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The Artist's Burden

There are two components of the creative process that many may consider dichotomous—those of *art* and *science*. Art is said to be the product of right-brain thinking, whereas science is the product of left-brain thinking. Art is abstract and subjective—science is concrete and objective. Art, such as music, painting, dance or literature, has the primary purpose of entertainment. Science is the force that gets things done.

However, sometimes people can make a living by creating art, which serves to pay the bills that exist in the "real" world. Mathematics is necessary to build a house—but it can be a "pretty" house. Art and science interact and coexist and are inexorably bound to each other.

While studying Commercial Music Management at Austin Community College, I took a course entitled *Math: Spirit and Use*, which examined the artistic side of mathematics. In a paper I wrote for that class entitled "The Mathematics of Music," I examined, among other things, the modern tempered chromatic scale upon which all western music is based:

> The [chromatic] scale of equal temperament is a division of the octave into 12 equal intervals, called tempered half tones. Since an octave is the distance between [a given frequency] f and 2f [for example, the A above middle C is 440Hz and the A one octave higher is 880Hz] and that octave interval is divided into 12 equal intervals, a half tone or semitone is the frequency ratio between any two tones whose frequency is the $12^{th}$ root of 2, or 1.059463 (Apel 836). So, if C=f, C#=($12^{th}$-root-of-2)*f=1.059463f, D={($12^{th}$-root-of-2)*2}*f=1.122462f, etc. The interval between any two semitones is 12 times the logarithm on the base 2 of the frequency ratio (Olson 46-47).

As you can see, the modern musical scale is created using physics and mathematics—but it is so much more. As I address in the same paper, the musical scale has an unexplainable psychological effect on human listeners. When tones are heard in certain sequences, the ear anticipates the next tone—no one knows why.

How is art created by artists? Elizabeth Gilbert addresses that question by citing ancient mythological beliefs regarding inspiration channeled through humans from supernatural sources. Gilbert comes to the eventual conclusion that there is not a better explanation available—inspiration comes to the artist from "somewhere else."

However art is "received" by the creative artist, it is necessary for the artist to use real-world science to communicate the art to the audience.  William Blake (1757-1827) was an English poet, painter and philosopher who was, for the most part, an unrecognized talent during his lifetime.  Blake was a unique individual who presented his artistic message using more than one artistic medium.  He wrote the text of the poetry, engraved negative images of the designs on metal plates with acid, printed them on paper, and then painted the paper to create color images of the text of the poetry framed with visual art.  Knowing the physical process that Blake used to create his art, while interesting, is not necessary to appreciate the end result.  Likewise, it is not necessary to know that Queen guitarist Brian May set two of the pickups on his guitar 180 degrees out of phase with one another—to enjoy his guitar solo on *Bohemian Rhapsody*.

In fact, knowledge of the technical details of the creation of the art is often a distraction that can diminish the aesthetic appreciation of the audience.  Not only do they not *need* to know—they do not *want* to know.  However, the artist *must* be fully cognizant of the technical details—such is the artist's burden.

Pursuant to a degree plan leading to a Master of Arts in Rhetoric and Composition from Texas State University, I am taking a class entitled "Digital Literacies" where we examine computer-based communication and its "reciprocal relationships regarding rhetorical and socio-cognitive concerns for workplace, educational, and public lives" (course syllabus).  On February 18, 2009, roughly half-way through the semester—my mother died.

Although I had always assumed that I would outlive my mother, I was not prepared for the emotional devastation that I experienced.  A few weeks after the funeral, my stepfather presented me with several boxes of old photographs, and the idea came to me—an inspiration.  I would create a multi-media tribute to my mother and the other loved ones in my family who were no longer with us.  This would serve several purposes: catharsis for myself, a gift of love to my remaining family, and completion of a seminar project that represented 30% of my course grade in my class.  Since I would use computer hardware and software to create a tribute that would involve "reciprocal relationships regarding rhetorical and socio-cognitive concerns," I asked my professor for permission to use the tribute for my seminar project—and she graciously consented.

I was determined to create the tribute for my family.  If I had not been allowed to use the tribute for my seminar project, I still would have done it—but would have had to wait until after the semester ended.  Because the tribute was intended to serve multiple purposes, I had to resolve the inevitable dilemma of the artist's burden.

The primary audience for my tribute is my family.  I wanted them to be able to start the presentation easily, and watch it without having to deal with technical details.  I wanted them to be able to feel it without thinking about it.  I wanted my tribute to express

my love for my family—those who are no longer with us, those who are still living, and even future generations yet unborn. However, even if I succeeded in this objective, it was insufficient to satisfy the requirements of a graduate-level seminar project, which would necessitate an explanation of the motivation, purpose and process of the creation of the project. The only solution to this quandary was to create the tribute and to make it available to my family in a user-friendly format—then, to create separate documents that would provide analysis of the process and relevance to the broader concept of digital literacies.

I will make the entire project, including this essay, available to my family. Since they have already seen the tribute, learning how I made it should not spoil it for them. The tribute showed them how much I love them. If they now discover that I am really an intellectual nerd—so be it.

I carefully selected the photographs and scanned them on my *Dell Photo Printer AIO 922*, a multi-purpose device that functions as a color printer, scanner, and copier. I selected the scan resolution as 150, 300, or 600 dbi (dots per inch), depending upon the size of the original photo; I saved the images as jpegs. I then processed the images using *JASC Paint Photo Album*, which is software that came with my computer—a *Dell Dimension 8400*.

I created a slide show with music using PowerPoint 2007. I chose a gray background with gold lettering because many of the photos are black and white. I used "rehearsed timings" to advance the 82 slides to fit the music—sometimes lingering on particular slides for emphasis. The song I chose, *Tuesday's Gone*, is in 6/8 time, which made it a challenge to transition the slides smoothly.

Of particular concern to me was Herman Robertson Jr., slides 15-23, who died tragically in 1944 at age 17—the summer before his senior year in high school. None of us who are now living knew him personally because he died before we were born. The only photos of him that I could find were school photos. I wanted to include them all, since they revealed different stages of his short life. I advanced the slides quickly to create a sort of animation.

An amazing thing happened in the synchronization of the slides with the music. Slide 14 shows my grandmother holding Herman Jr. as an infant; slide 36 shows my mother holding *me* as an infant. In both cases, the lyrics of the song "my baby's gone with the wind" is heard. I did not plan it; it just happened—and I find it a bit creepy.

The form of approximately the first two thirds of the slide show is generally linear, in generational order: three generations who are gone and my generation—myself, and my cousins Sheila and Robby. Starting with slide 53, the photos are more random and include Sheila and Robby's children—the latest generation.

After I completed the slide show, I had a new problem—how to deliver it to my intended audience.  The PowerPoint file is about 26mb—too big to attach to an email, and difficult to download.  I could not even depend on everyone in my intended audience having PowerPoint on their computers—especially the latest version.  I had to find an easier way for them to see my tribute, and I found it—YouTube.

I converted the PowerPoint file into an *MS Mpeg4 AVI* file with *E.M. PowerPoint Video Converter* by *EffectMatrix Software*—and uploaded it to YouTube.  Now, anyone with a web browser can see my tribute without having to download files or software to their computers.  As of this moment, the YouTube site has been viewed 106 times.

Finally, I created an annotated pdf version of the slide show with textual comments on most of the slides.  After the initial emotional impact of viewing photos set to music, I invite my family to read the information I have been able to discover—and my personal thoughts.  I hope my comments may interest others as well.  I will conclude this essay with my comments from slide 80:

> When my mother died, it occurred to me that I was now the patriarch of this branch of my family. The stories that my grandmother and my mother had told me were part of a 150-year oral tradition that would die with me unless I recorded them. In a digital age, it is possible to combine images and music in an artistic presentation. The Internet makes it possible for me to share my tribute with family members who live hundreds of miles away. Actually, I know beyond any doubt, that my tribute has been seen by family members beyond the reach of the Internet—I felt their presence while I was working on it—and I know that they are proud of me.

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