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The University of Missouri-Kansas City

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A N O T E f r o m t h e E d i t o r

As a child, I remember it being emphatically expressed that hard and gruesome work produces tangible, desired results. I am pleased to say that this year's edition of *Lucerna* is the product of such work. This year we changed the look of *Lucerna*, hopefully without marring the honorable traditions left by the previous editors and staff. None of this would have been possible without the dedication of the editorial staff. Their constant support and commitment made this year's journal possible. I would also like to thank Dr. John Herron, the interim Honors Program director, for all of his support and wisdom throughout the year. Our faculty advisor, Dr. Clancy Martin, deserves praise as well for his advice and recommendations. Even in her absence from UMKC, Dr. Gayle Levy was always helpful and influential. Moreover, I would be remiss to forget the College of Arts and Sciences Student Government Association and the SAFC. Thank you for making publication possible. Monumentally important were the submission reviewers. To each of you who volunteered time, thank you. I hope you can see the fruit of your labor.

Confined to the pages of this journal are words of academic excellence. Ranging from biology to Spanish, this journal contains brilliant work from the undergraduates of UMKC. Using our strict evaluation scale, the papers could receive a score ranging from 1 – 25. All of the works presented here missed no more than 3 points. There were many other papers that were worthy of publication, but due to our publishing limitations, they are not included in this volume. It was a pleasure reading all of the unique and well articulated findings of UMKC students from so many different disciplines. I only wish we could have published them all. However, I hope that my peers will be encouraged to continue pursuing academic excellence in their respective fields. This is but a taste of the potential UMKC holds. Enjoy!

Sincerely,
Ariel Green,
2009 *Lucerna* Editor-In-Chief

E D I T O R I A L B O A R D

Editor-in-Chief

Ariel Green

Ariel is a biology, chemistry, and philosophy major. She chose UMKC because of its six-year medical school program, although she did not end up enrolling in it. She joined the Honors Program because of the relationships she thought would be formed with fellow peers serious about their studies. Getting involved with Lucerna was a by-product of a colloquium make-up, but morphed into an interesting and rewarding challenge. Some of her favorite hobbies include obsessively reading, playing piano and guitar, and spending time with friends and family. After graduation, she plans to obtain a Ph.D. in biophysics or pharmacology and pursue a career in research and bioethics.

Managing Editor

Thomas Nienaber

Thomas is a biology major and chemistry minor. He chose UMKC because they accepted his high school credit. Thomas selected the Honors Program because he thought it a great way to get involved. He chose to become involved in Lucerna because he thought it a great way to “put ideas to work”. Some of his favorite hobbies include reading, music, and international affairs. He plans to attend medical school.

Managing Editor

Jesus Butler

Jesus just received a degree in communications with a minor in business administration. UMKC was an appealing option because of the educational quality and location. He chose to become a member of the Honors Program because of the opportunities to meet dedicated students and get involved on campus. His involvement in Lucerna came from a desire to further his experience in the academic world and have some fun in the process. Some of his favorite hobbies are playing guitar and discussing religion and philosophy. He plans to gain experience in the corporate world before returning to school for a MBA.

E D I T O R I A L B O A R D

Graphic Design Editor

Corey Light

Corey is an aspiring studio artist and art educator. He chose UMKC due to the vibrant urban community surrounding it. The Honors Program has given Corey a chance to develop in a cooperative academic environment while meeting dedicated students and staff. He enjoys designing and laying out *Lucerna* because he's always excited to present the best of UMKC to the public. He spends his days entrenched in graphic design and photography, hoping to continually enhance the visual landscape in the future.

Treasurer

Sadia Aslam

Sadia is a history and chemistry major. Being a native “Kansas Citian”, she chose UMKC for the unique opportunities she felt were offered to UMKC students. Sadia chose the Honors Program because it provided a forum for involvement, contribution to campus life, and opportunities to meet motivated UMKC students from all disciplines. Her interest in *Lucerna* originally stemmed from her previous experience with a literary magazine. However, she began to further appreciate her role once she realized the importance of *Lucerna* as the only undergraduate research journal at UMKC. Some of her favorite hobbies include reading historical fiction and spending time with family and friends. She begins her first year of law school this fall.

Executive Secretary

Tiffanie Fowlkes

Tiffanie just completed her Bachelor of Science in biology this spring. She chose UMKC because of the small biology department and a desire to stay in Kansas City. The Honors Program was appealing to her due to the tight-knit relationships with fellow peers that develops in such an environment. She chose *Lucerna* because of a belief in the importance of undergraduates publishing their work. Some of her favorite hobbies include reading, dancing, and going out to eat. In the fall, she will begin attending Washington University to obtain her Ph.D. in cell and molecular biology.

E D I T O R I A L B O A R D

Public Relations Coordinator _____ Maria Iliakova

Maria is a biology, chemistry, and Spanish major. She chose to become involved with Lucerna because of a belief in the importance of publishing undergraduate research. Some of her favorite hobbies include the following: traveling around the city and beyond, playing outside in nice weather, enjoying music, reading, drawing, and raising STD awareness amongst youth in our community. Her post-graduation plans include conducting research abroad for the spring of 2010 and becoming a physician scientist.

Events Coordinator _____ Kathryn Hembree

Kathryn just completed her degree in philosophy and chemistry. After attending the University of San Diego, she transferred to UMKC to be with family and for the educational opportunities it presented. She chose to get involved with the Honors Program because of the opportunities amongst professors and peers it provided. Her interest in Lucerna came from a desire to be involved in the publication of undergraduate research. Some of her favorite hobbies include reading, writing, traveling, and spending time with friends and family. She will begin working at Sullivan and Cromwell LLP in July of this year. In the future, she plans to obtain her law degree.

Dr. John Herron - Interim Honors Program Director
Dr. Clancy Martin - Honors Faculty Fellow, Faculty Advisor
Dr. Gayle Levy - Honors Program Director

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Ariel Green

The Role of High Risk HPV E6 Protein in Cervical Cancer Formation

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Background and natural history:

Over ninety percent of cervical cancer across the world is caused by a virus (2). This notorious culprit that ranked second in cancer-related deaths among females across the world is named human papillomavirus (HPV) (2). HPV is a sexually transmitted, lysogenic, double stranded circular DNA (dsDNA) virus with approximately eight thousand base pairs (1, 9, 15, 16). HPV does not possess an envelope and has icosahedral capsids (18). It, like other papillomaviruses in its taxonomic family, both assembles and replicates in the nucleus of the host cell (17).

The basal cells of the stratified squamous epithelium and the metaplastic cells at the squamocolumnar junction in the cervix serve as HPV's targets (15). Dissimilar to other types of genitourinary infections, HPV does not induce immediate symptoms upon infection (15 – 16). This is due to the host immune response to HPV infection (15). Given the recent discovery of a vaccine against this pathogen, various groups outside of the scientific community have turned their focus onto this virus. However, I would like to focus on the molecular infiltration this virus inflicts upon cervical epithelial cells.

HPV has a genome with three regions, the early (E), late (L), and non-coding long control region (LCR) (1, 9). The late region encodes for the structural proteins of the virus, while the LCR region, as implicated in the name, is for open reading frame (ORF) expression control (1).

It must be noted that not every strain of HPV is carcinogenic

(1). There are over one hundred types of the HPV virus (16). Current epidemiological studies have determined that the following are low-risk types: 6, 11, 40, 42, 54, and 57 (16). These types limit their effects to genital warts that are benign lesions (16).

The most commonly implicated carcinogenic, high-risk, HPV types are the following: 16, 18, 26, 31, 33, 35, 39, 45, 51, 52, 53, 56, and 58 (3, 16). These types induce dysplastic lesions, some of which are malignant cancers (16). HPV-16 is found in over fifty percent of cervical cancers (15). Integration of the viral genome into the host cell is required for transformation into cancerous cells (5). This may be due to the loss of E2 and E1 following integration, an ORF product responsible for repressing both E6 and E7 (1). In epithelial cells infected with low risk HPV, the virus remains in the episomal form with the E2 and E1 ORF products intact (15). Without these repressors, the uncontrolled expression of E6 and E7 leads to the degradation of p53 and retinoblastoma (16).

The early region is responsible for the pathogenicity of the virus. Amongst its six genes, two, E6 and E7, are very effective oncogenes. This paper will primarily focus on the role of E6 protein (pE6) in transforming the epithelial cells of the cervix into malignant carcinomas.

The E6 transcript was found in over ninety-two percent squamous cell carcinoma samples taken from Norwegian women (3). It is approximately 150 amino acids long with two zinc binding domains with the CXXC motif (18). The E6 ORF is expressed soon after infection with the HPV virus (4). The HPV virus uses this ORF product to disable the host cell's sensory mechanisms for DNA damage (4). By disabling important checkpoints in the cell, disrupting communication, and other harmful events, this double stranded DNA virus is able to transform dormant epithelial cells into proliferating, immortal carcinomas (4).

High Risk HPV pE6 targets p53 for destruction by ubiquitination:

While pE6 has several mechanisms it uses to accomplish the overall goal of cellular transformation, its most famous pathway is the degradation of the genome protector, p53. This action was shown by

Demers et al (4). They demonstrated that transfection of HPV-16 pE6 into primary human keratinocytes induced the elimination of p53 (4). The removal of p53 in the cell allows for the accumulation of mutations that contribute to the genomic instability of the cell and lead to transformation (11).

P53 is known to play an important role as a checkpoint in the cell cycle (4). It functions in the cell as a transcription factor for other genes that regulate the cell cycle (6). It acts as the signaling molecule to allow progression into both the synthesis phase and mitosis (4). This allows the cell to assess whether or not to replicate its DNA. If the DNA has, by some means, been damaged, p53 signals for cell cycle arrest and apoptosis. It does this by up-regulating the expression of p21 (18).

After treatment with low doses of actinomycin D, which induces DNA damage, epithelial cells that had been infected with this oncogene were unable to halt the cell cycle and continued into the synthesis phase (4). This function plays a significant role in the carcinogenicity of this ORF product. HPV-16 pE6 binds with a host E3 ubiquitin ligase given the name of E6AP (5, 7). They, cooperatively, bind to p53 and signal for degradation by the proteasome complex (5). To accomplish this task, HPV-16 pE6 requires the presence of six amino acids, out of the entire 150 amino acid sequence, that contain a PDZ binding domain (5).

After transcription of the E6 gene, it undergoes splicing (11). One of the splicing patterns gives rise to E6*1, which can bind to full length pE6 (11). This binding controls the degradation of p53 during the course of the disease to prevent transformation into cancerous cells (11). Hence, mRNA processing can affect the carcinogenicity of HPV. In this way, HPV can regulate the expression of pE6 and determine when to transform the cells by mechanisms other than E2 expression (11). However, despite these posttranscriptional modifications, all of the infected cells were transformed into carcinomas over time (11).

Therefore, by eliminating the cell's ability to assess DNA damage, epithelial cells continue through the cell cycle. This alone is able to transform normal epithelial cells into cancer. Unfortunately, the high risk types of HPV have other mechanisms they use to further

the transformation into cancerous cells (4). In combination with this carcinogenic blow, pE6 begins the process of transformation strong.

High Risk HPV pE6/E6AP degrade PDZ domain containing proteins involved in tumor suppression:

Proteins containing the PDZ domain have been implicated in tumor suppression (10). In epithelial cells, PDZ proteins are generally located at areas of cell-to-cell contact, such as tight junctions (18). Their role is thought to aide in signal transduction between cells (18).

DLG4 is a known target of HPV-18 pE6 and HPV-16 pE6 (10). Similar to the degradation of p53 by the proteasome complex, pE6 targets DLG4, perhaps in conjunction with E6AP, for degradation by process of ubiquitination (10). In CaSki cells, DLG4 is known to have tumor suppression capabilities, and thus its degradation in HPV infected cells may be important in transformation (10). The complete mechanism by which DLG4 functions as a tumor suppressor is still unclear (10). Still, it is, obviously, important to note that pE6 can disable another tumor suppressor besides the p53.

High Risk HPV pE6 binds to coactivators CBP /p300 to prevent p53 acetylation:

Interferon is a signaling molecule the host cell produces in response to viral infection (6). Type I interferons not only signal for an immune response, but can also induce growth arrest (6). Interferon is linked with p53 in that p53 can influence the production of interferon by up-regulation and therefore, the host cell's response to viral infection (6).

The activity of p53 is determined by coactivators CBP/p300 (6). They function as acetyltransferases for histones (6). Histone acetylation is very important for the expression of genes. By weakening the electrostatic interaction between DNA base pairs and the lysine residues on histone tails, the DNA encoding genes becomes accessible (7). These coactivators do not only acetylate histones, they also acetylate p53 itself (6). Acetylation of p53 increases its stability and transcriptional activity (6).

Not only does pE6 aide in the ubiquitination of p53, but it also diminishes p53's transcriptional activity as well by binding to CBP/

p300 (6). This sequestering activity prevents p53 acetylation (6). This decreased stability of the p53 weakens the remaining, non-ubiquitinated p53's ability to halt the cell cycle. This is yet another mechanism by which high risk HPV virus eliminates cellular defense against uncontrolled proliferation.

High Risk HPV E6 indirectly disrupts interferon response by infected cells:

Among the various regulatory effects the p53 gene has, interferon response is one of them. When infection occurs, HPV E7 protein (pE7) stimulates the formation of interferon (6). This is, of course, detrimental to the virus. HPV, unfortunately, has a counteractive mechanism. PE6 eliminates the antiproliferative response the infected cell would have by eliminating the effects of the p53 through binding to CBP and p300 (6).

P53 regulates the type I interferon response (6). As mentioned before, type I interferons can induce an arrest in cell growth (6). Non-acetylated p53 is unable to mediate the sensitivity of the infected cell to these interferons (6). PE6 induces this state of p53 by forming a trimeric complex with CBP, p300, and p53 (6). Therefore, infection by HPV bypasses antiviral systems that are functioning correctly.

Although the cells are properly responding to the HPV infection, they are no longer sensitive to the signal (6). This could create problems in treating HPV infections with interferons. If pE6 and pE7 are expressed without control, as they are after integration, then interferon treatment may not be effective. However, after early infection, interferon treatment could, potentially, be a reliable means of eliminating HPV infected cells.

High Risk HPV pE6 induces polyploidy:

A common form, in solid tumors, of genomic instability is aneuploidy, which is thought to form from a tetraploid intermediate (8, 14). Aneuploidy is a condition where the cell does not have a multiple of the haploid chromosome number. This condition is thought to be responsible for the different phenotypes of cancerous cells including the following: abnormal size, loss of contact with neighboring tissues, resistance to chemotherapy, increased proteins on the outer membrane, morphology, and others (14). Aneuploidy forces the cell to enter into

a never ending cycle of redistributing genes to gain the most beneficial translational products, even at the expense of genomic stability (14).

Tetraploidy is thought to arise when, during mitosis, cells pause in the metaphase point for extended time periods (8). This is independent of a spindle checkpoint (8). The function of the postmitotic checkpoint is similar to the G1 and G2 checkpoints. In every instance, p21 is present and is mediated by p53 expression (8). Normally, these abnormal cells would not be able to continue through the cell cycle. However, given the absence of p53 and pRb in HPV-induced carcinomas, the cells progress to the synthesis phase of the cell cycle (8).

pE6 is known to cause polyploidy by preventing cell cycle arrest stimulated by microtubule disruption (8). This contributes to the genomic instability of HPV infected cells, which leads to the development of carcinomas (8). The abrogation of p53 would seem a likely pathway to mediate this activity, but studies in defective p53 cells demonstrated that pE6 still induced polyploidy (8). This is important because degradation of pE6 is never complete in cervical cancer cells (8). Therefore, pE6 must have some other means of inducing polyploidy in the presence of the p53. Hence, even without the degradation of p53, pE6 is able to induce genomic instability that leads to carcinomas in human epithelial cells. In conjunction with the p53 degradation in human epithelial cells, pE6 further contributes to the transformation of these cells into cancer.

High Risk HPV-16 E6, in conjunction with HPV-16 E7, demolishes the expression of TLR9:

Toll-like receptors (TLRs) are responsible for recognizing molecular patterns associated with pathogens on both non-immune and immune cells (9). They are the receptors that bind to domains that originated from pathogens (9). TLR9 is responsible for recognizing foreign dsDNA-derived CpG motifs (9). Given the fact that HPV is a dsDNA virus, tests were done to ascertain whether TLR9 could bind to DNA motifs arising from HPV. The results established that TLR9 can recognize DNA motifs from HPV (9).

In HPV-16 infected cells, pE6 and pE7 were able to down-regulate the TLR9 pathway (9). This is not done by process of

ubiquitination or protein alteration (9). Instead they eliminate yet another sensory mechanism by halting transcription of TLR9 by down-regulating its promoter (9). Hence, pE6 not only bypasses the sensory mechanisms of the cell, but it evades the defense mechanism of the body by removing the receptor that could have detected its presence. This prevents any interference from the immune system that would quickly dispose of the virus before its most damaging work could be done (9).

High Risk HPV-16 E6 activates hTERT:

Telomerase, a four-subunit enzyme, is known to be involved in the immortalization of cancer cells (12, 18). It acts as the catalytic subunit of telomerase (12). By extending the telomeres, telomerase reverse transcriptase (hTERT) enables cells to bypass the Hayflick limit and prevent cell senescence (12 - 14). Cell senescence occurs when, after approximately fifty replications, the telomeres are shortened to the extent that chromosomes begin to fuse with each other and become aneuploid cells (13, 14). This triggers cell apoptosis if the damage cannot be fixed (13). Telomerase uses RNA as a template, synthesizing hexamer repeat DNA to the 3' end of telomeres (13, 18). This effectively lengthens the telomeres, prevents chromosomal fusion, and halts the signaling of apoptosis (13, 18). In most somatic cells, hTERT is down-regulated to prevent immortalization (13). In over ninety percent of cancerous cells, however, hTERT is active (13). Telomerase may also have proliferative activity independent of telomere extension as well (12).

HPV pE6 activates the TERT gene in cervical epithelial cells (12). In normal epithelial cells, histone deacetylases (HDAs) inactivate the hTERT promoter (12). By inhibiting HDA activity, the hTERT promoter can be activated (12). PE6 activates the hTERT promoter when H3 is acetylated; this is further enhanced by down-regulation of p300 and is dependent upon E6AP (12). This process begins early on during HPV infection, and continually increases until the increased transcription of hTERT is no longer dependent upon E6 (12). This trend follows the relative immortalization of the epithelial cells (12).

The activation by pE6 of hTERT is both p53-degradation and PDZ domain binding independent (12). This function is dependent

upon E6AP ligase (12). Although p300 knockdown is not the sole reason for hTERT up-regulation, it does seem to play an important role in telomerase activation (12).

In summary, pE6 has the capability of activating cellular machinery that immortalizes the cell. This transforms epithelial cells that previously had a timed death into cells that proliferate without consequences. With the absence of p53 and pRb, DNA damage accumulates and telomerase prevents shortened chromosome ends from fusing with neighboring chromosomes. Therefore, it is yet another mechanism by which pE6 bypasses cellular checkpoints for DNA damage and, instead, transforms into carcinogenic cells.

Discussion:

Given the examples of how a single protein infiltrates several elements of the cellular defense machinery, it is no wonder that a system of these proteins induces transformation of normal cervical epithelial cells into cancer. HPV is a virus that contains all of the necessary elements to hijack the cell into virus-making factories. HIV disrupts the immune system. HPV disrupts the cell.

Stripping the cells of their original function, HPV quickly disposes of the genome protectors. It disrupts both intracellular and intercellular communication. It activates genes for immortalization that, in a way, return the cells to an undifferentiated state. It induces genomic instability. All of these things are done within the first stages of infection.

Every year, approximately 6.5 million new HPV infections are reported in the United States alone (15). An estimated 20 million individuals are already infected with the virus (15). It is estimated that at least fifty percent of all sexually active individuals will acquire the virus by the age of 50 (15). To think that cervical cancer is caused by a virus of this competency is not a welcome thought. Causes for cancer have always been elusive or too ambiguous, but to find a culprit, and a culprit that is highly efficient at transforming these cells, has spurred research around the world. Recently, a vaccine has been introduced that may hold the key for prevention, but treatments for this deadly virus still fall in the category of barbaric killing of cells, without much differentiation between

the infected and the normal.

HPV remains a virus of interest, not only for clinical reasons, but for the understanding of the cell cycle in humans. HPV abolishes checkpoints in the cell cycle through various mechanisms. Further understanding of the viral mechanisms of transformation could enlighten researchers about the pathways cells take to become cancer without viral influence. This information could be vital in developing new cancer treatments and more insight into cell senescence in general.

If scientists can understand the viral pathway high-risk HPV uses to transform cervical epithelial cells into carcinomas, then they can understand more about cellular immortalization. HPV-infected cells provide an excellent source for testing telomerase activity, not only for cancer treatment, but for potential uses in prolonging life.

Works Cited

- #1 Tungteakkhun, S.S., and Duerksen-Hughes, P.J. Cellular binding partners of the human papillomavirus E6 protein. *Archives of Virology*: 397 – 408, 2008.
- #2 Wei, Qize. Ptx2a binds to human papillomavirus type 18 E6 protein and inhibits E6-mediated p53 degradation in HeLa cells. *Journal of Biological Chemistry*. 37790 – 37797, 2005.
- #3 Kraus, I, Molden, T, Holm, R, Lie, A.K., Karlsen, F., Kristensen, G.B., and Skomedal, H. Presence of E6 and E7 mRNA from human papillomavirus types 16, 18, 31, 33, and 45 in the majority of cervical carcinomas. *Journal of Clinical Microbiology*: 1310 – 1317, 2006.
- #4 Demers, W., Foster, S.A., Halbert, C.L., and Galloway, D.A. Growth arrest by induction of p53 in DNA damaged keratinocytes is bypassed by human papillomavirus 16 E7. *Proceedings of the National Academy of Science*.: 4382 – 4386, 1994.
- #5 Cooper, B., Brimer, N., and Vande Pol, S.B. Human papillomavirus E6 regulates the cytoskeleton dynamics of keratinocytes through targeted degradation of p53. *Journal of Virology*: 12675 – 12679, 2007.
- #6 Hebner, C. Beglin, M., and Laimonis, A.L. Human papillomavirus E6 proteins mediate resistance to interferon-induced growth arrest through inhibition of p53 acetylation. *Journal of Virology*: 12740 – 12747, 2007.
- #7 Habold, C., Poehlmann, A., Bajbouj, K., Hartig, R., Korkmaz, K.S., Roessner, A., and Schneider-Stock, R. Trichostatin A causes p53 to switch oxidative-damaged colorectal cancer cells from cell cycle arrest into apoptosis. *Journal of Cellular and Molecular Medicine*: 607-621, 2008
- #8 Liu, Y., Heilman, S.A., Illanes, D., Sluder, G., and Chen, J. p53-independent abrogation of a postmitotic checkpoint contributes to human papillomavirus E6-induced polyploidy. *Cancer Research*: 2603 – 2610, 2007.
- #9 Hasan, U., Bates, E., Takeshita, F., Biliato, A., Accardi, R., Bouvard, V., Mansour, M., Vincent, I., Gissman, L., Iftner, T., Sideri, M., Stubenrauch, F., and Tommasino, M. TLR9 expression and function is abolished by the cervical cancer-associated human papillomavirus type 16. *The Journal of Immunology*: 3186 – 3197, 2007.

- #10 Handa, K., Yugawa, T., Narisawa-Saito, M., Ohno, S., Fujita, M., and Kiyono, T. E6AP-dependent degradation of DLG4/PSD95 by high-risk human papillomavirus type 18 E6 protein. *Journal of Virology*: 1379 – 1389, 2007.
- #11 Cruz-Hernandez, E., Garcia-Carranca, A., Mohar-Betancourt, A., Duenas-Gonzalez, A., Contreras-Paredes, A., Perez-Cardenas, E., Herrera-Goepfert, R., and Lizano-Soberon, M. Differential splicing of E6 within human papillomavirus type 18 variants and functional consequences. *Journal of General Virology*: 2459 – 2468, 2005.
- #12 James, M., Lee, J.H., and Klingelutz, A.J. HPV16-E6 associated hTERT promoter acetylation is E6AP dependent, increased in later passage cells and enhanced by loss of p300. *International Journal of Cancer*: 1878 – 1885, 2006.
- #13 Mazzucchelli, G.D., Gabelica, V., Smargiasso, N., Fleron, M., Ashimwe, W., De Pauw-Gillet, M., Riou, J., De Pauw, E. Proteome alteration induced by hTERT transfection of human fibroblast cells. *Proteome Science*, 2008.
- #14 Rasnick, D. Auto-catalysed progression of aneuploidy explains the Hayflick limit of cultured cells, carcinogen-induced tumours in mice, and the age distribution of human cancer. *Biochemical Journal*: 497 – 506, 2000.
- #15 Ault, K. Epidemiology and natural history of human papillomavirus infections in the female genital tract. *Infectious Diseases in Obstetrics and Gynecology*: 1 – 5, 2006.
- #16 Dehn, D., Torkko, K.C., and Shroyer, K.R. Human papillomavirus testing and molecular markers of cervical dysplasia and carcinoma. *Cancer Cytopathology*: 1 – 14, 2007.
- #17 Zheng, Z., and Baker, C.C. Papillomavirus genome structure, expression, and post-transcriptional regulation. *Front Biosci.*: 2286 – 2302, 2006.
- #18 Longworth, M.S., and Laimins, L.A. Pathogenesis of human papillomaviruses in differentiating epithelia. *Microbiology and Molecular Biology Reviews*: 362 – 372, 2004.

BethAnn Steinbacher

Are Commercialized Classrooms Selling Our Kids Short?

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There is a trend in America that has been on a steady rise for the past decade. It involves the quality of education and may have long-term affects on the lives of the children living in America. It has been studied by several major institutions including universities, consumer magazines, and private organizations. The people conducting these studies all agree that this movement has few benefits. Those who seem to benefit most from this trend are major corporations in America, but at what cost to our children? The trend that is being referred to is the commercialization of the American public education system. While corporations have long been involved in marketing their products to schools through fundraisers, the 1990s saw an explosion of corporations marketing their products to a captive audience – a classroom full of children (Butler-Wall 2008). This increased corporate “sponsoring,” or commercialization of classrooms, throughout public school buildings and product placement in school curriculum has had a detrimental effect on the quality of the education children living in America are receiving. Corporations are not wasting any time placing their advertisements in public school classrooms, district buildings, buses and athletic fields under the guise of being community partners. Those in favor of corporate sponsoring say this is necessary because schools lack the necessary funds for even basic classroom materials. Opponents of corporate sponsoring say we have put American children up for sale to the highest bidder.

The commercialization of education can best be defined as “the practice of global corporations altering or disrupting the teaching and

learning process in schools from kindergarten through college” (Butler-Wall 2008). The people responsible for creating the marketing plans for these global companies have made it clear that it is to their advantage to come into the public schools and advertise their products to students. The attitude among corporations is that school is the best place to test market and introduce new products, to promote sampling and to generate immediate sales. The stated goal of advertising agencies is “to brand children as early as possible to consume their client’s products” (Butler-Wall 2008). When those that make the decisions about school policy allow marketers direct access to students’ minds, it not only denies those students a real education by creating a distracting, cluttered environment, but it also allows corporations to influence students’ behavior with word and image manipulation.

In 2000, The U.S. General Accounting Office released a report on the commercialization of public schools in the United States (Spring 2008). The report is a summary of how “in-school marketing has become a growing industry and companies are now becoming known for their success in negotiating contracts between school districts and beverage companies” (Spring 2008). The soft drink industry is the industry most linked to commercializing classrooms. Statistics in the report show that there are approximately two hundred school districts that have signed exclusive contracts with soft-drink companies to sell their beverages in schools (Spring 2008). Public schools are not becoming affiliated with just soft drink companies for funds. They are allowing such corporations as General Mills, Procter & Gamble, Kellogg’s and the National Coal Foundation to distribute lesson plan materials in their schools (Saltman 2000).

The relationship between public schools and corporations is often described as a partnership. However, a more accurate description of a corporate partnership is the straight promotional efforts of a corporation to get their products into the hands and heads of children while they are in school. These partnerships, which are really corporate sponsorships, are becoming more accepted and “allow major corporations in the United States to appear to support education while

actually engaging in marketing goods, services or corporate images to youth” (Saltman 2000). Researchers have categorized corporate sponsoring in two ways: the community partnership and educative involvement.

The first category of corporate sponsoring is disguised as a community partnership, in which the corporation assists the schools in their districts by donating money or equipment to the schools. The increased presence of corporations in schools is being accepted because of the illusion of funds being contributed to public schools. However, the tax breaks offered to corporations has allowed the removal of huge sums of money from the local tax base. Therefore, what is actually being contributed to the schools is only a fraction of the money being removed from the tax base. In 1989, Wisconsin corporations contributed \$156 million dollars to the public schools. This contribution is a fraction of the amount of the over \$1 billion in tax breaks that Wisconsin corporations received during the late 1990s (Saltman 2000). In his book *Savage Inequalities*, Jonathan Kozol explains that Pfizer and Monsanto, chemical plants located in East St. Louis, do not pay taxes and have formed their own incorporated towns to serve as tax shelters. It must be noted that no one actually lives in these towns (Saltman 2000). These tax shelters allow corporations to be excused from paying taxes. The taxes not paid by corporations because of loopholes in the law or incentives offered by cities is a major cause of schools not being able to fund themselves sufficiently, especially in urban areas (Saltman 2000). According to Jonathan Wilson, former chairman of the Council of Urban Boards of Education, 30 percent or more of the potential tax base in urban areas of Chicago is exempt from taxes, compared to as little as three percent in adjacent suburbs (Kozol, 1991). Kozol points out that “the soft drink companies haven’t contacted East St. Louis yet. The districts getting the easy money are affluent and high-scoring systems” (Bracey 2002).

A second form of commercialism is educative, which cloaks itself as being educational. It begins when corporations send a complete curriculum to teachers at no cost to the school. Overworked teachers

welcome these packets into their classrooms because all the planning has been done for them. Yet, there is no guarantee that these lesson plans are written by anyone knowledgeable about education. The curricula seem to be just another avenue for corporations to promote misinformation and unhealthy products. General Mills promotes its sugary fruit snack, Gushers, in their curriculum on volcanoes entitled “Gushers: Wonders of the Earth.” This curriculum involves activities using this particular snack. The National Coal Foundation wrote in its learning materials that an increase in carbon dioxide cannot damage the earth’s atmosphere, but rather benefits it (Saltman 2000). In *The War Against American Schools: Privatizing Schools, Commercializing Education*, Gerald Bracey writes that “schools should not be in the position of selling captive students to advertisers, whatever the excuse. They are entrusted with children’s minds and they have no right to sell access to them” (Saltman, 2000) Anyone reviewing the marketing plans by these corporations can see that the goal is for the corporations to make money, not do what is in the best interest of children.

It is in the best interests of our children for them to receive an education that is not funneling them towards fulfilling a role in corporate America. Instead, they should receive an education that develops their critical thinking skills and allows them to develop a more general knowledge base. In addition to blurring the line between pure academics and a corporate agenda, the commercialisation of education is affecting our children in several different ways. These ads are well written and may cause students to desire things they do not really need or which may be detrimental to their health or the environment. Children, especially in the higher grades, know these products are not healthy or environmentally friendly, but when schools endorse these products as a positive thing, it lessens the credibility of the staff and fosters an environment of distrust among teachers and students. These advertisements create friction at home because children are being exposed to products their parents cannot afford to purchase or simply do not want their children to have. In this case, the school district is working in total opposition to the parents’ goals and values (CCCS,

2001).

Commercializing public schools sends a message of incompatibility between the district goals and school goals. Schools foster an environment of cooperation, independent thinking and problem solving. A corporation's goal is to make money and they achieve this by convincing children how to think and feel through cleverly worded advertisements. Manipulating images and words to pressure children into feeling or thinking the same way is the very opposite of the school's goals. In addition to creating an environment of mixed messages, the time children spend watching or reading ads is time taken away from real learning.

As schools become more reliant on corporate donations, it will become difficult to convince legislature that full funding of education is necessary. The limited funds schools currently receive go towards time wasted while students read advertisements and watch commercials that precede educational videos and private news shows. A study done in 1998 by educator Alex Molnar and economist Max Sawicky indicates that when students watch a subscription news programs in school just twelve minutes a day for ten days, it costs U.S. taxpayers \$1.8 billion dollars for the class time. It is easy to see how this wasted time adds up to wasted tax dollars and, more importantly, wasted opportunities for real learning (CCCS, 2001). It will become difficult to justify increased funding of public schools when a portion of what is already received is being wasted on propaganda from corporations. There is no evidence of the amount of advertisements in public schools decreasing or being eliminated all together.

Corporations admit to establishing long term plans for gaining our children's loyalty. Joseph Fenton of Donnelly Marketing believes that "the kids we're reaching are consumers in training" (Consumers Union 1990). Advertisers know that children have tremendous spending power. More than 43 million children attend schools and spend at least 20 percent of their time in school (Consumers Union 1990). They have serious influence over which products become popular and which ones fail in the marketplace. Estimates indicate they are spending

about 15 billion dollars a year on everything from food and beverages to video games and clothes (Consumers Union 1990). This makes children a prime target for corporations to begin familiarizing them with their products and to gain their loyalty. Corporations are gaining this loyalty by putting their marketing propaganda into classrooms disguised as curriculum. Alex Molnar, director of the Center for the Analysis of Commercialism at the University of Wisconsin, explains that “companies like to say they are promoting education and school-business partnerships, but what they are really doing is going after the kids’ market anywhere they can” (Manning 1999). They are pushing crass commercialism on our children and equating happiness with material possessions. Children are “then immersed in a culture of materialism and are learning that everything is for sale” (Ince 2004)

A survey of hundreds of American students, most of them over age twelve, was done to establish students’ primary value system. Tim Kasser, a psychology professor at Knox College in Illinois and one of the researchers conducting this survey, asked the participants to agree or disagree with statements such as:

1. I’d be happier if I could afford to buy more things.
2. The purpose of life is to be rich.
3. The purpose of life is to contribute to the world.

Kasser explains that scientific research shows us that when children are overly exposed to advertisers’ messages, they eventually adopt the belief that money and products will buy them happiness. This belief system causes many long-term problems for the believer. Kasser explains that “a person whose values are based on the pursuit of money report less happiness and fewer experiences of pleasant emotions (Ince 2004). In fact, he argues, they are “disproportionately afflicted with symptoms of physical distress, such as sore throats, headaches and sore muscles” (Ince 2004). Kasser’s research has also found that high school students who have a materialistic value system are more likely to have sex, use drugs, smoke cigarettes and drink alcohol (Ince 2004).

It is not just the social aspects of children’s development that

are affected by commercialized classroom. The commercialization of classrooms also affects students' cognitive abilities to think critically. Susan Linn, a psychiatry professor at Harvard Medical School, has been studying how the relationship between schools and corporations has affected education (Ince 2004). She says that being overly exposed to all types of marketing messages undermines a child's ability to think independently and that children eventually accept the advertiser's invitation to "Obey Your Thirst" or to "Just Do It." Unfortunately, just doing it might involve drinking alcohol or a variety of things that may not be what is best for them.

The minds of American children deserve better than to be sold to the highest bidder. Teachers need to be able to teach children in a neutral environment that allows students to explore their world from all angles, not just from the viewpoint of the corporate-sponsored lesson of the week. When corporations, whose only goal is to make a profit, come into the classroom to "educate" our children, they take away our children's right to choose how they see their world and make their own decision about where they fit in it. Corporations that would have children educated to meet their future employment needs create a future generation of non-thinkers, which is the cost for children when business is conducted in the classroom. The marketing plans of corporations rely on getting the public to all think the same way and to believe that they cannot live without their particular product. When school administrators and teachers allow this ideology into the classroom, they take away our children's hope of learning how to ask challenging questions and how to think for themselves. Children do not need a fancy DVD or slick, colorful marketing materials to become educated. They simply need a teacher who cares enough to welcome them into a classroom that allows them to discover themselves and their world without being bombarded with corporate messages on how to think or how to act.

Works Cited

- Bracey, Gerald W. (2002). *The War Against America's Public Schools: privatizing schools, commercializing education*. Boston, MA: Allyn & Bacon.
- Butler-Wall, Brita. (n.d.). Risks of commercializing education: Why we need commercial-free schools. *Citizens' Campaign for Commercial-Free Schools*. Retrieved March 1, 2008, from <http://www.scn.org/ccs/risks.pdf>.
- Campbell, Raold F., & Cunningham, Luvern L. (1970). *The Organization and Control of American Schools*. Columbus, OH: Charles E. Merrill Publishing Company.
- Ince, Judith. (2004 October). Do corporations in classrooms hurt kids? *The Tyee*. Retrieved March 1, 2008, from <http://theyee.ca/2004/10/14/CorporationClassHurtKids/print.html>
- Kozol, Jonathan. (1992). *Savage Inequalities: Children in America's Schools*. New York, NY: Crown Publishers.
- Manning, Steven. (1999 September). Students for Sale. *The Nation*. Retrieved March 17, 2008, from <http://www.thenation.com/docprint.mhtml?i+19990927&s=manning>
- Rockne, Jennifer. (2002 February). Branded: corporations and our schools. *Reclaim Democracy*. Retrieved March 1, 2008, from http://reclaimdemocracy.org/education/branded_schools.html
- Saltman, Kenneth J. (2005). *The Edison Schools: corporate schooling and the assault on public education*. New York, NY: Routledge.
- Spring, Joel. (2008). *American Education*. New York, NY: McGraw-Hill Companies.

Karen Anton

The Audible in Joyce's Texts

x

Language in itself is a development of aural cues. Every written word has an audible pronunciation to accompany it. However, much prose writing is created with only the meanings of the terms and not the meanings of the sounds in mind. While this aural or musical quality is innate within language, it is often overlooked or only paid attention to in poetic texts. Language's roots are firmly placed in music, and any attempt to make literature into music is simply emphasizing a link that has always been there. James Joyce, being well-versed in the language of music, pays close attention to not only appropriate musical allusions but the sound and structure of his texts. While his early works simply mention music, as his writing style progresses, his language is clearly affected by a formally structured musical influence. Oddly enough, while rejecting concepts of form within words, Joyce began to embrace the standardized forms of very specific types of music. Joyce's writing throughout his career seems to enforce the points that language is intended to be aural. Therefore, language and sound should be reintegrated, musical allusions may be liberally used to add depth, and that forms for literature and music may be interchangeable or borrowed from each other. Perhaps this was his attempt to emphasize in language that which never should have been forgotten: the audible.

Joyce's early poems, such as those found in *Chamber Music*, simply mention music. While poetry in its very essence has some type of meter and attention to the sounds of speech, this collection of poems lacks anything that might make poetry sound like music, nor do the mentions of music call up any specific feeling. Simple lines such as: "The

old piano plays an air” (Chamber II.5) give the reader no insight into the mood of the piece and only serves as a mention of music to play off of the title of the collection. Joyce attempts to combine music with the idea of love, but he simply states this fact instead of utilizing any of the form or convention of music to get the point across: “There’s music along the river/For Love wanders there” (I. 6-7). No clear analysis of what makes love music-like or what kind of music he is referring to can be made. Near the end of the collection this association progresses: “Where love did so sweet music make” (XXXIII. 2). By adding the descriptor “sweet,” the reader is able to get some idea of the musical qualities Joyce is alluding to, but it is very inexact. Only in the last poem of the collection does music begin to combine with the words in form as described in the line, “Clanging, clanging upon the heart as upon an anvil” (XXXVI. 8). This line nicely combines the rising tension of the words with the tension of a loudly clanging and articulate anvil before the poem ends with the speaker alone, denoting a silence. While the words themselves do not strongly imply a musical connection, they may be seen as the beginnings of Joyce’s integration of music into language.

Oddly enough, even Joyce’s early prose work contains more poetic use of music through language than his collection of poems. Joyce’s short story “The Dead,” from *Dubliners* exhibits musical allusions that actually add to the story line as well as scenes displaying the emotion of music. Joyce depicts this connection between language arts and music through Gabriel as he contemplates this very link: “He repeated to himself a phrase he had written in his review: One feels that one is listening to a thought-tormented music” (Dead 208). In this scene, Gabriel realizes the juxtaposition that one can make between text and music to provoke an emotional response. After Gabriel’s viewing of his wife listening to music, he is reminded of verse that he had written and compares their recollection to the way in which music travels through a space: “Why is it that words like these seem to me so dull and cold? Is it because there is no word tender enough to be your name? Like distant music these words that he had written years before were borne towards him from the past” (232). This passage connects words of the past to

music from a distance, drawing an excellent parallel between the sound of language and the sound of music. It also provokes an emotional response by mentioning how the past and memories are similar to music drifting across space.

In addition to the link that Joyce begins to draw between the mention of music and its actual emotional function, his allusions in “The Dead” serve to clarify the plot. This differs from his earlier works in that the music is no longer simply acting as filler with minimal purpose, aside from the integration of other art forms. One Joyce critic suggests that “music...dominates the fabric of Joyce’s prose to such an extent that it becomes indispensable to those representations of sensibility, place and circumstance which seem to justify the fable in the first place” (White 115). Without allusions to music in “The Dead,” Joyce would have been forced to bluntly state the traits of the hosts of the party rather than slowly exposing them to the reader through their musical performances. The musically informed reader may pick up on connotations in the story that are minimally evident without referencing the musical allusions. “The Dead” contains many references to the magnitude of the show that is being put on, and Joyce emphasizes this display even through the musical performances of the hostesses:

Gabriel could not listen while Mary Jane was playing her Academy piece, full of runs and difficult passages, to the hushed drawing-room. He liked music but the piece she was playing had no melody for him and he doubted whether it had any melody for the other listeners, though they had begged Mary Jane to play something [. . .] The most vigorous clapping came from the four young men in the doorway who had gone away to the refreshment-room at the beginning of the piece but had come back when the piano had stopped. (202-3)

In choosing to perform an Academy piece when all of the previous music had been specifically for dancing, Mary Jane takes the attention away from the merry-making of the guests so as to focus it completely upon herself. Not only that, but she seems to have picked a piece purely for its technical merit and not for a beautiful melody, which

is a quality that most non-musicians would quite appreciate. Even a piece that requires such technicality should have a melody beneath the ornamentation; implying that none of the listeners can hear a melody shows that Mary Jane is wrapped up in the details while ignoring the heart of the piece. Aunt Julia chooses a very difficult piece as well, and Joyce gives more depth to the allusion by actually naming the aria that she sings: “Her voice, strong and clear in tone, attacked with great spirit the runs which embellish the air and though she sang very rapidly she did not miss even the smallest of the grace notes...[The applause] sounded so genuine that a little colour struggled into Aunt Julia’s face” (209). This aria, which is rather light-hearted and praises the beauty of a young bride-to-be, proves a stark contrast to Aunt Julia. Gabriel even notes later that he “had caught that haggard look upon her face for a moment when she was singing *Arrayed for the Bridal*” (241). This contrast emphasizes the disparity between their intent of hosting a charming dinner party and the “boxed” nature of the party itself. Both Mary Jane and Aunt Julia’s performances are met with enthusiastic applause, but it appears to be only to keep the progression of events moving so that they can eat their extravagant dinner. By using these musical allusions, Joyce was able to reticently point out an undertone of discontent to the informed reader without having to spell out the point.

Joyce ends this story with an allusion to a traditional song in a performance that is not nearly as flawless but more genuine than those of the hostesses: “The song seemed to be in the old Irish tonality and the singer seemed uncertain both of his words and of his voice. The voice, made plaintive by distance and by the singer’s hoarseness, faintly illuminated the cadence of the air with words expressing grief” (228). D’Arcy’s performance is the least showy yet most emotionally effective, spurring the touching ending of the short story as the language itself becomes less showy and more poetic. Perhaps a certain Joyce critic is correct in asserting that “the poetics of music are as nothing to the story, at least not in any literal sense. It is the condition of music regained in language, recaptured in prose but not imitated that distinguishes Joyce’s technique in ‘The Dead’” (White 119). It is this addition of

musicality that propels Joyce's later works forward as sound plays a greater role in his texts. The closing lines of "The Dead," while they do not specifically mention music, clearly refer to aural perceptions: "His soul swooned slowly as he heard the snow falling faintly through the universe and faintly falling, like the descent of their last end, upon all the living and the dead" (Dead 242). Certainly, few readers would be able to imagine the sound of softly falling snow as it is almost, if not completely, imperceptible to the human ear. However, these lines are stated so beautifully that one might imagine a slowly descending line of music with a soft diminuendo at the end of a heavily ornamented movement of music.

Joyce continues to appeal to the musical aspects of language in *Portrait of the Artist as a Young Man*. Often it is forgotten that silences are as audibly important as actual sounds. A silence properly utilized in music can successfully yield the same type of emotional response as an actual tone: "They would be alone, surrounded by darkness and silence: and in that moment of supreme tenderness he would be transfigured" (Portrait 311). In this passage, Stephen's feelings for a girl combined with an aural description yield a beautiful depiction of his love for her. Transfiguration is a dominating theme of operatic music of the time, including the aria referred to as "Liebestod" or "Love-death" perhaps the best-known aria in Wagner's *Tristan und Isolde*. This aria was called by Wagner "Verklärung" or "Transfiguration." Since Joyce was quite a fan of Wagner, it is not outrageous to suggest that this dichotomy of death and transfiguration in terms of love is being hinted at in this passage. In a later passage, Stephen begins to associate groupings of the visible with musical equivalents:

A quartet of young men were striding along with linked arms, swaying their heads and stepping to the agile melody of their leader's concertina. The music passed in an instant, as the first bars of sudden music always did, over the fantastic fabrics of his mind, dissolving them painlessly and noiselessly" (420-1).

In this scene, Stephen associates the observable grouping of four men walking with a standardized rhythmic pulse with the sound of the

beginning bars of music in a piece. This association adds considerable depth to the mere perception of seeing a group of men walking down the street. Like many references to music this one comes and goes quickly, yet here time is taken to describe the way in which the music leaves—“noiselessly.” The music dissipates in the way that any sound should, leaving a distinct absence of music in the silence, yet some remnant of it must remain as it has been “dissolved” into Stephen’s mind.

Allusions to actual melodies, not just situations that call music to mind, also abound in *A Portrait of the Artist as a Young Man*. While listening to dance music, Stephen’s emotions are made clear to him. “The sentiment of the opening bars, their languor and supple movement, evoked the incommunicable emotion which had been the cause of all his day’s unrest and of his impatient movement of a moment before. His unrest issued from him like a wave of sound” (Portrait 323). In this passage, audible music, not just a reference to music, causes Stephen to feel an emotion that he cannot even convey to others. While in this case, the music is audible but not labeled as a specific work. Near the conclusion of the book, Joyce writes in an easily recognizable operatic theme: “The birdcall from Siegfried whistled softly followed them from the steps of the porch” (508). In addition to using the bird symbolically as it will reappear throughout the final chapter, this reference is significant because in the Wagner opera this call immediately precedes Siegfried’s encounter with the dragon Fafner. This alerts the reader that Stephen will soon be confronting an inevitable issue, which turns out to be his struggle for independence.

It is in the integration of Joyce’s pairing the feelings of music with visual occurrences and his allusion to musical themes that he truly begins to amalgamate his text and the audible. Stephen’s creative process itself is described as taking on musicality: “He spoke the verses aloud from the first lines till the music and rhythm suffused his mind, turning it to quiet indulgence” (Portrait 490). This passage very clearly depicts the strong link between the words of verses and the music that may hide within verse. This link is further illustrated directly following Stephen’s misquoting of the verses in a piece by Nashe: “But why? Her

passage through the darkening air of the verse with its black vowels and its opening sound, rich and lutelike?" (503). Here, the formation of vowels is excellently juxtaposed with the open, dark sound that musicians strive to create on solo instruments. This fascination with the combination of spoken language and its musical qualities continues to grow in Joyce's later works.

Inevitably, Stephen's view of the world begins to revolve more and more around the form itself of music until eventually he seems to develop some type of musical aesthetic that involves the combining of music, words, and form. Stephen even begins to link his immediate surroundings with the form in which music is written: "His prayer... ended in a trail of foolish words which he made to fit the insistent rhythm of the train; and silently, at intervals of four seconds, the telegraphpoles held the galloping notes of the music between punctual bars...He sang softly to himself with quaint accent and phrasing" (Portrait 337). This description clearly describes the staff on which music is notated. Not only does the speaker imply the form of the staff but also the tempo by stating at what rate the bars are passing. Perhaps one of the most clearly and beautifully stated passages in this novel occurs as Stephen realizes and asserts the connection between words and the other arts:

The phrase and the day and the scene harmonised in a chord. Words. Was it their colours? He allowed them to glow and fade, hue after hue: sunrise gold, the russet and green of apple orchards, azure of waves, the grey-fringed fleece of clouds. No, it was not their colours: it was the poise and balance of the period itself. Did he then love the rhythmic rise and fall of words better than their associations of legend and colour? (428)

Of course, Stephen never tells the reader if he prefers the "rhythmic" aspects of words or their "associations," but the comparison is now exposed for the reader to contemplate. This passage opens by depicting a harmonization of "the phrase and the day and the scene." This harmonized chord is an aural combination of multiple pitches tuned until distracting waves are removed from the sound and the distinct pitches become no longer separate but part of a bigger, fuller

whole. After beginning his thought with a musical sentiment and briefly exploring the range of the visual, Stephen determines that it is this “poise and balance” found in harmony that gives satisfaction in the writing or reading of words. In other words, the very form of music is not only conducive to writing but the very essence of what makes it enjoyable.

Joyce’s commitment to the form of music truly becomes noticeable in *Ulysses*, particularly “The Sirens” episode. From the opening line, the reader knows that the chapter will be based on the aural: “Bronze by gold heard the hoofirons, steelyrining imperthnthn thnthnthn” (*Ulysses* 256). This line sets up a percussive rhythm which may be followed throughout the chapter. Rhythm is not the only structural device that Joyce had in mind for this chapter. In fact, Joyce labeled “The Sirens” a “fuga per canonem” (Weaver 70), a musical form used predominately in the 16th century. This seems an oddly restrictive form to choose while experimenting with its use in prose, yet Joyce made a valiant effort to show the comparison, even though the chapter may be more easily fit into a different musical structure. In fact, Joyce is said to have asked a friend while watching *Die Walküre* if the “musical effect of [his] Sirens episode [was] better than Wagner’s” and was quite upset upon finding out that his friend did not agree (White 116). It is rather impossible to imitate in writing the pervading polyphony and imitation found in a fugue, and fugues are not even that prevalent in operatic works.

While Joyce was rather successful in imitating as much of the form as he could, his writing is no comparison to actual audible music. Joyce’s reaction to the operatic form adds to the disconnect between his actual formal techniques and those of the fugue. In the chapter itself, Joyce mentions and makes use of an operatic aria technique: “Waken the dead. Pom. Dignam. Poor little nominedomine. Pom. It is music, I mean of course it’s all pom pom pom very much what they call da capo. Still you can hear. As we march we march along, march along. Pom” (*Ulysses* 289). The term “A da capo aria” refers to a song in which the performer “returns to the head” or main theme. In this section, the rhythm of the term “pom” is liberally returned to. This operatic form

fits very well with the structure of the chapter as a whole, as the form of “The Sirens” nicely imitates the exposition of a larger work complete with development and recapitulation of the fragmented phrases that had been introduced in the exposition.

Despite Joyce’s liberal use of form in this chapter, he did not neglect the musical allusions that he had been implementing more and more seamlessly in his books. Along with allusions, distinctions are made between what is merely audible and what is musical: “There’s music everywhere. Ruttledge’s door: ee creaking. No, that’s noise. Minuet of *Don Giovanni* he’s playing now” (Ulysses 282). In addition to the defining of non-aesthetic sound as noise, the reference to the minuet from Mozart’s *Don Giovanni* cues in the informed reader to a relationship between Boylan and Molly, similar to the relationship between Giovanni and Zerlina, as the woman succumbs to the man offstage and out of sight. The chapter ends with strings of interspersed “taps” (282-9). According to the storyline, these taps are the cane of a blind man finding his way down the street, but they could also be another reference to Giovanni. As the taps increase in number, they show themselves to be very similar in form to the drum hits symbolizing the Commandant who tries to save the purity of his daughter, even from beyond the grave. One critic even attempts to claim that allusions such as these are what may make Joyce’s chapter polyphonic enough for the form to be interpreted as music: “Can we call the many allusions to other music music? If so, Simon’s singing of ‘Martha’ as Bloom writes a letter to Martha Clifford should contribute some counterpoint” (Weaver 73). While musical allusions certainly bring specific pieces and sounds to mind, this critic is mistaken in identifying it as counterpoint. In music, there are strict conventions about the exact timing and intervallic relationships between two melodies in counterpoint, and no consideration of the exact way the melodies line up are evident in Joyce’s text. The text undoubtedly contains musical forms, but the allusions remain multifaceted and not part of this form.

Inevitably, all of Joyce’s complex work with translating musical form to literary form ultimately lends itself to the simpler relationship

between the spoken word and musicality. Dynamic contrasts within the vocal inflections of the characters are certainly evident in the chapter: “Growl angry, then shriek cursing [. . .] then all of a soft sudden wee little wee little pippy wind” (Ulysses 288). This one sentence gives the impression of a fortissimo followed by a subito piano, which is a frequently used dynamic pattern in dramatic music. The ending of the chapter rings true to an actual performance as well: “Ppprrffrrppff. Done” (291). While this final sound is commonly associated by critics with Bloom’s flatulence or a vocal imitation of flatulence, it is also reminiscent of the sound of a stage of musicians breathing together at the finish of a piece. Perhaps the train of thought behind all of the structural formation is best stated earlier in the chapter: “Words? Music? No: it’s what’s behind” (274). This short passage once again alludes to the close relationship between the spoken word and the rhythm and tonality of music. Clearly, both words and music are considered to be integral parts of getting a point across. However, this time it bypasses both as the leading form and points to something beyond words and music.

This something beyond words and music, if it can be found anywhere, may be found in *Finnegans Wake*. Joyce also had a specific musical structure in mind for this book as he “referred to [. . .] *Finnegans Wake* as a ‘suite’ in the key of E-flat,” (Weaver 4). In fact, some critics have gone so far as to translate all of the characters into respective note names that modulate as they fall or rise, creating a literary circle of fifths complete with tonic to dominant movement (104-5). While this interpretation does bear mentioning, it seems to be taking the comparison to a bit of an extreme, as one can play around with letters long enough to create any type of root movement. Many of Joyce’s texts have been set to music, including a piece called “Roaratorio” by John Cage. However, Cage particularly seems to be creating his own interpretation rather than being true to Joyce’s intentions with the piece. First of all, Cage’s score is not limited to a performance of *Finnegans Wake* but to any piece of literature the performer may want to convert into music. Cage wanted to create a composition “free of melody and free of harmony and free of counterpoint and free of musical theory”

(Cage 107), while Joyce himself paid very close attention to music theory in creating the form and structure of his text. Nevertheless, one can certainly take to heart a certain critic's description of the new role of music in this book: "In *Finnegans Wake* [. . .] the presence of music is so powerful that it is no longer a symbolic resource or descriptive technique but a rival to language (White 119). Joyce is not creating music from language or simply inserting music, however skillfully into the text; he is allowing the music to stand side by side with the words themselves.

However, the extent to which the words in the book are manipulated sometimes makes the musical allusions even harder to notice. On the other hand, by eliminating common words, the reader is forced to listen carefully to the aural qualities of the words that Joyce is creating, as "the eye often notes cacophony that the ear silently translates into sound" (Weaver 97). This cacophony is easily noted in just about any passage from the book: "Didn't you spot her in her windaug, wobbling up on an osiery chair, with a meusic before her all cunniform letters, pretending to ribble a reedy derg on a fiddle she bogan without a band on? Sure she can't fiddan a dee, with bow or abandon!" (Finnegan 198). However, this passage contains musical allusions as well as a musical quality within the text. Here, Anna Plurabelle Lee is being gossiped about as the washerwomen speculate that she cannot even read the cuneiform-like notation of music. If this is not insult enough, "derg" may imply "dirge," indicating that Anna cannot play a slow, death-like piece, let alone the high-spirited fiddle tunes that one normally associates with the violin.

The cuneiform reference remains significant through the book as music is addressed almost as a language of its own. The following phrase may seem to be referring merely to time, but Joyce adds a marginal note translating it to music: "Please stop if you're a B.C. minding missy, please do. But should you prefer A.D. stepplease" (Finnegan 272). In the margin is a treble clef depicting the notes B, C, A, and D, as if this sheds light on the meaning of this excerpt. Many of the marginal notes are in different languages, and certainly this note brings musical notation into that collection of written language. Joyce even composes something of

his own in this “musical language:”

“ THE BALLAD OF PERSSE O’REILLY.”

Have you heard of one Hump-ty Dump-ty how he
fell with a roll and a rum-ble and curled up like Lord O-la-fa
Crum-ple by the butt of the Mag-a-zine Wall of the
Mag-a-zine Wall Hump, hel-met and all. *Da Capo*

“Music cue” (44)

This song entails that combination of language and music. An author can try to combine forms within the language as much as he wants, but real harmony between the two is found most obviously in vocal work such as “The Ballad of Persse O’Reilly.” Through this song, Joyce was able to exactly articulate pitch and rhythm of the text, which is often extremely variable in prose. In addition, this piece is another example of operatic form known as the *da capo* aria. This form was extensively used in opera seria, of which Joyce was quite fond as well as appearing in “The Sirens” in *Ulysses*.

Through his career, Joyce became increasingly sophisticated in his merger of music and literature in his texts. While Joyce never attains literature that is music as some critics would like to claim, he certainly promoted the language of music, even leading musicians to pay attention to his work as well as literature enthusiasts. Ultimately, Joyce seems to focus upon sounds of language, allusions to music, and the strongly linked organizational forms of words and music. In his own words: “Exactly: and that is the ineluctable modality of the audible” (*Ulysses* 37).

Works Cited

Cage, John. Interview with Klaus Schönig. Laughtears: Conversation on Roaratorio. 1979.

Joyce, James. "Chamber Music." The Portable James Joyce. Ed. Harry Levin. New York: Penguin Books, 1976. 629-48.

Joyce, James. "The Dead." Dubliners. The Portable James Joyce. Ed. Harry Levin. New York: Penguin Books, 1976. 190-242.

Joyce, James. Finnegans Wake. New York: Viking Press, 1939.

Joyce, James. A Portrait of the Artist as a Young Man. The Portable James Joyce. Ed. Harry Levin. New York: Penguin Books, 1976. 245-526.

Joyce, James. Ulysses. New York: Vintage Books, 1961.

Weaver, Jack W. Joyce's Music and Noise: Theme and Variation in His Writings. Gainesville, FL: University Press of Florida, 1998.

White, Harry. The Progress of Music in Ireland. England: Four Courts Press, 2005.

Michael Devitt

The Rhetoric of Shell Shock

✧

When I was a teenager, one of my favorite comedians was George Carlin. In 1990, Carlin released a CD called *Parental Advisory: Explicit Lyrics*. The last track on the CD was a routine in which Carlin decried the use of euphemistic language and its effects on society. He began by describing an early medical term called shell shock and how, over time, the term had changed into something that, only 70 years later, was hardly recognizable from the original.

There's a condition in combat. Most people know about it. It's when a fighting person's nervous system has been stressed to its absolute peak and maximum -- can't take any more input. The nervous system has either snapped, or is about to snap.

In the First World War, that condition was called "shell shock." Simple, honest, direct language. Two syllables. Shell shock. Almost sounds like the guns themselves. That was 70 years ago.

Then a whole generation went by, and the Second World War came along, and the very same combat condition was called "battle fatigue." Four syllables now. Takes a little longer to say. Doesn't seem to hurt as much. Fatigue is a nicer word than shock. Shell shock. Battle fatigue.

Then we had the war in Korea. 1950. Madison Avenue was riding high by that time, and the very same combat condition was called

“operational exhaustion.” Hey, we’re up to eight syllables now. And the humanity has been squeezed completely out of the phrase. It’s totally sterile now. Operational exhaustion. Sounds like something that might happen to your car.

Then of course came the war in Vietnam, which has only been over now for about 16 or 17 years, and thanks to the lies and deceptions surrounding that war, I guess it’s no surprise that the very same condition was called “post-traumatic stress disorder.” Still eight syllables, but we’ve added a hyphen! And the pain is completely buried under jargon. (Carlin, track 15)

While not entirely accurate, George Carlin’s routine has stuck with me since I heard it 19 years ago. I’m not entirely sure why. Maybe it’s because I’ve worked as a writer and editor since my mid-twenties, and putting words together is how I make a living. Maybe it’s because my father is a Vietnam veteran who has struggled with the effects of post-traumatic stress disorder himself for more than 30 years. Whatever the reason (or reasons), I thought it would be an interesting subject to investigate. What exactly is shell shock? How did the term originate, and how and why did it eventually come to be known as post-traumatic stress disorder? What influence did rhetoric have on this change, and what implications does it have for changes to the language in the future? These are the questions this paper will attempt to answer.

I. Shell Shock: Origins and Definitions

While historical and literary references to the effects of trauma on mind and body date back for millennia, the first scientific analyses of the condition date back only to the late 1850s. In Great Britain, technological advances such as the railway system made travel more convenient, but also significantly more dangerous, and the number of railroad crashes occurring in Britain at the time was shockingly high. Among those affected was the writer Charles Dickens, who was involved in a horrific railroad crash in Staplehurst. While not seriously harmed, he wrote of witnessing “terrific sights” at the accident, and admitted

afterward, “I am not quite right within ... but believe it to be an effect of the railway shaking” (Turnbull 87).

In 1861, Dr. Waller Lewis created the term “railway spine”, and attributed it to post office employees who had been involved in railway crashes. People diagnosed with this condition suffered a range of physical and psychological problems, including difficulty sleeping, tinnitus, irritability, nightmares, and chronic pain (Lasiuk & Hegadoren I 15). Shortly after the first cases of railway spine were diagnosed, serious medical and legal debates arose concerning its origins, or etiology. In many cases, the symptoms of railway spine were present, but without any obvious sign of injury or neurological damage. As a result, it was often difficult to tell whether a person’s injuries were authentic, or whether they were only pretending to be injured so that they could receive financial compensation. Physicians and legal experts were left to deal with a series of difficult questions. Was the condition organic – that is, was it caused by some physical injury or wound – or psychological in nature? Did an accident cause railway spine, or was a person’s own experience with or interpretation of the event the actual source of the condition? These questions would continue to be played out in courts and medical circles over the next century.

War was another setting for research into the physical and psychological impact of trauma. In 1870, Dr. Arthur Meyers coined the term “soldier’s heart” to describe the effects of active duty on the cardiovascular system; symptoms included fatigue, heart palpitations, sweating, and tremors. The condition was thought to occur from having to carry extremely heavy amounts of equipment for long periods of time without rest, which forced the major blood vessels supplying the heart to pump excessively hard to maintain circulation (Jones 535). The following year, Jacob Mendez Da Costa, who had served as an Army surgeon in the American Civil War, expanded on Meyers’ description, and concluded that soldier’s heart (renamed Da Costa’s syndrome in the U.S.) was a strictly biological response to the stress of combat.

Following the Civil War, interest in the study of trauma essentially disappeared until the outbreak of World War I, which elevated

the numbers of death and injury from warfare to levels never before seen in human history. In a little over four years of fighting, an estimated 16 million people were killed, another 21 million were wounded, and the world's geopolitical structure would be forever changed.

World War I was also the first war in which both sides employed high numbers of ordinance such as mortars, grenades, and artillery shells, some of which could be fired upon enemy troops from a distance of several miles. The constant threat of death from artillery, combined with the grisliness of trench warfare, miserable living conditions, and the sight of killing on a massive scale, inevitably took their toll on hundreds of thousands of servicemen whose minds and bodies could no longer take the strain of accumulated trauma. Increasing numbers of soldiers who had been close to a shell explosion, but showed no outward signs of injury, began to present a puzzling array of symptoms, ranging from amnesia and headache to tinnitus, dizziness, an inability to concentrate, and hypersensitivity to noise.

British physicians, unsure of the exact cause of the symptoms, began using the term "shell shock" to describe cases that occurred as a result of close exposure to exploding shells and ordinance. The first published article on shell shock appeared in the *Lancet* in 1915; between 1915 and November 1918, dozens of articles describing the effects of shell shock would appear in medical journals throughout Europe and North America.

Whether the result of a physical wound or psychological stress, shell shock was one of the leading causes of casualty in World War I. By some estimates, 10 percent of all British battle casualties were categorized as shell shock. 80 percent of servicemen who were diagnosed with severe shell shock never returned to active duty because of their disabilities (Anderson 212). In October 1917, an American officer, Thomas Salmon, estimated that shell shock was responsible for one-seventh of all discharges from the British Army – a number that rose to one-third when physical wounds were excluded (Jones, Fear & Wessely 1642). One year after the war's end, 38 percent of all hospitalized

veterans in the United States were classified as mental or nervous cases. Similar results were seen among British, French and German troops (Anderson 205).

II. Shell Shock: Changes in Definition and Language

As was the case in the years following the Civil War, interest in the treatment of trauma and its effects on mind and body waned in the decades that followed World War I, only to re-emerge with the start of World War II in 1939. Instead of calling it shell shock, military physicians and psychiatrists in Great Britain came up with the phrase “postconcussion syndrome” to describe the condition. However, many of the symptoms used to diagnose postconcussion syndrome, such as headaches, fatigue, dizziness, and tinnitus, were identical to those used to diagnose shell shock a quarter-century earlier, and physicians were left to grapple with the same diagnostic problems seen in World War I. John Fulton, an American professor writing about the condition in the *New England Journal of Medicine*, admitted that it was “delicate and often difficult” to differentiate physical cases of postconcussion syndrome from psychological cases (Fulton 2).

New terms for shell shock continued to appear in the medical literature as World War II progressed. “Exhaustion” and “battle exhaustion” were first used by British medical personnel in 1942, based on the recommendations of Brigadier General W.B. James, a consultant in psychiatry to the British Middle East Force. Having studied the British Eighth Army’s desert campaign in North Africa for two years, he concluded that the campaign had “exhausted the Eighth Army both mentally and physically” (Jones and Wessely 229), and chose the terms to suggest that they were temporary physical and mental states from which soldiers could recover over time.

In the United States, a variety of terms were used during World War II. “War neurosis” was used by psychiatrists, but the more common phrase among soldiers in the field was “battle fatigue,” along with shell shock, especially by older servicemen who had served in World War I. In some instances, the rates of battle fatigue among American soldiers in World War II far exceeded what had been reported during World War

I; at times, up to 40 percent of all soldiers incapacitated in action were diagnosed with some type of neuropsychiatric disorder (Pols 145).

Alarmed at the high number of servicemen being diagnosed with battle fatigue and its impact on the Army's ability to wage war, General Omar Bradley issued a two-part directive in April 1943 regarding the treatment of all psychiatric casualties. First, casualties were to be held for a minimum of seven days and evaluated by a qualified medical provider before being sent to the rear for further treatment or returned to active duty. Second, terms such as shell shock and battle fatigue were to be discontinued; in their place, medical personnel were instructed to use the term "exhaustion" as the initial diagnosis for all combat casualties determined to be psychiatric in nature (Jones 87).

As the war progressed, battle fatigue and exhaustion continued to take its toll on the U.S. Army, and severely hampered its ability to wage war. In September 1943, for example, the Army inducted 118,600 new recruits, but at the same time, it evacuated or discharged 112,500 enlisted men due to combat fatigue and related ailments. By the war's end, more than 504,000 American servicemen were classified as psychiatric casualties and were permanently lost from service (Anderson 206).

In October 1945, the U.S. Army officially replaced "exhaustion" with "combat exhaustion." This change was instituted by Albert Glass, a psychiatrist and Army colonel, and was designed to eliminate diagnoses of psychoneurosis or personality disorder from battle casualties, while emphasizing the role of combat as the primary cause of trauma. The term, also sometimes referred to as "operational exhaustion," was first applied to soldiers serving in the Korean War.

In 1952, at the height of the Korean War, the American Psychiatric Association published its first edition of the Diagnostic and Statistical Manual of Mental Disorders. While not including shell shock or battle fatigue, the manual (DSM-I) included a diagnostic category for "gross stress reaction" that included combat as a causative factor. The diagnosis was seen as appropriate for cases involving exposure to "severe physical demands or extreme stress, such as in combat or civilian

catastrophe” (DSM-I 4).

Starting with the Vietnam War, “combat exhaustion” was phased out in favor of “combat fatigue.” Research on servicemen in the Second World War and the Korean War had shown that even the best soldiers could suffer from mental and physical breakdowns if they were subjected to prolonged fighting. Combat fatigue, a term also introduced by Albert Glass, was intended to convey the message that a normal person who had demonstrated previously satisfactory military service could also be overwhelmed by the stress of intense or prolonged combat (Jones & Wessely 226). Like the conditions before it, the symptoms of combat fatigue included irritability, sleep deprivation, nightmares, depression, and lack of food intake.

In 1980, the American Psychiatric Association published its third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III). Included in the DSM III, under a section on anxiety disorders, the association provided the diagnostic criteria for a new term, “post-traumatic stress disorder,” or PTSD. While avoiding any mention of combat, the diagnosis was written in such a way that it could be applied to any person who “has experienced an event that is outside the range of usual human experience and that would be markedly distressing to almost anyone” (Lasiuk & Hegadoren II 73). Since its first incarnation, PTSD has undergone three minor revisions, but today, it remains the standard diagnosis used for anyone affected by a serious traumatic event.

III. Shell Shock: Rhetorical Implications

In less than 65 years, the term used to describe the physiological and psychological effects of prolonged exposure to combat was changed from a simple, two-word phrase to an eight-syllable term that is often replaced with an acronym. How and why did this change happen? And what are the rhetorical issues surrounding this significant change in language, not just for shell shock, but for language in general?

To answer these questions, one must first define the terms in question from a medical perspective. Dorland’s Medical Dictionary defines shock as “a sudden disturbance of mental equilibrium.” Shell shock is included as a subcategory of shock; in fact, it is referred to as

“a term used during World War I to refer to a wide variety of mental disorders associated with combat experience” that is “now called post-traumatic stress disorder.” Exhaustion is defined as “a state of extreme mental or physical fatigue.” Dorland’s defines fatigue as “a state of increased discomfort and decreased efficiency resulting from prolonged or excessive exertion.” Stress is considered “the sum of the biological reactions to any adverse stimulus, physical, mental, or emotional, internal or external, that tends to disturb the organism’s homeostasis,” and the dictionary warns that inappropriate or inadequate responses to stress “may lead to disorders,” but does not list what those disorders are. Curiously, Dorland’s does not include a definition for post-traumatic stress disorder.

As one analyzes the definitions, a pattern begins to emerge. Just as Carlin noted in his routine, the language is softened with each succeeding term. Exhaustion has less of a negative connotation than shock; fatigue is a softer term than exhaustion; and stress is defined in such a way that any type of factor can cause a stressful reaction. At the same time, one can see connections between the terms. Stress is a type of physical exertion, excessive amounts of which can lead to fatigue. Overabundance of fatigue causes one to become exhausted, which can lead, eventually, to post-traumatic stress disorder.

The same pattern emerges when one examines the actual terms used by the military. Shell shock, which was used predominantly during World War I, is an alliterative phrase with two syllables, and makes a direct reference to the cause of shock – an exploding shell. Battle fatigue and combat fatigue, which were used unofficially in the early parts World War II and again during the Vietnam War, still include a reference to causation: battle and/or combat. Yet both phrases are four syllables, double the number in shell shock, and they use a less negative descriptor in fatigue. Combat exhaustion and operational exhaustion, used during the Korean War, up the syllable count again, in one instance making the phrase four times as long as shell shock, and the direct references to the cause of the condition are removed completely. Post-traumatic stress disorder, a term which did not officially exist until 1980 but which

has been applied to veterans of the Vietnam War and all other military conflicts since, adds a hyphen and softens the language yet again. The person's body is no longer in shock or injured, but is in "disorder" as the result of some type of "stress," which may have nothing to do with combat. (Similar changes are seen in the diagnostic criteria for shell shock, gross stress reaction and post-traumatic stress disorder, all of which are included at the end of this article; please see Tables I-III for review.)

The use of rhetoric, therefore, seems to have played a defining role in the use of shell shock as a medical diagnosis, along with its subsequent derivations. In *Rhetoric*, Aristotle states that "the use of persuasive speech is to lead to decisions" (Aristotle 219), and offers various lines of argument to help prove or disprove a statement. One line of argument that can be used is "the assertion that some possible motive for an event or state of things is the real one" (Aristotle 230). Another line recommended by Aristotle is to show that if the cause is present, the effect is present, and if absent, absent. For by proving the cause you at once prove the effect, and conversely nothing can exist without its cause" (Aristotle 231).

These rhetorical arguments can be seen at work in the earliest discussion over the etiology of shell shock. In fact, almost immediately after the term "shell shock" was first used, critics began calling for it to be modified, if not completely removed from the medical literature, due to questions about the condition's origins and the inability of physicians to render a correct diagnosis. Because soldiers presented with symptoms that were remarkably similar to those experienced by servicemen who had suffered an actual head wound, diagnosing the condition became difficult. Many of the symptoms of shell shock, such as irritability, tinnitus, and difficulty sleeping, had also been seen in people diagnosed with railway spine in the 1860s. As a result, the same questions that had been posed about the etiology of railway spine a half-century earlier were soon being asked about shell shock.

At the outbreak of World War I, the medical profession was divided into two rival schools of thought as to the cause of shell shock.

Dr. Frederick Mott, Britain's leading neuropathologist in the early 20th century, believed that the forces of compression and decompression that occurred in close proximity to an explosion damaged "the delicate colloidal structures of the living tissues of the brain and spinal cord," adversely affecting "the functions of the vital centers in the medulla" (Jones, Fear & Wessely 1642). Carbon monoxide released by an exploding shell or mortar, he thought, could also damage the central nervous system. In either case, while the exact nature of shell shock remained unclear, Mott considered it "an organic problem," a physical injury that produced an array of debilitating side-effects (Jones, Fear & Wessely 1642).

In the other camp were members of the psychiatric and psychological professions, led by Captain Charles S. Myers, a specialist in psychology and consultant to the British Expeditionary Force and the author of the seminal *Lancet* article on shell shock. Based on personal observations of wounded soldiers, and the discovery that many veterans suffering from shell shock were nowhere near a shell explosion when the condition first appeared, but nevertheless developed symptoms identical to those who had, Myers surmised that shell shock was psychological, rather than physical, in origin.

Essentially, it seems that Myers was using Aristotle's cause and effect argument to disprove Mott's theory that shell shock was physical in nature. Mott theorized that shell shock was caused by physical changes to the brain, or the presence of gases that damaged the nervous system. Myers used Aristotle's proofs to refute those claims. If a soldier exhibited all of the signs of shell shock, but wasn't physically wounded by a shell or hadn't inhaled any noxious gases, then how could it be caused by physical trauma alone? And if it was possible that shell shock was a psychological reaction to combat, couldn't it be a real reaction?

The Army Council eventually sided with Myers' explanation. Based on his recommendations, in 1915 the Army Council created two distinct classifications for shell shock: W and S. Shell shock (W) cases were those wounded by direct action, such as an exploding shell, while shell shock (S) cases were those suffering from "nervousness" and

anxiety. This decision had significant ramifications for the professions of psychiatry and psychology. Had the Army Council accepted Mott's theory that shell shock was caused by physical injury only, then psychiatrists and psychologists would have been largely unable to improve the condition of many servicemen, and the standing of Myers and his followers would have been greatly reduced in the eyes of the military. However, labeling shell shock as the result of some kind of psychological trauma allowed for the possibility of recovery, at least on a limited basis. Perhaps something considered untreatable could be treated after all, and perhaps the fledgling psychiatric profession – of which Myers was a leading member – could reach new levels of respect, legitimacy and influence.

There is little doubt that financial considerations also factored in the decision to abandon the use of shell shock, and that rhetorical arguments were used to justify these considerations. In December 1916, the Ministry of Pensions was placed in charge of benefits and duties for wounded veterans in Great Britain, and the awarding of pensions was revised so that wounded soldiers would receive compensation, depending on the severity of their injuries. The loss of two or more limbs merited a 100 percent pension, while the loss of a leg above the knee qualified one for a 60 percent pension; below the knee, a 50 percent pension (Jones, Palmer & Wessely 375).

While it was easy for doctors to administer pensions for the loss of a limb, shell shock often manifested with no visible signs of injury, making it far more difficult to categorize. Moreover, the different diagnoses of shell shock conferred different benefits. Shell shock (W) cases were entitled to wear a wound stripe on their uniform, were usually invalidated from the front to Great Britain and, depending on the severity of injury, were entitled to receive a pension for their wounds. Shell shock (S) cases, on the other hand, were not entitled to a wound stripe or pension, usually received treatment at a field hospital close to the front, and could be returned to active duty after receiving care.

One month after World War I ended, approximately 32,000 pensions had been given to British soldiers diagnosed with shell

shock and other nervous disorders. By March 1921, that number had more than doubled to 65,000, creating an annual expenditure of approximately six million pounds, presenting a substantial financial problem to a government struggling to deal with a global financial downturn (Jones & Wessely 151). In the United States, the cost was even higher. By some estimates, the federal government spent as much as a billion dollars treating the psychiatric problems experienced by veteran soldiers between World War I and World War II. In 1940 alone, the cost amounted to \$42 million (Anderson 214).

It should come as little surprise, then, that the British government made a concerted effort to discourage the use of shell shock as a medical term, and that it enlisted the help of the psychiatric profession to do so. In 1920, the War Office appointed the Southborough Committee to essentially prevent outbreaks of shell shock from occurring in future military conflicts. In 1922, the committee issued its official report, which recommended that the term be “eliminated from official nomenclature,” and that “no case of psycho-neurosis or mental breakdown, even when attributed to a shell explosion or the effects thereof, should be classified as a battle casualty any more than sickness or disease is so regarded” (Southborough 190). In July 1939, two months before the start of World War II, the Ministry of Pensions assembled a committee of representatives and psychiatrists to make policy recommendations on war syndromes. The committee expanded on the conclusions of the Southborough report, and recommended that “such terms as ‘shell shock,’ which may suggest that these nervous symptoms have a physical basis or are due directly to injury, must be rigidly avoided” (Jones, Palmer & Wessely 376).

Here – and throughout all of the manifestations shell shock has undergone in the past 90 years – one can see Michel Foucault’s description, taken from “The Archaeology of Knowledge,” of the psychiatric profession as a group that limits and defines objects. According to Foucault, “In these fields of initial differentiation ... psychiatric discourse finds a way of limiting its domain, of defining what it is talking about, of giving it the status of an object – and therefore

of making it manifest, nameable, and describable” (Foucault 1437). Both the Southborough and Ministry of Pensions committees were staffed by psychiatrists, and the Southborough report provided the first working definition of shell shock in the scientific literature, using phrases such as “emotional shock” and “nervous and mental exhaustion” (Southborough 92). Thus, the psychiatric profession played a significant role in determining what shell shock was; by including exhaustion in the definition, it may have acted as a precursor to the U.S. Army’s decision to rename the term exhaustion in 1943.

One also sees examples of “the authorities of delimitation” such as the medical profession at work. Foucault writes that “in the nineteenth century, medicine ... became the major authority in society that delimited, designated, named, and established madness as an object,” (Foucault 1437). It functions as one of many “systems of exclusion” that “have to do with the part of discourse which puts power and desire at stake” (Foucault 1464). While he is writing about the definition of madness, the medical profession’s ability to name conditions and diagnoses can be applied just as easily to shell shock. At the same time the profession could provide a definition of what shell shock was, it also excluded criteria; the recommendation of the Southborough Committee that “no case of psycho-neurosis or mental breakdown ... be classified as a battle casualty” indicates the committee’s power in this area. In essence, the committee was given free reign to decide what shell shock was (or was not), what conditions caused it (or did not cause it), and whether or not it should be treated as an actual casualty (or a type of sickness or disease). The members of the committee were essentially hand-picked by officials from the War Office, which suggests that while its intentions may have appeared objective on the surface, the decision to not classify shell shock as a type of physical trauma may have been formulated well before the committee first convened. This indicates the power of the state and the medical profession in general, and the committee in particular, in determining whether shell shock is a physical or psychological disorder – determining, in a way, whether the condition actually exists.

IV. Shell Shock: Final Thoughts and Observations

George Carlin ended his routine on shell shock and post-traumatic disorder by telling the audience, “I’ll betcha, if we’d have still been calling it shell shock, some of those Vietnam veterans might have gotten the attention they needed at the time. I’ll betcha” (Carlin, track 15). As the son of a Vietnam veteran, I agree with this statement completely. I’ve witnessed some of the effects of PTSD first-hand – the flashbacks, the memory lapses, the inability to concentrate. And I’ve seen the same effects in colleagues who have served in Iraq and Afghanistan. Some of them have been diagnosed with PTSD; others with a new term, traumatic brain injury (TBI).

For my father, the effects of the physical and mental injuries he suffered in combat linger to this day, and by a twist of irony he is reminded, at least indirectly, of his experiences in Vietnam on a regular basis. In 1982, the Vietnam Veterans Memorial – often referred to as “The Wall” – was dedicated in Washington, D.C. Two years later, a portable scale model of the wall known as “The Moving Wall” was created; it is still displayed at numerous sites throughout the country each year. The creator of the Moving Wall is a Vietnam veteran named John Devitt – which also happens to be my father’s name (The Virtual Wall). Occasionally, he is asked if he is “that” John Devitt. One can see his shoulders slump and his eyes fall toward the ground before offering a simple, “no,” and then doing his best to change the subject.

The unfortunate part of this experience is that changing the subject is exactly what the psychiatric profession, the military, and various government agencies have tried to do with shell shock since the term was first used in the scientific literature. For decades, military physicians and government officials have devised new ways to describe the effects of prolonged stress and trauma under combat, without fully exploring the consequences of their actions. What they have failed to realize is that changing the name of the condition does not change the condition, nor does it relieve the pain and suffering that thousands of American soldiers continue to feel. At best, they are guilty of misdirection and obfuscation; at worst, they are guilty of deluding people

and creating false hope where none should exist.

By no means am I a Luddite. In some instances, I do think changes in language are necessary, even justified. For instance, many companies now have a chairperson or chair instead of a chairman, which has helped to remove the gender bias that was endemic to the American business sector for centuries. Most people refer to the human race as humankind instead of mankind. And if a person needs help, they can flag down a police officer or firefighter instead of a policeman or fireman. As the example of shell shock in this paper shows, however, I think there are times when the shorter and more direct the language is, the better. I also think that the amount of soft, politically correct, euphemistic language we use today is a significant reason why so many people have difficulty communicating with one another. What we really want to say to someone is buried under layers of jargon, and we're so concerned about saying the wrong thing, or something that might insult the other person, that we essentially end up saying nothing. There are times where softening the language is appropriate, but I think that most of the time, this softer, euphemistic language ends up causing more harm than good. If you don't think so, just ask someone who's been diagnosed with post-traumatic stress disorder – or their son.

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Table I: Diagnostic Classification of Shell Shock, Army Council, 1915

- Shell Shock, Wound (W) = Wounded by direct action, i.e., exploding shell.
- Shell Shock, Sickness (S) = Sickness, i.e., mental disturbance/nervousness

x

Table II: Diagnostic Criteria, Gross Stress Reaction (Diagnostic and Statistical Manual of the American Psychiatric Association, First Edition (DSM-I), 1952

Under conditions of great or unusual stress, a normal personality may utilize established patterns of reaction to deal with overwhelming fear. The patterns of such reactions differ from those of neurosis or

psychosis chiefly with respect to clinical history, reversibility of reaction, and its transient character. When promptly and adequately treated, the condition may clear rapidly. It is also possible that the condition may progress to one of neurotic reactions. If the reaction persists, this term is to be regarded as a temporary diagnosis to be used only until a more definitive diagnosis can be established.

This diagnosis is justified only in situations in which the individual has been exposed to severe physical demands or extreme emotional stress, such as in combat or in civilian catastrophe (fire, earthquake, explosion, etc.). In many instances this diagnosis applies to previously more or less "normal" persons who have experienced intolerable stress.

The particular stress involved will be specified as (1) combat or (2) civilian catastrophe.

x

Table III: Diagnostic Criteria, Post-Traumatic Stress Disorder (Diagnostic and Statistical Manual of the American Psychiatric Association, Third Edition (DSM-III), 1980

- A. Existence of recognizable stressor that would evoke significant symptoms of distress in almost anyone.

- B. Re-experiencing of the trauma as evidenced by at least one of the following:
 - 1. Recurrent and intrusive recollections of the event.
 - 2. Recurrent dreams of the event.
 - 3. Sudden acting or feeling as if the traumatic event were recurring, because of an association with an environmental or ideational stimulus.

- C. Numbing of responsiveness to, or reduced involvement with, the external world, beginning some time after the trauma, as shown by at least one of the following.
 - 1. Markedly diminished interest in one or more significant activities.
 - 2. Feeling of detachment or estrangement from others.
 - 3. Constricted affect.

- D. At least two of the following symptoms that were not present before the trauma:
1. Hyperalertness or exaggerated startle response.
 2. Sleep disturbance.
 3. Guilt about surviving while others have not, or about behavior required for survival.
 4. Memory impairment or trouble concentrating.
 5. Avoidance of activities that arouse recollection of the traumatic event.
 6. Intensification of symptoms by exposure to events that symbolize or resemble the traumatic event.

Works Cited

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, first edition. Washington, D.C.: American Psychiatric Association Mental Hospital Service, 1952.

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, first edition. Washington, D.C.: American Psychiatric Association, 1980.

Anderson, Rebecca. "Shell Shock: An Old Injury With New Weapons." *Molecular Interventions* 8.5 (2008): 204-218.

Aristotle. "Rhetoric." In: *The Rhetorical Tradition: Readings From Classical Times to the Present*. Ed. Patricia Bizzell and Bruce Herzberg. Boston: Bedford/St. Martin's, 2001. 179-240.

Carlin, George. *Parental Advisory: Explicit Lyrics*. Eardrum Records, 1990.

Dorland's Medical Dictionary, 31st edition. Philadelphia: W.B. Saunders Company, 2007.

Foucault, Michel. "The Archaeology of Knowledge." In: *The Rhetorical Tradition: Readings From Classical Times to the Present*. Ed. Patricia Bizzell and Bruce Herzberg. Boston: Bedford/St. Martin's, 2001. 1436-1460.

Fulton, John. "Blast and Concussion in the Present War." *New England Journal of Medicine* 226 (1942):1-8.

Information About the Vietnam Veterans Memorial in Washington, D.C. The Virtual Wall (www.virtualwall.org/aboutwal.htm). Accessed April 23, 2009.

Jones, Edgar. "Historical Approaches to Post-Combat Disorders." *Philosophical Transactions of the Royal Society (British)* 361 (2006):533-542.

Jones, Edgar, Nicola Fear and Simon Wessely. "Shell Shock and Mild Traumatic Brain Injury: A Historical Review." *American Journal of Psychiatry* 164.11 (2007):1641-1645.

Jones, Edgar, Ian Palmer and Simon Wessely. "War Pensions (1900-1945): Changing Models of Psychological Understanding." *British Journal of Psychiatry* 180 (2002): 374-379.

Jones, Edgar and Simon Wessely. *Shell Shock to PTSD: Military Psychiatry From 1900 to the Gulf War*. London: Psychology Press, 2006.

Lasuik, G.C. and K.M. Hegadoren. "Posttraumatic Stress Disorder, Part I: Historical Development of the Concept." *Perspectives in Psychiatric Care* 42.1 (2006):13-20.

Lasuik, G.C. and K.M. Hegadoren. "Posttraumatic Stress Disorder, Part II: Development of the Construct Within the North American Psychiatric Taxonomy." *Perspectives in Psychiatric Care* 42.2 (2006):72-81.

Pol, Hans. "Waking up to Shell Shock: Psychiatry in the U.S. Military During World War II." *Endeavour* 30.4(2006):144-149.

Turnbull, Gordon. "A Review of Post-Traumatic Stress Disorder. Part I: Historical Development and Classification." *Injury* 29.2 (1998): 87-91.

James Comminellis

Reasoned Piety:

A summary and explication of discussion of one of al-Ghazālī's Incoherence of the Philosophers

x

There is perhaps no better way to open a paper on Abu Hāmid Muḥammad al-Ṭusī al-Ghazālī's *Incoherence of the Philosophers* than to quote his opening prayer. It reveals both a man in search of the truth, devoted to his God and endowed with the skill to communicate it beautifully:

We ask God in his majesty that transcends all bounds and His munificence that goes beyond all ends to shed upon us the lights of His guidance and to snatch away from us the darkness of waywardness and error; to make us among those who saw the truth as truth, preferring to pursue and follow its paths, and who saw the false as false, choosing to avoid and shun it. . . and that He may bestow His prayers and His assured peace upon our prophet, the chosen, Muhammad, the best of men, and upon his virtuous family and his companions pure, keys of guidance and lanterns in the darkness.¹

Ghazālī, born in 1058 in northeast Persia, grew to be one of the greatest minds of his time. A leading theologian educated him; and he mastered theology of al-Asharī at a young age. By his thirties, Ghazālī taught at the university of Baghdad—one of the most prestigious academic institutions of the time.² A devoutly religious man, he

1 Al-Ghazālī, *The Incoherence of the Philosophers*, trans. Michael E. Marmura (Provo, Utah: Brigham Young University Press, 1997), 1.

2 W. Montgomery Watt, "Introduction," in *The Faith and Practice* (London: George Allen and Unwin Ltd., 1953), 11.

considered God the source of all creation and the root of all causation. Yet, he came to question the validity of his knowledge and the motives of his success. Two intellectual crises drove Ghazālī to seek mystical understanding. In the first, he strove to find the validity of reason. He feared his senses misrepresented the world and voided his reasoning of it. He describes this in his autobiographical work, *Deliverance from Error*, saying, “I investigated the various kinds of knowledge I had, and found myself destitute of all knowledge. . . .except in the case of sense-perception. . . .”³ He concluded, however, that even sense cannot yield undeniable truth. After two months in this state, God restored peace to him. A second period of skepticism followed, in which Ghazālī determined that he achieved his worldly success for vainglory—rather than genuine religious impulse.⁴

In reaction, he wandered in isolated asceticism seeking divine intuition before returning to teaching. However, mysticism remained his focus in the latter part of his life—as is evident in his autobiography. In it he praises mystics as “men who had real experiences, not men of words. . . .”⁵ However, he always attempted to reconcile his mysticism with the tradition that worship practices of Islam developed. Indeed, he opposed the philosophers in *The Incoherence* because their teachings violate the common practices of religion. Ghazālī died in 1111 but so impressed the world that some have called him “the greatest Muslim after Muhammad, and he is by no means unworthy of that dignity.”⁶

The Incoherence is very specific both in purpose and scope. Ghazālī began and completed it in the 1090s. With the advent of Greek, specifically Aristotelian philosophy, new perspectives on religious practices developed. Ghazālī loathed the arrogance of those who assert philosophy as if it had some inherently elevated status over religious tradition and truth therein. He went so far as to accuse philosophy of encouraging compromise in the followers of God.⁷ *The Incoherence* meets

3 Al-Ghazālī, *Deliverance from Error, in The Faith and Practice*, trans. W. Montgomery Watt (London: George Allen and Unwin Ltd., 1953), 22.

4 Michael E. Marmura. “Translator’s Introduction,” in *The Incoherence of the Philosophers* (Provo, Utah: Brigham Young University Press, 1997), xviii

5 Al-Ghazālī, *Deliverance from Error*, 55.

6 Watt W. Montgomery, “Introduction,” 14.

7 Al-Ghazālī, *Deliverance from Error*, 72-73.

these arrogated philosophies and responds with basically theological arguments worded like philosophy: “[I] will dispute with them in this book in their own language—I mean, their expressions of logic.”⁸ In so doing, Ghazālī made no attempt to refute the Greek philosophers (Plato, Aristotle, Galen etc...). Rather, he opposed their translators: Ibn Sina (Avicenna) and al-Farabī. The work’s title refers to those Muslim philosophers whom Avicenna and al-Farabī inspired to new thought—but chiefly these two. Regardless, in refuting their claims, Ghazālī attempted no complete philosophical/theological system in response. In writing *The Incoherence*, he endeavored no resolution to these debates but only to show the ineptitude of the opposing side. In essence, he attempted to deflate the pride and inherent sense of superiority contemporary culture gave the philosophers.

The work discusses twenty major points and subdivides them into more specific disputes. Of these the longest and the focus of this paper is the argument concerning the pre-eternity of the world. Put simply, is the world as old (co-eternal) as God? The philosophers argue yes—that the world has no temporal beginning. Ghazālī, divides their position into four major proofs and systematically refutes each of them. He constructs the work as a dialogue: the philosophers claim this, and he rebuts; they counter-rebut, and Ghazālī responds to that and so on.⁹ One can perhaps think of the structure as an overly planned out coffee shop conversation. This paper simplifies and condenses the dialogue and furnishes examples more familiar to the modern mind.

Despite the conflict inherent in such a work, and Ghazālī’s scathing report of those who blindly adhere to philosophy, he and the philosophers share a surprising amount of common ground. Ghazālī, at least in the first discussion, makes no attempt to refute Aristotelian science.¹⁰ He uses it as support or illustration in many of his arguments.

8 Al-Ghazālī, *The Incoherence of the Philosophers*, 9.

9 One should bear in mind the arguments of the philosophers come from Ghazālī. Averroes responded to Ghazālī’s work with *The Incoherence of the Incoherence*, which contains a more balanced defense of the philosophers.

10 For more on Ghazālī’s treatment of Aristotelian science in regard to occasionalism versus Aristotelian causation see: Taneli Kukkonen, “Possible Worlds in the *Tahāfut al-Falāsifa*: Al-Gazālī on Creation and Contingency.” *Journal of the History of Philosophy* 38, no. 4 (2000), <http://muse.jhu.edu>.

In particular, he continually draws parallels to the Aristotelian perspective of space and compares it to his conception of time.

Further, the two sides argue over the nature of the material world—not of God. Each side attempts to support its conception of the universe without compromising certain qualities of the Divine. First, they both uphold the existence of the Divine. There are no atheists in this debate. Both contend that God created the material world but disagree about its temporal origin.¹¹ Neither position will yield to accepting a weak God. He must be unchanging and omnipotent—as will be seen in the opening proof.¹² Many of the arguments on both sides support the nature of the Divine while claiming the other side does otherwise. Basic logical ideas unite them further. Neither of them will accept an argument ending in an infinite regress, i.e., an endless row of dominos falling and causing one another to fall but having no beginning. Lastly, despite arguing over the definitions of possible, impossible, and necessary, which arise in the fourth major proof for the pre-eternity of the world, the opposing sides show a surprising amount of agreement in logical terminology.

Proof I.

Proof one addresses the philosophers' argument that the eternal cannot produce the temporal. For the sake of ease, the dialogue here is divided into two major sections. The philosophers question God's motivation in creating the world. Pictures when discussing the supernatural always present a danger, but for a moment think of this God sitting in nothingness. This Being is unchanging and all-powerful. No one and nothing could exist to ask Him, "Would you care to make man and the world today?" Thus, the only thing that can change in opinion or action is this God Himself. However, if God's eternal character cannot change, than what stimulated the world's creation? Nothing besides God could exist to motivate creation. Any change of will within

11 Creation here means God is related to creation as a cause is to its effect. A cause need not come before the effect. For example, a muscle causes one's limbs to move. Yet, the muscle and the limb move simultaneously.

12 However, omnipotence has a narrower definition here, which neither party states specifically. It does not mean God can do "anything," rather, that He can do anything in the realm of possibility. They both imply that God acts in coherence with logic. Neither resort to claiming God's illogicality as explanation for his actions. I will discuss this further in the footnotes.

God would defy His character—one of omnipotence and immutability: “To project a change of state [in the eternal] is impossible.”¹³ They argue, if all the conditions for a cause are met, its effect should come immediately. Further, if He had always willed the world’s creation, it should be coeternal with Him: having no beginning but nonetheless being caused by Him. The philosophers illustrate this by comparing it to a divorce. A man desiring divorce, who has fulfilled all the necessary paper work, will not delay in leaving his wife—since all the necessary conditions have been fulfilled. Similarly, in the state of pre-creation, only God’s will could inhibit His action. Hence, if he had always willed creation, all the “conditions” for the effect (creation) would be fulfilled. If so, this establishes the world’s eternity with Him. This idea of an effect proceeding immediately from its cause, the philosophers argue, is supported by “logical necessity, “ which seems to mean the logical conclusion of any unbiased mind.

Ghazālī first responds to the philosophers’ conception of Divine will and then to their epistemological claim to know these things by “necessity.” Ghazālī illustrates the difference between Divine and human will saying human will “designate[s] that which has an objective [fulfilling a need] and there is never [such] an objective in the case of God.”¹⁴ He contends that Divine will differs from human will just as the philosophers argue that Divine and human knowledge differ. They uphold that the “eternal knowledge is not to be compared with created [knowledge],”¹⁵ because they consider God a simple entity and contend that his knowledge does not count as a complexity in Himself. The philosophers define a “simple entity” as singular with no attributes within itself. Thus, to retain God’s simplicity and knowledge, the philosophers claim that knowledge is not an attribute—which would compromise His simplicity.¹⁶ Since human and godly knowledge differ, so also can human and godly will differ. Therefore, the philosophers cannot claim that godly will and action must happen simultaneously—as happens in human

13 Al-Ghazālī, *The Incoherence of the Philosophers*, 14.

14 Ibid, 23.

15 Ibid, 18.

16 Ghazālī disagrees with this perspective of God but chooses not to argue against it to any conclusion.

will. Ghazālī seems to imply here that God wills creation eternally, and integral in that will was a certain time for creation.

From this conception of God as both omniscient and simple, Ghazālī confronts the philosophers' understanding by "logical necessity" and expands with two other examples. Ghazālī asserts that omniscience necessitates complexity. Indeed, people attribute intelligence or ignorance to each other frequently. While older age keeps such comments quiet or masked with nicer language, elementary school children will say things like, "He's so dumb." Certainly, saying so seems as much an attribution as indicating the color of one's shirt. Thus, how can God be simple and omniscient? As an alternative, the philosophers may argue God has no knowledge of the world. However, "a maker who does not know his handiwork is necessarily impossible."¹⁷ Yet, the philosophers claim their conception of God is known by "logical necessity."

Ghazali refutes the philosophers' claim of knowledge by necessity by citing other concepts they claim as known by "logical necessity." They hold (by "logical necessity") that all numbers must fall on an even or odd position. Yet, the world's coeternity with God necessitates an infinite number of planetary rotations; and infinity has no designation of even or odd. It is neither. Earth must have a number of rotations, but it will be neither even nor odd. Therefore they erroneously claim by "logical necessity" that all numbers fall as even or odd. Further, Ghazālī cites Plato's conception of the soul, which the philosophers uphold as known by "logical necessity." They claim each separate soul will eventually reunite to the one God and become part of His simple essence. Ghazālī's claims that "logical necessity" cannot comprehend this idea once put in other terms. How, he argues, can individuated self-aware beings be brought together in one simple aggregate? The soul and seawater differ. Souls clash; they do not cohere as water does. Hence, Ghazālī reflects this idea of knowledge by "logical necessity" in opposition to the philosophers.¹⁸

The second section of this first proof, which I have divided for the sake of ease, analyzes the nature of time and further discusses Divine

¹⁷ Al-Ghazālī, *The Incoherence of the Philosophers*, 18.

¹⁸ Ibid., 20.

will.

Ghazālī begins by stating that God created both time and the material world through pure power of will; and that will discerned between moments of time to determine the proper time of creation.

The philosophers counter Ghazālī by citing his illogical definition of will and the indiscernible nature of time. Will does not determine between similarities. By similarities, the philosophers mean indiscernible things—like pitch-blackness. Trying to divide blackness into groups and categories is ridiculous. One cannot divide truly similar things. So also dividing time—like pitch-blackness—into categories of pre- and post-creation is ridiculous. “For the similarity of [temporal] states is known by [rational] necessity.”¹⁹ The philosophers give no specific definition of will but contend that reason chooses between two similarities that can be divided.²⁰ Thus, a thirsty man with two identical glasses of water in front of him will select the one closest to his dominant hand. Will does not distinguish the two here; nor can it in the case of time. ²¹ Things are differentiated from one another by specifications: i.e., red and blue are both colors. Their redness or blueness specifies them. Nothing specifies one moment of time from another. Since will cannot differentiate between similarities, how can one claim God’s differentiation of time—something that lacks specification? Because he cannot, time and material with it must be eternal.

Ghazālī continues to define will as “being an attribute whose function is to differentiate a thing from its similar.”²² Further, he claims that to maintain their perspective of the world, the philosophers must agree that time has differentiation. Ghazālī claims the will does function when faced with similar things. Again, the thirsty man with two identical

19 Ibid, 24.

20 This actually bears a striking resemblance to the ancient and current debate over free will versus determination. To support free will demands that one define will, which proves very difficult. For more see: James Rachels. “The Debate over Free Will,” in *Problems from Philosophy, Reason and Responsibility: Readings in Some Basic Problems of Philosophy*, ed. Joel Feinberg and Russ Shafer-Landau (Belmont, CA: Thomas Wadsworth, 2008), 478-486.

21 This argument causes one to question what the philosophers and Ghazālī mean by “omnipotent.” If omnipotence can do anything, how then should it have trouble differentiating moments of time? Thus, it seems omnipotence refers only to the realm of logical possibility.

22 Al-Ghazālī, *The Incoherence of the Philosophers*, 22.

glasses of water before him, both of equal distance from both the man's hands, could not decide between the two based on logic or anything else. Nor would he sit there, frozen with indecision, because of his reason's inability to distinguish an advantage between the two. Rather, he would simply choose one. This, Ghazālī argues, is the function of will. Since will can logically discern between similarities, creation in time—with time preceding it—is possible.

He goes on to rebut the philosophers' argument about the indiscernible nature of time in spatial terms. The shape of the world before creation could have been anything, even a triangular Earth. Conversely, the philosophers maintain that the Earth could not be any shape other than spherical, and that shapes do have a sense of differentiation that time lacks. Ghazālī then references and uses as argument a shape they consider simple without differentiation: a sphere, as they suppose, is similar with no unequal parts, and this is known by "rational necessity." This equality of the sphere is a vital part of their conception of the universe. The simple and ascending spheres indicate a God of infinite simplicity, which aligns with the Neo-Platonist perspective of God. Ghazālī attacks this by observing that the sphere has parts: in the case of the lowest sphere, it has poles. Thus, what the philosophers call similar in parts is not. They claim the same of time: that its equal parts allow no differentiation. By attacking their conception of a sphere's equality, Ghazālī also steals support from their contending for time's equality of parts, both of which are supposed to be known by "rational necessity".

Ghazali further claims that the rotation of a sphere or planet "being circular and opposite are equivalent."²³ Either direction would yield little change in the world. The philosophers counter saying east to west differs from west to east obviously. Ghazālī ends this argument by comparing the philosophers' notion of the difference in contrary motions of the spheres to the obvious difference inherent in the "priority and posteriority in terms of the world's [coming into] existence...."²⁴ Since they maintain that the spheres' motion to the west or east counts as a

²³ Ibid, 27.

²⁴ Ibid, 27.

contrary, Ghazālī claims that creation at one time or another also counts as a contrary; and will can differentiate between contraries.

Ghazālī's last rebuttal to the philosophers analyzes causation, and should resound with familiarity to anyone well read in the foundations of western philosophy. He asserts that the philosophers' argument must resort to an infinite regress.²⁵ The world, by the philosophers' logic, does not proceed from the Eternal but is eternal with Him. The world is thus composed of an infinite chain of temporal events: i.e., the grass grows because it has rained a lot lately. It has rained because the wind currents have brought humid air from the equator. The winds act as such because of consistent high- and low-pressure fields in the world, etc. And this causation has gone on for all eternity with temporal events causing one another without any beginning. Ghazālī maintains, however, that an eternal causation must begin this chain of events, i.e., that a first (eternal) domino must fall to knock over the rest. And without that eternal domino, no effects or causes (other dominos falling) can come about. To this, the philosophers have no answer.

Proof II.

The second proof deals primarily with time. Proof one takes for granted that time existed before creation and attempts to show that time has differentiation. Ghazālī now confronts the philosophers concerning God's relation to time. They consider Him prior to creation in essence and cause—but not in time.²⁶ Ghazālī opposes them by explaining God as prior in cause and time. He contends that “[t]ime is originated and created and before it there was no time at all.”²⁷

The philosophers counter Ghazālī by citing that one cannot conceive of something existing before time. Indeed, to say something exists “before” something else implies time. Thus, they claim Ghazālī has no real notion of his own argument. They continue their argument with an example of material creation before time. In this hypothetical, planets

25 As stated in the introduction, accepted contemporary logic rejected infinite regression. David Hume in the 18th century argued otherwise, and it continues as a philosophical contention up to the present: David Hume, *Dialogues Concerning Natural Religion* (London: William Blackwood and Sons, 1907), 119-122.

26 Al-Ghazālī, *The Incoherence of the Philosophers*, 30.

27 *Ibid.*, 31.

exist, but time does not. “Years” in this scenario are meaningless. They choose instead to cite the rotations of planets: planet “one” is made; it rotates 500 times, then planet “two” is created moving with equal speed and an equal distance as “one”. Given this distinction, neither can have the same number of rotations. This reasoning demands that a sort of demarcation exists even in the absence of time.

Ghazālī dispatches these arguments by pointing out the mind’s inability to comprehend timelessness and that the philosophers’ hypothetical misses the point of his argument entirely. Ghazālī’s rebuttal here centers on spatial relations the philosophers accept, which support Ghazālī’s temporal perspective. Ghazālī states that no effort can unbind human comprehension from time. Human estimation cannot defy our temporal understanding: This estimative faculty “is specifically related with time and space.”²⁸ However, time does not confine God. He created and masters time while humans, on the contrary, are subject to it.

As illustration, Ghazālī applies a spatial concept the philosophers consider necessary and existent: “[The philosophers] will then say, ‘beyond the world there is neither a void nor filled space.’”²⁹ Such a concept defies human understanding. Imagine a room with nothing in it yet not empty; or one filled to the ceiling with furniture yet unoccupied. The idea cannot register with human reason—or what Ghazālī calls the estimative faculty. Hence, the philosophers must either accept a principle beyond human realization or deny their perspective of the universe.

Ghazālī addresses their hypothetical and frames it again in spatial terms. He asks if God could have made the spheres any thicker or thinner.³⁰ If not, the philosophers compromise God’s omnipotence.³¹ If yes, this demands the space beyond the world have some measurement.

Measurement in a space neither filled nor empty is senseless. So also

28 Ibid, 35.

29 Ibid, 35.

30 Ibid, 38.

31 This section particularly shows a confined meaning of omnipotence. At one point the philosophers state: “We do not say that that which is not possible is within [divine] power. The world’s being greater or smaller than what it is impossible. Hence, it is not within [divine] power” (p. 38) Ghazālī does not rebut their claim that omnipotence only functions within the realm of possibility. Rather, he argues that the “world’s being greater or smaller” is possible. It seems Ghazālī and the philosophers agree to a narrow definition of omnipotence.

the rotations of the world/spheres as a measurement in place of time is senseless. The philosophers' hypothetical remains subject to the limited estimative faculty and time. Ghazālī concludes that the philosophers must admit the possible creation of time or discard vital concepts of science within their own philosophy. If God can possibly create time, this further degrades the philosophers' perspective of a pre-eternal world. Ghazālī attempts no explanation for the creation of time but only observes the flaws in the opposing position. And this is the work's focus: to observe these flaws—not adduce a perfectly sound philosophical/theological system in opposition.

Proof III.

The third proof primarily disputes the possibility of the world's creation and how it reflects on God's omnipotence. The philosophers assert that the world's creation must have always been possible. After all, things do not shift from possibility to impossibility as the wind moves from east and then to west. Can one imagine a circle-square someday becoming possible? No. Impossibility or possibility, according to the philosophers, is an eternal attribute. They move away from this to a hypothetical: if the world at one time could not exist, and then at another it could, than this compromises God's omnipotence. It implies that at some time or "temporal state," God could not create the world.³²

Ghazālī agrees with their first contention but questions its basis. Yes, the world's creation was always temporally possible; and therefore God's omnipotence remains uncompromised. However, he observes that the philosophers deny the temporal creation of the world. Ghazālī's other proofs attempt to disprove the world's non-temporal creation. And thus he ends the argument stating that "[the temporally created world alone] is the possible, no other."³³

Proof IV.

The fourth proof hinges on semantics. It presents and debates logical terminology: possible, necessary, and impossible. Impossible is either the juxtaposition of opposites (a circle square) or that which cannot ever exist. The necessary means it cannot but exist. The main

³² Ibid, 40.

³³ Ibid, 40.

arguments revolve around the possible. How does one define possible? By one definition, the philosophers argue for the world's pre-eternal nature while Ghazālī rebuts with another.

The philosophers begin explaining that possibility requires a material connection or receptacle, but that material itself is eternal. Material here means an object always preceding and stripped of particulars: no form/shape, no color, no texture, etc. They consider particulars temporally originated and continue saying that one understands particulars (colors and shapes) only by observing physical forms. For example, one comes to learn shapes and colors (particulars) from looking at pictures (material) in elementary school. “Moreover, [possibility] is a relative description. It inevitably requires an entity to which to relate.”³⁴ So the logic goes, one can only comprehend the possibility of blackness in an object if whiteness also exists. And since material—separate from any particulars—has no opposite, its origin must come before time. For the possibility in the material world is obvious since it does in fact exist before one's eyes. Remember, possibility is eternal,³⁵ but with no material receptacle, possibility would precede the world's existence. How can possibility sustain itself without a subject? For example, how could the possibility of Icarus flying into the sun exist, if he did not exist? Since possibility requires a material subject and cannot sustain itself, the material world is eternal.

Ghazālī counters by claiming a different conception of possibility and citing three examples of possibility apart from material. He defines possibility as “a judgment of the mind.” The mind apart from material can comprehend possibility. He illustrates this with three examples. Firstly, the impossible has no material receptacle. By definition it cannot. Yet, something can (possibly) be impossible. Secondly, the mind can comprehend colors without material objects. Once learned, one cannot distinguish between colors without material objects for them to color. Lastly, the philosophers' conception of the soul will not conform to their definition of possibility, for they claim the soul subsists in itself without need of material or matter—that its possibility existed before

³⁴ Ibid, 41.

³⁵ Ibid, 39.

its creation.³⁶ How then can an immaterial soul possibly exist if all possibilities must relate to material? Thus, Ghazālī cites flaws in their logic to support the world’s temporal origin.

The remainder of the argument centers on these three examples, which each side attempts to use in support of one definition of possibility. The philosophers rebut Ghazālī’s examples and frame them to fit their own argument. The impossible does have a material receptacle. The philosophers explain that the impossible also means the juxtaposition of two contraries. For example, something cannot be red and not red at the same time. Since each contrary has a receptacle in material, so also the impossible has a receptacle in the material and thus remains possible. They maintain that to understand particulars (shapes, colors, textures, etc...) one must experience them first. Indeed, how could one comprehend a color without seeing an example of it in the material world.³⁷ They argue the soul’s material receptacle is the body. The soul’s governance over the body gives it possibility.

Ghazālī ends the discussion by countering two of the opposing examples. He seems to concede to their definition of impossible—that the existence of contraries allows impossibility as a material receptacle and thus is possibility. He further allows some leeway regarding the comprehension of color. He asserts that the mind needs material examples to first understand color. However, the intellect can realize universals—which the philosophers acknowledge. For example, one cannot comprehend and keep straight all the varying shades of blue. However, one does have an understanding of blue as a general concept applicable to all those varying shades. Ghazālī contends that these universals exist solely in the mind. If universals exist solely as a judgment of mind, than their possibility must reside in the mind as well. Thus possibility is merely a judgment of the mind—not dependent on a material receptacle.

Ghazālī ends by denouncing the philosophers’ explanation of the

36 Ibid, 42.

37 This hints at a philosophical definition for creativity: that creativity only recomposes already present material. For example, a painter cannot conjure up a fourth primary color. Rather he must work with the colors the present world offers.

body as the material receptacle for the soul. If, as the philosophers claim, the soul's possibility comes before its origination, possibility must exist without a material receptacle.³⁸ To claim the body as a soul's material receptacle is far-fetched considering that the soul, by the philosophers' definition, is "neither in a body nor matter and [is] not imprinted in matter." If the soul does not even imprint upon matter, how then can one claim the body as its material receptacle? The discussion ends here where Ghazālī affirms that the philosophers must either change their own conception of the universe and soul or accept his definition of possibility, which allows for the temporal origination of material. The first discussion here concludes with the purpose of Ghazālī's writing: "To muddy [the philosophers'] doctrine and throw dust in the face of their proofs with that which would reveal their incoherence."³⁹

Despite the rather esoteric nature of this debate, it depicts a culture more intellectually active than many would think. It produced men like Ghazālī, who show a command of both religious thought and philosophical cunning. Currently, society separates the religious and the learned. Ghazālī's writings defy this distinction. He had command of both religious and secular knowledge, yet remained a pious man. His ability to balance such delicate understanding remains rare. He held that one must poke into every dark recess, assault every problem and scrutinize the creed of every sect.⁴⁰ Monotheists, polytheists, spiritualists, and atheists alike would do well to seek understanding of their opposition as Ghazālī did in writing *The Incoherence of the Philosophers*.

38 Ibid, 45.

39 Ibid, 46.

40 Al-Ghazālī, *Deliverance from Error*, 20

Bibliography

Al-Ghazālī. *The Incoherence of the Philosophers*, trans. Michael E. Marmura. Provo, Utah: Brigham Young University Press, 1997.

Al-Ghazālī. *Deliverance from Error, in The Faith and Practice*, trans. W. Montgomery Watt. London: George Allen and Unwin ltd., 1953.

Hume, David. *Dialogues Concerning Natural Religion*. London: William Blackwood and Sons, 1907.

Kukkonen, Taneli. "Possible Worlds in the Tahâfut al-Falâsifa: Al-Gazâlî on Creation and Contingency." *Journal of the History of Philosophy* 38, no. 4 (October 2000), <http://muse.jhu.edu>.

Marmura, Michael E.. "Translator's Introduction," in *The Incoherence of the Philosophers*. Provo, Utah: Brigham Young University Press, 1997.

Rachels, James. "The Debate over Free Will." *Problems from Philosophy, Reason and Responsibility: Readings in Some Basic Problems of Philosophy*, ed. Joel Feinberg and Russ Shafer-Landau. Belmont, CA: Thomas Wadsworth, 2008.

Watt, W. Montgomery. "Introduction," in *The Faith and Practice*. London: George Allen and Unwin ltd., 1953.

Sadia Aslam

A Hand-Up, Not a Handout: William Volker as a Progressive Philanthropist, 1938 to 1941

✧

Introduction

“Where did you get the new teeth, Tommy?” asked Russell Greiner, affable Kansas City printer. Tommy, the crippled elevator operator, smiled broadly to reveal his new dentures. “Mr. Volker gave them to me.” “How did that happen?” “Well, I was down to the Helping Hand, and somebody suggested I go see William Volker. My old teeth were infected, you know. They said he would help me on account he had helped most of them. So I went down to his office, and I had to wait a long time. There must have been fifty people waiting to see Mr. Volker. Some of them were pretty well-dressed, too.” “Did you see Mr. Volker personally?” inquired Mr. Greiner. “I understand he has hired a social worker to help him, he has so many requests for help.” “Oh, yes, I saw Mr. Volker himself. He sees everybody. I told him my story and he was real interested. He asked a couple of questions, then asked me to come back in two days.” “Well,” Tommy related, “I went back but I didn’t have to wait this time. His secretary or something came over and gave me a slip of paper. It was a note to the dentist. I got a swell set of teeth, and do you know what! He sent me to his own dentist!” “Good for you, Tommy,” said Russell Greiner as he walked away, shaking his head in wonderment. “Mr. Greiner,” called the elevator boy after

him. “Don’t say anything about this. Mr. Volker asked me to keep it under my hat. I don’t know why.”¹

Progressivism and Early Twentieth Century

Philanthropy

Industrialization had many effects on Americans; everything from politics and the economy to social values and the urban landscape had to be reconfigured with the onset of intensified immigration and the urbanization that accompanied industrialization. Progressivism, the most effective non-partisan reform movement in American history, attempted to deal with the chaos created by the rapid changes in all sectors of society in post-Civil War America by trying to establish a new social order and uplifting the moral fabric of society.

At its core, Progressivism altered the social, economic, and political arenas of life. The relationship between the state and citizens became stronger as government sponsored agencies were created to help and protect constituents. American democracy was redefined as the economy moved away from solely laissez-faire and the government gained greater control over individuals’ daily lives.² American Progressives in general were college- educated and applied a scientific order to life by valuing rationalism above all else. Unlike earlier generations, who believed that poverty was the fault of the poor or ordained by God, Progressives saw poverty as the obvious result of the new changes in American cities. They tried to fix society with calculated precision, using methods such as settlement houses, prohibition, and better public education. These Progressive ideas can clearly be seen through William Volker’s early twentieth-century work to create a Board of Public Welfare, the Civic Research Institute in Kansas City, and his service on the Kansas City Board of Education. Volker, a Kansas City manufacturer turned philanthropist, once explained his views:

<?> Herbert C. Cornuelle, *Mr. Anonymous: The Story of William Volker* (Chicago: Gateway, 1951), 137-8.

2 Maureen A. Flanagan, *America Reformed: Progressives and Progressivisms, 1890s-1920s* (New York: Oxford University, 2007), vi.

Vice, poverty, disease and crime are the vicious circle. They are so closely interwoven that they cannot be treated separately. Society lets its most valuable property shift for itself. If it finds good pasture, all very well. If it chances to stray into barren fields, that is nobody's lookout. Society is willing to let the risks for vice, poverty, disease and crime remain at the maximum...It is the policy of the welfare board to lend a helping hand to the worthy and to use the big stick on the unworthy. It is our experience that 80 percent of the loss from the vicious circle can be reclaimed for society.³

Although Progressivism as a movement lost momentum by the 1920s with the passage of legislation such as the 18th and 19th amendments, Volker's beliefs and actions, which embraced a Progressive philosophy fused with religious and personal ideals, remained consistent until the end of his life. In spite of Volker's commitment to social work, he became legendary in Kansas City because of his more personal private charitable contributions to individuals. Speaking at the dedication of the Volker Memorial on September 20, 1958, Henry Haskell, an editor for the *Kansas City Star*, remarked:

A friend once asked Mr. Volker how he reconciled the dispensing of private "charity" on this lavish scale with his known devotion to the newer concept of voluntarily organized social service, utilizing the latest preventative and remedial techniques under professional direction. He smiled and replied, "If there appears to be a real need, I never let my left hand know what my right is doing."⁴

Cryptic comments like this reveal Volker's complex views on

3 Henry Van Brunt, "William Volker's Hard Head Made Millions: His Soft Heart Gave Millions Away," *The Kansas City Star*, January 11, 1948.

4 Henry C. Haskell, "The Story of William Volker's Good Works," *The Kansas City Star*, September 21, 1958.

social welfare. Although his Progressive views seem to have come out of the early twentieth century, when he helped set up institutions such as the Board of Public Welfare, the conditions of the Great Depression in the mid- to late 1930s changed circumstances for many individuals. Instead of thinking of his grants as a handout, he must have considered his small aid a hand-up, a way to provide help to those he deemed deserving individuals while simultaneously encouraging the more ideal self-help.

The Progressive ideals of the early twentieth century shaped William Volker's philanthropy and determined who received aid from him. As the example of Tommy, the elevator operator, revealed, Volker provided money to individuals for specific reasons. As a result, he provided a service to the citizens of Kansas City that was not fulfilled by any other source at the time.

Kansas City: 1938-1941

As Volker had predicted in the early 1880s, Kansas City expanded immensely during the first half of the twentieth century. Like many of the big cities at the turn of the century, Kansas City, had a political machine, led by Tom Pendergast between 1925 and 1939.⁵ Because of the Pendergast connections with the Roosevelt administration, Kansas City did not suffer as badly as many other cities during the Great Depression. The recipient of many New Deal federal grants, much of Kansas City's downtown skyline today was the result of Works Progress Administration money during the 1930s.⁶ The WPA led to more jobs in Kansas City and stimulated the local economy. The widespread effect of this New Deal measure is present in some of Volker's notes about applicants as he mentions that some individuals were employed by the WPA.⁷

5 For more information on Pendergast and Kansas City during the era, see William M. Reddig's *Tom's Town: Kansas City and the Pendergast Legend* (1947. Reprint, Columbia, MO: University of Missouri, 1986).

6 A. Theodore Brown and Lyle W. Dorsett, *K.C.: A History of Kansas City, Missouri* (Boulder, CO: Pruett Publishing, 1978), 199.

7 Kansas City, Western Historical Manuscript Collection, William Volker and Company Records, "Requests for Financial Assistance: 1941," KC 0059, Folder 33. Hereafter called WHMC.

Regardless of the New Deal legislation, Americans continued to suffer from the consequences of the Depression well into the late 1930s. It was not until full-scale mobilization for World War II that the United States emerged from the Depression. The lack of money due to monetary deflation during the 1930s had numerous daily implications for individuals, including everything from perpetuating malnutrition to the lack of affordable basic healthcare.⁸ Welfare came in the form of employment, loans to avoid foreclosure on mortgages, or similar plans rather than the direct relief that so many Americans needed to buy everyday necessities. Volker, as seen through his notes on financial aid applicants, focused on providing funds for healthcare and living expenses when approached by the needy. Since the general philanthropic attitude also shied away from giving money to individuals, dating back to ideas surrounding the importance of the Protestant work ethic, Volker's charitable actions served a much needed role in Kansas City.

Although William Volker played an integral part in Kansas City's development of many social welfare organizations, there have not been any scholarly studies of Volker or his influence on Kansas City. Philanthropy as a subject of scholarly research did not emerge until the 1980s because it was considered a component of social work since the beginning of the twentieth century.⁹ Even now, the shape of philanthropy is continuously changing. This study incorporates several distinct areas of research to discover the effect of one individual on Kansas City and the forces that shaped his charity.

The William Volker and Company Records includes a sample of requests for financial assistance and notes made by Volker regarding the applicants. I am using the applications to gain an understanding of the kinds of people who received Volker's aid. I am also using a few individuals whose information is more complete as case-studies in order to describe a representative recipient.

In order to supplement the documents delineating

8 Ross Gregory, *America 1941: A Nation at a Crossroads* (New York: Free Press, 1989), 74.

9 Lawrence J. Friedman, "Philanthropy in America: Historicism and Its Discontents," *Charity, Philanthropy, and Civility in American History*, Lawrence J. Friedman and Mark D. McGarvie, ed., (Cambridge: Cambridge University, 2003), 1.

Volker's charity, I am using numerous articles from *The Kansas City Star* that featured Volker and his charity. It was the *Star* that dubbed Volker "Mr. Anonymous," a name that stuck because of Volker's famed desire for anonymity.¹⁰

One of the legacies of the Progressive era was the formation of social agencies to research societal problems and ultimately correct them. By using contemporary reports and studies done by the Civic Research Institute, I can present a better picture of Kansas City between 1938 and 1941. The reports provide the goals and aims of the various committees, as well as a description of Kansas City's residents and the problems they faced. I will discuss how, although Volker's private charities did not always complement the work of social agencies, they consistently furthered the causes of such organizations.

William Volker: the Citizen

Every city has citizens who alter the future of the locale through small but significant actions. Sometimes these individuals become mythic heroes and join the folklore of local history, while others have a statue, park, or road dedicated to them but otherwise fade into obscurity over time. William Volker, a twentieth-century businessman and philanthropist, is unrecognizable today except in relation to Volker Boulevard, along which lies the Volker Memorial in the Frank A. Theis Park, and the Volker campus of the University of Missouri-Kansas City. Sixty years ago, however, he was considered the "first citizen of Kansas City."¹¹

The fourth child of Freidrich and Dorthea Volker, William Volker was born in Hanover, Germany on April 1, 1859.¹² The family immigrated to Chicago, Illinois in 1871 to avoid military conscription during the Franco-Prussian War, arriving in October, a few

¹⁰ Harry Haskell's recent book *Boss-Busters & Sin Hounds: Kansas City and Its Star* (Columbia: University of Missouri, 2007), is a good source of Kansas City history as told through the story of the *Star*. Especially pertinent to this subject is his chapter on the "Progressive Decade".

¹¹ Van Brunt, "William Volker's Hard Head Made Millions: His Soft Heart Gave Millions Away," *The Kansas City Star*, January 11, 1948.

¹² Cornuelle, *Mr. Anonymous: the Story of William Volker*, 3.

days after the Great Chicago Fire.¹³ At this point, twelve year-old Volker attended school for two years to learn English before getting a job as a clerk at a Chicago retail store, where he quickly rose in the ranks, with his wages increasing from \$1 per week to \$5 per week. Volker attended business college after this, following the advice of the head clerk.¹⁴ At the age of seventeen, in 1877, Volker began to work as a bookkeeper for the Brachvogel House, a Chicago business that specialized in manufacturing picture frames. He became interested in western Missouri, since it provided the walnut used to make the picture frames. Charles Brachvogel, the owner of the company, came to trust Volker's business ideas, so when Brachvogel unexpectedly died three years later, his family asked Volker to continue to run the business. He was only twenty years old at the time.¹⁵

Because he had six years of experience working in the picture frame business, in 1882 Volker decided it was time to start a business of his own.¹⁶ Since Chicago already had enough woodworking companies, Volker determined that it would be best for him to move to a place with fewer competitors. When choosing between St. Joseph, Missouri and Kansas City, Missouri towns near the source of the walnut he planned to use—he chose Kansas City “largely by hunch,” predicting the growth of the then small Midwestern city.¹⁷

From 1882 to the turn of the century, William Volker and Company expanded and became increasingly profitable, making Volker a millionaire by 1906.¹⁸ From the original picture and window frame manufacturing company, Volker gained control of similar companies including a window shade factory and a cotton mill in other parts of the nation.¹⁹ This merging of businesses reveals that, like many Gilded Age industrialists throughout the country, Volker too was interested in vertical integration--the incorporation of various related companies--to improve efficiency in production and increase profits. However, unlike

13 Van Brunt, “William Volker’s Hard Head Made Millions,” January 11, 1948.

14 “The Price of Success,” *The Kansas City Star*, June 27, 1915.

15 Van Brunt, “William Volker’s Hard Head Made Millions,” January 11, 1948.

16 Ibid.

17 Ibid.

18 Cornuelle, 68.

19 Van Brunt, “William Volker’s Hard Head Made Millions,” January 11, 1948.

many industrialists, he did not believe in Social Darwinism, Herbert Spencer's theory that money would naturally flow to the most capable in a free-market economy, thus justifying the enormous wealth of corporate giants in this new age. Volker's beliefs, shaped by his humble and religious upbringing, tended to lean more towards the Progressive ideology popular in the late-nineteenth and early-twentieth centuries, explaining some of the reasons for his support of welfare organizations and penchant for giving to others.

Civic Involvement: Board of Public Welfare and Board of Education

Volker's business position led to his civic involvement in Kansas City. The Board of Public Welfare, which came into existence as the Board of Pardons and Paroles in 1910, was the first of its kind in the United States and preceded similar endeavors by more than two decades. Well ahead of others with this notion, Volker believed that "it was the City's duty to care for its indigent... [and] that welfare activities should be administered with the thought of prevention rather than cure; that it is much better to teach the means of prevention of social evils than to try to effect a cure after the evil exists."²⁰

The Board's efforts "combined a traditional emphasis on self-help with a forward-looking commitment to activist government."²¹ Its goal was to provide access to jobs, housing, loans, and financial and legal advice to limit the amount of direct financial assistance while simultaneously weaning clients off welfare efficiently. Going along with the Progressive aims of the day, the Board also regulated and surveyed work and social conditions by inspecting and monitoring factories, private charities, dance halls, and movie theatres.²²

Volker's actions and participation on this Board as the first president speak louder than words, since by most accounts he was a reticent man who wanted to stay out of the limelight. Even though

²⁰ Mary Lou Fenberg, "History of Board of Public Welfare, Kansas City, Missouri, 1910-1918," (unpublished Master's thesis, Washington University, 1942), 25.

²¹ Harry Haskell, *Boss-Busters & Sin Hounds: Kansas City and Its Star* (Columbia, MO: University of Missouri, 2007), 106.

²² *Ibid.*, 106.

Kansas City Star writer Henry Van Brunt believed that Volker's service on the Board of Public Welfare was the best example of his ideal for public service, Volker served for only three years, claiming, "My three years of service as friend of the friendless has given me the deepest pleasure I have ever known. It has been a privilege to me to serve, as it would be to any man, and I am a better citizen now than I was before. It is not right that I should have all the pleasure when there are others to whom it would mean the same."²³

As Tom Pendergast consolidated power as a political boss, he branched into social work, finding out that dispensing charity and favors increased a sense of loyalty among his constituents. As a result, however, the Board of Public Welfare began to compete directly with the Pendergast machine, eventually leading to the decline of the Board in the late 1910s.²⁴ This remained the case until the end of the Pendergast machine and the reintroduction of the Board in 1940. In many of the notes Volker made regarding applicants, he recorded jobs, prospects for jobs, and often whether or not the applicant had applied to "PW," public welfare.²⁵ This shows Volker's continuing commitment to social service organizations and the importance of people using their services.

Although he worked with many institutions, including the Helping Hand Institute, the Jefferson Home for Women, and the Armour Home, between 1912 and 1926 Volker devoted a great amount of time to the Board of Education in Kansas City. Among the changes that ensued under his leadership were "the introduction of vocational training...regular health examinations, open-air classrooms, and the provision of milk for undernourished children."²⁶ He was most famous, however, for instituting a retirement plan for teachers, providing funds when needed.²⁷ It becomes evident through his actions on the school board that part of Volker's reasons for providing aid to fellow

23 Van Brunt, "His Hard Head Made Millions," January 11, 1948.

24 Haskell, *Boss-Busters & Sin Hounds*, 135.

25 William Volker, "Requests for Financial Assistance:1941" (Folder 33), *William Volker and Company Records* (KCo059), WHMC-KC.

26 Haskell, "The Story on William Volker's Good Works," September 21, 1958.

27 Van Brunt, "His Hard Head Made Millions," January 11, 1948.

Kansas Citians stemmed from his interest in creating successful lives--beginning with childhood problems. Through his service on these civic boards, Volker not only realized the needs of those around him, he was also able to institute reforms that are carried out to this day. His aid to individuals, as a result, can be seen as an extension of his actions on these committees, since he had the same goal in mind: helping people in need to better their lives through immediate assistance, whether it be rent for living, money for groceries, shoes for working, or a bicycle to get to work.²⁸

Promotion of Self-Help: Applying Progressive Ideals

There are no extant records that reveal Volker's lifelong dedication to Progressivism, but he showed his progressive character with through actions, taking part in civic social welfare organizations at the pinnacle of the reform era in the first decade and a half of the century. When the momentum of the reform movement ended with World War I, it is unlikely that Volker altered his beliefs and actions to flow with the new time. The result was an individual who carried on the work he had started, though on a much smaller and unpublicized scale.

In the second half of his life, Volker, along with the rest of the American populace, faced uncertain times as life changed dramatically between the two world wars.²⁹ Volker's interviewing and receiving individual aid applicants appeared to be his attempt to create order in a seemingly chaotic world, to make a rational attempt to allow people to help themselves by encouraging them to get an education, find a job, or seek treatment for health problems.

Aid Recipients: Trends and examples based on a Sample

An average of between fifty and sixty persons a day entered the Volker office, seeking financial aid. They were black and white, rich and poor, Jew and Gentile,

²⁸ Kansas City, WHMC, William Volker and Company Records, "Requests for Financial Assistance: 1941," KC 0059, Folder 33. These are all examples of reasons.

²⁹ Harvey Green's *The Uncertainty of Everyday Life, 1915-1945* (New York: HarperCollins, 1992), provides an excellent synopsis of the various struggles and changes Americans faced in this time period, ranging from housing to labor and health concerns.

Protestant and Catholic...William Volker measured each applicant with his pale blue stare and quickly made his decision. He made few mistakes in judgment and was not often cheated...The Volker desk at the office sat inconspicuously among others of the same design and out in the open. There was a railed enclosure with chairs for visitors...and most of the visitors were applicants for aid. The run-of-the-mill down-and-outer looking for a handout, was given a card bearing the Volker name which, by arrangement with E. Terry Brigham, entitled the applicant to the services of the Helping Hand institute. Others, according to their merits, became “cases” on regular assistance. They numbered thousands and were of infinite variety.³⁰

Using the requests for financial assistance found in the Volker collection, I analyzed a sample of sixty-four requests to collect specific data. Based on a preliminary survey of the collection, I determined that the information Volker most often noted was the gender, family/marital status, reason for application, and amount of aid. Not all of this information was included in every request however, so the completeness of the data set varied greatly.³¹

One way to analyze Volker’s aid is to look at the people to whom he gave aid and to establish whether their conditions were representative of the larger Kansas City population. When screening applicants, it seems that age and gender were two of the most important criteria for Volker. *Star* writer Henry Van Brunt claims that “Mr. Volker confessed to a weak spot where aged, impoverished women were involved. ‘It never hurts to spoil old people,’ he used to say. ‘Old ladies ought to have money to jingle in their pockets.’”³² This was definitely the case with Martha Fuhrman, an

30 Van Brunt, “His Hard Head Made Millions,” January 11, 1948.

31 For some of the requests, the only information that remains is a ticket to the William Volker Charities Fund that notes the date, name of applicant and amount granted. In these cases, no reason or family status can be determined, thus limiting the results even further.

32 Van Brunt, “His Hard Head Made Millions,” January 11, 1948.

eighty-year-old woman whom Volker noted lived in the Armour Home³³ from 1929 to 1941. She came to Mr. Volker to get his help so she could see a doctor for her eye trouble. Another of Fuhrman’s visits to Volker was for her brain trouble. Both times she received small amounts of money (\$5), but, more importantly for her, she felt that going to a hospital would be more beneficial to her than seeing the Armour Home doctor³⁴

Based on the sample shown in Figure 1, approximately equal numbers of men and women received aid from Volker. An obscuring factor, however, arises from the fact that spouses were often listed in Volker’s notes and, when it came to regular recipients, some of the receipts were made out to one person, while others named the spouse. The same condition appears with members of the same family, i.e. sometimes a daughter or son came on behalf of a widow or parent. Regardless of gender, it appears that Volker asked standard questions in order to gain an understanding of the applicant’s history before asking the reason for the request.³⁵

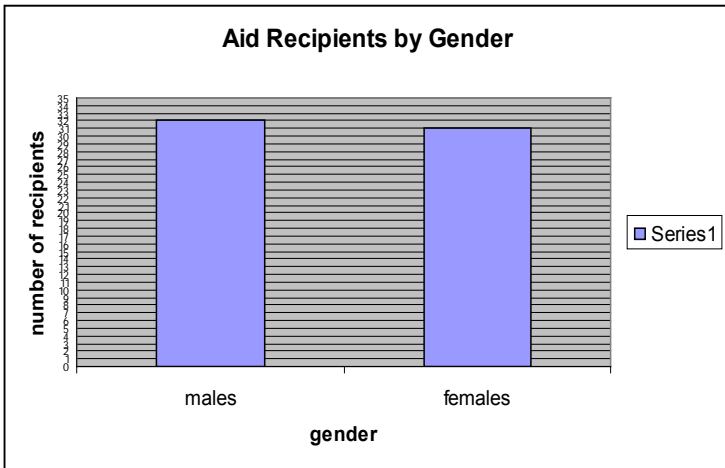


Figure 1

The Great Depression resulted in the breakup of many

33 According to George Green’s *Condensed History of the Kansas City Area: Its Mayors and Some V.I.P.s* (Kansas City: Lowell, 1968), Armour Home was an established home for older couples who were over 65 and had been residents of Kansas City for ten years. Couples had to sign over any property to the Home in exchange for an income during their lifetime.

34 Kansas City, WHMC, William Volker and Company Records, “Requests for Financial Assistance: 1941,” KC 0059, Folder 33, Furhman, 4/1/41.

35 Kansas City, WHMC, William Volker and Company Records, “Requests for Financial Assistance: 1941,” KC 0059, Folder 33.

families, as husbands often left home to find work. A striking example of this is seen in Volker’s notes on George P. Woods, a Kansas City resident for thirty-five years. Woods claimed to have been separated from his family for three years while working for the WPA between 1938 and 1940, among other things. He had three children, aged 17, 14, and 6 years, who were living with their mother. Woods had been out of a job since January 1941; he came to see Volker in September of the same year. He had been admitted to the Veteran’s Hospital between March and July of 1941 and asked for \$12 to pay off his bill at the Regent Hotel for \$8 since they were holding his clothes, as well as \$3.50 for a Greyhound bus fare. Volker issued a check on September 5, 1941 to Woods but cancelled it at the end of the month when Woods never came to pick it up.³⁶ The information Volker noted about Woods, the fact, for instance that he had been a store clerk for three years prior to working for the WPA, shows the amount of thought and commitment Volker put into each applicant’s request for aid.

Most of Volker’s applicants were married, as shown in Figure 2. The marital status of applicants, however, could be determined only if Volker mentioned a spouse. As a general trend however, most married applicants usually requested aid for subsistence, i.e basic living expenses such as groceries or rent, while single or widowed individuals were more likely to ask for educational or health related assistance.

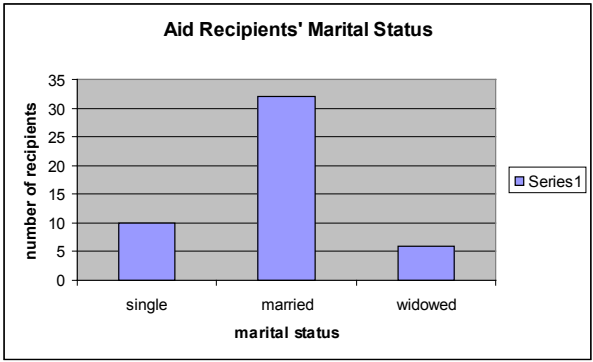


Figure 2

³⁶ A statistical view of reasons, generalized as educational,

Kansas City, WHMC, William Volker and Company Records, “Requests for Financial Assistance: 1941,” KC 0059, Folder 33, Woods, 9/1941.

health, living, or other, is given in Figure 3. The story of George R. Adkins and his family, however, reveals how reasons for requesting aid varied over time. Volker's notes on the Adkins started in February 1938 and continued until Volker received a letter from Adkins in January 1943. In September 1938, Volker noted that Adkins had seven children ranging in age from seven to eighteen years. He had worked for the WPA since June 1938, receiving wages of \$11 per week but owed \$6.25 in rent. In December 1938, Adkins was examined for TB and declared unfit for manual labor. He still had four children at home and requested money for his sixteen-year-old son, who needed surgery on his tonsils. A later note in September 1941 revealed that Adkins requested \$1 for a pair of

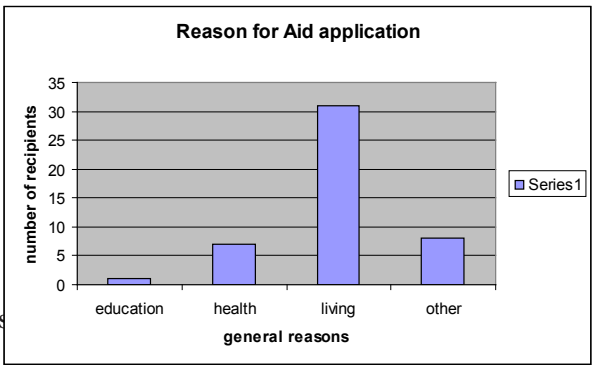


Figure 3

Interestingly, most of the amounts Volker gave to applicants were small, usually \$1. Although a dollar was worth more in the late 1930s, it still was not a small fortune. Again, this reveals that Volker was not trying to create a community of pensioners, but rather encourage self-sufficiency by encouraging and helping individuals to get jobs and more education. Although it seems counter-productive to give handouts, as Henry Haskell pointed out, Volker, it seems, could not resist helping out when he saw the need. He thought of it as an investment in the future and a step in the right direction rather than creating a group of people dependent on his charity for their livelihood. This explains the small amounts he gave: enough to make a small difference and help

someone along. Figure 4 shows the ratio of amounts recipients received

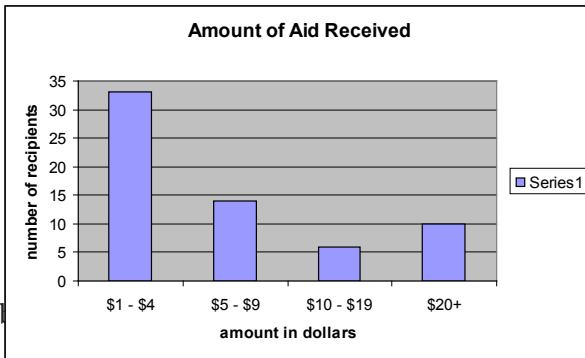


Figure 4

In 1937, Kansas City already had a significant tradition of social work funded through the Charities Committee of the Chamber of Commerce, but leaders expanded the organization. The recognized social planning agencies focused on five different areas: neighborhood work and recreation through settlement houses,³⁸ health and health education through hospitals and the city Health Department, children, family and individual service through social workers, aid for the aged and handicapped through homes and institutions,³⁹ and protective care through the Girls Advisory Bureau caring for unmarried mothers.⁴⁰ Since Volker was an honorary chairman of the Charities Committee, he was well aware of its goals and progress in Kansas City. It seems, however, that since the goal of each welfare institution was specific, and Volker realized that it was easy for a working family to fall through the cracks, he decided to supplement the existing institutions by interviewing individuals and giving out money of his own.

From annual reports such as the Council of Social Agencies meeting report, it is obvious the problems that plagued all cities, ranging from delinquency to disease, were present in Kansas City,

38 These included Guadalupe Neighborhood Center, Institutional Church, Italian Institute, Jewish Educational Institute, Mattie Rhodes Neighborhood Center, and Swope Settlement among others. Some of these institutes are still around today, revealing the longevity of the Progressive era institutions.

39 Some of these included Salem Home, The Little Sisters of the Poor, Catherine Hale Home, etc.

40 *Good Neighboring in Kansas City: Yesteryear...And This Year.* 1937.

but that cooperative efforts tried to mitigate them. For example, one committee was in charge of Christmas adoptions of families. The report presents numbers of families adopted compared to the number that had applied for aid, as well as challenges such as duplicate or even triplicate adoptions of the same family by different agencies.□ Summaries of activities and the annual budget of the Council are included to show what various social agencies were accomplishing and why cooperation made social work more efficient. Volker was the first president of this council in 1919, until he resigned later that year to take a more background role as was his preference.

A more revealing 1940 study of the 2,260 “unemployable” families in Kansas City tried to discern the reasons behind this phenomenon. The study revealed that “more than half these families were headed by women, almost half of whom were widowed, another half are separated or divorced and only a few have never been married.” Also, seventy percent of debt was owed to landlords, grocers, or doctors for essential supplies.□ These are the same reasons my sample of Volker’s aid uncovered. Many of the individuals who were regular recipients were either unemployed but seeking a job, or unemployable because of age, health reasons, or familial responsibilities, making them *deserving* when compared to those relying on welfare to live without trying to help themselves improve their condition.

Conclusion

William Volker has left an important legacy for Kansas City through the institutions he helped establish and fund. Although he did not want to be recognized for this work, agreeing with Ralph Waldo Emerson that “the silence that accepts merit as the most natural thing in the world is the highest applause,” it is important to realize the significance of this debt Kansas City owes Volker.□

As shown by this small sampling of his notes, Volker provided aid to many individuals for reasons ranging from education and health to living expenses. Volker’s reasons can only be conjectured, but are most easily explained by his commitment to social and civic

institutions, his religious and personal values, and his ideals as a Progressive reformer.

This is an important topic of study, especially relevant in today's societal progression towards community involvement and service. By studying previous models of philanthropy, we can make philanthropy even more effective to make a larger impact in bettering society as a whole. Also, keeping with Kansas City's tradition of being a unique city shaped by differing forces, Volker was a unique individual. Harry Haskell claimed that "we have among us no one quite like him... [And] I very much doubt whether any other American city has ever had his exact counterpart."

Over the last decade, philanthropy has moved back towards the actions Progressive reformers advocated. For example, community service is emphasized over simply writing checks to charitable organizations. Also, Progressives, especially female activists, advocated teaching people to improve their lives through education about hygiene, sanitation, and similar personal changes.

Consistent with the American reluctance to give out money, Volker provided money for specific causes in cases where he had the opportunity to make an immediate difference. A shy and unassuming man, unlike many of his Progressive contemporaries, he preferred to stay in the background. Although the memorial dedicated to him in 1956, a decade after his death, was well-deserved, Volker would not have allowed it in his life.

Bibliography

Primary Sources:

Beyond the Border Line: A Study of "Unemployable" Families Receiving General Relief in Kansas City, MO. Published by a joint committee representing Council of Social Agencies of Kansas City, MO, Jackson County Chapter-Missouri Association for Social Welfare, Kansas City Chapter-American Association of Social Workers. November 1940.

Council of Social Agencies. 1938 Annual Report. Twentieth Anniversary Council of Social Agencies, 1919-1939. Annual Meeting, January 26, 1939, Kansas City, Missouri.

Council of Social Agencies. 1940 Annual Report. Twenty-second Annual Meeting, January 23, 1941, Kansas City, Missouri.

Good Neighboring in Kansas City: Yesteryear...And This Year. 1937.

"The Price of Success," *The Kansas City Star*, June 27, 1915.

Van Brunt, Henry. "William Volker's Hard Head Made Millions: His Soft Heart Gave Millions Away," *The Kansas City Star*, January 11, 1948.

Van Brunt, Henry. "A Spotlight on 'Mr. Anonymous' Today." *The Kansas City Star*, September 20, 1958.

"Tribute In Art to Volker Life." *The Kansas City Star*. September 21, 1958.

Volker William. William Volker and Company Records, c. 1893-1964. Applications for Financial Assistance. KC 059, Folder 33. Western Historical Manuscript Collection –Kansas City, Kansas City, MO.

Secondary Sources:

Brown, A. Theodore and Lyle W. Dorsett. *K.C.: A History of Kansas City, Missouri.* Boulder: Pruett, 1978.

Fenberg, Mary Lou. "History of Board of Public Welfare, Kansas City, Missouri, 1910-1918" unpublished Master's thesis, Washington University, 1942.

Flanagan, Maureen A. *America Reformed: Progressives and Progressivisms, 1890s- 1920s.* New York: Oxford University, 2007.

Friedman, Lawrence J. and Mark D. McGarvie., ed. *Charity, Philanthropy, and Civility in American History*. New York: Cambridge University, 2003.

Gregory, Ross. *America 1941: A Nation at the Crossroads*. New York: Free Press, 1989.

Green, George Fuller. *A Condensed History of the Kansas City Area: Its Mayors and Some V.I.P.s*. Kansas City: Lowell, 1968.

Green, Harvey. *The Uncertainty of Everyday Life, 1915 – 1945*. New York: HarperCollins, 1992.

Greenbaum, Fred. *Men Against Myths: The Progressive Response*. Westport, CT: Praeger, 2000.

Gould, Lewis L. *The Progressive Era*. Syracuse: Syracuse University, 1974.

Haskell, Harry. *Boss-Busters & Sin Hounds: Kansas City and Its Star*. Columbia: University of Missouri, 2007.

Payton, Robert L. and Michael P. Moody. *Understanding Philanthropy: Its Meaning and Mission*. Bloomington, IN: Indiana University, 2008.

Reddig, William M. *Tom's Town: Kansas City and the Pendergast Legend*. 1947. Reprint, Columbia, MO: University of Missouri, 1986.

Cameron Buie

The Bernoulli Brothers and the Brachistochrone

x

The world of Mathematics in the 17th century was rife with rivalries. Isaac Newton and Gottfried Wilhelm von Leibniz both claimed to have developed the methods of Calculus, and their competing claims split the society of mathematicians into factions. Newton's supporters were primarily British mathematicians. Among those in the Leibniz camp was the Swiss mathematician Johann Bernoulli. Another famous rivalry was one between Johann and his older brother Jakob. One of them would develop some mathematical problem and challenge the other to solve it. Sometimes, money was staked on the outcome of the challenge, and the challenges were often rather public.

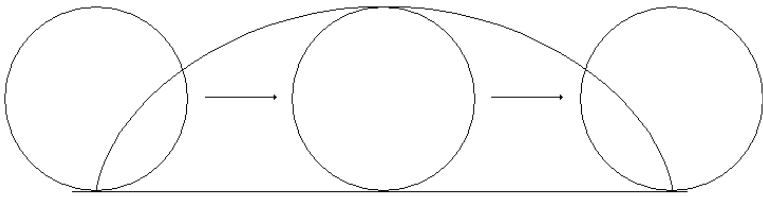
In the June 1696 *Acta Eruditorum*, one of the world's first scientific journals, Johann proposed the following mathematical problem [1, p.645]:

“If two points A and B are given in a vertical plane, to assign to a mobile particle M the path AMB along which, descending under its own weight, it passes from the point A to the point B in the briefest time”.

This problem became known as the Problem of the Brachistochrone (from the Greek words *brachistos* and *chronos*, meaning “shortest” and “time”), and Bernoulli pledged to reveal the name of the solution curve in six months if none were able to find it within that time. Only Leibniz was able to determine the solution within that period, and at his urging,

Bernoulli extended his time limit an additional five months, “in order...that no one might have cause to complain of the shortness of time allotted” [1, p.647]. Bernoulli also restated the problem publicly in January 1697 at the University of Groningen, where he was a Professor of Mathematics, so that “those to whom the...*Acta* is not available” could be given a chance to solve it. Further, he specified that the two given points not be on a single vertical line (since in that special case, the vertical line would be the solution curve), and that the path be frictionless [1, p.647].

This problem was not a new one. In his 1638 publication, *Two New Sciences*, Galileo demonstrated that the Brachistochrone curve was not the straight line between the endpoints, despite being the curve of the shortest distance, and posited that an arc of a circle seemed to be the solution. As it turns out, his supposition was incorrect, but the true answer, the inversion of a curve called the Cycloid, is closely tied to the circle. If a circle is “rolled” along a straight line, the Cycloid is the curve generated by the path of a single point on that rolling circle. The inversion is the same curve, just upside-down.



The Cycloid has many interesting properties. The area under one arch of a cycloid is three times that of its generating circle. The arc length of one arch of a cycloid is eight times the diameter of its generating circle. Christiaan Huygens discovered a particularly remarkable physical property of the inverted Cycloid: that the time it takes for a particle to descend from rest at some point of the curve to the lowest point of the curve is the same, regardless of the starting point (so long as the starting point isn't the lowest point of the curve). Particles starting higher up on the curve accelerate more quickly down

the steeper incline, but must travel a greater distance, while particles starting closer to the lowest point have less distance to travel, but are accelerated less quickly. Because of this property, the inverted Cycloid is often called the “Isochrone” or “Tautochrone” (from the Greek words *isos* and *tauto*, meaning “equal” and “the same”).

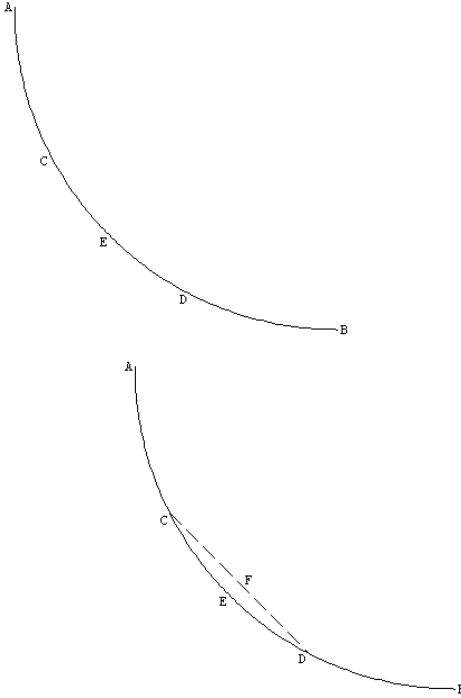
In the proclamation in which Bernoulli restated the Brachistochrone problem, he remarked on the fact that so few had theretofore solved it, and while he didn't explicitly state any names, a challenge to Isaac Newton can be readily inferred from the phrasing [1, p.648]. Shortly thereafter, the problem came to Newton's attention. Within twelve hours of receiving it, he solved it, and the result was published in the January 1697 issue of *Philosophical Transactions*, a publication of the Royal Society. In the *Acta Eruditorum* of May 1697, Bernoulli submits his own proof of the solution, along with those of his brother Jakob and the Marquis de L'Hospital, as well as the excerpt from *Philosophical Transactions* containing Newton's solution. He also acknowledges the solutions of Leibniz and Ehrenfried Walther von Tschirnhaus. Of the six mathematicians whose solutions are mentioned or included, only L'Hospital's is incorrect.

Johann's proof is rather innovative. Operating under Fermat's principle—that light always travels from one point to another along the path that takes the least time—he demonstrates that a beam of light traveling through (and being refracted by) differentially thin layers of varying transparent materials will travel along a Cycloid path. While this does effectively validate Bernoulli's claim that the problem was a useful one to science, and not merely hypothetical speculation, his method cannot be generalized to apply to other fields or circumstances. His brother Jakob's method, on the other hand, is generalizable, and was later developed into what is known as the Calculus of Variations.

Jakob precedes his proof with the following Lemma—a sort of preliminary proof, the result of which he uses to help complete his primary proof. My following analysis appears in square brackets.

Lemma:

Let $ACEDB$ be the desired curve along which a heavy point falls from A to B in the shortest time, and let C and D be two points on it as close together as we like.



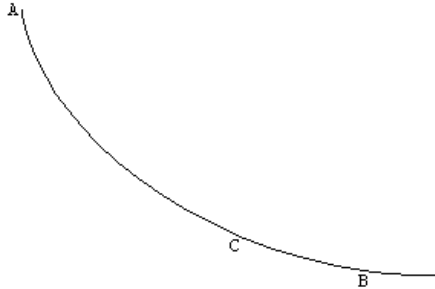
Then the segment of arc CED is among all segments of arc with C and D as end points the segment that a heavy point falling from A traverses in the shortest time. [In other words, there are no other curve segments with endpoints C and D through which a heavy point falling from A would pass in less time than it would through CED .

Demonstrating this fact is the purpose of the Lemma, as it allows him (in his subsequent proof) to focus on any segment of the curve, rather than the curve in its entirety.]

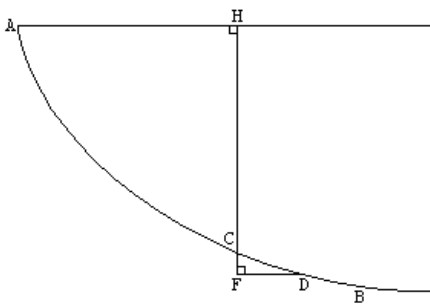
[Proof of Lemma:] Indeed, if another segment of arc CFD were traversed in a shorter time, then the point would move along $ACFDB$ in a shorter time than along $ACEDB$, which is contrary to our supposition.

[End of Proof of Lemma.]

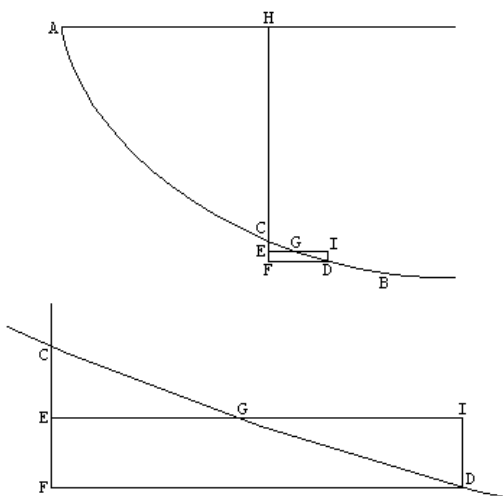
[Proof of the Brachistochrone Problem:] Hence in a plane arbitrarily inclined to the horizon (the plane need not be [vertical]), take ACB as the required curve, on which a heavy point from A reaches B in a shorter time than on any other curve in this plane.



Take on it two points C and D infinitesimally close together [practically the same point, in other words. Bear in mind that, even though (for the sake of clarity) C and D don't look like they are infinitesimally close in the following diagrams, it is something he is taking for granted] and draw the horizontal line AH , the vertical CH , and DF [perpendicular] to it.

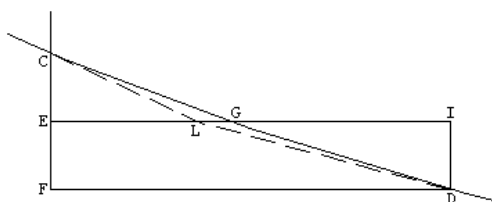


Take E halfway between C and F and complete [rectangle $EIDF$] by means of the line EI [and DI].



On EI we now must determine point G such that the time of fall through $CG +$ the time of fall through GD [which is denoted by $t_{CG} + t_{GD}$, being sure to keep in mind that the fall begins at point A] is a minimum. [In other words, given points C and D , infinitesimally close, on ACB , we want to find a formula that describes how to place point G between them.]

If we now take on the line EI another point L such that GL is incomparably small as compared to EG [so he is assuming that G and L are nearly the same point. He has already assumed that CD is infinitesimally small, so he is taking GL to be infinitesimally small compared to that], and if we draw CL and DL ,



then, [since he is assuming that CGD and CLD are effectively the same path:]

$$t_{CL} + t_{DL} = t_{CG} + t_{GD}$$

[here, “=” is technically only a very close approximation, and should be

taken to mean that the difference between the two things being “equated” is negligibly small] and hence [by subtracting t_{CL} and t_{GD} from both sides]

$$t_{DL} - t_{GD} = t_{CG} - t_{CL}.$$

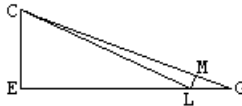
I now reason as follows. According to the nature of the fall of heavy bodies [see Appendix 1 for explanation],

$$\frac{CG}{CE} = \frac{t_{CG}}{t_{CE}}, \quad \text{and} \quad \frac{CL}{CE} = \frac{t_{CL}}{t_{CE}},$$

hence [subtracting the right from the left, we have]

$$\frac{CG - CL}{CE} = \frac{t_{CG} - t_{CL}}{t_{CE}}.$$

If we take a point M on CG such that $CG - CL = GM$,



then we have, because of the similarity of the [“infinitesimal”] triangles LMG and CEG , [that $\frac{GL}{CG} = \frac{GM}{EG}$. Then, multiplying by CG and dividing by CE , we see that $\frac{GL}{CE} = \frac{CG * GM}{CE * EG}$. Since $GM = CG - CL$, we have that

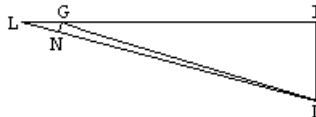
$$\frac{GL}{CE} = \frac{CG * (CG - CL)}{CE * EG} = \frac{CG}{EG} * \frac{(CG - CL)}{CE}. \quad \text{Thus, since } \frac{CG - CL}{CE} = \frac{t_{CG} - t_{CL}}{t_{CE}}, \text{ we have]}$$

$$\frac{GL}{CE} = \frac{CG * (t_{CG} - t_{CL})}{EG * t_{CE}}. \quad (\#)$$

In the same way, we find, according to the nature of the fall of heavy bodies,

$$\frac{GD}{EF} = \frac{t_{GD}}{t_{EF}}, \quad \text{and} \quad \frac{DL}{EF} = \frac{t_{DL}}{t_{EF}}, \quad \text{hence} \quad \frac{DL - GD}{EF} = \frac{t_{DL} - t_{GD}}{t_{EF}}.$$

If we take on DL the point N such that $DL - GD = LN$,



then we have, because of the similarity of [“infinitesimal”] triangles

LNG and GID , [that $\frac{GL}{LN} = \frac{DG}{GI}$. Then, multiplying by LN and dividing by EF , we see that $\frac{GL}{EF} = \frac{DG * LN}{EF * GI} = \frac{DG * (DL - GD)}{EF * GI} = \frac{DG}{GI} * \frac{DL - GD}{EF}$, recalling that $LN = DL - GD$. Thus, since $\frac{DL - GD}{EF} = \frac{t_{DL} - t_{GD}}{t_{EF}}$, and recalling that $EF = CE$ by construction, we have]

$$\frac{GL}{CE} = \frac{DG * (t_{DL} - t_{GD})}{GI * t_{EF}} \quad (##)$$

By comparison [of (#) and (##)] we obtain

$$\frac{CG * (t_{CG} - t_{CL})}{EG * t_{CE}} = \frac{DG * (t_{DL} - t_{GD})}{GI * t_{EF}},$$

and [multiplying both sides of the equation by the right-hand denominator, dividing by the left-hand numerator, and recalling that $t_{DL} - t_{GD} = t_{CG} - t_{CL}$, we see that]

$$\frac{GI * t_{EF}}{EG * t_{CE}} = \frac{DG * (t_{DL} - t_{GD})}{CG * (t_{CG} - t_{CL})} = \frac{DG}{CG}.$$

But [since C and E are infinitesimally close together, the acceleration due to gravity over CE is negligible, so we can treat the speed of the falling object at point C as the average speed, \bar{v} . Then, because $v_C = \bar{v} = \sqrt{2g * y_C}$ (see Appendix 1 for this extrapolation), and since $\bar{v} = \frac{CE}{t_{CE}}$,

we can see that $t_{CE} = \frac{CE}{\sqrt{2g * y_C}} = \frac{CE}{\sqrt{2g * CH}}$. In the same way, since E and F

are infinitesimally close together and $CE = EF$ by construction, we have

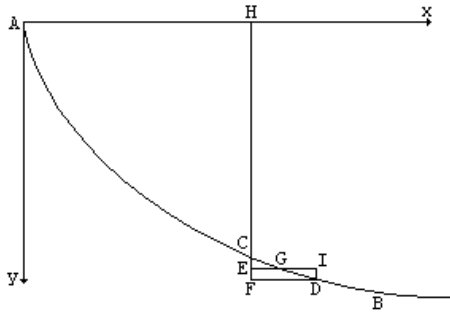
$t_{EF} = \frac{CE}{\sqrt{2g * EH}}$. Then we see that $\frac{t_{EF}}{t_{CE}} = \frac{CE * \sqrt{2g * CH}}{CE * \sqrt{2g * EH}} = \frac{\sqrt{CH}}{\sqrt{EH}}$, so] according to

the law of gravity we have

$$\frac{GI * t_{EF}}{EG * t_{CE}} = \frac{GI * \sqrt{CH}}{EG * \sqrt{EH}},$$

and therefore finally:

$$\frac{GI * \sqrt{CH}}{EG * \sqrt{EH}} = \frac{DG}{CG}.$$



Now EG and GI are elements of the abscissa AH , CG and DG are elements of the curve $[ACB]$, CH and EH their ordinates, and CE and EF elements of the ordinate. [In the notation of modern differential Calculus, we would refer to $EG + GI$ as dx , where AH is some nonnegative value of x , as on the axes above; we would refer to $CG + DG$ as ds ; CH and EH are some nonnegative values of y , as on the axes above; and we would refer to $CE + EF$ as dy . Note: by these labels, we are assuming that the force of gravity is pulling downward in the positive y direction. Further, since GL is “incomparably small as compared to EG ,” GL would be referred to as d^2x , the second differential of x .] The problem can therefore be reduced to the purely geometric one of determining the curve of which the [curve] elements are directly proportional to the elements of the abscissa and indirectly proportional to the square roots of the ordinates. [In other words:

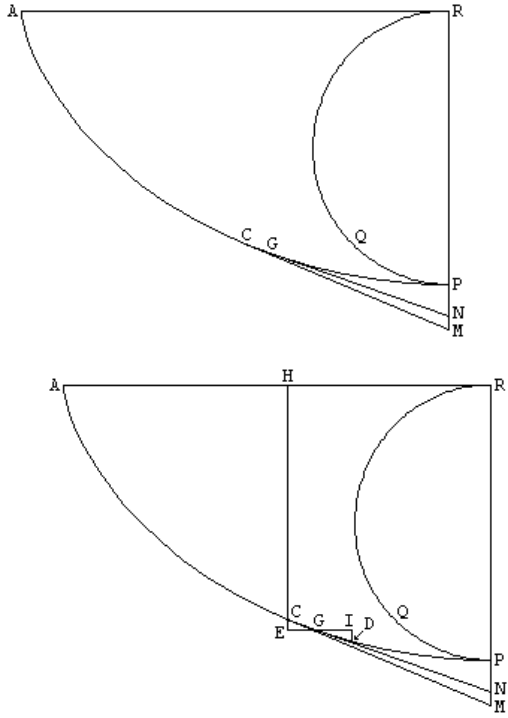
$ds * \sqrt{y} = k * dx$, where k is some nonnegative constant. Then, since $ds^2 = dx^2 + dy^2$, we can square both sides to get $(dx^2 + dy^2) * y = k^2 * dx^2$. Then, $y * dy^2 = (k^2 - y) * dx^2$. Dividing by the quantity $(k^2 - y)$ and

taking the square root of both sides, we have $dy * \sqrt{\frac{y}{k^2 - y}} = dx$, which is of identical form to the differential equation for the cycloid. Rather than stop at that, however, Jakob goes on to prove geometrically that the cycloid fits the equation he derived in the previous proof.]

I find that this property belongs to the Isochrone of Huygens, which therefore is also the Oligochrone [Jakob’s name for the Brachistochrone, from the Greek *oligo*, meaning “scant”], namely the

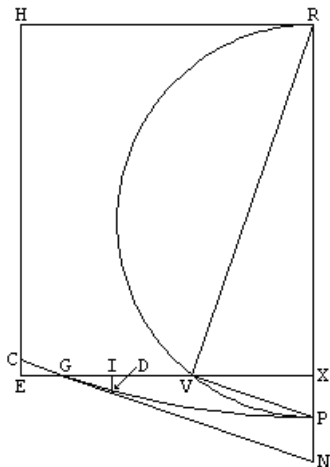
cycloid [2, pp.396-398].

[Proof that the cycloid has the properties determined for the curve of least descent:] Let ACP be a semicycloid; let CM and GN be tangents to the curve in C and G ; let PQR be the [left] semicircle of the generating circle of ACP [extend PR to M . Drop a perpendicular from H on AR through C to E and draw lines EI and DI as before].



[See the figure below. Extend EI to PR , intersecting the semicircle in V and its diameter in X . Draw PV and RV . Recalling that G and D are assumed to be infinitesimally close together, we can treat D as though it is a point on tangent GN . A property of cycloids that Jakob uses here is that Differential Triangle DGI is similar to Triangles PVX and NGX . A property of semicircles he uses is that Triangles PVX , VRX , and PRV are

similar.]



Then [by the similarity of the aforementioned triangles] we have

$$\frac{GI}{DG} = \frac{GX}{GN} = \frac{VX}{PV} = \frac{RX}{RV}$$

[Then, from the equation of the semicircle

$$VX = \sqrt{\left(\frac{1}{2}PR\right)^2 - \left(RX - \frac{1}{2}PR\right)^2} = \sqrt{RX * PR - RX^2},$$

we can use the Pythagorean

Theorem on Triangle VRX to find that

$$RV = \sqrt{RX^2 + VX^2} = \sqrt{RX^2 + RX * PR - RX^2} = \sqrt{RX} * \sqrt{PR}.$$

Thus, recalling that $RX = EH$, we have]

$$\frac{GI}{DG} = \frac{RX}{RV} = \frac{(\sqrt{RX})^2}{\sqrt{RX} * \sqrt{PR}} = \frac{\sqrt{RX}}{\sqrt{PR}} = \frac{\sqrt{EH}}{\sqrt{PR}}. \quad (\&)$$

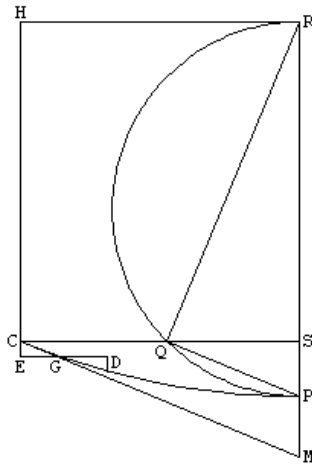
[Now we draw a perpendicular from C to PR , intersecting the semicircle and its diameter at Q and S , respectively. Because of the same properties of semicircles and cycloids from before, we have that

Differential Triangle CEG is similar to Triangles PSQ , MSC , QSR , and PQR . Additionally, just as before, from the equation of the semicircle

$$QS = \sqrt{\left(\frac{1}{2}PR\right)^2 - \left(RS - \frac{1}{2}PR\right)^2} = \sqrt{RS * PR - RS^2},$$

we can use the Pythagorean

Theorem on Triangle QSR to determine that $QR = \sqrt{RS} * \sqrt{PR}$.]



Then we have [recalling that $RS = CH$]

$$\frac{CG}{EG} = \frac{CM}{CS} = \frac{PQ}{QS} = \frac{QR}{RS} = \frac{\sqrt{RS} * \sqrt{PR}}{(\sqrt{RS})^2} = \frac{\sqrt{PR}}{\sqrt{RS}} = \frac{\sqrt{PR}}{\sqrt{CH}} \quad (\&\&)$$

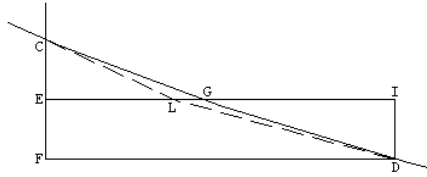
Therefore [multiplying (&) by (&&) and dividing $\frac{GI}{EG}$ by the result yields]

$$\frac{DG}{CG} = \frac{GI * \sqrt{PR} * \sqrt{CH}}{EG * \sqrt{PR} * \sqrt{EH}} = \frac{GI * \sqrt{CH}}{EG * \sqrt{EH}},$$

as was desired [3, p.213]. [End of Proof.]

This problem attracted some of the most famous European mathematicians of the period to attempt to uncover its solution. It was yet another outlet for the fierce competition so typical of that era, and contributed to many scientific advances, including the development of a new field of Calculus. Like Bernoulli, many were fascinated by the fact that the inverted Cycloid is the solution to both the Brachistochrone and Isochrone problems, and others are fascinated by it even today.

Appendix 1



The average speed of a moving body is the distance of travel divided by the time of travel. The statements (regarding “the nature of the fall of heavy bodies”) made by Jakob are equivalent to saying

$$\frac{CG}{t_{CG}} = \frac{CE}{t_{CE}} = \frac{CL}{t_{CL}},$$

which means that the average speed is the same over CG , CE , and CL .

Since C and G are infinitesimally close, we can treat the slope of the curve—and, consequently, the acceleration due to gravity on a body moving along the curve—as constant from C to G . Thus, by the Mean Speed Rule, the average speed, \bar{v} , of a body moving from C to G is

$$\bar{v} = \frac{1}{2}(v_C + v_G).$$

The mean speed rule also holds true for a body moving from C to E or from C to L .

The law of conservation of energy states that the sum of kinetic energy (energy due to movement) and potential energy (energy due to position) remains constant. Assuming that gravity is pulling in the direction of positive y , this can be expressed as

$$\frac{1}{2}m*(v_1)^2 + -m*g*y_1 = \frac{1}{2}m*(v_2)^2 + -m*g*y_2.$$

If we divide everything by m , the mass, and take the initial velocity and y value to be zero, then

$$\frac{1}{2}(v_1)^2 - g*y_1 = 0 = \frac{1}{2}(v_2)^2 - g*y_2.$$

Rearranging and taking the square root of both sides shows

$$v_2 = \sqrt{2g*y_2},$$

so an object’s speed at any point along the curve is directly proportional to the square root of its y value. Thus, since the y value is the same for

points E , L , and G , the object's speed would also be the same at those points. Then the mean speeds over CE , CL , and CG are equal, as was stated.

Works Cited

1. *A Source Book in Mathematics*. Ed. David Eugene Smith. Dover. 1959.
2. *A Source Book in Mathematics, 1200-1800*. Ed. Dirk J. Struik. Harvard University Press. 1969.
3. *Acta Eruditorum*. May, 1697. Ed. Otto Mencke.

Magie Hogan

The Great Moral Tragedy

✧

I Introduction

According to John Dewey, “The separation of warm emotion and cool intelligence is the great moral tragedy,” (238). For when it comes to morality, this “cool intelligence” is trusted to stand alone. The legitimacy of reason is blindly respected in our society. It is the language of leaders and a value that affects our conduct as individuals and as a whole. The moral tragedy comes into play as hindsight reveals the failure of this approach to inspire ethical behavior. In this paper, I will argue that when making decisions about intervention, sentiment ought to trump reason. Unfortunately, sentiment-based decision making will not become the norm until current habituated dependencies on reason-based justifications are challenged. Two historical events of the twentieth century will be used to show contradicting results of this imbalance. A wave of illogical action at the start of World War I, and a void of necessary action during the Rwandan genocide were results of decision makers valuing reason far above sentiment.

II Progressive Sentiment over Ineffective Reason

Though often overlooked, sentiment is overwhelmingly important in moral decision making. David Hume wrote that “reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them” (167). Hume identifies ways in which reason is inadequate for the job of moral activity. Reason connects sentiments with logic, but does not have the ability to determine good from evil. Furthermore, it is “morals [that] excite passion and

produce or prevent actions,” which leaves reason ineffective in the shadow of sentiment when dealing with intervention (p.170). Thoughts motivated by sympathy move through a situation similarly to that of reason, though they produce more effective results. Hume specifies that sympathy is a process that recognizes the cause and effect of emotions and thus produces sentiment which is the root of human motivation (175). These three strengths of sentiment, being the ability to determine good from evil, produce action, and understand that action, are highly important in cases of war and genocide where so many decisions presented are decisions of morality.

Annette C. Baier refers to “the care perspective,” which is concerned with the good of others and thus holds the same responsibility and weight as Hume’s sympathy (445). Both Baier and Hume are prescribing a more important role for emotion in our society. Jonathan Glover, author of *Humanity: A Moral History of the Twentieth Century*, values sentiment, though less for its motivational qualities and more for its preventative ones. He argues that sentiment is necessary to avoid Nietzsche’s version of ethics as self-creation which results in selfishness, dominance and a “festival of cruelty;” this proves to be insightful in the light of poorly made moral decisions (17). He seems to respond to Baier with the stance- “My caring about the sort of person I am motivates the project of self-creation. Why should not my caring about other people set limits to it?” (17). Hume, Baier and Glover all hold “the others” as a moral focus. When making ethical decisions it is sentiment, not reason, that is more effective as it takes “the others” into account.

Reason as a Bad Habit

Though sentiment-based decision making would be more valuable in the case of intervention, habituated dependencies to rely on reason continue to prevail. According to John Dewey, “To change the working character or will of another we have to alter objective conditions which enter into his habits” (p.22). The bad habit is reliance on reason, and through certain instances of intervention the halting qualities present when sentiment is absent become clear. Consider that from the

assassination of Archduke Franz Ferdinand of Austria on June 18 of 1914 to the British Entry of the war on August 3 of the same year, the leaders of multiple countries reasoned themselves into a World War (Glover part 4). The way in which World War I started seems to have been a series of “if-then” ultimatums. Austria-Hungary told Serbia that if they accepted an ultimatum to suppress propaganda, tighten boarder controls, and arrest certain groups and individuals, than they would not be invaded (179). On July 29 Germany declared that if Russia mobilized, than they would mobilize as well. Germany then sent an ultimatum to France stating that if they did not stay neutral, than they would be invaded. The invasion took place on August 2, the same day that the ultimatum from Britain stating that Germany invading Belgium was grounds for war was broken. These “if-then” statements are soaked in reason, leaving little room for sentiment to be noticed, with no chance of their being intellectualized for motivation. Glover wrote of the countries involved “they misperceived each other and miscalculated each other’s responses – they were sleepwalking into war,” (185).

WWI was not an isolated incident. Others can be identified where lack of focus on sentiment resulted in conflict. One of these instances is the genocide that took place in Rwanda in the mid-1990’s. Hume creates for us a picture of “the judicious spectator,” which is the ability of us all to experience feelings of approval or disapproval when we reflect from a common point of view on the people affected by an action (178). This should be a powerful way for those in leadership positions to make decisions that affect others. However, there is a flaw in our current employment of the judicious spectator. Though there may be reflection from a common point of view regarding the people affected by an action, we are disregarding our own feelings of approval or disapproval (sympathy) that result from reflection. It is because of this flaw in thought process that the situation in Rwanda was able to happen under the watch of the rest of the world. In the midst of evacuation of non-Africans from Rwanda, intense hate propaganda, and public mass killings, Bill Clinton was able to address the people of America and the people of the world with the message that the United States would not

intervene in a humanitarian crisis void of interest for our own country (Barker). It is clear that those responsible for making this decision were indeed reflecting on who would be affected from common point of view. It is also clear that in this reflection there was no true sentiment allowed to have an effect on the decision. It was Hume who pointed out that sympathy can be used as aversion. In Clinton's speech he expressed a deep regret for the people involved, but if the sentiment was true, there would have been a motivation to act. We didn't even interfere with the radio broadcast messages telling Hutu that now was the time to slaughter their Tutsi neighbors (Barker). Reason justified that this would have been a violation of the Constitution's freedom of speech, regardless of the right to life which is still found in our constitution mid-genocide (Barker). As I will demonstrate, sentiment would have told us that at this point any act of prevention, no matter how small, was completely worthwhile.

There were some who stayed in Rwanda and put this mentality to use. Philippe Gaillard was the individual leading the Red Cross in Rwanda during the genocide. From his position he experienced the massive amount of violence, and he experienced it quickly judging from the estimated 100,000 people killed in the first week alone. When a Red Cross van was stopped by the extremists and the six wounded inside were killed, he was faced with the decision of whether or not to make the information public. Despite the Red Cross dictum of neutrality through public service, and the danger he was putting himself in, he spoke of what he saw. The publicity embarrassed the extremists and the Red Cross was granted safe passage throughout Rwanda. Gaillard said that "in such circumstances if you don't at least speak up, clearly, you are participating to the genocide. If you just shut up when you see what you see, and morally, ethically you can not shut up, it's a responsibility to talk" (Barker). Carl Wilkins, an Aid worker for the Adventist Church, protected an orphanage of children by simply speaking to the Prime Minister of Rwanda. In reflection he later said, "In each one of us there is such a potential for good and such a potential for evil" (Barker 2004). These men and other individuals expressed their inability to

leave the situation without trying to help. They said they would feel wrong. Moreover, and more importantly, they would feel responsible. Hume would describe these people as virtuous for “virtue is nothing but to feel a satisfaction of a particular kind from the contemplation of a character,” (174). Their actions, which were fueled by sentiment-packed perspectives of the genocide, are even more heartbreaking next to episodes of apathy. For on the other hand, Hume describes that one can have a general desire to achieve good and avoid evil without involving emotion (169). Mix this reason based concept of good and evil, with empty words of sympathy, and the disassociating distance between America and Rwanda, and a disaster like genocide can pass unrestricted so completely by the people with so much power.

How to Shake a Bad Habit

John Dewey set out to describe an ethical program which was to use “the intelligent acknowledgement of the continuity of nature, man and society” to secure a morality free from the weight of ineffective habits (13). These habits, once established, are not thought of as needing reevaluation. As society changes drastically between generations; through wars, genocides, invasions, and revolutions, it is absolutely necessary to look at the habits that fuel values. Dewey writes that “instead of constantly utilizing unused impulse to effect continuous reconstruction, we have waited till an accumulation of stresses suddenly breaks through the dikes of custom,” (96). The build up of ineffective behavior leading to the release of effective action happens under some circumstances. Unfortunately, the situation of how to deal with genocide-related issues has not yet reached this point. Throughout history, an act of genocide leads to the general conclusion of “never again.” However, our blind social forces seem to have created an “accidental morality” in which it is ethical and excusable for a present episode of genocide to be ignored (292). In the case of war and genocide it would be in the best interest of humanity to take a proactive approach to replace ineffective behavior with habits that can make a positive difference.

Sentiment and reason are both going to show up within people habitually. The question becomes which of the two will be valued in human conduct? Dewey describes this as a choice “between the development of a technique by which intelligence will become an intervening partner and a continuation of a regime of accident, waste and distress,” (254). If sentiment becomes a habit of society it will be valued among its members. Our values affect and are affected by our environment as well as our conduct. Impulses and actions from our up to date experiences will act as informants and keep the system of nature, man, and society up-to-date with the reality of interaction.

III Kant and Reason

The sentiment-based philosophy of Hume was different than that advised by his immediate predecessors. Let us, for example, consider how what I have said here stands up to the framework provided by Immanuel Kant. Kant argues that the only way in which to establish moral rules is through reasoning (Kant, 2007). If approached in this manner, morality will become indisputable and universalizable. This perspective is a problem if it is to be incorporated into Dewey’s ethical program. A moral truth that is expected to be universalizable is expected to apply to all people and appeal to human reason. Without reflection over the success or failure of past activities when seeking moral truths, habituated, ineffective tendencies will become the norm. Reason alone is a stagnant moral plan. In the case of intervention, Kant would push decision makers to reason through the situation, and dismiss any emotion that may get in the way. As it was made clear through World War I, reason can not stand on its own to produce a morality from a situation that makes sense. In this case, reason resulted in the action of war before anyone involved had time to gain a feeling of the situation. Rwanda, however, was not about senseless action but rather a lack of activity caused by reason based holdups. Kant may argue that emotions are too airy and subjective to hold any of the weight of moral decision making. But judging from these historical events and more it would do humanity good not to leave reason-based decision-making habits in

place.

IV Conclusion

Ethical dilemmas are very prominent in times of violent conflict. If sentiment is valued over reason in war and genocide-related matters, then the chance of the moral effects of a situation getting out of control is reduced. There is intuition built into sympathy and sentiment. Hume writes that “the moment we perceive the falsehood of any supposition, or the insufficiency of any means our passions yield to your reason without any opposition,” (168). We know this to be true. If one desires something but is convinced of otherwise, they desire it no more. Emotion is not stagnant; it responds intuitively to a situation as the situation changes with human conduct and environmental concerns. Sentiment holds the flexibility needed to work with Dewey’s ethical program and, if habituated, will help change human behavior in a more productive direction.

Works Cited

- Baier, Annett. (2007). *The Need for More than Justice*. Ethics: Selections from Classic and Contemporary Writers. Belmont: Thomson Wadsworth
- Barker, Greg. (2004). *Ghosts of Rwanda*. Unites States: PBS.
- Dewey, John. (1956). *Human Nature and Conduct*. New York: The Modern Library.
- Glover, Jonathan. (2000). *Humanity: A Moral History of the Twentieth Century*. New Haven: Yale University Press.
- Hume, David. (2007). *A Treatise of Human Nature*. Ethics: Selections from Classic and Contemporary Writers. Belmont: Thomson Wadsworth
- Kant, Immanuel. (2007). *Foundations of the Metaphysics of Morals*. Ethics: Selections from Classic and Contemporary Writers. Belmont: Thomson Wadsworth

Andrea Ridlen

Closing Pandora's Box: Putting an End to Credit Card Companies' Windfall Profits from Penalty Fees

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Introduction

Debra and Michael Johnson live with their two young children in a small two-bedroom house in the suburbs. Debra teaches first grade at the elementary school, and, until recently, Michael worked fifty hours a week as an electrician. They are of modest means and live a modest lifestyle. They had been getting by living paycheck-to-paycheck until Michael lost his job when his company downsized. Michael applied for job after job, but to no avail. The economy was tough and no one was hiring.

With Debra now the family's sole wage earner, the Johnsons are no longer able to pay their bills. They charged the gas and electric bills to their credit card just to keep their heat and electricity on. Next it was the groceries. That was the last charge they made to their credit card. Although they had always paid their bills on time in the past, they had to skip their \$50 minimum payment on the credit card this month. They were getting close to their \$2,500.00 credit limit.

The next month when they received the credit card bill, the new balance due included fifty dollars¹ for the minimum due from the month before, fifty dollars for this month's minimum payment, and a forty dollar late charge. Again, the Johnsons could not afford to pay the credit card bill. The next bill came with another forty dollar late fee. Only this time, the new late fee put the Johnsons over their credit limit, and there was a forty dollar over-limit fee in addition to the other fees. Their new

¹ Most credit card companies require a minimum payment each month of two percent of the total balance. \$50 would be the minimum due on a \$2,500.00 balance.

balance due was \$270.

Finally, after eight weeks and two missed credit card payments, Michael found a new job. The Johnsons did their best to catch up on all their bills by paying what they could. This month, the Johnsons paid \$70 on their credit card—the most they could afford—bringing the balance due down to \$200. However, due to the late and over-limit fees that had been assessed, the Johnsons were still above their credit limit. The credit card company also sent the Johnsons a letter saying that since the family had been late on two consecutive credit card payments, their interest rates were being raised from 7 percent to the “Default Rate” of 30 percent, which would apply not only to new purchases, but to purchases the Johnsons had already made.

The next month, they received another forty dollar late fee and another forty dollar over-limit fee, in addition to their minimum monthly payment of fifty dollars. Now their balance due was \$330. The Johnsons continued to pay as much as they could each month, but did not get caught up on the payments for another three months. By the time the Johnsons got caught up on their minimum payments, they had paid over \$440 in fees to the credit card company, in addition to the 30 percent interest rate.

According to Robert Hammer, chairman of industry consultant R.K. Hammer, “Issuers will reap a record \$20.5 billion in penalty fees in 2009.”² These fees are essentially contract penalties and not compensatory in nature; this results in a windfall to credit card companies.³ As contract penalties have long been held violative of public policy, credit card late and over-limit fees should be abolished. Current legislation is impotent at protecting consumer rights.

This article begins by discussing usury laws and the historic disdain for contract penalties. Part II of this article explains and contrasts liquidated damages and contract penalties. Part III explains why credit card late and over-limit fees are penalties rather than

² Kathy Chu, U.S.A. Today, Bank Credit Card Fees Keep Going Up, March 15, 2009, available at: http://www.usatoday.com/money/perfi/credit/2009-03-15-bank-credit-card-fees_N.htm?csp=34.

³ Kathleen Day and Caroline E. Mayer, Credit Card Penalties, Fees Bury Debtors; Senate Nears Action On Bankruptcy Curbs, Washington Post, March 6, 2005, at A01.

liquidated damages. Finally, Part IV discusses remedial measures that must be taken to prevent credit card companies from reaping windfall profits through penalty fees. I argue that credit card late and over-limit fees are not liquidated damages, but contracted-for penalties that result in unjustified windfall profits to credit card companies which are obtained through contracts of adhesion and should not be enforced because they are illegal under common law and against public policy.

I. History

American jurisprudence's disdain for contract penalties can be traced back to penal bonds in England, which emerged in the late thirteenth century. In order to secure performance under a contract, a promisee would exact from the promisor a sealed instrument which promised to pay a certain sum, on the condition that the obligation to pay would be void upon the promisor's satisfactory completion of performance.⁴ The stipulated penalty for non-performance could be any amount agreed upon by the parties, even if it exceeded the value of the act or forbearance stipulated.⁵ For centuries, English common law courts "enforced such bonds literally and, if the promisor had not strictly performed as required by the contract, would give judgment against the promisor for the sum fixed in the bond, regardless of the amount of loss caused by the promisee by the breach."⁶ Although some courts were sympathetic to the debtor, the prevailing attitude was that one must be held to the letter of his contracts.⁷

Penal bonds originally became popular in England as an alternative to charging interest on loans, which was considered usury, and therefore unlawful for Christians.⁸ In such transactions, the debtor's bond would state that he would pay the creditor ten dollars (or whatever currency was in use at the time) on a certain day, or eighteen dollars if he were to pay after that day.⁹ Since usury was illegal, and could be used by debtors as a defense to the obligation, courts attempted to distinguish

4 E. Allan Farnsworth, *Farnsworth on Contracts* §12.18 at 812 (4th ed. 2004);

5 William H. Loyd, *Penalties and Forfeitures*, 29 *Harv. L. Rev.* 117 (1915).

6 Farnsworth, *supra* note 4 at 812.

7 Loyd, *supra* note 5 at 118, 120.

8 *Id.* at 117, 119.

9 *Id.* at 120.

between “agreements where the penalty was truly conditional, where the borrower could wholly discharge himself by repayment within a given time, and where the written condition was but a subterfuge, and the real intent of the parties was that the loan should not be repaid without the added sum. . . .”¹⁰ The former agreements, where the bond was merely collateral, were generally legal, whereas the latter were considered unlawful usury.¹¹

It was not until the seventeenth century that courts began to chip away at the stronghold of contract penalties by relieving penalties incurred through the “minor negligence” of an obligor.¹² Still, progress was slow.

Although plaintiffs were no longer able to recover in excess of actual damages, defendants still had to suffer judgment in the courts of chancery before they could get their relief at equity.¹³ This inconvenience was later remedied with statutes having the effect of consolidating the actions.¹⁴ The modern law, adopted by the United States, prohibits recovery in excess of actual damages (including interest) for both penal bonds and contracts in general.¹⁵

II. Liquidated Damages vs. Penalties

It has become commonplace for sophisticated parties to include terms in their contracts providing that if the promisor fails to perform as agreed under the contract, he must pay a predetermined sum to the promisee.¹⁶ Since no damages have yet occurred at the time of contract formation, these stipulated sums are often speculative at best. Such provisions are only valid if the sum payable upon breach is meant to approximate the actual damages the promisee would suffer. Courts will not enforce stipulated damage provisions that function as penalties, even

¹⁰ Id. at 121.

¹¹ Id.

¹² Id. at 125

¹³ 4 and 5 Anne, c. 16 §§ 12, 13.

¹⁴ 8 and 9 William III, c. 11 § 8.

¹⁵ Sun Ridge Investors, Ltd. v. Parker, 956 P.2d 876 (Okla. 1998); Flores v. Millenium Interests, Ltd., 185 S.W.3d 427 (Tex. 2005); Raffle v. Medallion Kitchens of Minn., Inc., 1996 WL 675787 (N.D. Ill. 1996); see also James P. George, Reimposable Discounts and Medieval Contract Penalties, 20 Loy. Consumer L. Rev. 50, 61 (2007).

¹⁶ Memorial Gardens, Inc. v. Olympian Sales & Management Consultants, Inc., 690 P.2d 207 (Colo. 1984).

if the parties have both willingly agreed to such a term.¹⁷ “While freedom to contract lies at the core of contract law, freedom of contract does not embrace the freedom to punish, even by contract.”¹⁸ Thus, public policy demands that the stipulated damages be compensatory in nature, rather than punitive.¹⁹

The purpose of contract remedies is to compensate the non-breaching party for any loss she incurs as a direct result of the breach, and to put her in the place she would have been had the breach not occurred.²⁰ Contract remedies are not designed to punish a party who fails to perform under a contract.²¹ Professor Allan Farnsworth explains, “[It] is a fundamental tenet of the law of contract remedies that an injured party should not be put in a better position than had the contract been performed.”²² Thus, well-established common law dictates that contracted-for penalties are unenforceable because they are against public policy.²³

This judicially-imposed safeguard prevents parties with superior bargaining power from contracting for their own unjust enrichment. It is unlikely that a person in an arm’s length negotiation with a party of roughly equal bargaining power would consent to a penalty against himself. By refusing to enforce terms that no reasonable person would intentionally bargain for, the courts help protect consumers from abusive contract terms imposed on them by parties with grossly disproportionate bargaining power.²⁴

17 Canadian Mining Co. v. Creekmore, 295 S.W.2d 357 (1956).

18 DAR & Associates, Inc. v. Uniforce Services, Inc. 37 F.Supp.2d 192, 200 (E.D.N.Y., 1999).

19 Monsanto Co. v. McFarling 363 F.3d 1336, 1345 (C.A. Fed. (Mo.),2004)

20 Restatement Second of Contracts § 356, comment (a).

21 Farnsworth, supra note 4 at 760.

22 Id.

23 Graves v. Cupic, 272 P.2d 1020 (Idaho 1954), Phillips v. Phillips, 820 S.W.2d 785 (Tex. 1991), Norwalk Door Closer Co. v. Eagle Lock & Screw Co. 220 A.2d 263, 266-67 (Conn. 1966.), Lake Ridge Academy v. Carney, 613 N.E.2d 183, 188 (Ohio 1993), Milton Const. Co., Inc. v. State Highway Dept., 568 So.2d 784, 789 (Ala. 1990), Guiliano v. Cleo, Inc., 995 S.W.2d 88, 101 (Tenn. 1999), Leonard v. Northwest Airlines, Inc., 605 N.W.2d 425, 431 (Minn. App. 2000).

24 Courts often take into consideration the relative bargaining power of the parties when determining whether a clause is for a penalty or liquidated damages. See Pacificorp Capital, Inc. v. Tano, Inc., 877 F.Supp. 180, 184 (S.D.N.Y.1995) (“parties bargaining power is a factor when determining if one side is exacting an unconscionable penalty”(quoting Rattigan v. Commodore Intern. Ltd., 739 F.Supp. 167, 172 (S.D.N.Y.1990))).

Contract penalties are also offensive to public policy because they are meant to coerce the promisor into performance through an *terrorem* effect.²⁵ When the amount to be paid by the breaching party is clearly in excess of any actual damages the promisee would suffer, the purpose of the clause is to secure performance by compulsion, not compensate the injured party.²⁶ Judge Jasen of the New York Court of Appeals – illuminating the effects of penalty clauses – explains, “A promisor would be compelled, out of fear of economic devastation, to continue performance and his promisee, in the event of default, would reap a windfall well above actual harm sustained.”²⁷

Although courts generally do not allow promisees to recover windfall damages through penalty clauses, courts do enforce liquidated damages clauses which are structured to estimate a party’s actual loss in the event of a breach.²⁸ To be considered a liquidated damages clause rather than a penalty, the clause must meet three conditions:

- 1) the amount stipulated must be a reasonable one, that is to say, not greatly disproportionate to the presumed loss or injury;
- 2) the damages to be anticipated as resulting from the breach must be uncertain in amount or difficult to prove; and
- 3) there must have been an intent on the part of the parties to liquidate them in advance.²⁹

To be valid, the liquidated damages clause must be a reasonable estimate of forecasted damages when the contract is made, and does not necessarily have to equal actual damages at the time of breach.³⁰ When distinguishing between liquidated damages and penalties, Judge Posner stated, “If damages would be easy to determine [at the time of contracting], or if the estimate greatly exceeds a reasonable upper

25 *Pacheco v. Scoblionko*, 532 A.2d 1036, 1038 (Me. 1987), S.L. Rowland Const. Co. v. Beall Pipe & Tank Corp., 540 P.2d 912, 921 (Wash.App. 1975), *Truck Rent-A-Center v. Puritan Farms 2nd*, 361 N.E.2d 1015, 1018 (N.Y. 1977).

26 *Truck Rent-A-Center*, 361 N.E.2d at 1018.

27 *Id.*

28 *Days Inn Worldwide v. Mandir, Inc.*, 393 F.Supp.2d 1240, 49 (W.D. Okla. 2005), *Manufacturers Cas. Ins. Co. v. Show-Me Power*, 157 F.Supp. 681, 83 (D.C. Mo. 1957).

29 *Stamford v. Banta*, 92 A. 665, 667 (Conn. 1914).

30 *Lake River Corp. v. Carborundum Co.*, 769 F.2d 1284, 1289-90 (C.A.7 (Ill.),1985).

estimate of what the damages are likely to be, it is a penalty.”³¹

Since most sophisticated contracts are drafted by intelligent lawyers who know that only liquidated damages are enforceable, the label put on the sum to be paid is often irrelevant.³² One must usually look to the specific facts of the agreement to determine whether the clause is meant to approximate actual damages or as a punitive fee designed to unjustly enrich the promisee.³³ When a liquidated damages clause “is intended to operate as a means to compel performance, it will be deemed a penalty and will not be enforced.”³⁴

If a damages provision is designed to put the non-breaching party in the place he would have been had the contract terms been fulfilled, the parties must anticipate actual damages in the event of a breach.³⁵ To be enforceable, the agreed amount must bear a reasonable relationship to the forecasted damages.³⁶ If the non-breaching party would not suffer any actual damages under a breach, then any stipulated sum to be paid by the breaching party would not be compensatory; if there is no loss, there is nothing to be compensated for. If the damages provision is non-compensatory, it is a punitive damages provision that is unenforceable under the common law on public policy grounds.³⁷

31 Id.

32 Richard A. Lord, *Williston on Contracts* § 65:11 (2008).

33 Contracted for liquidated damages “may be and often are held to provide for a penalty.” *Graves v. Cupic*, 272 P.2d 1020 (Idaho 1954) (Supreme Court of Idaho found the stipulated damages to be unconscionable, exorbitant, arbitrary, and lacking of any “reasonable relation to the damages which the parties could have anticipated from the breach” where a tavern owner attempted to retain \$14,500 in partial payments – toward the \$50,000 purchase price – as liquidated damages when the buyer could not complete the transaction); *Philips v. Philips*, 820 S.W.2d 785, 787 (Tex. 1991) (Supreme Court of Texas rejected the provision of a partnership agreement setting liquidated damages as ten times the actual damages incurred by a breach of trust.); *Lake Ridge Academy v. Carney*, 613 N.E.2d 183, 188-191 (Ohio 1993) (Supreme Court of Ohio permitted liquidated damages provision in a private school reservation agreement providing that repudiation by a child’s parent after an August 1 deadline would result in liability for the full year’s tuition amount because 1) the school would be “unable to calculate and prove the precise damages caused by the loss of one student’s tuition,” 2) the contract, taken as a whole, was not “so manifestly unconscionable, unreasonable, and disproportionate in amount as to justify the conclusion that it does not express the true intention of the parties,” 3) the contract, taken as a whole, was not unconscionable, 4) the contract, taken as a whole, was not unreasonable, and 5) damages were not disproportionate to actual damages).

34 *Brecher v. Laikin*, 430 F. Supp. 103, 106 (S.D. N.Y. 1977).

35 *Southern Roofing & Petroleum Co. v. Aetna Ins. Co.*, 293 F.Supp. 725, 731 (D.C.Tenn. 1968), *In re Dow Corning Corp.*, 419 F.3d 543, 549-50 (C.A.6 (Mich.),2005).

36 *Johnson v. Jones*, 33 Ark.App. 149, 152, 807 S.W.2d 39, 41 (1991).

37 Restatement (Second) of Contracts § 356 (1981) Comment a and b. (“The parties

III. Why Credit Card Late Fees are Penalties rather than Liquidated Damages

A. Credit Card Agreements are Contracts of Adhesion under which Cardholders Have No Meaningful Opportunity to Bargain for Terms.

In the United States, credit card companies make the decision of whether to extend offers of credit based on a person's FICO score – potentially ranging from 150 to 950 – which is mathematically derived from “payment history, amounts owed, types of credit used, new credit and length of credit history,” all contained in one's credit report.³⁸ Credit card companies calculate the interest rate they will offer to the consumer based on the level of risk the consumer poses as a borrower.³⁹

These “offers” are contracts of adhesion, offered on a take-it-or-leave-it basis, in which the consumer has no ability to bargain for individual terms.⁴⁰ The majority of credit card offers are sent via direct mail solicitations.⁴¹ These solicitations generally include an application for credit or a notice of “pre-approval” and a mere summary of the terms of the cardholder agreement, rather than a copy of the agreement in its entirety.⁴² The agreement itself is presented to the consumer as a standardized printed form with numerous pages of small font type.⁴³ The consumer has no opportunity to negotiate with the credit card company on an individual basis.⁴⁴ Resounding evidence of the adhesiveness of credit card terms can be found in the findings of a nationally

representative poll of more than 1,000 adults conducted by the Opinion to a contract may effectively provide in advance the damages that are to be payable in the event of breach as long as the provision does not disregard the principle of compensation. * * * Punishment of a promisor for having broken his promise has no justification on either economic or other grounds and a term providing such a penalty is unenforceable on grounds of public policy.” *Id.* at Comment a. (Emphasis added.)

38 Jessica Dickler, *Settling the Credit Score*, CnnMoney.com, August 6, 2008, http://money.cnn.com/2008/08/06/pf/credit_score_availability/index.htm.

39 *Id.*

40 *Homa v. American Express Co.*, 2009 WL 440912, 5 -6 (C.A.3 (N.J.) 2009) (Credit card contract that is presented on a “take-it-or-leave-it basis” in a standardized printed form where the “adhering” party has no opportunity to negotiate was a contract of adhesion.); *In re Plourde*, 397 B.R. 207, 225-26 (Bkrty.D.N.H., 2008).

41 In 2004, credit card issuers sent more than five billion direct mail solicitations. Ronald J. Mann, “Contracting” for Credit, 104 Mich. L.Rev. 899, 905, 906, 908 (2006).

42 *Id.* at 905, 908.

43 *In re Plourde*, 397 B.R. 207, 225-26 (Bkrty.D.N.H., 2008).

44 *Id.*

Research Corporation for the Consumer Federation of America in 2007.⁴⁵

The poll found that:

--91 percent of Americans think it is unfair to raise interest rates or fees at any time for any reason. (76 percent believe it is very unfair.)

--83 percent of Americans think it is unfair to increase the interest rate on one card because of a person's payment history on another card. (62 percent believe it is very unfair.)

--84 percent of Americans think it is unfair to apply interest rate increases not only to new balances but also to past balances. (61 percent believe it is very unfair.)

--85 percent of Americans think it is unfair to increase an interest rate to 30 percent for making two late payments. (64 percent believe it is very unfair.)

--76 percent of Americans think it is very unfair to charge \$30 for making a late payment. (51 percent believe it is very unfair.)

--82 percent of Americans think it is unfair to charge a \$30 fee each month if a balance is over the credit limit when a person is no longer using the card. (64 percent believe it is very unfair.)⁴⁶

Given the apparent attitudes of American consumers, it is clear that if given any meaningful opportunity to bargain for individual terms, consumers would not agree to penalty fees which are standard in the cardholder agreements of every major card issuer.

In these contracts of adhesion, credit card companies reserve the right to unilaterally change the terms of the agreement at any time,

⁴⁵ Congressional Testimony by Travis B. Plunkett, Affiliated with Consumer Federation of America, Consumer Protection; Committee: Senate Banking, Housing and Urban Affairs, Cong. Q., February 12, 2009.

⁴⁶ Id.

for any reason, and the consumer effectively accepts the terms merely by continuing to use the card.⁴⁷ The cardholder's only recourse to avoid the imposition of the new terms is to cancel his credit card.⁴⁸ In its cardholder agreements, American Express expressly reserves the right to unilaterally change the terms of the agreement, including:

(1) the right, in its sole discretion, at any time, to increase and/or decrease the credit line and cash advance limit; (2) the right to decline any attempted charge even if the charge would not cause the debtor to exceed its credit line or cash advance limit; (3) the right to unilaterally change the mathematical formulas specified in the credit card agreement for calculation of the finance charge if the formula produces mathematically similar results; (4) the right to exclude, in its discretion, certain debit transactions or fees from the calculation of the daily balance to which the finance charge is applied; (5) the right to suspend or cancel the account, or any feature offered with the account, including reducing the credit line to an amount below the outstanding balance in its sole discretion, at any time, whether or not the account is in default and without prior notice to the debtor; and (6) the right to add, modify or delete any benefit, service or feature that may accompany the account at any time without notice.⁴⁹

Consumers often do not receive meaningful notice of a change in terms of the contract.⁵⁰ “When [the credit card company] does provide notice, the notice typically is in the form of a new agreement included in a billing statement together with a variety of other promotional materials.”⁵¹ Most consumers routinely discard these “bill stuffers” without a glance.⁵²

47 “Current credit card agreements provide the issuer with the right to unilaterally alter virtually all of the material terms of the contract, and to even terminate the contract, in whole or in part, with no notice to the consumer.” *Id.*; See also, Mann, *supra* note 41 at 905, 908 (noting that standardized contracts, like credit card agreements, are usually not negotiated and that credit card agreements typically “reserve[] to the issuer the right to amend ... at any time,” with such amendments being “remarkabl[y] frequen[t]”).

48 *Id.*

49 Plourde, 397 B.R. at 225-26.

50 Mann, *supra* note 41 at 908.

51 *Id.*

52 *Id.*

B. Current Late and Over-limit Fees are Not Reasonable Estimations of Damages in the Event of Breach.

Credit card contracts invariably state that if the consumer makes his minimum payment after a certain time on the due date or pays less than his total minimum payment, the customer is assessed a “late fee.”⁵³ Late fees often range from \$35 to \$39 per occurrence in agreements with major card issuers.⁵⁴ Some credit card agreements provide for smaller late fees on low balances.⁵⁵ A late fee will be assessed whether the consumer makes the payment one minute after the cutoff time on the due date, three days later, or waits until the next month.

Once the consumer misses a payment, remits his payment after the due date, or exceeds his credit limit, the fees assessed by the credit card company become a part of his minimum balance due for the next billing cycle, even though the fees themselves do not reflect any additional capital expenditure by the creditor. Thus, if on the due date of the next payment the cardholder only remits his past and current payments due based on the principal and interest, but does not pay the fees, he will incur an additional late fee and an additional over-limit fee (if his balance still exceeds the credit limit) even though he has not borrowed any additional money. Many credit card companies also charge over-limit fees if a late fee causes the cardholder’s balance to exceed the limit.⁵⁶ As a result of this practice of fee-stacking, credit card balances may grow exponentially over time, sometimes resulting in the cardholder paying several times the value of the goods and services he charged to his credit card.⁵⁷

The credit card company’s cost to process the payment is the same whether the payment is made on time, a day late, or even a month late. The company has absolutely no transaction cost if the payment is

53 Gregory Karp, Study: Small Bank Card Fees Less Punitive (Sept. 8, 2008), <http://www.gregkarp.com/blog/2008/09/09/study-small-bank-card-fees-less-punitive/>.

54 For a list of penalty fees charged by various credit card companies, see Gregory Karp, Study: Small Bank Card Fees Less Punitive (Sept. 8, 2008), <http://www.gregkarp.com/blog/2008/09/09/study-small-bank-card-fees-less-punitive/>.

55 Id.

56 Plunkett, *supra* note 45.

57 Id.

not made at all, because there is no transaction to process. Therefore, the credit card company will not suffer any damages from processing the late payment.

Although they are not required to, some credit card companies may call or send a written notification to cardholders, informing them that their payment was not received. In the event of a written notification, it would be one of many mass-produced automatically via a computer program which inserts the customer's personal information from its existing databases, in the same manner the companies mass-produce direct mail solicitations. In the case of a phone call, companies often use automated voice recordings or perhaps a live person to make the collection calls. The cost of any of these notification methods is negligible at best. However, many credit card companies do not send any notices at all, and the charges merely appear on the cardholder's next billing statement, which produces no additional cost. Also, if the consumer's payment is merely late because the credit card company processed the payment after the cutoff time on the due date, or before any reminder could be sent out, there is no additional transaction cost, and no late fee would be justified.

The credit card company may argue that it suffers damages because it could have re-lent the consumer's minimum payment and received interest on that money. However, the credit card company is already accruing interest on the minimum payment—from the cardholder.⁵⁸ When the cardholder fails to make his payment on time, interest is accruing on his total balance, including the unremitted minimum payment, whereas if the cardholder had remitted the payment, he would stop paying interest on that portion of his balance. Therefore, the credit card company would not make any more money by lending the amount of the minimum payment to another borrower.⁵⁹ Most likely, the credit card company is already making the most possible interest

⁵⁸ Late fees in a mortgage contract were struck down in Oklahoma as illegal contact penalties

⁵⁹ Most credit card agreements contain terms providing that if a cardholder makes one or a series of late payments, the interest rate on both new and existing balances will default to the maximum interest rate allowed by law, the "default rate." Mann, *supra* note 41, at 908-09.

on its money by lending to the cardholder.⁶⁰ Other types of loans, such as mortgages, car loans, and student loans, usually garner much lower interest rates for the lenders.⁶¹ (This assumes that the lender is a bank which engages in other types of lending.) If the credit card company is already making the most money that can be guaranteed on the amount of a cardholder’s minimum payment, then it stands to reason that the company is not losing any money, and therefore suffers no actual damages, if the cardholder makes a late payment.

Credit card companies may also argue that the late fees and over-limit fees compensate them for the perceived increase in risk of the cardholder’s nonpayment, evidenced by the fact that he failed to make one or more of his payments on time. However, credit card companies already have a mechanism in place to compensate for the perceived increase in risk—they increase the cardholder’s interest rate.⁶² After a single late payment, a low interest rate may skyrocket to thirty percent or more.⁶³ In some cases, a consumer may pay his credit card bill on time every single month for years, and he may still see his rate increase if he makes a late payment to a completely different and unrelated lender.⁶⁴ The rate hikes, often to the “default rate”, apply to both new and existing balances.⁶⁵

Furthermore, if the credit card company’s goal was for the cardholder to pay off his balance, it would seem counterintuitive to impose compounding \$39 late and over-limit fees each month. The accumulation of fees in addition to a regular monthly payment often results in a “balloon payment” for the consumer to cover the overdue amounts.⁶⁶ These balloon payments get larger each month until the consumer is able to completely pay down all the overdue penalty

60 See Sun-Times Wires, *Your Wallet*, Chi. Sun Times, December 19, 2008, at 42 (citing 5.19 percent average 30-year fixed-rate mortgages).

61 Id.

62 Although credit card issuers argue that the default rate is imposed to compensate them for the increased risk they must bear, this seems inconsistent with the fact that card issuers increase the default rate at times when their cost to purchase the funds has declined. Plunkett, *supra* note 45.

63 Elizabeth Stull, *Bankruptcy Filings Rising, Rochester Area ‘Fortunate,’ Daily Record* (Rochester, N. Y.), Oct. 10, 2008 (page unavailable online), 2008 WLNR 19554846.

64 Id.

65 Mann, *supra* note 41 at 909.

66 Plunkett, *supra* note 45.

fees combined with his average monthly payment. Meanwhile, since the consumer made a late payment, his interest rate will increase retroactively, making even his normal minimum payment much higher.⁶⁷ Penalty fees thus create a self-fulfilling prophecy by making it even more difficult for cash-strapped consumers to pay down their credit card bills, and thereby proving that the consumers who missed that first payment are “risky.”⁶⁸

Credit card companies should not receive any compensation at all for any perceived increase in risk the borrower may pose when he exceeds his credit limit, because the companies have complete control of whether such transactions are even approved. If the credit card companies are able to deny the transactions, but choose not to do so, they have willingly assumed any associated risks.

C. If Credit Card Companies did Suffer Damages, They Would Not be Difficult to Calculate.

Credit card late and over-limit fees also fail the Banta⁶⁹ test because credit card agreements are purely financial, and any projected damages from lost profits or extra transaction costs are easily ascertainable. To mail a late payment notification, the damages would be the cost of postage; if a human representative notifies the cardholder by phone, it would be the hourly employee’s wage for the number of minutes spent on the phone call. If there is no notification, there is no transaction cost at all, which means that a one-size-fits-all fee is inappropriate. Since it is completely within the power of a credit card company to deny over-limit transactions altogether, any additional costs incurred as a result of these transactions would be voluntarily assumed, and should not be assessed against the cardholder; if the credit card company chooses to permit the transaction, it will still benefit by accruing interest on that amount from the cardholder.

IV. Proposed Remedies

A. The Courts Giveth and the Courts Should Taketh Away.

⁶⁷ Id.

⁶⁸ “There is very little evidence that relatively modest problems, like one or two late payments of a short duration - significantly increase a consumer’s chances of default.” Id.

⁶⁹ *Stamford v. Banta*, 92 A. 665, 667 (Conn. 1914).

In the 1990's there was a public outcry protesting late fees. In 1995, consumers banded together in a class action lawsuit against Citibank, one of the major credit card issuers.⁷⁰ In *Sherman*, the New Jersey Supreme Court held that the term "interest" in the National Bank Act refers only to periodic percentage rate charged on outstanding balances and does not include loan terms or charges such as late fees.⁷¹

We determine that the understanding of "interest" as expressed and authorized in the NBA does not include distinctive and contingent loan terms or charges, such as late fees, that are unrelated to interest rates. We hold that late-payment fees are not "interest" within the intent and purposes of the applicable federal statute. Rather, "interest at a rate allowed by the laws of the State . . . where the bank is located" refers only to the periodic percentage rate charged on outstanding balances. Therefore, plaintiff's state-law defenses to the bank's charges do not conflict with federal law, are not preempted, and the late-payment fees are illegal under New Jersey law.⁷²

One might easily agree with the New Jersey Supreme Court, as late fees, which may potentially be higher than the entire balance of a credit card, do not seem to even be related to the amount of money one has borrowed.⁷³ Consider the following: Consumer has a credit card balance of \$25.00. She pays her bill on the due date, but after the cutoff time, incurring a late fee of \$39.00. The late fee would be 150% of her total balance due, and she would still have to pay an additional amount for the regular periodic interest as per her cardholder agreement.

However, even if late fees were determined as a percentage of the cardholder's total balance, certainly such fees were not anticipated, much less expressly authorized by Congress when enacting the National Banking Act. Even if the late penalty was a low percentage of the card's total balance, the resulting fees to cardholders would be outrageous.

American Express is reportedly considering such a scheme: cardholders

70 *Sherman v. Citibank (South Dakota), N.A.*, 668 A.2d 1036 (N.J.,1995).

71 *Id.*

72 *Id.* at 1040.

73 Consider the following: Consumer has a credit card balance of \$25.00. She pays her bill on the due date, but after the cutoff time, incurring a late fee of \$39.00.

would pay either \$39 or 2.99% of their balance as a late penalty, whichever is greater.⁷⁴ Under such a regime, a consumer with a \$10,000 balance would open his bill to find a \$299 late fee, even though his minimum payment due may have only been \$200.

Soon after New Jersey ruled that the National Banking Act's authorization of charging interest did not include late fees, the United States Supreme Court heard a very similar California case against Citibank and came to the opposite conclusion, overruling Sherman.⁷⁵ The Supreme Court reasoned that since the Comptroller of the Currency had "reasonably interpreted the term 'interest' to include late payment fees,"⁷⁶ that the Court should defer to the Comptroller, the official charged with administering the Act.⁷⁷

The text of the National Banking Act reads as follows:

Any association may take, receive, reserve, and charge on any loan or . . . other evidences of debt, interest at the rate allowed by the laws of the State . . . where the bank is located, or at a rate of 1 per centum in excess of the discount rate on ninety-day commercial paper in effect at the Federal reserve bank in the Federal reserve district where the bank is located, whichever may be the greater, and no more, except that where by the laws of any State a different rate is limited for banks organized under state laws, the rate so limited shall be allowed for associations organized or existing in any such State under title 62 of the Revised Statutes. When no rate is fixed by the laws of the State, or Territory, or District, the bank may take, receive, reserve, or charge a rate not exceeding 7 per centum, or 1 per centum in excess of the discount rate on ninety-day commercial paper in effect at the Federal reserve bank in the Federal reserve district where the bank is located, whichever may

74 Chu, *supra* note 2.

75 *Smiley v. Citibank (South Dakota), N.A.*, 517 U.S. 735 (1996), *Citibank (South Dakota), N.A. v. Sherman*, 517 U.S. 1241 (1996).

76 Comptroller of the Currency defined the term "interest" to include "fees connected with credit extension or availability: numerical periodic rates, late fees, not sufficient funds [NSF] fees, overlimit fees, annual fees, cash advance fees, and membership fees"; 12 C.F.R. § 7.4001(a).

77 *Smiley*, 517 U.S. 735.

be the greater⁷⁸

By adopting the Comptroller’s skewed definition of “interest” and holding that the National Banking Act pre-empts state law in the area of consumer protection, the Supreme Court has left the states powerless to protect their citizens against penalty fees and other abusive lending practices.⁷⁹

When one reads the plain language of the statute, one observes that every time the statute mentions “interest,” the term is always used in connection with a “rate.” A careful reading of the statute indicates that the interest contemplated was a periodic percentage rate, such as the APRs which credit card companies are already charging consumers. Late fees and over-limit fees are often flat fees which are never a defined proportion of a consumer’s balance due, and can in no way be considered a “rate” of any kind. It is hard to imagine that Congress’s legislative intent included allowing forty-seven states to be subject to the intentionally-weakened consumer protection laws of Delaware, Nebraska and South Dakota,⁸⁰ especially considering the deeply-rooted historic resistance to nationalized banking.⁸¹

The Supreme Court could effectively abolish late fees by overruling *Smiley* and adopting an interpretation of the National Banking Act consistent with the plain language –holding that late and over-limit fees are not authorized under the Act—and simultaneously finding that the National Banking Act’s authorization for lenders to export interest rates⁸² does not pre-empt the consumer protection laws of the

78 12 U.S.C. § 85

79 *Smiley*, 517 U.S. 735.

80 Kevin G. Toh, *Are Credit-Card Late Fees “Interest”? Delineating the Preemptive Reach of Section 85 of the National Bank Act of 1864 and Section 521 of The Depository Institutions Deregulation and Monetary Control Act of 1980*, 94 Mich. L. Rev. 1294, 1296 (1996).

81 *Sherman v. Citibank (South Dakota), N.A.*, 668 A.2d 1036, 1040 (N.J. 1995) (citing William Oscar Scroggs, *A Century of Banking Progress*, 50-51 (1924); John J. Knox, *A History of Banking in the U.S.*, 12 (2d ed. 1969)).

82 In a unanimous opinion authored by Justice Brennan, the United Supreme Court held that under the National Banking Act, a national bank based in one state (here, Nebraska) could charge out-of-state consumers interest rates that were allowed by its home state when such a rate is greater than that allowed in the consumer’s state, thereby permitting “exportation” of interest rates. *Marquette Nat’l Bank of Minneapolis v. First of Omaha Service Corp.*, 439 U.S. 299, 301 (1978).

cardholder's state.⁸³ While it would still be possible for states to impose their own legislation which enables credit card companies to charge late and over-limit fees, clearly, many states—including the twenty-six states that joined in an amicus curiae brief in support of Barbara Smiley—would be more protective of their consumers.⁸⁴

Admittedly, it is unlikely that the United States Supreme Court will overrule its unanimous decision in *Smiley*⁸⁵, especially given that the composition of the Court has not changed substantially since 1996.⁸⁶ However, perhaps after seeing the far-reaching ramifications of its decision, the court would be willing to reconsider its decision.⁸⁷

B. Legislative Remedies

Numerous bills have been introduced in the legislature to curb the abusive lending practices of credit card companies, but precious few even make it out of committees. The Credit Cardholders Bill of Rights, which has proven to be an exception to the rule, recently passed in the United States House of Representatives and is currently up for consideration in the Senate.⁸⁸ This piece of legislation, as passed by the House, is proposed as an amendment to the Truth in Lending Act⁸⁹ that would help even the playing field for consumers in many important aspects. Victories for credit cardholders would include: the ability to opt-out of creditor authorization of transactions that cause a cardholder to exceed his credit limit where a fee would be imposed; limitation on the number of over-limit fees which a creditor may impose in a single

83 For an in-depth discussion of the arguments why the National Banking Act does not pre-empt state consumer protection laws, see Toh, *supra* note 3, in its entirety.

84 Amicus Curiae Brief of The Commonwealth Of Massachusetts And The States Of Arkansas, Connecticut, Florida, Hawaii, Indiana, Iowa, Kentucky, Maine, Maryland, Michigan, Minnesota, Mississippi, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Washington, West Virginia And District Of Columbia in Support of Petitioner, 1996 WL 88720 (Mar. 01, 1996).

85 517 U.S. 735.

86 There have only been two changes to the Court: Justice O'Connor was replaced by Justice Alito in 2006, and Chief Justice Rehnquist was replaced by Chief Justice Roberts in 2005.

87 As an example, the late fees under consideration by the Court in *Smiley* were \$6, from a card issuer based in a state with very weak consumer protection laws, and since that decision, standard late fees have risen to \$39. 517 U.S. at 738.

88 "The Credit Cardholder's Bill of Rights Act," 2009 House Bill 5244, passed 312-112 on September 23, 2008.

89 15 U.S.C.A. § 1601

billing cycle; a prohibition on retro-active interest rate increases; and the requirement that cardholders be notified forty-five days in advance of an interest rate increase under most circumstances.⁹⁰ The Credit Cardholders' Bill of Rights would also prevent credit card companies from arbitrarily raising interest rates.⁹¹ However, the credit card companies would still be allowed to raise a cardholder's interest rate if the minimum payment was not received within a thirty day grace period following the due date.⁹²

However, while these long overdue amendments to the Truth in Lending Act⁹³ constitute significant progress in the protection of consumer rights, they do not abolish, nor even limit the amount lenders may charge for late and over-limit fees.⁹⁴ In fact, Representative Maloney⁹⁵, the bill's sponsor, used this as a selling-point during the United States House of Representatives' hearing on the bill: "Unlike other proposals before Congress our bill does not set price controls, it does not . . . set rate caps, or limit the size of fees."⁹⁶

Alternatively, Congress could return the power to legislate consumer protection laws to the states by either amending the National Banking Act⁹⁷ or creating new legislation. Given consumers' intense dissatisfaction with the current state of creditor relations⁹⁸ and the states' eagerness to retain the right to legislate this important area of law under their police powers,⁹⁹ it would seem that such an initiative would prove wildly popular. Congress could accomplish this goal simply by amending the National Banking Act¹⁰⁰ to expressly disclaim federal pre-emption of state consumer-protection laws, thereby protecting state powers while

90 2009 H.B. 5244 (§127B(c))

91 2009 H.B. 5244 (§127B(a)(1))

92 Id. at 127B(b)(1)(C)

93 15 U.S.C.A. § 160.

94 2009 H.B. 5244.

95 Representative Carolyn B. Maloney, United States House of Representatives (D-NY).

96 Hearing of the Financial Institutions and Consumer Credit Subcommittee of the House Financial Services Committee; Subject: The Credit Cardholders' Bill of Rights: Providing New Protections for Consumers; /Capitol Hill Hearing/U.S. News Service, March 18, 2008.

97 12 U.S.C. § 85.

98 Plunkett, *supra* note 46.

99 Amicus Curiae Brief, *supra* note 77.

100 12 U.S.C. § 85.

retaining the ability to achieve lender parity between state and federal lending institutions.

V. Conclusion

Credit card late and over-limit fees are penalties, not liquidated damages, which are only artificially agreed upon through contracts of adhesion. Congress must act decisively by amending the National Banking Act so that state courts would be free to prohibit penalty fees in their states, and courts would be able to once again prevent recovery of these contract penalties.

Maria Iliakova

El sueño de las comedias del Siglo de Oro: El nacionalismo, la religión, y el gobierno

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La vida es sueño, y los sueños también, escribe Pedro Calderón en la obra titular, *La vida es sueño*. El autor formula el tema de albedrío, voluntad, destino en el centro de una historia dominada por los cambios que desafían los personajes. Las comedias del Siglo de Oro usualmente establecen su acción siglos antes de su época dorada, pero las ideas que sus sueños, específicamente, engendran pertenecen a su sociedad. La vida es sueño critica el gobierno, la religión, y el rol del género en la forma de ilusión y fantasía, un formato evidente en las otras obras de esa época. Las imágenes veladas ponen en duda el comportamiento de la colectividad y examinan los problemas de la España real.

Los sueños se manifiestan en la *Numancia* de Cervantes y *Fuenteovejuna* de Lope de Vega en la forma de las aspiraciones de nacionalismo y comunidad. El suicidio colectivo de los numantinos ante un asedio mortal de los Romanos elige una opción extrema de declarar su solidaridad con la floreciente nación española. Sacrificando todo, los numantinos demuestran el fervor que reemplaza la razón y aporta el orgullo patriótico. Aunque su sacrificio no tiene reacción inmediatamente del estado que apoyan, Numancia sirve como un símbolo de la honra de España y su gente (60, Tar.)

La combinación de esperanza, honor, y patria vuelve en *Fuenteovejuna*. Lope de Vega critica el abuso de poder del Comendador, enviado por los Reyes Católicos a Fuenteovejuna. Cuando los aldeanos se vengan de los crímenes, matando al tirano y sus dos criados, los mayores defienden su pueblo entre la corte. Su mensaje es que los que sueñan de maltratar a los súbditos del rey español, más de parte del rey, van a sufrir

consecuencias por sus acciones. En los versos 2393-95, en que el alcalde de Fuenteovejuna, Esteban, asigna la culpa de la muerte del Comendador al pueblo unido, el junta la mejora del pueblo con su dedicación a los reyes (Swietlicki.) El comentario de la obra sobre la unión del campo y la corte representa el cambio de pensamiento político, el deseo para más interacción entre los líderes y sus ciudadanos.

La obra anónima, *La Estrella de Sevilla*, sigue con el tema del honor y la gobernación en las imágenes pintadas por las palabras de Lope de Vega. Un rey disfrazado, un personaje que recurre en *Del rey abajo, ninguno* en otra forma, asume un rol crítico al analizar las ilusiones de esta comedia. Al intentar violar a la hermosa Estrella, el rey pierde su puesto honrado entre uno de sus oficiales, Busto, el hermano de la ofendida. Busto expresa su sorpresa fingida de encontrarse con el Rey en tan circunstancias en los versos 1021-23, en que el Rey le dice, “Detente; que soy el Rey,” y en respuesta, Busto responde, “Es engaño. ¡El Rey procurar mi daño...” Aunque el oficial sabe que ha encontrado al Rey, Busto le reprocha al delincuente, que ha tratado de violar a su hermana en la medianoche, a su manera. Busto finge no creer que está hablando con el Rey, explicando que las acciones no son posibles para un noble. El público se da cuenta que el Rey para su responsabilidad para la matanza subsiguiente de Busto en la forma de justicia conmutativa. La obra manda el Rey culpable a la realidad última de Dios, en quien existe el destino ineludible (Mazzeno.) El fatalismo del poder malvado apoya inspección del gobierno y el sueño de que todos se enfrentan a las consecuencias de sus acciones, hasta los Reyes.

La confusión de identidad en *Del rey abajo, ninguno* de Rojas Zorrilla invita la exploración de las mismas ideas centrales de la *Estrella* y de *Fuenteovejuna*. La acción se enfoca en el contraste entre el monarca y su gente con el tema del “menosprecio de corte y alabanza de aldea” (Martel, 703.) Don García, el protagonista de la obra, se encuentra con un gran dilema cuando descubre que el Rey trata de violar a su esposa, Doña Blanca. Para preservar su honra y la reputación de su Rey, Don García planea matar a Doña Blanca y a sí mismo, interrumpiendo solamente por su temor y desvanecimiento. Cuando entiende el error de

identidad entre el Rey y Don Mendo, un noble fingiendo de ser el Rey, el público se recobra el aliento. Qué suerte que no haya terminado con su plan extremo. Zorrilla subraya este desorden en que un nombre vale más que una vida, que la apariencia puede llevar a efectos verdaderos. Insinúa que la gente no puede apoyar a su gobierno ciegamente y que las leyes deben proteger y aplicarse a todos. En sumo, la idea central es que un rey no está por encima de nadie. La crítica del sistema social se extiende más a fondo en otras comedias del Siglo de Oro.

Guillén de Castro en *Las Mocedades del Cid* expone las tribulaciones del Cid como joven soldado para su patria y su mujer, creando la imagen de un héroe español. Rodrigo, que va a convertirse en el Cid se parece como un protagonista prototípico. Valiente en guerra, líder de sus tropas, seguidor de su rey, y señor de una mujer tenaz, el es valiente. Castro promociona con bombas y platillos la forma de ser del Cid, contribuyendo a la leyenda de este símbolo español. La exploración y adulación de la hombría pone en su lugar subordinado a Jimena, terminando con la cuestión de identidad de sexo (Lanz, 486.) La obra es conservadora en la presentación de la patria como lo más importante de un honrado, *Numancia* hace eco a este idea, y Castro reta a la audiencia de imaginarse como el Cid. Los temas tradicionales e inspiraciones ceden a los sueños individuales, la narración sobre la interacción de la persona y la sociedad.

El Burlador de Sevilla de Tirso de Molina y La Verdad Sospechosa de Ruiz de Alarcón crean fantasías que encajonan los personajes principales de las obras. Don Juan, el Burlador y conocido diablito seductor juega con las emociones, las personas, y las acciones, tomando a la ligera la vida. Los engaños constituyen sus metas y mentiras todas sus palabras. Con su negación completa las normas sociales y los recursos privilegiados para hacer lo que quisiera, el desempeña la función del tonto del pueblo sin ser consciente de esto. El disfruta su fantasía viril, el status de playboy, protegido por su familia noble, los Tenorios, en la corte del Rey, pensando que sus abusos no van a provocar consecuencias. El momento de catarsis agarra poderosamente, con simbolismo religioso, alegórico, histórico, y el tema

de predestinación que gobierna la vida (Arias.) La religión predominante de la época en España es el catolicismo, y el autor, un sacerdote, la omite hasta el final de la acción. La justicia divina exige que Don Juan acepte la responsabilidad para sus pecados. Estrella comparte con El burlador la cuestión de voluntad en una época de religión autoritaria. Tirso muestra que las fantasías de Don Juan no tienen lugar en la sociedad propia y llevan a una gran lucha entre la voluntad y el destino, en que el segundo gana. Los versos 3956-57 y 3973-74 pronuncian las palabras de la última condena de Don Juan, “Esta es justicia de Dios: quien tal trace que tal pague.” Sin la oportunidad para reparación, el soñador de Sevilla muere en las llamas.

La imaginación de Don García establece el argumento de Ruiz de Alarcón en *La Verdad Sospechosa*. Don García, el galán prototípico, tiene mucho en común con Don Juan Tenorio, incluyendo a su modo de vivir en sueños en vez de la realidad. El miente para divertirse y para cambiar a las circunstancias cuando se conviene. La obra ensalza la moral y las virtudes de la rectitud, castigando a las mentiras de Don García, pero en una manera menos grave de que usa El burlador. El tono de *La Verdad* es poco serio en comparación, pero, desacredita los sueños que superan la vida, “y aquí verás cuán dañosa es la mentira” (3108-09.) Aunque no niega la existencia de la voluntad, la discusión termina en que hay opciones buenas y malas y que la realidad va a determinar los resultados. El debate entre el albedrío y la predestinación procede de nuevo en otras comedias del Siglo de Oro.

El faustino tema de *El Esclavo del Demonio* de Mira de Amescua literalmente enfrenta el bien y el mal, pero toca los argumentos corrientes de todas las comedias del Siglo de Oro, la patria y la religión. Don Gil es un noble con carácter moral, pero su moralismo le confunde. Su creencia en la predestinación, de que todo ya está determinado en su vida y que no puede cambiar su destino, le permite hacer un pacto con el diablo con la justificación que el no puede prevenir lo que sea no importa como se comporta. Don Gil acepta la ofrenda del diablo porque la idea de ser mal sin cambiar su futuro le parece más interesante que seguir las reglas de la sociedad. Amescua critica la ilusión de este autoengaño,

de vivir en “humo, sombra, nada, muerte” (2763.) Don Gil finalmente se da cuenta de que sus acciones dañan a los otros y que es hipocresía ser una persona moral y abandonar sus principales. Sus palabras (2871-75) ilustran su cambio de opinión, en una advertencia que el da a sí mismo, “asombró tu pecado: asombre tu penitencia.” Al fin, Don Gil niega la idea de predestinación, entiende que cada acción trae responsabilidad, y que la voluntad da a los seres humanos la posibilidad de ser morales. Amescua presenta la religión entrelazada en el buldingsroman de Don Gil, y trata el sujeto progresivamente. Su apoyo del albedrío contra la fatalidad que dominó el concepto del catolicismo en la España del Siglo de Oro provee una fundación para la obra, sinónima de sueño, *La vida es sueño*.

Pedro Calderón de la Barca escribe la comedia *La vida es sueño* llena de fantasía y delirio mental. La obra aclara el debate filosófico entre el albedrío y la predestinación en el contexto de la religión y gobernación del Siglo áureo. Soñar es un acto constituyente de la estructura de la sociedad, que desde el principio hasta el fin, indistinguible de la verdad que viven los personajes de esta comedia. Segismundo, el funesto príncipe, nacido con la predestinación de ser detestado por la humanidad, según las predicciones de los astrólogos en que cree su padre, el Rey Basilio. Lo interesante de observar es que el concepto de destino no surge de la fe católica, aunque concuerda directamente, pero se presenta de la creencia pagana. La sociedad acepta la fatalidad totalmente, y está relacionando al gobierno antidemocrático (Kluge, 46.) Que el Rey puede decidir de encarcelar a Segismundo, su hijo, en la base de una predicción parece insufrible, pero refleja su control autocrático de todo lo que afecta su corte. La posibilidad de cambiar el gobierno, físicamente reemplazando el Rey Basilio por legítimo heredero, Segismundo, y para uno de manera más progresiva cuestiona la ciega fe en la ordenación. Además, presenta el problema de reconciliación entre voluntad y gobierno más secular en una época religiosa. Aunque las creencias espirituales causan el dilema de Segismundo, el no puede, y no quiere, renunciar a la orden que se ha establecido cuando le permita entrar en su estado (Rupp, 295.) El pensamiento aceptado contradice

el cambio que pudiera comenzar con Segismundo, y el hace el papel del aplacador en su rol de Rey cuando lo gana. Segismundo presenta la discusión, “En lo que es justa ley, no ha de obedecer el Rey,” (1321-22) usando su condición como ejemplo. El contraste de su afable aceptación del reinado con su manera fería que ha demostrado toda su vida subraya la diferencia entre el albedrío y la voluntad.

La razón y el impulso componen formas antagonistas de existencia y acción en *La vida es sueño*. El albedrío se basa en lógica, entendimiento, y discernimiento, en desemejanza de voluntad, que involucra instinto (Sears, 281.) Segismundo vive con voluntad total en la torre rodeada por un bosque, donde nadie puede encontrar o sufrir de sus decisiones. El Rey, con tan poder que lleve, también tiene voluntad de hacer que quiere, pero la audiencia de su corte, de su nación, y de su mundo. La voluntad de impulso complementa a la existencia del destino, y la idea, presentada por *El esclavo del demonio*, que las acciones temporales no pueden cambiar la determinación eternal. Segismundo sufra aislamiento de humanidad para su potencial de causar estragos, y no tiene la oportunidad de tener el albedrío. Su razón o irracionalidad no afectan a nadie desde su prisión, y por eso, el entiende que vive en un sueño. La primera vez que tiene la libertad y poder en un rol experimental en la corte, Segismundo destruye todo lo que toca, pero nada más se puede esperar de una persona encarcelada toda su vida. Para el abuso que el ha sufrido en la vida para delitos que no han sucedido, el sólo sabe la voluntad que daña a los demás y a si mismo. La madurez que acompaña el albedrío no le viene hasta que comprende la diferencia entre deseo y deber. Danièle Becker, en su comparación de esta obra con el drama griego de Orfeo escribe sobre la capacidad del albedrío de cambiar todo, incluso al destino (782). Segismundo busca la manera apropiada de aplicar el libre albedrío a su experiencia.

Según su forma de vivir, tomando el nivel más bajo hasta el más alto, Segismundo cree que el sueño y la vida son la misma irracionalidad que domina la vida humana. En los versos 1148-49, el explica a su conserje, Clotaldo, “En el mundo...todos los que viven sueñan,” y que los ambos estados son unidos. El sueño no es solo un parte de la vida

dormida, pero existe en la forma de ilusión en cada parte de conducta social. En su monólogo conocido, Segismundo explica que la riqueza, la pobreza, el poder de un gobierno, todo es una ficción construida por nuestra fantasías (2148-87.) El concluye, “Toda la vida es sueño: y los sueños sueños son.” El frenesí que es la vida, entonces, incluyendo a la religión, el código moral, y el control que la sociedad ejerce recurre como tema en literatura hasta hoy en día. La noción es moderna y nihilista, radical para la época dorada llena de decoración barroca y órdenes sociales estrictas. Durante el experimento con Segismundo en su primera prueba de ser una parte de la clase noble y poderosa, le advierte, “Mira bien...que seas humilde y blando, porque quizá estás soñando, aunque ves que estás despierto” (1527-38.) Segismundo, dudando de los consejos, fracasa en la oportunidad de abandonar su torre y regresa pronto a su prisión. Después, él advierte a la gente que trate de estar despierto, sabiendo que la ilusión del sueño no es la verdad, “Decir que sueño es engaño: bien sé que despierto estoy” (1237-38,) obviamente, aprendido de la experiencia.

Calderón subraya la capacidad de escapar de lo absurdo de la vida entre sueño. Que las ilusiones dominan la vida de la corte es evidente en la descripción del Rey Basilio obsesionado con astrología, los cortesanos con la sucesión, los súbditos con el heredero real del Rey, y de la protagonista, Rosaura, de venganza. El autor indica que la verdad está perdida en tantas complicaciones. Si los personajes fueran hábiles de ver lo que existe en lugar de lo que es, tendrían vidas menos ajetreadas y basadas en gran parte en la realidad. Soñar es un acto componente de la estructura de la sociedad contemporánea, cruzando el océano. El sueño americano, por ejemplo, tipifica el ideal, la idea de que siempre habrá un mañana mejor que hoy, lleno de oportunidades para mejorar con su propio albedrío. Hoy en día, la religión o espiritualidad persiste como parte integral del sueño mezclada con la esperanza. No es un pecado imaginar o idealizar si motiva acción. Sin los vinculantes de España del Siglo de Oro, el sueño puede dirigir a las industrias, la educación, y el siempre cambiante gobierno. La aplicación de la obra es universal, “Encontrada en muchas fuentes...en la vida de Buda, el cuento

de Barlaam y Josaphat, Job, Isaiah, y los sermones del día de Calderon” (Martel, 608.) Por ser un texto literario, *La vida es sueño* ofrece ideas que caracterizan un tiempo y lugar definido. La búsqueda de la línea donde termina la vida y donde empieza el sueño ya no tiene contestación definitiva.

La imaginación cambia la percepción de la gobernación desde su comienzo al fin de la obra. Aunque el escenario de la obra no es España, sino la exótica Polonia, la acción se relaciona con el imperialismo español. Un país que ha producido literatura simbólica como *El Cid*, *La Celestina*, *La Numancia*, y otras que tributan a la leyenda del macho bravo y gente que apoya a su nación en todo, vive bajo un gobierno poderoso y una sociedad que viola la privacidad de pensamiento y el comportamiento privado. Calderón y otros dramaturgos retratan a los españoles que permiten todos los abusos y errores a sus líderes y a la clase alta, pero que regula la vida de todos en detalles y que alejan del progreso la comunidad. El patriotismo, sugiere Calderón, en vez de ser fanatismo, debe ser el apoyo del albedrío de cada persona a superarse, y así con toda la patria en sumo. Los caprichos de los Reyes afectan a los súbditos en un error depravado que causa estancamiento o fracaso. Lo mejor es tener un líder bajo las mismas leyes que su gente y con el progreso de su nación a la vanguardia de algo a su manera. Calderón escribe este sueño en este drama para que el público comprenda el mensaje y se convierta, en tiempo, en catalizadores del cambio.

Los sueños dominan las obras del siglo de oro español en la forma de patriotismo y moralismo. Don Juan, Don Gil, y Don García aprenden las consecuencias de ignorar las normas de la sociedad, especialmente de religión, y pagan por sus acciones. Entre ellos, Don Gil y Don García se arrepienten antes del último fallo, y sufren menos que Don Juan, condenado eternamente. El diablo entra en la vida cotidiana de los españoles en *El Esclavo del Demonio* y prueba la lealtad de la gente a sus creencias. La fe puede corromper, y la fantasía de la obra revela que el destino puede cambiar las acciones de los individuos. *La Numancia*, *Fuenteovejuna*, y *Las Mocedades del Cid* presentan sueños patrióticos y heroísmo idealizante en el nombre del rey. Simbolizan las

representaciones de los mejor de la sociedad, los valientes y honrados, pueden hacer soñar para mejorar la nación, si todos tratan de mejorarse. Enterrar cuentos de individuos entre la historia de España para inspirar metas altas de su gente. *La estrella de Sevilla y Del rey abajo, ninguno* exploran el tema de la identidad de los Reyes. La conclusión de ambos es que la gente es responsable de controlar y exigir lo bueno de su gobierno. *La Vida es Sueño* también pone la atención a la interacción entre el gobierno y los súbditos. El denominador común en todas las comedias es la capacidad de soñar y pensar claramente para que mejore el individuo y la sociedad.

Bibliografía Selecta

1. Arias, Judith H. "Doubles in Hell: El Burlador de Sevilla y convidad de Piedra." Hispanic Review 58.3 (Summer 1990): 361-377. Literary Reference Center. EBSCO. Miller Nichols Library, Kansas City, MO. 5 Dec. 2008 <<http://search.ebscohost.com.ezproxy.mnl.umkc.edu/login.aspx?direct=true&db=lfh&AN=11035558&site=ehost-live>>.
2. Becker, Danièle. "Jeroglífico y Apocalipsis del Secreto en el Teatro del Siglo de Oro: El Caso de Eudírce y Orfeo de Antonio de Solís." AIH Actas X (1989): 773-788. Centro Virtual Cervantes. 5 Dec. 2008. <http://cvc.cervantes.es//obref/aih/pdf/10/aih_10_1_085.pdf>
3. Kluge, Sofie. "Calderón's Anti-Tragic Theater: the Resonance of Plato's Critique of Tragedy in *La vida es sueño*." 19-52. University of Pennsylvania Press, 2008. Literary Reference Center. EBSCO. Miller Nichols Library, Kansas City, MO. 1 Dec. 2008 <<http://search.ebscohost.com.ezproxy.mnl.umkc.edu/login.aspx?direct=true&db=lfh&AN=30056616&site=ehost-live>>.
4. Lanz, Eukene Lacarra. "Political Discourse and the Construction and Representation of Gender in Mucedades de Rodrigo[sup1]." Hispanic Review 67.4 (Sep. 1999): 467. Literary Reference Center. EBSCO. Miller Nichols Library, Kansas City, MO. 7 Dec. 2008 <<http://search.ebscohost.com.ezproxy.mnl.umkc.edu/login.aspx?direct=true&db=lfh&AN=2624336&site=ehost-live>>.
5. Martel, José, and Hymen Alpern. Diez Comedias del Siglo de Oro. 2. New York: Harper & Row, Publishers, 1968. Mazzeno, Laurence W. "The Star of Seville." Masterplots, Revised Second Edition. (1996). Literary Reference Center. EBSCO. Miller Nichols Library, Kansas City, MO. 1 Dec. 2008 <<http://search.ebscohost.com.ezproxy.mnl.umkc.edu/login.aspx?direct=true&db=lfh&AN=MOL9560000861&site=ehost-live>>.

6. Rupp, Stephen. "Reason of state and repetition in The Tempest and La vida es sueño." Comparative Literature 42.4 (Fall 1990): 289. Literary Reference Center. EBSCO. Miller Nichols Library, Kansas City, MO. 1 Dec. 2008 <<http://search.ebscohost.com.ezproxy.mnl.umkc.edu/login.aspx?direct=true&db=lfh&AN=9604084214&site=ehost-live>>.

7. Sears, Theresa Ann. "Freedom Isn't Free: Free Will in La vida es sueño Revisited." Romance Quarterly 49.4 (Fall 2002 2002): 280. Literary Reference Center. EBSCO. Miller Nichols Library, Kansas City, MO. 1 Dec. 2008 <<http://search.ebscohost.com.ezproxy.mnl.umkc.edu/login.aspx?direct=true&db=lfh&AN=8559420&site=ehost-live>>.

8. Swietlicki, Catherine. "Close Cultural Encounters: Speech and Writing In Fuenteovejuna." Hispanic Review 60.1 (Winter 1992 1992): 33-53. Literary Reference Center. EBSCO. Miller Nichols Library, Kansas City, MO. 4 Dec. 2008 <<http://search.ebscohost.com.ezproxy.mnl.umkc.edu/login.aspx?direct=true&db=lfh&AN=11035649&site=ehost-live>>.

9. Tar, Jane. "Amarrita in Cervantes' La Numancia" Romance Notes 45.1 (Fall 2004 2004): 55-61. Literary Reference Center. EBSCO. [Miller Nichols Library, Kansas City, MO. 5 Dec. 2008. <<http://search.ebscohost.com.ezproxy.mnl.umkc.edu/login.aspx?direct=true&db=lfh&AN=19433482&site=ehost-live>>.

A B O U T
T H E
A U T H O R S

Karen Anton just completed a degree in clarinet performance, philosophy, and English. She enjoys music, playing the clarinet, visiting the opera, and beautifully-printed books. She will begin attending the Jacobs School of Music at Indiana-Bloomington in the fall. After graduation, she wants to teach at the college level and continue her research.

Sadia Aslam will begin her first year in the 90+ program this coming fall, after completing the degree requirements for history and chemistry. She enjoys reading historical fiction and hanging out with family and friends. Her plans after graduation from law school include becoming a public interest lawyer and aiding families within the city and beyond.

Cameron Buie just completed his degree in Mathematics earning Departmental Honors. He is entering graduate school in the Department of Mathematics and Statistics this Fall to pursue a Ph.D. in Mathematics, and has been awarded a Graduate Teaching Assistantship. On April 17, Cam gave a 30-minute talk in the department Expository Talks Series titled, “The 1906 Erdos-Renyi-Sos Proof of the Friendship Theorem: ‘Suppose in a group of people we have the situation that any pair of persons has precisely one common friend. Then there is always a person (the ‘politician’) who is everybody’s friend.”

James Comminellis is a senior in Medieval and Early Modern History. He enjoys playing violin, boxing, reading both fiction and non-fiction, playing video games, watching films, and engaging in coffee shop conversations. He plans to apply for the Rhodes scholarship to continue

his education in Medieval history at Oxford. Ultimately, he would like to teach at the college level and continue his research in Christian doctrine and the treatment of heresy.

Michael Devitt finished a degree in English this semester. He enjoys reading, writing, and watching sports. He plans to take a year off to travel in Europe or the Far East and finish his book. After this sabbatical, he plans to attend graduate school.

Ariel Green is a senior biology, chemistry, and philosophy major. She enjoys reading, writing, playing music, and discovering things. Her plans after graduation include obtaining her Ph.D. in biophysics or pharmacology and pursuing a career in bioethics and public health.

Magie Hogan is a philosophy major. She enjoys reading, acting, improv comedy, and writing hip songs. Her plans after graduation could possibly include the Peace Corps, graduate school, law school, entrepreneurship, and/or the performance lifestyle.

Maria Iliakova is a senior biology, chemistry, and Spanish major. She enjoys traveling around the city and beyond, playing outside in nice weather, and raising awareness of STDs/HIV to youth in our community. Her plans after graduation include obtaining a M.D./Ph.D. to become a physician scientist as well as a public health and community service advocate.

Andrea Ridlen just finished a degree in political science. She enjoys volleyball, tennis, reading, and traveling. Currently, she is enrolled in the 90+ program at UMKC. She plans to practice law in real estate, product liability, and consumer protection.

BethAnn Steinbacher is an elementary education major. She enjoys keeping up with her children's activities, reading, and running. Her plans after graduation include becoming a first grade teacher.

H O N O R A B L E M E N T I O N S

David Camerlinck and his paper, “The Lie of Remembrance”

David Collier and his paper, “Morality and Class Structure in Charles Dickens’ *Hard Times*”

Ryan Lane and his paper, “The Rwandan Genocide: Our Failed Duty Against Anarchy”

Tiffanie Fowlkes and her paper, “Assembly of Cytoskeletal Filaments, Associated Proteins, and Neurodegenerative Disease in Eukaryotes”

S P E C I A L T H A N K S T O

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