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Technical Communication: More Than Writing or Speech

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MASTER OF ARTS PORTFOLIO

Submitted to the English Department of Bowling Green State University in partial fulfillment of the requirements for the degree of Master of Arts in the field of English

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Associate Teaching Professor Heather Jordan, First Reader Teaching Professor Kimberly Spallinger, Second Reader

TABLE OF CONTENTS

Technical Communication: More than Writing or Speech	3
The Unlikely Tale of Homicide and the Making of a Dictionary: Does Texting Make All That Work for Nothing?	8
Backward Design: Designing Secondary Technical Writing Curriculum by Starting at The End	17
From Apathy to Action: Viewer Interaction with the Represented can Change the Course of World Events (Research and Analysis)	39
Man's Body: Not a Likeness to God Rather a Sign Vehicle	54

Technical Communication: More Than Writing or Speech

"Writing is never finished; it's just due." I heard this quote somewhere early in my coursework, and it summarizes my journey through the Bowling Green State University Master of Arts program in English. This quote rings true to me on two levels. On a surface level, as many people experience when completing an academic program, I juggled work, parenting, and the distractions of life while trying to meet writing and other assignment deadlines in my coursework. On a deeper level, this strikes at those ingrained feelings that by turning over my writing, I become vulnerable. Doubt creeps in about my research abilities, writing abilities, and thinking processes when I know someone else will review those things, and then ultimately put a grade on it—the official stamp of pride or shame.

Nevertheless, after hearing this quote, it hit me in my pragmatic bone. I told myself that this was the best I could do considering the time and circumstances dealt to me. When my father died, and later when my daughter was in the hospital frequently for several months, it created stress and even put me behind in my coursework, but I was able to shrug off those fears.

Ultimately, I came to realize that I could come back to my work if I wanted to develop it more—something we forget from a lifetime of writing for a grade and a deadline, starting from when we first begin to write. The mark of a grade does not hit the death knell for revisions to that piece; the summative nature of a grade is actually a formative feedback opportunity if one chooses to revisit the work. I suppose I always knew that, but I embrace this now. I think that is what is so valuable about the portfolio project. I get to revisit pieces—pieces I was not ready to part with—and try to do them justice, yet still with the growth mindset that I can only do what time and circumstances will allow me to do and that yes, I can come back to this later. Thus, my portfolio may be polished, but it's not finished. It's just due.

I entered the BGSU program to become a better writer and enhance my Juris Doctor degree and work experience in teaching writing. Although I achieved what I set out to do, it was not in the way I had imagined. I thought I would be better in a technical sense—more adept at writing and writing in different ways. That did come to fruition. But, I think what I gained was deeper than that. I became a better writer and have enhanced my career and education by understanding myself as a writer and the world I live in—someone who questions more, thinks harder, and keeps a positive mindset.

The pieces I chose for this portfolio reflect areas I felt challenged. Some of the pieces challenged my narrow thinking and others my lack of knowledge. Sometimes as teachers, we become narrow minded based merely on our own anecdotal experiences, i.e. "Texting is ruining kids' grammar." Through this program, I had the opportunity to challenge those thoughts through readings and research. Thus, my first portfolio piece reflects my thoughts and growth mindset.

As someone who has attained a Juris Doctor degree, I have been steeped in rhetoric and a rigorous form of technical writing and research; however, the Professional Writing and Rhetoric program exposed me to other types of technical writing and, most challengingly, visual rhetoric. Hence, my remaining three pieces showcase my areas of discovery and challenge with technical writing projects, most particularly in the visual rhetoric area.

CHALLENGING MY MINDSET

The first piece, from my very first class at BGSU in Linguistics, left lingering questions in my mind after I wrote it, partially from my own observations as a teacher, but also from the idea that was planted by my professor, Dr. Sheri Wells-Jensen. In "The Unlikely Tale of Homicide and the Making of a Dictionary: Does Texting Make All That Work for Nothing?" I

initially questioned the decline of students' writing due to texting in a course-required book review. She challenged me to investigate the impact of texting on students' language skills for a portfolio piece. So, I did. This piece is an unusual piece as it combines a book analysis with research, but I see it as a reflection of my experience at BGSU. Ideas were planted by professors that encouraged me to question and grow as a thinker and a writer. Thus, I expanded this piece from being a simple book analysis by adding research on the effects of texting on language. Through this piece, I realized that texting is technical communication at its core, whether one considers it a form of writing or speech. I see this as a piece that I may return to yet again as more research becomes available about the effects. Through this research, I was able to move beyond my limited, anecdotal observations and was exposed to new, novel ideas behind texting. For me, this piece has impact on me beyond my own edification because I can share different and new ideas with others when the topic inevitably comes up, particularly with other parents and my writing colleagues.

CHALLENGING MY KNOWLEDGE

My next piece from Visual Rhetoric and Practices of Writing course, "Backward Design:

Designing Secondary Technical Writing Curriculum by Starting at The End," started off as a

simple lesson plan to demonstrate to my professor I could develop a lesson that showcases visual
rhetoric. As I perused my other writings from the program, it occurred to me to combine this
lesson plan with a paper I wrote in a different class on curriculum design to showcase the

Backward Design method from my other paper—hence, the marriage of two pieces of my work.

The curriculum design piece was an interesting discovery for me. The method was something I
had been doing for years, likely intuitively. When I read about Backward Design in my
coursework, I remember thinking "There's a name for that!" I wanted to know more to see how I

could improve my own lesson design, which became my primary motivator for that research. In my revision process, I cut out a significant portion of my original research, and then I substantially revised what was left to make it work with the visual rhetoric lesson plan. I wanted to specifically connect curriculum design theory with the practical side of how to apply a theory to lessons in a technical writing class—something I did not find in my research. Technical writing instructors may come from different backgrounds, including backgrounds that may not include educational theory. Therefore, I feel this piece is a practical piece that can be used by all technical writing instructors.

My third piece is my substantial research piece. This one was a unique experience for me because it involved applying visual rhetoric methodologies to images. Many of the concepts and terminology in the Visual Rhetoric class were novel to me because I had never been exposed to them in any other academic program I have been through before. The changes I made to this piece centered around clarifying the context of the images and analyzing the "content analysis" in more detail. When I was brainstorming a topic, I wanted to show how some images have a bigger impact than others. But, as Dr. Heba said, I needed to answer the "So what?" question, and I had to narrow the topic down and get to the heart of what someone could glean from it. Ultimately, I decided to show how victims of war or violent conflict can convey a message to the viewer that effects important change. I wanted to convey that a producer of a single image can change the tide of a famine or a war. In today's world, anyone can create an image that could go viral, so the answer to the "So what?" is that we all possess the power available to us to effect large-scale change in our world.

My final piece is the one that I think really showcases a deeper analysis, despite being short. This visual rhetoric paper pushed me harder than anything else I did in my coursework. It

started with a passing idea that popped into my head from a single sentence in the course reading and turned into something that I wrestled with on an intellectual level, but also on the writing level. In the chapter "What is an Image?" by W. J. T. Mitchell in his book *Iconology; Image*, *Text*, *Ideology* he states, "'[I]mage' is to be understood not as 'picture' but as 'likeness,' a matter of spiritual similarity."

I struggled with this paper when I wrote it and probably struggled with it more during the revision process once I had been away from the topic for a while. My purpose was to provide a theory to show how God's likeness is not man's body, rather the body is the sign vehicle for God's image—his image being an abstract sign. I used the Percean Model to explain what God's image really is and what role the physical body plays in that. This is a deeply theoretical and philosophical piece for me and showcases my challenge to apply visual rhetoric theories to images. In this piece, I choose to take out confusing areas and add in an image and analysis because the assignment was over visual rhetoric, after all.

All in all, these pieces are examples of my growth in mindset and knowledge. As Carol S. Dweck states in her book *Mindset*, "Much of what may be preventing you from fulfilling your potential grows out of [mindset]." This program and these pieces helped challenge my preconceived notions or lack of knowledge by introducing me to theory and research that broadened my knowledge and changed my thinking from fixed to growth mindset, which helped me maximize my potential in this program. "Writing is never finished; it's just due" is now my mantra as I embrace that even these portfolio pieces can be visited again. I started this degree pursuit wanting to merely expand my technical knowledge, yet I finished as a better teacher and writer, *and* with a better understanding of myself and the world I live in.

The Unlikely Tale of Homicide and the Making of a Dictionary:

Does Texting Make All That Work for Nothing?

Introduction

Could you bear the murder of an impoverished father by a delusional, but genteel slayer, if the aftermath led to the murderer's significant contribution to one of the greatest literary accomplishments in the English language? Simon Winchester's book *The Professor and the Madman: A Tale of Murder, Insanity, and the Making of the Oxford English Dictionary* is about acceptance, friendship, and change—change in the hearts of those afflicted by the event; change in the mind of a brilliant, but diminished man; and oddly connected to these occurrences, change in the English language. The book showcases how well over 100 years ago the creators of the *Oxford English Dictionary* wrestled with origins to words and staying abreast of changes in the language similar to the struggle we see today, particularly with texting. Despite the popular belief and weak research to the contrary, texting may have positive effects on children's writing, and surprisingly, may be adding a new form of speech communication.

BOOK ANALYSIS

Winchester opens his book with a shocking murder that wrenches at the heart: a laboring man with a wife, seven children, and a child on the way, is randomly murdered in the slums of London as he walks to his job in the early morning hours. This scenario sounds like any number of stories in today's news, but this story plays out the details of the life of the murderer, William Chester Minor, and how, but for committing this murder, the world may not have been gifted with the use of his brilliant mind in the making of the largest and most complete recordation of the English language.

Being a scientist himself, Winchester couldn't write the story without going to great lengths to investigate why Minor would commit such a senseless crime. His investigation revealed that his religious upbringing collided with a world of sexual deviance and repression of sexual fantasies, which combined with the trauma of being a surgeon during the Civil War possibly triggered schizophrenia. Winchester also showed the unexpected effect of the murder—forgiveness and friendship. Minor forged an unlikely friendship with the victim's widow while he was institutionalized for his mental disorder. The widow would deliver books to Minor and this is how he discovered that volunteers were needed to do research for the Oxford English Dictionary—a perfect job for an educated, brilliant mind trapped in an asylum with nothing to do for the rest of his life. The rest of the book is devoted to the making of the dictionary, the forging of a friendship between the director of the project and Minor, the difficulties of the project, and Minor's contributions to the project.

What I find interesting about the book is that the original language advocates pompously felt that the English language was in a perfect state and should be preserved as it was with a strict set of rules (Winchester 91). There is debate as to whether the first project director, Samuel Johnson, was of this inclination or not (92). Whatever Johnson's view was initially, it's thought that his work in compiling the first part of the dictionary led him to find his belief impossible to support and that language was much more fluid (92). Winchester opines that Johnson's shift in his view of language could be explained by an illuminating quote from Benjamin Martin, "No language as depending on arbitrary use and custom can ever be permanently the same, but will always being a mutable and fluctuating state; and what is deem'd polite and elegant in one age, may be accounted uncouth and barbarous in another" (93).

Almost 250 years later, the debate on language change continues, and I am not so sure which side of the views above I support. Probably like my political views, I am somewhere in the middle-ish (is that a legit word?). I think we continue to be in the midst of a shift in spoken and written language today. Because I received a significant portion of my education before the advent of the internet, my language instruction and use of language seems much more formal than what I see used today, even in the professional environment. Unlike what it seems the rest of the world subscribes to, I cannot get myself to type anything but complete words and sentences when I text, email, and post to social media. Furthermore, I find myself nagging to and complaining about my children's terrible writing who have been raised in this digital age.

Yet, my resistance seems artificial when I then proceed to use words that never existed before the internet—such as the verb "google." So, it makes me wonder, am I really a stickler about grammar and word usage and truly resist current trends in spelling and grammar (e.g. texting paragraphs with glaring omissions, like no vowels or punctuation¹—Wth is with that anyway—Oops! Did I just slip?)? I am a hypocrite, it seems. But back to Martin's quote above, I most certainly see a shift in language.

Further, a *New York Times* article came to mind about pronoun accuracy in today's age which exemplifies grammar issues I am seeing today as a teacher and a parent. In "'He,' 'She,' 'They' and Us," higher education writer Raillan Brooks penned an article on pronouns, particularly in the transgender age. The article reviews grammar conventions and the major shift in pronoun usage, including the singular use of 'they' now permitted by the Associated Press.

ME: Did you remember to tip your stylist?

MIRIAM: o i frgot i wasnt tryn to be rude i feel baaaad now she was super sweet

¹ Below is an example of a text between my daughter, Miriam, and me on the day of prom, May 13, 2017:

This, too, was unheard of back in the day when I took high school journalism. Thus, one can't deny that spoken language is changing when even the Associated Press approves change in the written use of language in such a drastic way.

I think my takeaway from the book is that it's likely impossible to completely cling to grammar conventions and word usage of the past. Yet, I know that what the language is becoming is not necessarily what it will be forever. Since the invention of the printing press in the mid-15th century, complaints have abounded about the changes in our language (Pinker 5). Knowing that language changes, will there be anything left of Standard English as a result of the texting world we live in today? Are kids today growing up to be masters of electronics but not of their own language?

TEXTING AND PROPER GRAMMAR USE

With the advent of the cell phone, texting is a more recent form of communication, and I assert it adds to the richness of our language and does not reduce the quality of our language as many may believe. I confess that I was one of many who felt texting may be ruining how kids today write. Anecdotally, I could say that the writing I have observed seemed less capable than of my own generation. But, is it texting that accounts for that? It seemed to be the most obvious reason to me. Yet, as I researched texting and language, I found that texting may not be harming our children's grammar as much as we thought, rather there is some research that points to positive effects, and texting may even add to our language in an extraordinary way.

Textese may not be harming children's grammar. Wood, et al. reviewed existing research, including their own previous research, that showed texting negatively impacts students' grammar and found the research was not without possible issues, such as the group studied might not be representative, and they ultimately concluded that a cause and effect relationship could not be

made with this research and further studies are needed because of the weaknesses of the research available (416). They also argue that there might be legitimacy to grammar violations in texting, but these may be deliberate omissions or simply errors in writing (416). This type of writing is called textese. "Textese is a form of abbreviated written—or actually typed—language, that is characterized by the omission of words and the use of *textisms*, such as abbreviations, letter/number homophones, emoticons, etc." (van Dijk, et al. 2). Thus, a conscious omission, including omission of punctuation, should be treated differently than other types of grammar issues because it does not reflect lack of grammar knowledge, rather it reflects choices in grammatical structure. Wood, et al. found that these grammar violations "d[id] not appear to be linked to changes in grammatical skills over time adds to the growing body of evidence that there is no need for panic about the effects of textism use on the language skills of children, adolescents, or adults" (427).

In fact, there seems to be a positive association between textism and spelling, specifically phonology and alphabetic principles. Waldron and Wood suggest that to use textisms, children must have a good grasp on phonology and that some research supports that textism "could actually reinforce children's phonological representations and understanding of letter-sound correspondences" (385). This comports with Wood, et al. finding that conscious omissions do not mean children do not know grammar, rather they are choosing how to construct words and sentences.

Further, it is common knowledge that avid readers tend to be better at writing. Powell and Dixon point to research by Plester et al. in finding that there was a positive association between use of textisms and literacy "even after age, phonological awareness, vocabulary and age of acquiring a phone had been partialled out" (59). This positive literacy effect could be due to

children's extended exposure to reading and constructing texts messages. If we know that better readers tend to be better writers, and we know that there is a positive effect of textism on literacy, then how can we assume that today's kids don't know how to write? Maybe we are examining texting as writing as an incorrect form of communication.

TEXTING AS SPEECH

Texting as a form of speech rather than writing. A different way to look at texting is not at how it is impacting our grammar and writing skills, but how it is a form of communication that replaces speech, thus is not a writing issue, rather it is a new form of communication (McWhorter). The advent of texting created an alternate way to speak, meaning, texting actually replaces speech (McWhorter). It is commonly known that how we speak and how we write are different and use different conventions. If we closely examine how we text, it seems to pattern an actual face-to-face conversation more than writing.

As linguist and Columbia University professor John McWhorter states in his TED2013 presentation "Txtng is killing language. JK!!!," we now have cell phones readily available to us where we can send and receive messages quickly and so "then you have the conditions that allow that we can write like we speak. And that's where texting comes in... What texting is, despite the fact that it involves the brute mechanics of something that we call writing, is fingered speech. That's what texting is. Now we can write the way we talk." Not only is it a new form of communication, but texting also has the cognitive benefit of being bidialectal, similar to being bilingual, and is a way that our young people are expanding their linguistic repertoire (McWhorter). McWhorter likens texting to speech because of the conventions used, linguistic markers such as pragmatic particles, and the emerging structure, but the communication is made in such a way as if between actual people conversing. This makes sense. For example, think of

how emotion, or the otherwise nonverbal, aspect of actual face-to-face conversations has been translated into emoticons and intentional misspellings to convey sound that shows emotion (see "baaaad" in footnote¹) Students wouldn't think about inserting emoticons into academic speech, but they use it appropriately in a text to convey the nonverbal aspects that would normally take place in a face-to-face conversation.

Therefore, we can look at texting as having positive (or negative) effects on students' grammar, but we can also look at it not as a grammar problem. Rather, it is a new form of communication in the history of man that simulates speaking more than writing, thus is not a grammar or writing issue at all.

CONCLUSION

Clearly, there needs to be more research as to negative and positive effects texting may have on kids today. There seems to be a variety of possibilities of the effects of texting as well as weak or nonexistent research. One thing is clear: however, language—whether a form of writing or speech—is always changing. We write differently than we did in generations past, and we certainly speak differently than we did in the past. Psychologist and linguist Steven Pinker postulates, "It is foolish, and fortunately impossible, to choke off the influx of new words and freeze English vocabulary in its current state, thereby preventing its speakers from acquiring the tools to share new ideas efficiently" (239). New ideas. If we believe McWhorter, we may even be adding a new form of speech.

Reading Simon Winchester's book *The Professor and the Madman: A Tale of Murder, Insanity, and the Making of the Oxford English Dictionary* made me ponder language in a way I never had before. Two themes in the book were about acceptance and change—themes that helped me view my own language use differently from thinking we were seeing the end of our

language as we knew it to being open to new possibilities in language use. Moreover, I admit that I have never given a moment's thought to who created the first full dictionary of my language, nor have I given thought to how that task was accomplished. But I know I will never look at my trusty, 25-year-old dictionary the same way again. However, I may need to buy a supplement!

So, how did my own daughter fare in life after showing her nearly incoherent, nonpunctuated and abbreviated text message shown in the footnote? The rest of the story, as Paul Harvey used to say, is that the stylist received her tip and my daughter was accepted into her favorite Big 10 school in Michigan. Not too bad for someone who comes across as illiterate. Or, should I say, dialectal?

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Backward Design: Designing Secondary Technical Writing Curriculum by Starting at The End

Introduction

The Backward Design model of curriculum development requires a teacher to determine what the students are to learn by the end of a unit or course and then create the appropriate learning activities to achieve that goal. This is a useful model of curriculum development in technical communication because this genre of writing is focused on a specific end result—creating useable and accessible information. If the end is the goal for students in technical communication, then why isn't there more information available to teachers of technical communication to ensure they are constructing curriculum in a manner to achieve that goal?

There appears to be a gap in scholarly works directly tying technical writing and the backward design model of curriculum development for student learning. Scholarly articles about teaching technical communication seem to focus on teaching in a specific content area, such as science and engineering or connecting industry and technical writing instruction, rather than on how to actually construct the technical writing curriculum or theory behind student learning. A lot of technical communication articles directed to teaching are about the focus on developing technical writing as a separate discipline (Connors 83). Thus, the lack of resources makes it difficult for new technical communication teachers or teachers who need to retool and teach technical communication to get started.

To be instructive to technical communications teachers, a brief theoretical background of the Backward Design model, developed by Jay McTighe and others, is discussed below with a practical application of the model to the technical communication genre using Randy Bowen's template for teachers. This model of curriculum development meets academic standards through a purposefully designed curriculum using McTighe's three-stage process.

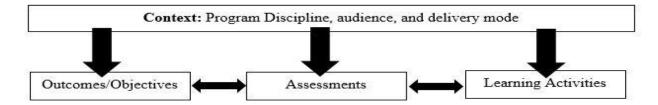
THEORY AND TEMPLATES AS BACKDROP TO CURRICULUM CONSTRUCTION

Backward Design model of curriculum design. To provide a brief review, backward design is a method of curriculum design that supports deeper student learning of content. The design allows for flexibility in teaching and assessing yet maintains rigorous standards for all students (McTighe and Brown 242).

Jay McTighe, one of the introducers of the backward-design process, describes this as a three-stage process: 1) stage one – identify desired results; 2) stage two –assessments provide evidence of stage one; and 3) stage three – a learning plan is developed to achieve stage one and prepare for performance at stage two (237-239). This differs from what is often seen and heard in classrooms where a teacher sees a lesson that is interesting and incorporates it, only then trying to figure out if or how to assess the lesson. The learning plan comes last in McTighe's model.

"From a design perspective, Backward Design enhances student learning. Backward Design ties course objectives to assessment and corresponding learning activities. This reverse engineering approach provides a clear "roadmap" for designing and organizing course content to achieve the focal course objectives" (Shah 142). Shah provides a visual depiction as follows:

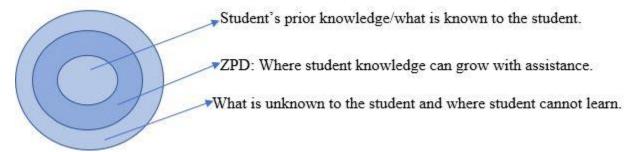
Fig. 1: Shah's "roadmap" for Backward Design



However, this reverse engineering should take into consideration whether the activities are geared to student learning or whether the activities are too difficult, causing student failure. So, *how* to engage students effectively at the third stage is imperative.

Using learning theory in Backward Design. As most educators know through experience, if not intuition, students learn the most when they are guided through new things based on their prior knowledge with assistance from someone with deeper knowledge of the topic. Psychologist Lev Vygotsky identified the Zone of Proximal Development ("ZPD") as the place where the most student learning can take place—the place where the student is stretched to deeper understanding of material, but only through the assistance of someone with deeper knowledge (Danish 7). This zone is beyond what the student could learn on his own (Danish 7). This method helps learners construct new knowledge under the guidance of another where a student can find meaning in the new knowledge by connecting it to previous knowledge. The ZPD is often visually depicted similarly as seen in figure 2.

Fig. 2: Vygotsky's Zone of Proximal Development



It is in the ZPD, the place that is beyond a student's base knowledge, where those who teach become instrumental in the student learning process. "In the constructivist model, instructors first introduce foundational concepts, adding increasingly complex concepts as students master the more basic ones" (Rolloff 291). In addition to teacher-led activities, this model would work well with peer tutoring or group activities with learners of different levels within the groups.

To provide a workplace example, the ZPD concept is not dissimilar to mentorship programs for new employees. For example, an expert is paired with a novice technical

communicator to help guide them, in a scaffolded approach, toward success within the discourse community by assisting them through tasks and contexts that the novice would not understand otherwise (Kohn 178).

Using a template to ensure successful creation of curriculum. To assist with implanting a backward design model that takes Vygotsky's theory into consideration, Randy Bowen's teaching guide on "Understanding by Design" illustrates a template (see fig. 3) that can be used. This template is a practical model of curriculum development for teachers that illustrates the Backward Design model. The template starts with the end in mind—the desired results that is the ability of the student to acquire, understand, and ultimately transfer the knowledge beyond the lesson or course, which is McTighe's Stage 1.

Bowen's template next breaks down how to assess the desired results in Stage 2. The template requires the teacher to break down the criteria that the students will be assessed on as well as how to prove the student has achieved the desired results. The key here is allowing students to demonstrate the acquired knowledge. When referring to McTighe's "UbD in a Nutshell," McTighe describes this authentic piece as a "student's ability to apply their learning in new, varied, and realistic situations - transfer - in which they must "do" the subject as opposed to merely answering pat questions" (3). So, authentic assessment means that students demonstrate knowledge in real-world tasks. This type of assessment could include "debates, exhibitions, experiments and presentations" (Reynolds 17).

In the third and final stage of the model, the teacher must outline the student learning activities and methods of instruction which connect with the end goal. As one teacher who implemented backward design stated, "By the time the goals and assessments had been thoroughly developed, the content that needed to be covered was obvious" (Michael 50).

It is at this third stage where it is vital to incorporate Vygotsky's theory on ZPD to ensure that the learning plan in Stage 3 focuses on learning activities and teaching strategies that provide students with the most learning growth. It's during these activities where students should be exposed to the tutelage of the teacher and others with deeper knowledge of the topic so they can assist them to a higher level of learning.

An outline of the basic template is shown in figure 3.

Fig. 3: Randy Bowen's template for teachers to create a lesson, unit or course using the Backward Design model

	Stage 1 – Desire	d Results
ESTABLISHED		Transfer
GOALS	Students will be able to independ	lently use their learning to
The enduring understandings		nsfer the knowledge gained from the lesson, iside of the context of the course.
and learning		Meaning
goals of the	UNDERSTANDINGS	ESSENTIAL QUESTIONS
lesson, unit, or course.	Students will understand that	
		Refers to the provocative questions that
	Refers to the big ideas and	foster inquiry, understanding, and
	specific understandings	transfer of learning. These questions
	students will have when the	typically frame the lesson, unit, or course
	complete the lesson, unit, or	and are often revisited. If students attain
	course.	the established goals, they should be able
		to answer the essential question(s).
		Acquisition
	Students will know	Students will be skilled at
	Refers to the key knowledge students will acquire from the lesson, unit, or course.	Refers to the key skills students will acquire from the lesson, unit, or course.

	Stage 2 – Evidence and Assessment
Evaluative	Assessment Evidence
Criteria	
	PERFORMANCE TASK(S):
Refers to the	
various types of criteria that students will be evaluated on.	Refers to the authentic performance task(s) that students will complete to demonstrate the desired understandings or demonstrate they have attained the goals. The performance task(s) are typically larger assessments that coalesce various concepts and understandings like large projects or papers. OTHER EVIDENCE: Refers to other types of evidence that will show if students have demonstrated achievement of the desired results. This includes quizzes, tests, homework, etc. This is also a good point to consider incorporating self-assessments and student reflections.
	Stage 3 – Learning Plan

Summary of Key Learning Events and Instruction

This stage encompasses the individual learning activities and instructional strategies that will be employed. This includes lectures, discussions, problem-solving sessions, etc.

In sum, the Backward Design model is a way to construct curriculum beginning with the end in mind. Next, the model establishes the assessment curriculum, and only then are the dayto-day activities designed to connect the learning to the end goal. It is important to ensure that the activities are delivered in a way that the greatest student learning takes place.

To achieve that deeper level of understanding during the third stage, teachers of technical writing courses must guide students to the next level of learning by building from their prior knowledge that was assessed at Stage 2. The assessment scheme should also include whether the design of the curriculum and the methods employed to deliver activities were successful.

EVIDENCE OF SUCCESS OF CURRICULUM DESIGN

Before teachers can measure student success on a unit, the pre-assessment schemes should target and evaluate students' current and emerging learning knowledge and capabilities to help teachers determine what instructional strategies to employ. This assessment is often called a diagnostic assessment.

All assessments should be tied to what it is that students are to learn. Thus, a teacher should identify an outcome or objective a student should meet and ask themselves questions, such as:

- ✓ How will I know the student has achieved that objective or standard?
- ✓ How can I determine where a student is at on a continuum from no knowledge of that objective to competent or mastery knowledge of that objective?
- ✓ What type of assessment will help me to identify these things?

"By defining the ZPD as the distance between what a student can do independently and with help, its role in assessment becomes clear: once we understand students' current and emerging capabilities, we can then target instruction more effectively" (Danish 7). McTighe writes that instruction should focus on student deficiencies made apparent through the assessment scheme:

Because students typically vary in their prior knowledge and skill levels—particularly at the beginning of a course of study, grading period, unit, or lesson—responsive teachers should target their instruction to address significant gaps in knowledge and skills. Such responsiveness follows from effective diagnostic assessments that reveal if such prerequisites exist within each learner. (McTighe 238)

For example, an objective might be: Students can write basic business correspondence, such as emails, letters, and memorandums using accurate rhetorical decisions for the circumstances. How will you know if a student has achieved that standard? Is it when the student can write a business letter without assistance and with few to no errors? An assessment scheme must determine where a student is knowledgeable or may lack knowledge so that effective instruction can be

implemented to increase knowledge, practice the skill, and then apply the knowledge and skills to a new situation.

To assess the objective of a student writing a business letter, a teacher may administer an objective, multiple-choice pre-test over parts of a business letter, basic grammar, and rhetorical devices. This provides preliminary evidence of a baseline of student knowledge on the desired outcome and goal. From there, the teacher would provide instruction and learning activities on areas of deficiency.

Then, a follow-up assessment would require the student to apply the knowledge and practiced skill by writing a business letter, unaided, as a post-test. At this point, the teacher could identify if the students achieved that objective. "If gaps or deficiencies are present, however, instructors can eliminate or ease such gaps through a variety of instructional interventions, including individual coaching and tutorials, small-group instruction, and peer coaching activities" (McTighe 238). Thus, if some students struggled with applying the skill to a new scenario, a teacher would employ more individualized instruction as a follow-up for those students who are at varying levels of understanding and ability. The post-test then becomes the evidence from the assessment scheme that shows whether the desired results were met.

ACTIVITIES AND METHODS OF INSTRUCTIONAL DELIVERY AS BRIDGE TO STUDENT SUCCESS

The third stage of McTighe's model, the learning plan, includes the student learning activities and methods of course instruction that are developed once objectives and assessments have been determined. To close the loop between these three stages, the learning plan activities are the ones that will be assessed to determine if the objectives have been met. This final stage brings the entire process together, and "it encourages us to think about a unit or course in terms of the collected assessment evident needed to document and validate that the desired learning has been achieved, so that the course is not just content to be covered by or a series of learning

activities" (qtd. In Baughman 3). As one teacher who implemented the backward design approach said, "Class time was markedly more active for students after implementing the backward design course planner" (Reynolds 26). Thus, the learning plan is not "just a series of learning activities" as Baughman quotes from Wiggins' and McTighe's work, rather it's purposefully designed to engage students to achieve higher student achievement by aligning these activities with assessments, and ultimately the objectives.

Reading through the theory and reviewing the template is helpful and necessary to understanding how to implement the Backward Design model in technical communication lessons. However, like with students, a model or sample of an actual lesson using Bowen's template of the Backward Design model can assist with fully understanding how to accomplish Backward Design. Figure 4 is an actual learning plan targeted to eleventh and twelfth graders based on the Common Core Standards. For sake of brevity, the learning plan is one lesson within a bigger unit on visual rhetoric.

In Stage 1 below, you can see the breakdown of a lesson that creates a technical communication learning experience where a student is able to demonstrate knowledge in an authentic way by creating an image that includes "demand" and "offer." After determining what you want the student to achieve, Stage 2 outlines the evidence that will be gathered to ensure the goals are met. Stage 3 outlines activities to engage students in a way to maximize learning and are aligned to the desired results.

Fig. 4: The three-stage process of Backward Design using Bowen's template for a Technical Writing Project on "Demand" and "Offer" in an image

	Stage 1 – D	Desired Results	
ESTABLISHED	~	Transfer	
GOAL	Students will be able to inde	pendently use their learning to	
Students will create original "demand" and "offer" images	Make strategic use of digital media and visual displays of data to express information (CCSS.ELA-LITERACY.CCRA.SL.5). Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, (CCSS.ELA-LITERACY.CCRA.SL.2).		
		Meaning	
	UNDERSTANDINGS Students will understand that Demand and offer are one of the many ways a message can be communicated visually from the producer of the image to the viewer of the image	 What kind of prior knowledge does the student have about communicating messages visually? What information would the student need to know about how to create an image? What are the characteristics of "demand" and "offer"? In what ways can the visual information be conveyed? How will you know the communication is effective? 	
		Acquisition	
	Students will know	Students will be skilled at	
	The difference in the message communicated with a demand versus an offer in an image	How to create an image that includes either a demand of the viewer or an offer to the viewer	

 Evaluative Criteria PERFORMANCE TASK(S): Notes taken Responses on Discussion Boards Quality of examples Evaluative Criteria PERFORMANCE TASK(S): Cold calls (randomly calling on students) during in-class lectures discussions to probe students' thoughts and also their proper use of terminology providing immediate formative feedback Brief review by teacher of students' class notes to ensure they are identifying key points and advising them when deficiencies observant ways to improve their notes 	of e
 Notes taken Responses on Discussion Boards Quality of PERFORMANCE TASK(S): Cold calls (randomly calling on students) during in-class lectures discussions to probe students' thoughts and also their proper use of terminology providing immediate formative feedback Brief review by teacher of students' class notes to ensure they are identifying key points and advising them when deficiencies obsertions. 	of e
 Notes taken Responses on Discussion Boards Quality of Cold calls (randomly calling on students) during in-class lectures discussions to probe students' thoughts and also their proper use of terminology providing immediate formative feedback Brief review by teacher of students' class notes to ensure they are identifying key points and advising them when deficiencies obsertions. 	of e
 Responses on Discussion Boards Quality of discussions to probe students' thoughts and also their proper use of terminology providing immediate formative feedback Brief review by teacher of students' class notes to ensure they are identifying key points and advising them when deficiencies obsertions. 	of e
 Review by teacher of Discussion Board post(s) for basic understa through proper use of basic terminology and provide feedback to students about their posts Review by teacher of basic terminology and provide feedback to students about their posts Review by teacher of students' examples brought to class by probatheir analysis of their image during class as a form of immediate formative assessment Assessment using terminology and characteristics of "demand" and "offer" that may generate individual formative feedback, unless condemonstrates problems as a whole, which would necessitate form feedback and review of concepts with the entire class Students' creation of their own "demand" and "offer" image, alore with a written analysis Students' review and analysis of another classmate's work to app their knowledge to another's work and get feedback from their stream partner Students' reflections during in-class discussion 	anding oing oid class ative oig
 Participation in class discussions and teacher questions Student reflections 	

	Stage 3 – Learning Plan
	Summary of Key Learning Events and Instruction
Class 1	 Pre-reading: Students will read pp. 114-124 in <i>Reading Images: The Grammar of Visual Design</i> by Gunther Kress and Theo van Leeuwen to get a background on one area of representation and interaction Students will take notes on class lecture and discussion questions over the reading that will orient students to where "demand" and "offer" fit into the rest of the unit, as well as to clearly define terminology See Lecture Handout 1
Class 2	Students will take notes on class lecture and discussion questions over the reading to clearly define characteristics of "demand" and "offer" • See Lecture Handout 2 • Homework: Students will post a response to a Discussion Board asking them to analyze an image
Class 3	Students will examine text book and teacher examples to identify characteristics of "demand" or "offer" in an image • See figures 4.1, 4.2, and 4.3 in K&vL • See Handout 3 • Homework: Students will research their own examples to share and analyze with the class
Class 4	Students will demonstrate their analysis of an image to the class • Students will present their two examples they found, one on "demand" and one on "offer"
Class 5	Students will demonstrate understanding of terminology and characteristics of "demand" and "offer" on a short assessment • See Assessment • Homework: Students will create their own "demand" and "offer" images, along with an analysis of each. See Assignment Guidelines.
Class 6	Students will exchange images they created and analyze another classmate's images, then compare with the creator's analysis followed by a class reflection about what they learned from creating the activity and the partner analysis exercise

The handouts, assignment, and assessment referred to are attached as "Appendix."

A further consideration for secondary teachers during the learning plan phase (which warrants a much larger discussion than provided here) is *how* to reach students at varying

learning abilities. Some students are not able to achieve the learning outcomes at the same pace as other students in the class and need alternate instruction and additional assessment to ensure student achievement of goals.

In Amy Childre's article on scaffolded activities in the Backward Design model, she explains that when designing and sequencing learning activities, a teacher should engage students with "essential questions and unit vocabulary, break instruction and activities into manageable parts, [and] weave assessment across the unit" as a part of the scaffolding process (Childre 9). Engaging students with questions and vocabulary helps them connect to the material, particularly those who have disabilities (9). Instruction that is inclusive of students with varying abilities would include "mini-instruction, activity, and reflection/discussion session to actively immerse students in the content" (9). By weaving assessments across a unit, student understanding can be monitored (10).

Scaffolded learning uses various instructional methods to ensure everyone is learning and achieving goals and is a best practice for teaching. However, putting a name to this helps teachers to be mindful when creating activities that all students march to a different drum, but we ultimately want them to all end on the same step.

CONCLUSION

The Backward Design model of curriculum instruction helps ensure that all students are receiving the instruction they need to achieve the unit or course objective, or standard. This model forces teachers to think first about what they want their students to learn and how they will know when students have achieved that learning outcome before working on student activities and instructional practices. This prevents students being taught lessons on premises, such as "This has always been taught" or "This looks like a good idea or fun activity," that have

no connection to stated outcomes. Lessons are focused on helping students achieve the outcome, while guided by a more experienced learner, often the teacher, who employs various strategies to ensure students are learning. This model combined with Bowen's template provide a starting point for teachers who want to create curriculum that ensures the ability to measure student achievement.

Appendix

Demand and Offer: Lecture Handout 1

Prior Knowledge on Audience Studies
Position of the Viewer
Producers and Viewers of Images
 2. 3.
Other Connections to Writing Studies
Notes from Class Questions and Discussion

Demand and Offer: Lecture Handout 2

The Concepts of "Demand" and "Offer"
Characteristics of "Demand"
Characteristics of "Offer"
Notes from Class Questions and Discussion

Demand and Offer: Handout 3

(images from Google images)















Demand and Offer: Assessment

INSTRUCTIONS: Provide a thorough review and analysis of the image below.

GRADE CRITERIA: There are 15 points available awarded as allotted below based upon quality.

Defined and correctly used terminology for demand and/or offer (2 pts)
Identified the characteristics associated with demand and/or offer (2 pts)
Analyzed the image using terminology and characteristics previously identified (3 pts)
Analyzed position of the viewer (3 pts)
Incorporated and applied concepts from other areas of writing studies we have already covered that apply to this image and are relevant to the discussion of demand and offer (3 pts)



Photo source: https://www.adforum.com/talent/65418-jack-mariucci/work/34511368

Demand and Offer: Assignment Guidelines

Objective: Students will create original "Demand" and "Offer" images

Due Date:

Assignment overview: You will create one "Demand" and one "Offer" image that you will analyze. Next, you will share your images with another classmate for feedback. Then, the class will reflect on the assignment, and students will need to share what they learned from this unit.

- 1. Brainstorm and then pick an issue or product that you can create both your demand and offer image about
- 2. Create an outline that breaks down the images and their meanings
- 3. After you have brainstormed your idea and outlined what you will do, create the image using digital media
 - You may then alter the image using software or applications
- 4. On a separate page, analyze (using proper grammar and punctuation) each image you created using the terminology and characteristics we have discussed in class
- 5. Place an MLA header with your name, class, etc. at the top left of the images page and your analysis page
- 6. Submit online to the assignment link "Demand and Offer Assignment"

In class, we will exchange your image with a partner who will analyze each image. You will then compare and contrast your own analysis with theirs. This provides insight to how you perceived your image and how someone else perceives it. The class will then reflect together on what everyone learned from this unit.

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From Apathy to Action: Viewer Interaction with the Represented can Change the Course of World Events

Introduction

When one thinks of images of victims of war or violence, it is likely of an image that was circulated heavily, but it may also be one that tugged at the heart strings ramping up public support for victims. Before the advent of faxing and the internet, sometimes the only images we even saw from happenings around the world were the ones that editors felt viewers would connect with the most and show a story (Powell 999). Today, we are bombarded by visual images more than ever before due to social media and the highly visual apps like Instagram and Snapchat, and the images that stand out are the ones that we connect with the most—hence, they become viral in today's world. But, what makes an image not just go viral, but rather powerful enough of an image that effects change? Nicole Maurantonio writes about "That Photo" as the "power of the visual to record the past and catalyze change" (502). What makes the image powerful? It is the effects the photographer uses that sends a message to the viewer. These effects enhance the message between the producer and object of the image to the viewer, often garnering support for victims, as seen in internationally recognized images of what would otherwise be obscure victims of war and conflict.

EFFECTS THAT ENHANCE VISUAL MESSAGES

The design of an image can enhance the effects of its message depending on the way the elements, also known at the participants, interact with each other. The interaction is between "represented participants (the people, the places and things depicted in images) and interactive participants (the people who communicate with each other through image, the producers and viewers of images) (Kress 114). Some of these effects are demand, frame size, and angle.

Demand. Demand in an image creates a contact, real or imaginary, between the represented and the viewer. Kress and van Leeuwen describe demand as when eye contact is made forming vectors, or eyelines, between the represented and the viewer and establishing contact that is explicit and requires a response from the viewer (117-118). More vectors can be formed through gestures that follow the eyeline forming demand (117).

Fig. 1: Famine in Somalia by James Nachtwey



In figure 1, the viewer is placed to where it is as if he or she is the one pushing the starving woman in the wheelbarrow. In 1992, photographer James Nachtwey wanted to bring attention to a crisis he felt was being ignored. He documented the famine in Somalia that occurred as a result of armed conflict in Mogadishu causing food prices to skyrocket ("Famine"). In the photo, the starving women turns her head toward the one who pushes the wheelbarrow. Combined with the outstretched hand reaching toward the handler of the wheelbarrow, the

viewer sees the demand by the woman to take action and feed her. Other than for sustenance, there could be few other reasons a woman this starved would use what strength she had left to turn her head and raise her hand. She likely could not make eye contact because her eyes were heavily lidded from apparent fatigue that goes with starvation. Thus, her head tilt and hand outstretched is her form of demand. Whatever is left in her that can communicate appears to be pleading for a handout to survive. Here, the call to action by the viewer is to help give her food. Thus, not only is this contact from the woman explicit, but the producer has positioned the viewer in such a way as to ask the viewer to do something (118).

Here, the producer was a reporter receiving support from the International Committee of the Red Cross ("Alan Kurdi"), thus there was an intent to visually appeal to viewers' sympathy and garner funding for those who were starving. The image was published in a feature article in the *Times* magazine and received such public support that the International Red Cross mobilized to assist in what was their largest operation since World War II ("Alan Kurdi"). Thus, the producer of the image effectively conveyed the message to gain public support for the cause—a famine in Somalia not receiving enough international aid.

Frame size. Similar to demand, the creator of an image makes choices about connection between the viewer and the represented using distance, similar to the social interactions we have everyday (Kress 124). The closer the represented, the more intimacy felt by the viewer, and the further the represented, the more it is objectified and impersonal (126). The choices available to the producer to use a particular distance is on a continuum, from very close-up shots to very long shots (Kress 124). The choices of shots then range from less than a head and shoulders-type shot to a shot were the person is less than half of the height of the frame.

One might think that frame size would not be an effect that would invoke a call to action about refugees who had been largely ignored. In 2015, that changed when Alan Kurdi's dead body washed up on the shores of Turkey in his family's attempt to reach Greece from Syria to escape from ISIS terrorists who were taking over their country ("Alan Kurdi"). A photojournalist captured Kurdi's image, a toddler lying dead on a beach with a government official seemingly taking notes nearby. The longer distance frame size fully shows Alan Kurdi's dead body and the adult first responder standing nearby. Although he is a toddler and quite small, the long shot makes his body look even smaller next to the water and the adult standing nearby.

A call to action to help refugees was likely invoked because a photo image of a dead toddler is not a stereotypical image of a refugee. Athanasia Batziou writes about how stereotypical photojournalism images of refugees causes viewers to see the refugee as not like us and as an "other" (43). This could be fear-driven because research shows humans tend to fear those of other groups (Wilmott 67). That fear and attempt to type someone as "other" could explain a lot of apathy toward Syrian refugees until the photo in figure 2 of Alan Kurdi was taken and then seen around the world. Instead of creating fear, however, this image invoked action by the viewers to help, likely due to the connection the viewer had with the image. Peter Bouckaert, Human Rights Watch's emergencies director, told Times, "It's, sadly, a very well-composed image showing a little toddler that we can all identify with, with his little sneakers and shorts on," he tells TIME. "I think for a lot of the public, their first reaction is: 'This could have been my child" ("Alan Kurdi"). One of the reasons the photo was well-composed is because of the framing. Because there is the distance, it looks like it could be anybody's child, and not an "other" that a viewer cannot identify with and thus ignore.

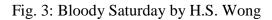
It is that connection of the image to our own experience that evokes a call for action to help prevent this from happening to other refugees. The United Nations Refugee Agency estimates over 5.6 million Syrians fled from their country looking for help (UNHCR). However, interest in assisting refugees through daily donations to the Red Cross spiked by 55 times the week after Kurdi's image was published compared to the week before (Cole).



Fig. 2: An image of deceased refugee Alan Kurdi by Nilufer Demir

Angle. Perspective in an image can be drawn by the angle—horizontal or vertical. For horizontal angle, the frontal plane of the image-producer and the frontal plane of the represented participants can form lines with vanishing points that determine the position of the viewer (Kress 134). When an image is not at a frontal angle then it is oblique (136). Frontal angle indicates the

producer of the image is a part of the world of the represented, but an oblique angle has the opposite effect (136). The more oblique, the less involvement from the viewer.





In figure 3, the represented is "a wailing Chinese baby whose mother lay dead on nearby tracks" ("Bloody Saturday"). The image was seen by 136 million people around the world, and "it struck a personal chord that transcended ethnicity and geography. To many, the infant's pain represented the plight of China and the bloodlust of Japan" who invaded China in an act of imperialism ("Bloody Saturday").

In Wong's photo above, the vanishing points lead off the page to the left which makes this photo oblique. This angle places the viewer in a less involved position and not a part of this world. In reality, many people in North America and Western Europe were not involved with politics in Eastern Asian countries during the 1930s when this was taken ("Bloody Saturday"). However, despite the obliqueness of the photo and general apathy of North America and Western Europe to get involved in the affairs of an Eastern Asian countries, the image's international circulation swayed public opinion and the U.S., Britain and France formally protested Japan's imperialist attack on China ("Bloody Saturday").

Using a different angle, the perspective can vastly change. The producer of an image with a vertical angle gives power to the viewer who steps into the place of the image producer and becomes the one who interacts. The vertical angle can also be such as to take power away from the viewer as well.

If the represented is seen from a high angle, then the viewer has power over the represented, and the power switches if seen from a low angle (Kress 140). If the image is eye level between the represented and the viewer, then there is equality (140). Figure 4 below is an example of no power difference between the represented and the viewer because the image is at the viewer's eye level.

There was conflict in Southern Nigeria during the late 1960s that created a new nation, Biafra, and the conflict between the two countries resulted in starvation and disease (McCullin). In his own country, this albino child was considered the lowest of lows and faced severe discrimination (McCullin). However, he is placed in a position of equality with the viewer to invoke not disregard as someone who is not worthy of assistance, rather to invoke a feeling of empathy that this is someone, like the viewer, who has a need yet the viewer is in a position to

help. The effect was massive public support of food, weapons, and medicine being airlifted into the area, and this photo ultimately was a part of the inspiration for Doctors Without Borders (McCullin).



Fig. 4: Albino Boy in Biafra by Don McCullin

Figure 5 is another image where the viewer is placed in a position of equality with those in the photo. This long shot shows children and soldiers rushing away from an apparent explosion. Many who publish, like the Associated Press, have ethical standards to respect victims, which arguably includes to not publish nude photos, particularly of children ("Telling the Story"). But, those policies were overturned for this photo that showed the world the atrocities during the Vietnam War, even though our own President at the time asked if it was a fake (Times 100). Ultimately, this photo documented history and bears witness to the effects of

war that ultimately changed American involvement because the U.S. withdrew from the war (Times 100).

Fig. 5: The terror of war by Nick Ut



CONTENT ANALYSIS

To get a deeper appreciation for these photos and their effects, a content analysis sheds light on common characteristics that might support why these photos created such public support. Even though I examined these photos under demand, frame size, and angle, they all may share certain characteristics in common. An analysis of the content in a quantitative method (Rose 85) can help find patterns common to images that invoke public support and effect change. *Hypothesis*. Photos of victims of war-time or other conflict with violence appeal to those who are not present by showing images that expose human frailty to communicate a message from its victims. The visual elements interact in such a way as to evoke empathy from the viewer with the intent that the viewer will take action to assist victims.

The photos in figures 1-5 are coded for items relevant to the victims of conflict and collected below.

- a. Image of actual war or conflict scene (violence) 2
- b. Image of the effect of war or conflict (effect of violence) 3
- c. Image with child(ren) 4
- d. Image with adult(s) 3
- e. Image of dead victim(s) 1
- f. Image of victim(s) near death 4
- g. Shot length (close) 0
- h. Shot length (medium) 3
- i. Shot length (long) 4
- j. Shot angle is high 4
- k. Shot angle is head on 1
- 1. Shot angle is low 0
- m. Image includes environment 5
- n. Demand is present in image 1

Although it is easier to find patterns when more images are examined, there are still some things that stand out in these images. First, most of the images featured children, even if adults were also in the image. This goes to a commonly known societal attitude that we need to protect our children. And, when we see children who are suffering, we might be more likely to act than if the same image featured only adults.

Another pattern that seemed significant was the shot length was more often long. This then makes sense why the count for an image that includes an environment is high as well. I think this is because it tells more of a story. For example, in figure 5, if the photographer had zoomed in on just the head of the nude child without more, a viewer would have no idea why she might be crying. By adding the running group of people, soldiers and the explosion in the background, it tells more of a story.

The photos included images where the victims were near death, or as in the Kurdi photo, the image was of his dead body. Research is not needed to support the idea that seeing victims of violent conflict and war in their most vulnerable state (i.e. dead, naked, crying) to know that their frailty is what created the support for the cause. If these pictures had been of health and happy people in war-torn areas, it would not have likely made the news, much less garnered financial or political support.

The position of the producer and viewer to that of the represented in the image creates feelings of power, equality, or even vulnerability, depending on the angle. When the producer, and ultimately the viewer, are placed in a position of looking down on the represented in an image, it conveys that the producer and viewer are in a position of power over the represented (Kress 140). Conversely, if the angle is looking up, then the represented is in a position of power or influence over the viewer (140). Equality between the producer and viewer and the represented is achieved when they are at eye level (140).

In figures 1-3 and 5, the viewer is positioned in a position of power. When in power, you have some measure of control whether actual or in theory. In the case of these four images, the viewers took control through financial assistance and political pressure, eventually getting support for more victims, not just the ones of the images. Figure 4 appears to place the viewer in

a position of equality with the represented. This seems odd as the viewer is not likely a starving albino child in a crumbling African nation. However, the producer is placing the viewer in a position to see the child as one equal in his need for assistance as to those similarly situated who are not ostracized.

Thus, the exposure of human vulnerability in these images effectively passed a message to the viewer to take action.

CONCLUSION

All of these photos could be considered "That Photo" which catalyzes change (Maurantonio 501). The photographers used the power of demand, frame size, angle and human vulnerability to communicate messages asking for support from victims who would otherwise not have the ability to do so. Although the victims may not have received support directly, their interaction with the viewer created a connection that allowed for victims, in general, from that conflict to receive the aid and support needed.

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Man's Body: Not a Likeness to God rather a Sign Vehicle

How do you create a theory about an image that may not be an image, or a picture, or any type of concrete or material visual object? Yet, the image is still visual, in body form, to millions and millions of people, even if mistakenly so. The phenomena I am referring to is God and his "image." My research indicates God is not a literal bodily image such as seen in man that many who follow the Old Testament may believe. Rather, semeiosis of man's body, man's mind, and God, together, is a sign as understood through the Peircean Model, and man's body is merely the sign vehicle.

BIBLICAL BASIS FOR GOD'S IMAGE

Who is this God and what do we rest our modern ideas and myths on? To begin, an examination of two popular modern translations, the following describe God in the first chapter of the first book of the Bible: "Then God said, 'Let us make man in our image, in our likeness . . . ' So God created man in his own image, in the image of God he created him; male and female he created them" (*New International Version*, Gen. 1.26-27). The *New International Version* of the Bible is one of the best-selling English translations and the publisher prides itself for its accuracy to the original text (Biblica).

Another popular translation used today that dates back to the fifteenth century is the *King James Version*. "And God said, Let us make man in our image, after our likeness . . . So God created man in his *own* image, in the image of God created he him; male and female created he them" (*King James Version*, Gen. 1.26-27; emphasis added). The King James Version is commonly known to adhere to the sentence structure of the original text as much as possible, and that is why some may struggle with comprehension of this version; however, the meaning is essentially the same in both translations.

Thus, both translations have the word "likeness" immediately following the word "image." Examining the actual translation from Hebrew, Greek and Latin, the added "likeness" after "image" is to prevent a misunderstanding by the reader that image is not a material image, such as a picture, rather a nonmaterial likeness, as in a spiritual likeness. W. J. T. Mitchell explains it this way in his book *Iconology; Image, Text, Ideology*:

The words we now translate as "image" (the Hebrew *tselem*, the Greek *eikon*, and the Latin *imago*) are properly understood, as the commentators never tire of telling us, not as any material picture, but as an abstract, general, spiritual "likeness" (the Hebrew *Demuth*, the Greek *homoioos*, and the Latin *similitude*) is to be understood, not as adding new information, but as preventing a possible confusion: "image" is to be understood not as "picture" but as "likeness," a matter of spiritual similarity." (31)

Today's readers might not distinguish image from likeness, or they may not have a sophisticated enough training of reading the Bible in its originally written language to understand that in the original text, the addition of likeness after image was to ensure clarity of the definition of image as not a material image, rather as an abstract thought of the essence of God.

Turning to Biblical scholars, Adam Clarke, a renown protestant theologian who single-handedly wrote the most "comprehensive commentary on the Bible ever prepared by one man" (studylight), says this about the use of image and likeness:

In our image, after our likeness . . . what is here said refers to his soul. This was made in the image and likeness of God. Now, as the Divine Being is infinite, he is neither limited by parts, nor definable by passions; therefore he can have no corporeal image after which he made the body of man. The image and likeness must necessarily be

intellectual; his mind, his soul, must have been formed after the nature and perfections of his God. (Bible Commentaries)

This interpretation seems to be supported by scholars of Judaism as well, and that "the image and likeness of God that is found in man is a non-physical characteristic" (Reiss 184). Reiss, a Rabbi and Bible commentator, refers to Maimonides, a renown Jewish scholar from the twelfth century, and his interpretation that man's intellect "resembles divine intellect and allows humans to commune with God" (184). Reiss also supports this view quoting David Clines who says man is "representative rather than representation" (185). Maimonides takes this abstract further to say that the traditional embodiment of God in who we know as Adam and Eve in the Book of Genesis were not actual people, rather they "represent the powers of the human soul" (Wurmser 138). Thus, scholars of the Bible see God's image in man as an abstract concept.

As Mitchell points out, it is no wonder scholars of *The Bible* want to clarify this point because the "taboos against graven images and idolatry" inherent in their faiths (32). As most notably written in the ten commandments, Moses received this directive from God to share with Man: "You shall not make yourself an idol in the form of anything in heaven above or on the earth beneath or in the waters below" (*New International Version*, Ex. 20.4). Maimonides would agree. He states we get closer to God by shunning the material when we "come closer and closer to a more adequate apprehension of God with every negation of positive attribution, the less and less they liken God to any composite thing" (Braiterman 228).

Thus, it appears that scholars—of different religions who all believe in the creation story as told in Genesis Chapter 1—would agree that the idea man is made in God's image means a mental, abstract image, or what I think of as exhibiting the essence of God, despite man's efforts to actually picture God. So, using Mitchell's words, how do we picture the invisible (40)?

SEMEIOSIS OF MAN'S BODY, MAN'S MIND, AND GOD AND MAN'S BODY AS A SIGN VEHICLE

Mitchell discusses the possibility of picturing the invisible (41) and discusses paintings and abstract art as a possible way to express the invisible. But, it was in his discussion of critics of pictorial expression and whether "the notion that painting is capable of expressing some invisible essence" (40-41) that it illuminates man's body is not an actual image of God. Rather, the semeiosis of the body, mind and God is a sign (Chandler 36), and the body is merely a sign vehicle (30).

Under Charles Sanders Peirce's triadic model of a sign, man's body is the *representamen*, man's mind and/or soul is the *interpretant*, and God is the *object* (Chandler 29). The sign is not the body itself, rather the "whole meaningful ensemble" and there may not be an "observable . . . relationship between a sign and a 'sign vehicle'" (30). The sign vehicle here would be the *representamen*, or the body.

Textual example of God's image in the triadic model of a sign. Using an example from one of Chandler's students to explain how the sign functions and replacing the student's words in the example with those of man's body, man's mind, and God, it may make the connection clearer.

The first thing that is noticed (the *representamen*) is the [body]; this prompts the realization that something is inside the [body] (the *object*). This realization, as well as the knowledge of what the [body] contains, is provided by the *interpretant* [or man's mind].

. . The important point to be aware of here is that the object of a sign is always hidden.

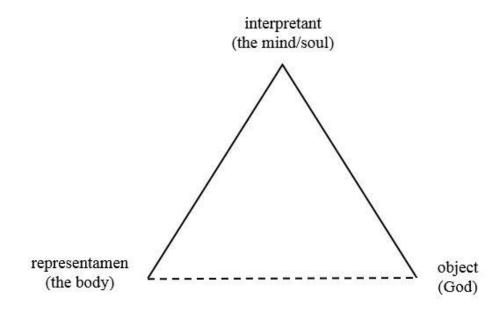
We cannot actually open the [body] and inspect [the object] directly . . . if the object could be known directly, there would be no need of a sign to represent it . . . Therefore

the hidden object of a sign is only brought to realization through the interaction of the representamen, the object, and the interpretant. (31)

Therefore, I think this example helps to explain that the body is not God's image itself, rather it is a sign vehicle of God's image as described in the example above.

Visual example of God's image in the triadic model of a sign. A different example of the triadic model applied to God's image is through a visual representation of the model as seen in figure 1 below.

Fig. 1: Visual depiction of God's image as a sign using the Peircean Model



For God to be a sign under the Peircean Model, all three parts shown in figure 1 are needed. "The sign is a unity of what is represented . . . [God], how it is represented . . . [the body], and how it is interpreted . . . [the mind/soul]" with the relationship between these parts being 'semeiosis' (Chandler 29). Note that the dashed line between the representamen and the object means that there is no observable relationship (30) and that would clearly be the case in a relationship with God who is an abstract idea.

CONCLUSION

Scholars of religious faiths who observe the Book of Genesis would likely agree that man being made in God's image does not mean actual physical likeness between man and God, rather intellectual likeness or likeness of the soul. The Peircean Model allows us then to construct a theory about God's image—an image that is abstract. And, man's body is merely a sign vehicle in the semeiosis of man's body (the *representamen*), man's intellect/soul (the *interpretant*), and God (the *object*) with the relationships together creating a sign—God's image.

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