming techniques that are based on analogy and creative problem solving. Their technique poses a few questions to get started, "What does your situation remind you of? What other areas of life/work experience similar situations? Who does similar things but not in your area of expertise?" From that comes the exploratory work of matching parallel concepts or things using "is like". This offers and opportunity to visualize a comparison that is more digestible. Thinking of "running a business like a theatre production" and the "packaging is like an egg" allows for analogic thinking about a sales team splitting into two halves, pre and post sales like a theatre production, or creating a package that visually shows how long before its sell-by-date by changing colors with time just as the chick in the egg slowly drains the white of the egg as it grows. (Infinite Innovations, LLD) When Steve Jobs introduced the iPod in 2001, he promised consumers it would "fit your whole music library in your pocket." Less than six and a half years later, millions of consumers routinely carry their favorite music, photos and TV episodes with them wherever they go. (Comcast Interactive Media, *Dispatches* 2008) Thinking of an electronic device "like a" physical media library with shelves full of records, CD's and a digital video recorder is the type of analogy that changes lives. Whether an advertiser for an edgy clothing and perfume brand like Juicy

Couture uses the visual comparison of their perfume to a “juicy” beverage signifying that it’s “good enough to drink” and when The Type Directors Club of NY uses a pound of beef as a visual to signify “fresh talent”, and when BMW’s Mini campaign uses reins around the actual vehicle to signify that the car is “wild like a horse”, analogy is alive and well. (See Appendix for examples of visual analogies in print advertising.)

So how do you use analogy to not only create profound design solutions that are well received by its audience but to also use it as a constructive model for a team to unify? How can we learn from iterative design models in science that base experimentation methods on the foundation of analogy? A research paper entitled *Making Tea: Iterative Design Through Analogy*, discusses that “the success of translating an analog or manual practice into a digital interactive system may depend on how well that translation captures not only the functional what and how aspects of the practice, but the why of the process as well. Addressing these attributes is particularly challenging when there is a gap in expertise between the design team and the domain to be modeled. *Making Tea* is a design method foregrounding the use of analogy to bridge the gap between design team knowledge and domain expertise. It provides a way for the design team to interrogate a practice that is otherwise beyond their expertise to interpret and the analogy helps domain experts articulate where the analogue breaks down, thus making it easier in some sense to describe the practice through a kind of contrast/comparison between analogue and actuality.” (University of Southampton, UK 2004)

How can this then be used as a team experiment for a group of creative professionals to strengthen their working relationship and therefore, creating stronger design solutions? As a design practitioner, a creative manager and a design educator it is believed that from the classroom experience to our industry practices in business, more team orientated projects should be established and fostered in the educational and professional environment. Therefore, it is a must to prepare designers who enter the workforce to be knowledgeable of the mechanisms of a team and also to sustain a team with its experienced design practitioners in order to create design solutions that breed from a blend of various contributors maximizing its impact. It has also been observed that even within an established design team, the solo design approach still exists as a methodology that can border dysfunction within a creative team. However, most design teams come from various educational experiences and creative leaders are faced with bridging that gap in the workplace.

It was tested that via analogy a team can also be used as an experimental model in creating a team that is

in sync with one another in order to make that connection with ones audience(s) even stronger. The challenges of an in-house design team in the media industry had to be mentored through a design experiment led by this author (manager) to transform what was discovered to be a dysfunctional team of visual designers and writers to a functional team that would come to innately build ideas via a collaborative model. The team was not dysfunctional when it came to raw talent; it was that they just didn't know each other that well. However, it was through this experiment, that all members of the team began to embrace that which was broken and dedicated as a team to come together. It is believed that a team that is "connected" can be unified in its creative thinking and can contribute ideas that meet the demands of today's market. A design team of interactive designers and copywriters were therefore, challenged to develop a team experience that would achieve team unity and highlight their creative prowess. This team managed by this author was encouraged that their "project" deliverables contribute to the overall industry of design via self-discovery and team collaboration– to follow an analogic process where the deliverables are the team itself as a productive working vehicle of blended talents and abilities. The analogy of collaborative design was presented to the team to achieve one goal: to work together. The secondary goal was to illustrate it, document it and share it.

It started by the team being given a personality survey (see Appendix) by this author who asked them to share their interests, creative influences, drivers and inspirations with the team and a deadline was set. This was in order for the team to get to know one another and gain a deeper understanding of another's approach. It was a rocky start, because there were a lot of options and seamless collaborative was not cohesive, yet. The individuals on the team explored multiple options and a lot of concepts about creating something that was of benefit to the viewer until it became apparent to the team that it was the team itself that needed to be the "project". By looking inward a team can be more productive outwards.

The scientific design team at University of Southampton documented, "We soon realized that we did not understand what we were seeing well enough to model it effectively or consequently to design an appropriate interaction. So we made tea. That was the Eureka moment: since we understood tea, we had something we could work with. We all shared making tea as a common expertise. We could observe, ask questions, and begin through this elicitation, to pull together our other studies and begin to design." (Making Tea: Iterative Design Through Analogy, University of Southampton, UK 2004)

Over the course of six weeks the team, including the manager, participated in various exercises: instead of

making tea the group created a collaborative and hands on collage experiment based on visual analogies representative of the team individuals. This collage exercise was conducted as a team approach within a timeline and each person created their portion of the collage based on images they brought that represented them. Following, the second week was a branding exercise followed by various design exercises where each had to design a poster in honor of a member of the team referencing their likes, dislikes and design style. This design exercise was for each designer to be assigned another designer in the team and having to design a poster of that designer in the style of what they learned about that individual but all in a unified style. Photography of that individual had to be included from images gained by the team approached photo shoot. The team then re-enacted the whole experiment and created a short film of the transformation of the team (including all the thoughts about not wanting to do this task) and laced it with humor (written by the copywriters and designers jointly) sharing some of the stores of the bumps and bruises along the way and each one's role in the experiment/project. The entire experiment, the film, findings and results were then shared (including a website with photos of the whole experiment in stages, the self-portrait posters, the team collage and the photo journal) to other departments in the interactive division in a presentation and a gallery-like exhibit. Invitations were designed and sent, swag was created and distributed before the presentation date to entice guests. The team realized its dysfunction/differences (communication styles, design styles, individual design approaches) and grew from it. The result was a functional team that related to each other in a more collaborative working model that then influenced the culture of other teams. **Project team: Untitled.psd was born.** As a result the team was more cohesive, more productive and enjoyed working together in a new way. This new perception allowed for them to create new ideas, new techniques for creating design with meaning and new outlooks based on learnings they gained about themselves and each other. *Confidence existed where it once was void and productivity of a team was accelerated.* (Untitled.psd 2007)

In conclusion, creative teams are an integral part of the success of an organization only by being a functional team with the proven ability to create “smart” design. This is now more imperative than ever. The use of analogy in design and other industries is one tactic that has been proved to net results due to its nature to reference the familiar. When we look at analogy as an experimental model for a human study it becomes more profound in being creative in problem solving overall. Whether it be an ad, an architectural structure or aiding the success of a team centric environment it is valid. How we articulate design methods and processes, how as creatives we think, how we interact with one another as fellow creatives, how we evolve as strategic and creative visionaries, how we share, how we teach, how we compare, how we relate in society and in our respective organizations is our call to duty. It the role of the creative to be

user centric in design approach and to foster an environment that is not afraid of its own reality or knowing when and how to make change in direction, call on multiple techniques or models, experiment with options and remember to “turn it upside down” in order to meet creative goals and create design solutions that break boundaries and make an impact.

“Design is a method of putting form and content together. Design, just as art, has multiple definitions; there is no single definition. Design can be art. Design can be aesthetics. Design is so simple, that’s why it is so complicated.”

-Paul Rand (Maeda, *Thoughts on Paul Rand*, 1997, MIT)

Appendix:

Supporting Materials

[Sample Content from design team experiment presentation]
(Copywriting by Scott Hilson, © 2007)



Image property of: Comcast Interactive Media, 2007

The Function of Dysfunction

A human experiment

The Project: An Overview

The Assignment:

As a group conceptualizes, develop and execute something that reflects the team as a cohesive unit.

Untitled.psd // translation...

Confusion:

What on earth? That's a pretty broad thought. What KIND of "something?" Can we get a little more info? And possibly a thought on WHY we're doing this? Is there a brief?

The Objective:

Expand upon the assignment and create something more significant. Brands, logos, ads, web pages. All typical. Our goal is to create something useable. Something memorable. Something dynamic.

Untitled.psd // translation...

Confusion – Layer Two:

Still no plan. No concept. No actual, tangible ideas. In fact, no real idea for what we should be producing. Rumbblings of having to stay late!?

Conceptual Progress:

More than just a team name, logo or brand ID, this could be something viral. A grassroots effort. Interactivity could reach beyond the boundaries of 2000 Market. It could become a community improvement initiative.

Untitled.psd // translation...

Confusion – Layer Two:

What's grassroots? Community effort? There's still no actual IDEA! Wait. Does "community" mean weekends? Do I need to be here? I'm getting a sore throat.

Discovery:

The human experiment is the solution. The deliverables are not the focus – just the mechanism. Collaboration and communication have become the goals. And they have already begun. Creating function from dysfunction is the objective.

Untitled.psd // translation...

Hope?

Did we just connect on something? And is that connection on something actually about doing nothing? So we have an idea about nothing? And we execute this how?

Analysis:

If the human experiment is the solution, the deliverables must be relevant. A group expression piece that combines the views, passions and interests of each member. A biographical poster campaign, which would be a design of each member as an individual but having shared look and feel. not the focus – just the mechanism. And the story itself – the evolution of a team. Visually documenting our journey.

Planning and Methodology:

We create materials that, in essence, brand ourselves and display our individuality. We tie that together with a video and additional visual stimuli. The viewing audience can make their own interpretation – as long as they understand that the group has become stronger and more synergistic because we acknowledged our weaknesses and then learned from and about each other.

Conclusion: Personalities meshed. We learned from our dysfunction and created something bigger than tasks. Leaderships formed. Communication improved. The team overall has been enriched. We have learned each other's communication "styles," we became acquainted with the personal and social nuances of our team, and we understand each other better overall. This will improve the flow and communication on future projects.

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INCREDIBLY MINI. THE NEW MINI. 