D-Shirts Online: An Experiment in Collaborative Design-Making

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The D-Shirts Online project is an interactive web site designed to enable non-artists or designers to create their own t-shirt graphics, print their design on iron-on transfers, and then iron the transfer to a t-shirt or sweatshirt. Viewers will be able to enter the site and learn about the history of T-shirts, gather background information regarding the project, find instructions, view my artist’s statement, or dive right in and begin designing. Once they do reach the design area, they have the option of choosing a piece of pre-drawn art to anchor the composition or they can draw their own. They can add and format text, reposition and resize elements, and—if they’re daring—unlock the clip art to rearrange.

Viewers are invited to become active participants in the project by creating their own designs. In fact, even if they decide not to create a design, just the act of viewing the site requires their interaction. The viewer becomes a collaborator in the project. But unlike the collaborative nature of “Happenings,” this participation does result in an object—an object that historically has been evaluated solely on the merits of visual style (Frascara 18). The creation of an object as the result of a non-artist’s collaboration certainly raises new questions about the origins, merits, and authenticity of the design. Is the resultant work effective as a design? Does it satisfy conventional aesthetic standards? Do the nonartists have the right to claim the design as their own, and what, then, does that infer about my own role in the collaboration? I am not sure that this project can determine a definitive answer, however, I have some theories that will, hopefully, be supported by the objects arising from this project. And, in setting up a situation where individuals have the opportunity to design and create, perhaps there will be a moment when each collaborator considers the question and arrives at their own conclusion.
Is it Effective Design?

Jorge Frascara argues that the effective measure of successful graphic design is not so much about the aesthetic context as it is about its effectiveness as a communication activity. He writes, “It has been said many times that the designer is a problem solver of visual communications and of clients’ needs. But the solution to a clients’ need is not the production of the visual communication, it is the modification of people’s attitudes or abilities in one way or another [his emphasis]” (25). He goes on to state that he does not advocate the demise of aesthetics in design, but instead wishes to clarify the importance of context and communicative effectiveness when evaluating design.

The “message” of the D-Shirts Online project is multi-faceted, and the measure of its overall effectiveness may be difficult to quantify. However, on the surface the initial message is clear: create your own t-shirt graphic, print it out, iron it on, and have fun doing so. When given the proper tools and freed of certain learned restrictions, we all have the innate ability to express ourselves visually. Non-artists may be skeptical of that message, believing that design is better left to the professionals. However, by entering into the project and interacting to the point of creating their own object, skeptical though they may have been, the very fact that they created a design is an affirmation of the message. Further, if they are indeed affirming the message, their original skepticism has changed: their attitude has been modified. By putting their design on a t-shirt and wearing it in public, they are actually doing more than simply affirming the message, they are passing it along. In saying, “look what I did,” the user is extending a non-verbal invitation to other non-artists to visit the site and do the same. If designs are created and
the t-shirts are made and worn, on a surface level, at least, the message will be getting through. One would have to conclude that the design is effective.

*Does it satisfy conventional aesthetic standards?*

This is, admittedly, a much tougher analysis to make. The American Heritage Dictionary defines aesthetic as "an underlying principle, a set of principles, or a view often manifested by outward appearances or style of behavior." Does the design have an aesthetic in the sense that it is beautiful? Perhaps, but perhaps not. Does it have an intended appearance? The answer to the latter lies within the collaborator. As outsider or critic or theorist, we certainly are entitled to our opinions, but the intentions of the designer are known only to the designer. Given that the D-Shirts Online site was entered into freely, and that the ensuing design was not created under duress, it's natural to assume that the designer was pleased enough with the composition to commit it to a t-shirt. Design hints built into the site will help educate the user about commonly accepted conventions, but in no way will the user be forced to subscribe to those conventions. Further, the availability of pre-drawn art is, among other things, a method of anchoring the design within those conventions, but again, the user can choose not to use the available art. In this way, every decision that the user makes regarding the composition becomes an intentional, reasoned choice. Granted, without a design language from which to draw, they may not be able to give voice to their reasons, but their creations will be reasoned just the same. One should certainly be able to claim an intended aesthetic to each design.
Can the Non-Artist Claim the Design as Their Own?

Designers is visual communication (Frascara 20). In my own career as a designer, my designs garnered awards for myself, my clients, and even those who produced and published the work. Howard Becker rightly identifies art making as a collaborative effort that includes not only the artist and those craftsmen directly involved with the production, but also those who make the tools used, publicists, gallery owners, and even the appreciative viewing public (Becker 768). Everyone involved plays a role in the art coming into being, all are working collectively. Some are designated as the artist, others craftsmen, and others become supportive role players, but all are necessary. In my own work, I collaborated with copywriters, photographers, color technicians, and press operators. Some, as in the case of the writers and photographers, were artists in their own right. Others, like the color technicians and press operators, were highly skilled craftsmen. While my designs owed a great deal to the artistry of my collaborators, they were still my designs.

Likewise, the collaborators on the D-Shirts Online project will be dependent upon the artistry and/or craftsmanship of others (myself) in the creation of their compositions, but the results will be their own design. What are we, then, to think about those who possess no apparent design skill or talent, but can step up to a kiosk, follow a few on-screen instructions, and walk away with a unique T-shirt design? I propose that they are at the very least collaborators, and as such, have the right to claim ownership as designer of the graphics they produce.
What Rights of Authorship am I Granted?

This project is about designing an engaging design process for non-designers. The challenge is to create an environment that allows— and actually encourages— non-designers to design, while at the same time structuring the process so that the results are successful. Form and function are obviously still important, but this project requires additional consideration, namely how to give non-designers the freedom to create while fostering at least a measure of compositional integrity.

On one level the project is a study in how the form comes to be, and how that process affects the formal properties of the design. By putting the "how" into the hands of the viewer, and creating a procedural environment that points the viewer in the right direction, the viewer's participation actually becomes one of the formal properties of the design, along with line, shape, color, texture, and format.

Environmental elements, be they the printing process, the physical location of the message and the surrounding "noise," or the media itself, should always be a consideration in the design process, and the viewer's interaction and participation becomes just one more environmental element of the overall design. Like the surrounding visual noise of a location, the viewer's interaction is something beyond my control. I can suggest, encourage, cajole and admonish, but ultimately, the viewer's input becomes something of a wild card in the final design. The resulting graphic satisfies their aesthetic, not mine. Therefore, much of my design is about setting into motion a series of occurrences that will ultimately result in a decorated t-shirt. The better I do my part,
hopefully, the more the decorated t-shirts will meet the measure of successful graphic design.

There is no way to predict what the viewer will come up with, but by the same token, it is unlikely that the viewer would ever come up with the same result without my influence over the process. The viewer is, again, a collaborator and not an autonomous designer. They will use what they have been given, interpret and filter the input, and add to the visual information in creating their own design.

Each resultant t-shirt design is valid in and of itself, being the offspring of an interaction with numerous environmental factors, but so too is the body of work comprised of all the resultant designs. As long as the project is up and running, the design will be changing, evolving, and growing.

**PROCESS**

Throughout my graduate school experience I have worked on a number of different projects. At a glance the projects appear to be wide-ranging and rather diverse, but upon closer inspection, a continuity emerges. Though not related by subject, each project contributed to the wealth of knowledge and experience required to complete my thesis project.

The first project I tackled as a graduate student was developing an interactive Web site about Avebury circle in England. Initially, I built the site using an application called
Director. I was already familiar with a similar application called Flash, but the idiosyncrasies of Director proved quite challenging. The experience forced me to rethink my approach to designing interactivity. Up until that point, my designs were limited to what I was easily able to copy or imitate. Artistic vision took a backseat to technical aptitude—I was constantly compromising the design in order to stay within the cozy confines of my limited knowledge base. Of course Director changed all that: I had no knowledge base. I had to learn everything, and in the process began to understand the technology that makes everything work.

Ultimately, I returned to Flash and rebuilt the entire site because the published document was a little sluggish out of Director. But the experience was liberating as I found myself able to think through design problems using programming logic. In gaining an understanding of the technology, I learned to design with the medium instead of against it. I still believed that the programming language of Adobe Flash, actionScript, could be used to create any kind of onscreen magic imaginable, but with an understanding between which magic tricks are within my repertoire, and which would be better left to programmers and engineers. My knowledge was far from complete: I had no understanding of code structure or syntax. I understood why the code worked, but not how. Later projects in Adobe Flash honed my understanding of actionScript by addressing specific design challenges: an online catalog for Karges Furniture Company was built in components and required an understanding of how separate Flash documents could be built independently then viewed as a unified whole; a driving game used variables to provide the viewer control over onscreen action within the scope of the design; and animations spoke to the differences between precise, code-driven movement
and the organic, fluid motion found in the natural world. But while the projects leading up to my thesis project laid the technical groundwork necessary to begin, the D-Shirts project is, without question, a unique entity. Its creation and development proved to be a chain of complications and challenges resulting in new discovery, and often, new design.

The initial concept was of a “campy,” user-friendly web site that encouraged viewers to build their own t-shirt graphics through a series of formulaic processes and steps. This version of the project, however, was more about me, the project designer, than the end user. My focus was on how to deliver clip art and type in a manner that would fool users into believing that they were creating something new instead of simply re-arranging puzzle pieces. Curiously, but not surprisingly, the design and graphics of that original concept almost seemed to hold the viewer in contempt. Neither the typography nor the site design welcomed the viewer and invited him or her to participate as an equal in the creative process. My own need for control over the outcome was a real barrier to the development of this project. I continued to make token design changes without embracing the idea of a fully vested creative user. By the spring of 2007, the graphics were passable, and the level of interactivity was such as to elicit praise and admiration from those who understood the complexity of actionScript. The site failed, however, to engage the larger public that was to be its audience.

There was nothing new in the site at that point. Interactive commercial sites already existed with the level of user participation of the D-Shirt site. With greater resources, they offered far more choice for the user than I was able to provide. The perceptive difference was marked, but not readily admitted by myself: the D-Shirt project was kind of cute but simplistic and amateurish. The issues addressed in my project had already
been resolved commercially on a grander scale. In fact, there was nothing new in my own understanding of either design or the interactive technology. Rather, the project was nothing more than a repackaging of earlier projects and tutorials dressed as something new.

By the fall of 2007, however, I was able to view the project through the eyes of my audience thanks, in part, to research into the works of Allan Kaprow and other “Happenings” artists of the 1950’s and 60’s. I came down off of my high horse and began to regard the viewer as collaborator instead of pawn. As a result, the heavy emphasis on pre-existing art from earlier versions gave way to tools that the viewer could use to actually create something. The site design reflected the new approach: the creative space was enlarged and the tool palette simplified, making a more intuitive, inviting, and creative environment for the viewer. Technically, however, this new approach created complexities and complications that were beyond anything experienced in previous projects.

What effectively became the third incarnation of the D-Shirts project was a component approach to each feature of the tool palette. A new Flash file was created to address the unique design and technical challenges of every user tool. By isolating each tool, I was able to concentrate on perfecting the code to make each tool work, without having to sort through targeting issues. In theory, this would allow me to resolve issues of functionality up front. Then I could copy the actionScript and adapt it to work within the greater document. This last step proved to be the greatest challenge of the entire project.
By the end of the Fall 2007 semester, each tool functioned as expected in its own document. But when transferring code from the component tool documents to the greater D-Shirts document, I quickly encountered problems. Throughout my graduate studies, I gained an understanding first of why code worked, then of how. I had yet to learn what, specifically, the various bits, pieces, phrases, and syntax of code actually did. As the component code snippets were compiled in the D-Shirts document, they interfered with the operation of each other. The individual tools did not work when compiled together. This was very nearly a fatal problem.

The final four months of work on the D-Shirt project were spent researching, rewriting, and debugging actionScript. As late as Easter weekend the underlying targeting structure of the design was re-written in an attempt to make additional tools functional. This re-writing had no effect whatsoever on the visuals, but it completely changed the addresses used in all 600 plus lines of code on the design page of the site. The site design was essentially set last fall. The graphic user interface of the finished D-Shirt site has not changed much since October or November of 2007, but the manner in which the pieces interact with each other was authored within the last 4 months. It is as if, after months of sketching and studies, a painting is found to be structurally unsound when brushed onto a canvas. Somehow, the brushwork could be preserved while a new stretcher is built, the canvas prepared, and even new polymers added to the paint. The visible portion of the painting, the portion seen, would appear unchanged, but everything else about the work would be new. The result, however, in the D-Shirt project is an application that actually works and provides the viewer/collaborator with a shared experience.
The Installation

The presentation of the project is on a freestanding computer with a color printer. Users are able to walk up and launch the application to enter the “site.” Once inside, they follow onscreen instructions that lead them to the design workspace where they create their own graphics. Once created, they can print either a proof (on paper), a transfer (on transfer material), or both. If they choose to print a transfer, they are able to actually transfer the design to a t-shirt using an iron and ironing board available as part of the installation right next to the computer. For the thesis show, transfer materials and white t-shirts in a variety of adult sizes were provided.

This should be a playful experience, and one that the viewer thoroughly enjoys. Viewers will have an opportunity to stand in front of the computer and design their own unique graphic. Far from being a passive display, appropriate signage will instruct and encourage viewers to step up to the computer and begin designing. After printing the transfer, the viewer will select a t-shirt and proceed to the iron and ironing board where they will apply their design to a shirt. Once applied, it is hoped that the viewer will slip the new shirt on over their own to wear around the gallery and out into the public.

This project is not intended to be a one-shot-and-done experience. The thesis show will be the inaugural opportunity for the public to interact with the site, but certainly not the last. As a display, the project could be presented at art fairs and exhibitions, allowing patrons to fully participate in the creative environment in addition to merely browsing booths. The very nature of the project as a digital application lends itself to publication through the internet. Once published as a web site, the project becomes an evolving and
engaging venue for a broad audience of users and artists, each with their own agenda and purpose for visiting the site. The life of this experiment in interactive design making is open ended, sure to be filled with change, adjustment, and refinement. It is hoped that the effort to this point is enough to sustain the project beyond the relatively friendly gallery audience, and that in whatever form this experiment continues, it remains a welcoming invitation for collaboration to all.
Works Cited
