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Snow in Kansas
By: Michael S. Vitevitch, Ph.D
University Honors Program

Although the title of this brief introduction to the 2011-2012 issue of the *Journal of Undergraduate Research* may sound poetic, it is an allusion to the Rede Lecture delivered in 1959 by C.P. Snow at Cambridge University entitled "The Two Cultures and the Scientific Revolution." His lecture focused on the disdain that those in the arts had for the sciences, and that those in the sciences had for the arts. Over 50 years later, it is all too easy to find an English major who can't balance his checkbook, and a major in Physics and Astronomy who thinks Titian is an alternate spelling for one of the moons of Saturn. Ignorance—of the Pythagorean Theorem or of the influence that Edgar Allan Poe had on literature—should not be worn proudly, like a badge of honor. Instead, one must strive to know both cultures. Indeed, being familiar with both cultures is the only way to truly understand the world around us.

Fortunately, the rise of fields like the Digital Humanities can be interpreted as a sign that the gap between the arts and the sciences is decreasing. In an effort to continue to reduce the gap between the two cultures, we made a conscious effort in this issue of the *Journal of Undergraduate Research* to include not just "traditional" or "stereotypical" research from the physical and social sciences, but to also include creative and scholarly works from the arts and humanities. Despite the differences in methodologies used in the arts and sciences, both fields strive to answer the same questions: Who are we? What does it mean to be human? Why do we do the things we do? We hope you enjoy the answers to these and many other questions in the pages that follow.

Thank you to all of those who have contributed in some way to this issue of the *Journal of Undergraduate Research*. The electronic version of this issue, along with previous issues of the *Journal of Undergraduate Research* can be found online at: http://web.ku.edu/~kujur/

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Undergraduate Research

Undergraduate Scholarship and Creative Works

The James K. Hitt Award for Outstanding Undergraduate Research

The year 2012 marks the inaugural year of the The James K. Hitt Award for Outstanding Undergraduate Research. This award was presented at the 2012 Undergraduate Research Symposium to three students who engaged in outstanding research and scholarship. These students—Cara Smith, Jessica Ludwig and Santiago Ferreira—presented the keynote addresses that kicked-off the Symposium on April 28, 2012. A written report of the research presented by Cara Smith also appears in this issue of the *Journal of Undergraduate Research*.

The James K. Hitt Award for Outstanding Undergraduate Research was established in October, 2011 by his son Alan B. Hitt and his daughter and son-in-law, Nancy Hitt Clark and David Clark. James Hitt was born in 1914 in Everest, Ks and raised in the small town of Hamlin in northeastern Kansas. Hitt first came to the University of Kansas in 1930 and graduated in 1934 with a bachelor's degree in mathematics. He continued his education at KU, earning his master's in mathematics in 1936. As an undergraduate, Hitt was a Summerfield scholar, ROTC member, and a member of several honors societies including Phi Beta Kappa. He was a member of Kappa Sigma fraternity. Hitt first served as a staff member in 1940 as Assistant Registrar, and left on military leave as a second lieutenant for active service in the Army during World War II from 1942-1946. He returned to KU and served in several positions over the next 32 years, including University Registrar, Director of Admissions, Director of the Office of Admission and Records, Associate Director of Institutional Research and Planning, and finally as a Special Assistant to the Chancellor.

Hitt's leadership and dedication at the University of Kansas were evident as a student and continued during his 32 year career as an influential and innovative administrator. Following his retirement in 1977, Hitt continued to engage in his love of music through his piano playing and remained a die-hard KU basketball fan. He spent many years as a loving care-giver to his wife Bernadine and co-founded the Caregiver Support Group for individuals caring for family members with Alzheimer's disease.

James Hitt died in January 2011. Hitt's son, daughter, and son-in-law, all of whom are KU alumni, wished to commemorate Hitt's achievement and dedication to the university. They felt that his sincere attention to KU students and faculty was truly exceptional and well-known across campus. As Hitt was involved both as a Summerfield Scholar and the head of the Summerfield committee, his son and daughter were keenly aware of their father's respect for academic excellence and research. Both felt their father's values are reflected in the University Honors Program's focus on scholarship, research and innovation, and felt that an Award for Outstanding Undergraduate Research would be an appropriate way to honor their father. We thank the Hitt family for their generous support of excellence in the domain of undergraduate research and scholarship.

Toward an Environmental Assessment of Social Determinants of Health: Direct Observations of Latino Neighborhoods in Kansas City

Cara Smith (Faculty Advisor: Stephen Fawcett)

Applied Behavioral Science

ABSTRACT

The environment – including exposure to social determinants – is a major influence on health outcomes and health disparities. Direct observation may be useful in identifying factors related to disparities in health across neighborhoods. This study explored the question of whether environmental features – exposures related to social determinants – can be assessed by direct observation. A checklist and measurement protocol was created for this purpose. This two-page environmental assessment was used to document the occurrence or non-occurrence of specific features or measures in six domains: housing (N=5), safety (N=11), recreational spaces (N=5), transportation (N=5), economic factors (N=2), and access to services (N=17). Each feature (e.g., broken windows, illegal dumping, and sidewalks) was measured in selected neighborhoods in urban areas of Kansas City with higher populations of Latino residents. After pilot testing was completed, ten neighborhoods of similar population densities were selected for study. These included five neighborhoods from census tracts of higher median annual income and five from census tracts of lower median annual income. Trained coders independently recorded the occurrence or non-occurrence of environmental features while walking through the ten neighborhoods. The assessment of each neighborhood took approximately one hour to complete. Results showed that there was a higher percentage of some negative features (e.g., broken windows, vacant houses) in lower income neighborhoods than higher-income neighborhoods. The higher-income neighborhoods had a greater percentage of some positive environmental features (e.g., childcare centers, schools, security systems etc.) that did the lower-income neighborhoods. The lower-income neighborhoods also had a higher percentage of some positive features (e.g., places of worship, parks) than did higher-income neighborhoods. Reliability of observations between independent observers suggests that the checklist may be an accurate tool for assessing environmental features related to social determinants of health.

INTRODUCTION

Research on social determinants of health suggests that physical health is affected by much more than access to primary health care (WHO Commission on Social Determinants, 2008). Only about 20% of overall health outcomes can be attributed to access to quality health care; by contrast, as much as 50% of the contribution to overall health outcomes can be attributed to the social, economic, and environmental conditions in people's lives (County Health Rankings, 2012). These social determinants – often related to income inequality – are seen as major determinants of health outcomes for populations (WHO Commission on Social Determinants, 2008).

Mechanisms by which social determinants produce health disparities include unequal exposure to environmental factors such as poor housing and living conditions (WHO Commission on Social Determinants, 2008). These differential exposures may be related to unhealthy housing, dangerous working conditions, low food availability and quality, social exclusion and barriers to adopting healthy behaviors and other risk factors (WHO Department of Ethics, Equity, Trade and Human Rights, 2010). Differential exposures to unequal health conditions are linked to health disparities, particularly for groups experiencing social exclusion such as Latinos and other racial and ethnic minorities (Braveman, 2006). Observable indicators of social determinants of health may be useful in distinguishing environmental features that may influence disparities in health across communities.

This study explored the question of whether environmental indicators that may affect health can be assessed by direct observation. The experimenter created an environmental assessment tool to test this question. The tool was used to survey higher- and lower-income Latino neighborhoods in Wyandotte County, Kansas.

METHODS
Context: Latino Health for All Coalition

This research project was conducted in support of the Latino Health for All Coalition, a community-academic partnership working with a low-income and primarily first-generation Latino community in Kansas City, Kansas. The mission of the Latino Health for All Coalition (LHFA) is to decrease rates of heart disease and diabetes in the Latino population and to increase the proportion of Latinos who engage in healthy lifestyle choices such as physical activity and nutritious eating habits in the Kansas City area. These objectives were selected because of the need that has been documented within the community.

In the Kansas City region, Latinos experience an average life expectancy 11 years shorter than whites (Farakhan and Thompson, 2000). Specifically, Latinos in the Kansas City area are slightly less than 1 ½ times more likely to die from diabetes – the second leading cause of death for Latinos in Kansas City, Missouri (Kansas City Missouri Department of Health, 2004) – than their white counterparts (Farakhan and Thomas, 2000). Even as the mortality rates due to cardiovascular diseases among whites and African Americans in Kansas City decreased between the years 1994 and 2003, the mortality rates due to cardiovascular diseases among Latinos continued to rise (Kansas City Health Department, 2004).

The Latino Health for All Coalition has set out to empower community members to positively impact their health and the health of their community in order to create greater community change. In doing this, LHFA aims to promote health equity by identifying and addressing the social determinants that affect Latinos and other minorities in Wyandotte County while also remaining culturally sensitive (Latino Health for All, 2008). In order to accurately identify social determinants, the Latino Health for All Coalition has engaged in extensive community health assessment efforts through a grant from the Centers for Disease Control and Prevention, the Racial and Ethnic Approaches to Community Health (REACH). This environmental assessment is one of many efforts intended to learn more about

factors affecting the overall health and health disparities among socially disadvantaged groups in Wyandotte County, Kansas.

Neighborhoods

Ten neighborhoods, each within a different census tract in Wyandotte County, Kansas, were selected for this research project. Census tracts were used to identify areas with differences in median annual income and relatively high population density overall and higher Hispanic population. Each of the census tracts had a population of 900 individuals or higher and Hispanic populations of 200 individuals or higher. Census tracts with Hispanic populations of 1,000 individuals or higher were selected when there were census tracts that also fit both the income and population density requirements. Five of the neighborhoods were selected from a lower median annual income range to serve as a lower-income group, and five of the neighborhoods were selected from a higher median annual income range to serve as a higher-income group. The five census tracts selected for the lower-income group had median annual incomes in the range of $9,694 - $24,999, and five of the census tracts selected for the higher-income group had median annual incomes in the range of $35,000 - $49,999. For each census tract, the street intersection closest to the centermost geographic point of the tract was selected as the center of the data collection area. From this point, observations were conducted for one-half mile outward in each of the four directions, North, South, East and West or the closest possible approximation thereof. Each of these half-mile radius zones within a census tract served as the operational definition of a neighborhood for the study. Appendix A provides a map of the neighborhoods involved in this study.

Measurement System

Table 1 displays the environmental assessment domains, measures and behavioral definitions used in this study. Environmental indicators for measures of social determinants were selected through literature review and social validation ratings by researchers with experience in the area. Lists of possible measures of social determinants of health were compiled from existing reports that used windshield surveys and other related methods. They included a number of domains as related candidate indicators; for instance, housing (e.g., broken windows, signs of eviction, etc.) and social order (e.g., parks, organized game courts, etc.) (Furr-Holden, Campbell, Milam, Smart, Ialongo & Leaf, 2010).

These lists of candidate measures were then presented to several experts in public health and community health. They evaluated each candidate measure using three criteria: a) its relevance to the construct of social determinants of health, b) its likelihood for feasibility of data collection, and c) its likelihood for accuracy or reliability between independent observers. Measures that scored high in all three of these categories were then selected for inclusion on the environmental checklist. Appendix B provides a data table of the candidate measures' evaluation.

A simple environmental assessment instrument (Appendix C) was then created consisting of these measures. This tool is a two-page checklist used to document the occurrence or non-occurrence of environmental features related to the domains of housing (N=5), safety (N=11), recreational spaces (N=5), transportation

(N=5), economic factors (N=2), and access to services (N=17). Observers scored for occurrence or non-occurrence of each indicator for each block surveyed within a particular neighborhood. There is also space for additional comments and qualitative description of neighborhood attributes.

Before the study took place, observers received training to help assure the accuracy of their recording. This consisted of a PowerPoint presentation that included behavioral definitions of each measure (e.g., housing – vacant dwellings) with examples and non-examples (e.g, photographs of what is by definition a vacant dwelling and what is not by definition a vacant dwelling). Table 1 contains a summary of the measures and corresponding behavioral definitions.

Table 1 – Environmental Assessment Domains, Measures, and Brief Definitions		
Domains	**Measure**	**Definition**
Housing	Broken Windows	Dwelling where any window has unrepaired cracks or missing glass as visible from the street
	Boarded Up Windows	Dwelling where any window has signs of makeshift repair (e.g., plywood, plastic sheets, etc.)
	Vacancies	Dwelling that appears to be without occupants (e.g., eviction sign, no furniture inside)
	For Sale/Rent	Dwelling with a posted sign that says "for sale" or "for rent"
	Fire Damage	Dwelling that shows signs of smoke or fire damage
Safety	Barred Windows	Any window that has two or more metal bars on the exterior side of the building
	Graffiti	Any words or symbols spray-painted onto surfaces
	Security Systems	Signs or other markers posted on a dwelling that indicate a security system is present
	Illegal Dumping	Any waste material that is larger than 1 foot by 1 foot (e.g., tires, appliances, equipment)
	Street Lights	Any public light on a post with as a source for illuminating the area
	Crosswalks	Any signage on pavement indicating where pedestrians are permitted to cross a street
	Police Presence	Any sighting of a police officer or a patrol vehicle
	Fire Stations	Any facility with a sign designating it as a fire station
	Guard Dogs	Signs or other markers posted that indicate the presence of dogs (e.g., "beware of dog")
	Trash	Any waste accumulated; must be at least 5 pieces of 2 inches by 2 inches
	Hazardous Materials	Harmful chemicals or refuse or sites where waste is dumped
Transportation	Bus Stops	Location with signage for bus stop
	Potholes	Any hole in the street pavement the size of a dinner plate or larger
	Sidewalks	Presence or cement or brick paths adjacent to the road
	Bike Lanes	Presence of a lane in road for bike traffic

	Taxis	Presence of a vehicle identified as a taxi
Economy	Vacant Store Fronts	Any retail or business building that is not currently occupied
	Payday Advance Stores	Operating business that has signage labeling it as a payday loan or advance store
Recreational Spaces	Parks	Space for communal interactions and/or recreation for the general public
	Parks with Amenities	Any man-made item or aspect that enhances the quality of the park (e.g., playground equipment, basketball courts, water fountain, etc.)
	Public Recreational Facilities	Enclosed building visibly designated as open to the public or as a "community center"
	Recreational Facilities with Amenities	Any item or aspect that enhances the quality of the community center
	Private Recreational Facilities	Enclosed building that is not designated to be open to the public
Services	Schools	Building with sign indicating it is a school
	Elementary Schools	Building with sign indicating it is an elementary school
	Childcare/Daycare	Building with sign indicating it is a childcare or daycare
	Primary Health Care	Building with sign indicating it is a primary care facility or clinic
	Safety Net Clinics	Building identified as a "Federally Qualified Health Center" (FQHC) or "Community Health Center"
	Social Services	Building identified as a government or government supported services office
	Food Stores	Any building that sells food or groceries
	Corner Stores/Tiendas	Food store that sells mainly food and household goods
	Supermarkets	Food store with additional services available (e.g., clothing retail, auto services, eye care, etc.)
	Bars	Any facility that serves alcoholic beverages (e.g., bar, tavern, pub, etc.)
	Restaurants	Any store where one can purchase or eat a meal (e.g., fast food, dine-in, carry-out)
	Liquor Stores	Any building marked as a liquor retail outlet
	Places of Worship	Any operating church or other religious building

	Gas Stations	Building that has at least one gas pump
	Hospitals	Health care institution with signage indicating it is a hospital
	County Dental Clinics	Building providing dental care that has signage identifying it as a "County Dental Clinic"
	Farmers Markets	Any set of stands selling produce and/or meat products

Several undergraduate students affiliated with the KU Work Group for Community Health and Development were trained using the observer codebook found in Appendix D. The students piloted the checklist in a different county that served as a test location for feasibility and accuracy. The first author (primary observer) then conducted observations of environmental features in the 10 selected neighborhoods within Wyandotte County. A random sample of two lower-income neighborhoods and two higher-income neighborhoods were concurrently observed by a second independent observer, an undergraduate student not the first author, so that accuracy of scoring could be assessed using measures of inter-observer agreement.

Development of Observational System

This measurement process was designed using an observational system framework outlined in the Community Tool Box (2012). First, the experimental question was identified: Are there differential levels of exposure to environmental conditions in lower and higher-income neighborhoods for the Latino community of Kansas City, Kansas? Second, the method chosen to address this question was direct observation of environmental features. Measures to be included were compiled through literature review and social validation of measures by researchers with experience in observational studies. The neighborhoods within Wyandotte County would be each observed one time during the course of the study. Third, codebook was devised for observers that provided behavioral definitions and scoring instructions for each measure as well as examples and non-examples. Observers were individually trained on the codebook regarding what to record and what conditions would be observed. Fourth, a second observer simultaneously to the primary observer yet independently assessed four of the ten neighborhoods to check the reliability of the environmental assessment tool. Finally, suggestions for adjustment in the measurement system were included in this study after data on inter-observer agreement were collected and analyzed.

RESULTS

Table 2 displays the overall results obtained using this measurement system.

Domains	Measure	Lower-Income		Higher-Income	
	Positive (+)/Negative (-) Measures	Mean (Block/Area)	Range	Mean (Block/Area)	Range
Housing	Broken Windows (-)	21%	7-39	5%	0-19
	Boarded Up Windows (-)	24%	18-48	19%	0-32
	Vacant Dwellings (-)	18%	6-25	15%	11-20
	For Sale/Rent (-)	15%	8-29	20%	11-38
	Fire Damage (-)	1%	0-4	0%	0-0
Safety	Barred Windows (-)	35%	19-47	12%	0-22
	Graffiti (-)	22%	10-35	4%	0-10
	Security Systems (+)	43%	7-71	62%	50-83
	Illegal Dumping (-)	13%	0-19	13%	0-50
	Street Lights (+)	96%	82-100	100%	100-100
	Crosswalks (+)	12%	0-34	11%	0-33
	Police Presence (+)	2%	0-7	2%	0-13
	Fire Stations (+)	0%	0-0	2%	0-17
	Guard Dogs (+)	15%	3-27	15%	0-25
	Trash (-)	29%	17-52	39%	11-60
	Hazardous Materials (-)	0%	0-0	0%	0-0
Transportation	Bus Stops (+)	21%	0-48	11%	0-39
	Potholes (-)	7%	0-17	6%	0-16
	Sidewalks (+)	87%	69-100	8%	0-50
	Bike Lanes (+)	0%	0-0	0%	0-0
	Taxis (+)	0%	0-0	1%	0-5
Economy	Vacant Store Fronts (-)	20%	0-46	2%	0-6
	Payday Advance Stores (-)	0%	0-0	0%	0-0
Recreational Spaces	Parks (+)	9%	0-35	4%	0-17
	Parks with Amenities (+)	6%	0-35	2%	0-17
	Public Recreational Facilities (+)	2%	0-7	0%	0-0
	Recreational Facilities with Amenities (+)	2%	0-6	0%	0-0
	Private Recreational Facilities (+)	1%	0-4	1%	1-17
Services	Schools (+)	2%	0-7	7%	0-50
	Elementary Schools (+)	2%	0-7	6%	0-17
	Childcare/Daycare (+)	0%	0-0	5%	0-33
	Primary Health Care (+)	2%	0-7	0%	0-0
	Safety Net Clinics (+)	1%	0-3	0%	0-0
	Social Services (+)	3%	0-10	0%	0-5
	Food Stores (+)	10%	0-21	1%	0-5

Table 2 – Mean Percent and Range of Occurrences of Measures in Each Block Per Area of Selected Lower-Income (N=5) and Higher-Income (N=5) Neighborhoods

Corner Stores/Tiendas (+)	8%	0-21	1%	0-5
Supermarkets (+)	1%	0-4	0%	0-0
Bars (-)	4%	0-19	0%	0-0
Restaurants (+)	9%	0-21	2%	0-17
Liquor Stores (-)	2%	0-7	0%	0-0
Places of Worship (+)	15%	4-38	6%	0-10
Gas Stations (+)	2%	0-4	0%	0-0
Hospitals (+)	0%	0-0	0%	0-0
County Dental Clinics (+)	0%	0-0	0%	0-0
Farmers Markets (+)	0%	0-0	0%	0-0

The results show a higher percentage of some negative environmental features to which residents were exposed in the lower-income neighborhoods than the higher-income neighborhoods. Negative environmental features occurred at a higher percentage in lower-income neighborhoods than in higher-income neighborhoods for these measures: broken windows, boarded up windows, vacant dwellings, fire damaged dwellings, barred windows, graffiti, potholes, vacant storefronts bars, and liquor stores. Higher-income neighborhoods had higher percentages of positive environmental factors than did lower-income neighborhoods for some features: security systems, street lights, fire stations, taxis, schools, elementary schools, and childcare or daycare centers. Other environmental indicators showed little or no difference across neighborhoods. For instance, the percent of blocks per neighborhood in lower-income communities was equal to that of higher-income neighborhoods for the measures of illegal dumping, police presence, guard dogs, hazardous materials, bike lanes, payday advance stores, private recreational facilities, hospitals, county dental clinics, and farmers markets. For other measures, lower-income neighborhoods had lower instances of negative environmental

features and higher instances of positive environmental features. Lower-income neighborhoods had lower percentages of "for sale" and "for rent" signs than did higher-income neighborhoods as well as a lower percentage of blocks with trash per neighborhood. Additionally, lower-income neighborhoods had higher percentages than higher-income neighborhoods of several positive environmental features: crosswalks, bus stops, sidewalks, parks, parks with amenities (e.g., parks with playgrounds), public recreational facilities, recreational facilities with amenities (e.g., recreational facilities with outdoor basketball courts), primary health care centers, safety net clinics, social services, food stores, corner stores or tiendas, supermarkets, restaurants, gas stations, and places of worship.

Figures 1-6 present some illustrative graphs of selected measures. Figure 1 shows that the percentage of occurrences of broken windows, a measure of housing, was higher in the lower-income neighborhoods (21%) than in higher-income neighborhoods (5%). Figure 2 shows that the percentage of occurrences of graffiti, a measure of the safety domain, was higher in lower-income neighborhoods (22%) than in higher-income neighborhoods (4%). Percentage of occurrences of sidewalks, a

measure of transportation, was higher in lower-income neighborhoods (87%) than in higher-income neighborhoods (8%), as shown in Figure 3. Figure 4 shows that a measure of the economy, vacant storefronts, were found to occur at a higher percentage in lower-income neighborhoods (20%) than in higher-income neighborhoods (2%). The percentage of blocks per neighborhood containing parks, as shown in Figure 5, was higher in the lower-income neighborhoods (9%) than in the higher-income neighborhoods (4%). Figure 6 shows the percentage of blocks with places of worship, an example of the services domain, was higher for lower-income communities (15%) than it was for higher-income communities (6%).
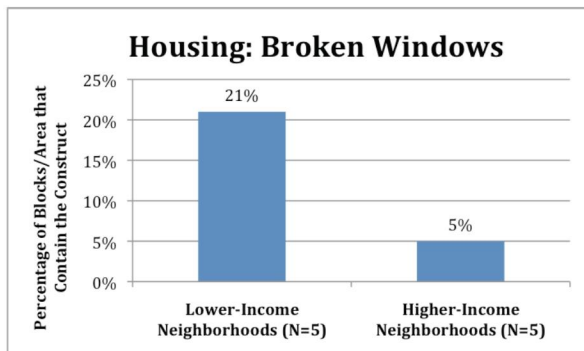
Figure 1 – Housing: Broken Windows
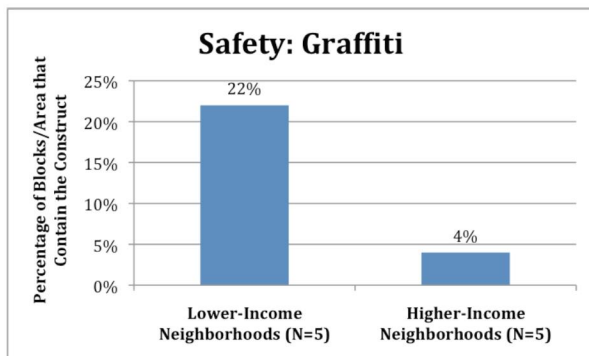

Figure 2 – Safety: Broken Windows

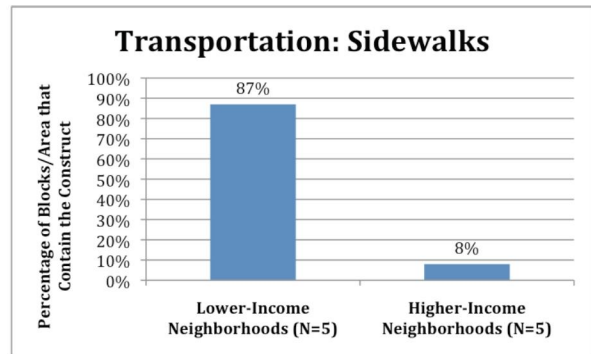**Figure 3 – Transportation: Sidewalks**
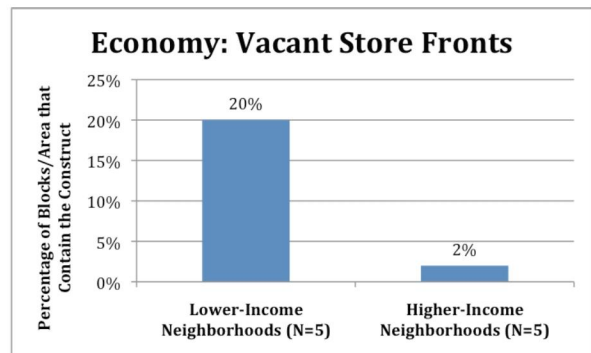

Figure 4 – Economy: Vacant Store Fronts

Figure 5 – Recreational Spaces: Parks
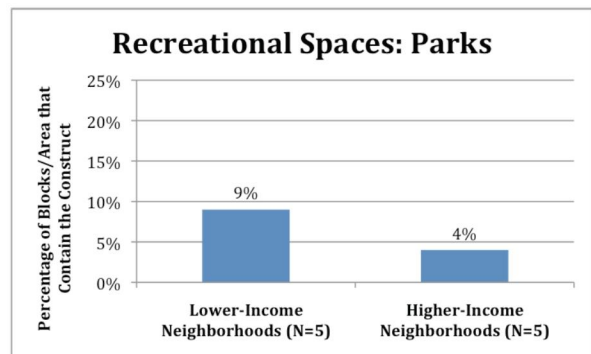
Figure 6 – Services: Places of Worship

Figure 7 – Inter-Observer Agreement
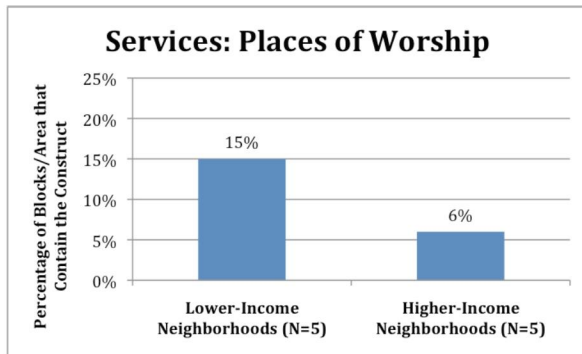
There was also variability between the neighborhoods surveyed within each group. For example, the low-income neighborhood in census tract 420.02 had places of worship on 4% of the blocks observed whereas the lower-income neighborhood in census tract 418 had places of worship on 38% of the blocks observed. The higher-income neighborhood in the census tract 437 had 11% of blocks with "for sale" or "for rent" signs while the higher-income neighborhood in census tract 405 had "for sale" or "for rent" signs on 38% of the blocks.

Inter-observer agreement was high overall with the primary observer (first author) and secondary observers (undergraduate students) agreeing on 98% of total opportunities, as shown in Figure 7. Inter-observer agreement was higher for some indicators than for others. Inter-observer agreement was above 80% for the following measures: all measures in the services domain; all measures in the housing domain; all measures in the transportation domain; all measures in the economy domain; and the measures graffiti, police presence, fire stations, street lights, crosswalks, security systems, guard dogs, barred windows, illegal dumping, and hazardous materials. For the measure of trash, it was below 80%.
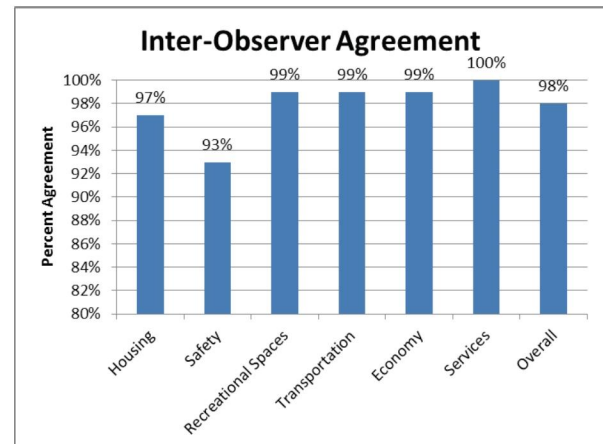
DISCUSSION

Findings from this study indicate that residents of the lower-income neighborhoods had greater exposure to some environmental features associated with health disparities than those living in higher-income neighborhoods. The higher-income neighborhoods had greater percentages for some positive features such as schools, childcare and daycare centers, and streetlights; and fewer negative features such as broken windows, vacant dwellings and store fronts, and bars and liquor stores. This was consistent with the hypothesis that differential exposures (to social determinants) were related to differential income. Many measures did not show marked differences between lower-income and higher-income communities. For instance, percentage of neighborhoods with police presence, crosswalks, evidence of guard dogs, and illegal dumping were equivalent across income levels. This was not consistent with the hypothesis.

Also not consistent with the hypothesis, greater percentages of many positive environmental features occurred in lower-income communities than in the higher-income communities, such as

blocks per area containing sidewalks, parks, and places of worship. These higher percentages of positive environmental features occurred in especially high number for the domains of recreational spaces (e.g., parks and recreational spaces) and services (e.g., restaurants, places of worship). This suggests that lower-income communities may not be as resource-poor as predicted by the hypothesis. These factors are assets upon which lower-income neighborhoods can build and may serve as important environmental features to leverage toward improving community health and the health outcomes of community residents.

A limitation of this approach was the minimal adaptability of this measurement protocol to different neighborhood conditions such as population density. For example, some of the neighborhoods surveyed contained fewer houses set farther apart whereas other neighborhoods contained houses that were much closer together. The neighborhood observed in census tract 418 contained 29 blocks while the neighborhood observed in census tract 438.03 contained 6 blocks. Additionally, this study was limited by the sampling method for each neighborhood area of only surveying four one-half-mile lengths out from the central point as opposed to the entire circular area with a radius of one half-mile. As an example, several neighborhoods were known to contain features such as schools or parks that were within the circular one half-mile radius, but these features were not observed or consequently scored because they were not along any of the four lengths surveyed. These are factors that should be considered in future research.

This study also had several strengths. One strength is the practicality of conducting the assessment. The only supplies used in observation were printed copies of the environmental assessment and clipboards. The average time spent in observation for an individual neighborhood was one hour, with a range of forty minutes to 1.5 hours. Further, this study attempted to identify and directly observe environmental features that may be related to differential exposures that contribute to health inequity, an area on which the experimenter was able to find only limited prior research. Finally, the environmental assessment was shown to have high levels of inter-observer agreement.

The findings of this study support the growing body of research connecting environment with health. The results suggest that indicators related to environmental features can be studied through direct observation. Future research should explore the question of which environmental features have the greatest correlation to social determinants and the greatest impact on health. Further research and collaborative action is also needed to establish and verify successful methods of eliminating health disparities. A potential future use of this environmental assessment is as a pre-test of neighborhoods before community organizations implement initiatives to improve health followed a second use of the assessment as a post-test of the neighborhoods after this work has been put into action. Use of this assessment in this way would serve to measure the broad effects of the community organization's work on the neighborhood residents' exposure to social determinants of health.

The Latino Health for All Coalition is taking part in such efforts to create conditions that promote health equality for Latinos in the Kansas City area.

Collaborative public health research actions should attempt to limit exposures in low-income neighborhoods. For instance, this might include community programs and policies that support access to services, places that assure opportunities for physical activity, safety improvement efforts, and economic improvement efforts within low-income areas with populations experiencing health disparities. The higher occurrences of service resources found by this study to exist in the lower-income communities support this recommendation and may be built upon for future health improvements. The goal of these efforts is to learn more about and act to reduce health inequities that prevent people from living healthy lives. We can work together to create more equitable conditions so that all people are able to live healthy lives.

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Regulatory Oversight of Foreign Clinical Trials: An Examination of the Industry's Influence on FDA Pharmaceutical Regulation and the Implications for Enforcement Activity Both Domestic and Abroad

Beeta Kashani (Faculty Advisor: Gary Reich)

Political Science

ABSTRACT

In recent decades, the pharmaceutical industry has followed the lead of other industries and has globalized its operations. The routine relocation of clinical trials to developing countries has uncovered a jurisdictional gap between domestic regulatory agencies and international mechanisms of governance. This thesis explains why existing regulations governing pharmaceutical clinical trials have created a regulatory vacuum in which ethical clinical practices and consumer safety are undermined. In the case of multinational pharmaceutical companies based in the U.S., I show that existing global protocols do not adequately address the ethical challenges created by the globalization of clinical trials. Meanwhile, the U.S. Food & Drug Administration also suffers from regulatory and supervisory failures due to the ability of the pharmaceutical industry to effectively capture the agency.

INTRODUCTION

In an increasingly globalized world, it has become more and more difficult to enforce health and safety regulations in international commerce. The ever-changing, ever-growing global economy has mitigated the regulatory role of the state, leaving matters of ethical, environmental, and legal compliance to transnational corporations to address at will, unencumbered by bureaucratic authority. The pharmaceutical industry is one of the many industries that has benefitted from this regulatory void, created by the lack of both global standards and the systematic failures of traditional regulatory bodies to monitor clinical research outside their domestic domains.

The ability to conduct clinical trials overseas allows pharmaceutical companies to circumvent burdensome ethical procedures in favor of cheaper, faster alternatives. Since 2007, twenty of the largest American pharmaceutical companies have based 45% of their reported trials outside the United States.[1] The number of countries serving as trial sites for clinical research has more than doubled in the past decade. There has been widespread and systematic ethical noncompliance on the part of the researchers who do their fieldwork in parts of the developing world, adversely affecting standards of care, quality of informed consent, reasonable availability, transparency of drug trials, and drug interaction effects.[2]

In this thesis, I will examine why existing regulations governing pharmaceutical clinical trials have created

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[1] Seth W. Glickman, et al. "Ethical and Scientific Implications of the Globalization of Clinical Research." *New England Journal of Medicine* 360.8 (2009): 816-23.

[2] Ezekiel Emanuel, David Wendler, and Christine Grady. "What Makes Clinical Research Ethical?" *JAMA*. 283.20 (2000): 2701-2711.

a regulatory vacuum in which ethical clinical practices and consumer safety are undermined. I will examine how the US Food & Drug Administration responds to the globalization of clinical trials, the influence of the pharmaceutical industry on research regulation, and the factors that contribute to the FDA's regulatory and supervisory failures. The first part of this thesis will briefly outline the nature and ramifications of unethical clinical trials in the developing world. I will then track the historical development of ethical principles guiding human experimentation in order to establish the context upon which modern day research policies are built. Using this foundation, the second part of the thesis will analyze the role of the FDA in monitoring the research activity of the pharmaceutical industry, and the relationship between the evolution of regulatory practices and industry interests. I propose that while the FDA has enormous authority and control over the drug approval and marketing process in the U.S., its efficacy in ensuring that ethical research protocol is followed abroad and that trial data is viable is hampered by industry pressures and inadequate coordination with foreign regulatory agencies.

Ethical Problems in Global Clinical Research

A majority of individuals enrolled as research subjects outside of the U.S. live in conditions rife with poverty, disease, limited access to healthcare, and inadequate education. Because they have so few opportunities to pursue their financial and physical security, and generally lack the knowledge and background in healthcare to understand the nature of clinical trials, individuals commonly feel they are in no position to

question or negotiate the terms of their treatments.[3] This often leads research subjects to the false assumption that, because the researcher is wearing a lab coat, they are acting in the patient's best interest based on their therapeutic obligation as a physician, when in actuality they are filling the role of a researcher with the primary objective to obtain trial data.[4] When one Peruvian mother took her sick child to a public hospital in Lima, her son received free treatment, diapers, and meals, and she was urged to sign medical forms even though she could not understand them. Days later, she found out her son had received an experimental therapy. She told a reporter, "Nobody said anything about it being an experiment. I would never have agreed if I had known. I worry all the time."[5]

Researchers often assume that illiterate subjects are incapable of making their own decisions regarding their health, so they dehumanize them and adopt a paternalistic approach, sidestepping the process of obtaining informed consent.[6] One study showed that 90% of the published clinical trials conducted in China in 2004 did not report ethical review of protocol, and only 18% obtained informed consent.[7] Another

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[3] Ibid, 820.
[4] Ileana Dominguez-Urban. "Harmonization in the Regulation of Pharmaceutical Research and Human Rights: The Need to Think Globally." *Cornell International Law Journal* 30.245 (1997): 245-86.
[5] Kelly Hearn. "The Rise of Unregulated Drug Trials in South America." *The Nation*, September 21, 2011.
[6] Diana Crane. "Sociological Perspectives on Research in Human Populations." *Bulletin of the World Health Organization* 55.2 (1977): 91-99.
[7] Dalu Zhang, et al., "An Assessment of the Quality of Randomized Clinical Trials Conducted in China,"

study demonstrated that when research subjects were given food, money, or shelter in exchange for their participation, they became so reliant on the benefits that withdrawing from the study became unthinkable, even when they were clearly uncomfortable and were legally allowed to opt out at any time.[8] Financial compensation ultimately takes advantage of most subjects' impoverished living conditions, essentially forcing them to put their own health at risk in the interest of accessing the only medical care or resources available.[9]

In addition to exploiting the disadvantaged position of many research participants, clinical research is disproportionately dedicated to conditions that are only of first world concern. Conditions of global significance — such as malaria, HIV/AIDS, tuberculosis, diarrheal diseases, and lower respiratory infections — cause the majority of premature deaths worldwide.[10] Yet, the majority of research is dedicated to developing treatments for more profitable ailments of affluence — overactive bladder, allergic rhinitis, and acid reflux — which have virtually no prevalence in any other part the world.[11] Dr. Jean-Hervé Bradol, President of the

French Section of Médicins Sans Frontiéres, warned of the dire need to address the gaps between research realities and the global disease burden: "In most cases, [the company's] objective is not to do research on illnesses affecting poor countries."[12] Of the 1,556 new drugs developed between 1975 and 2004, only twenty of them targeted the diseases responsible for fifteen million deaths annually. Not even 10% of clinical research focuses on the conditions that cause 90% of deaths worldwide.[13]

Not only is foreign clinical research often exploitative, it can also be scientifically unsound. Because the standard of care in the developing world is usually second-rate and local facilities lack adequate clinical infrastructure, health care professionals, and standard treatments and drugs, many patients who suffer from illnesses are often untreated or undertreated.[14] When these patients participate in a clinical trial, the experimental treatment is being tested on individuals who have had little to no previous exposure to drugs, and thus might have an entirely different effect than it would on a patient who has been medicated, vaccinated, and treated for their entire life, as is common in the first world.[15] These trials do not always take into account how the drug would interact with other treatments that might be administered or present in the bloodstream simultaneously, or the effect of environmental factors.[16] In many cases,

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Trials (2008).

[8] O.O. Ajayi. "Taboos and Clinical Research in West Africa." *Journal of Medical Ethics* 6 (1980): 61-63.

[9] Baruch Brody. "Ethical Issues in Clinical Trials in Developing Countries." *Biomedical Ethics.* By Thomas A. Mappes and David DeGrazia. Boston: McGraw-Hill, 2006 284-88.

[10] World Health Organization. "The top 10 causes of death." June 2011. <http://www.who.int/mediacentre/factsheets/fs310/en/index.html>

[11] Tessa Tan-Torres Edejer. "North-South Research Partnerships: the Ethics of Carrying Out Research in Developing Countries." *British Medical Journal* 319 (1999): 438-41.

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[12] Jean-Hervé Bradol. "Clinical Trials in Africa: Ethical Research Needed on Diseases," Doctors Without Borders, 7 June 2007. Web.

[13] Ibid.

[14] Glickman, "Ethical and Scientific Implications of the Globalization of Clinical Research," 819.

[15] Ibid, 820.

[16] FDA Cardiovascular & Renal Drugs Advisory

attention to social ecology and genetic diversity takes a backseat to the convenience of the test subjects' lack of education or poverty. Researchers have found divergence among the genetic profiles of populations according to geographic location; accordingly, some treatments may differ in how they respond to the particular genetic makeup of different people.[17] One study of 42 genetic variants related to pharmacologic response found that more than two-thirds had substantial differences in frequency between persons of African descent and European descent.[18] This has serious implications for trials involving cardiac, circulatory, and neurologic disorders.[19]

CASE STUDIES

In order to illustrate the serious implications of the ethical negligence routinely exhibited by pharmaceutical industry sponsors when conducting research, I will describe the clinical development of several controversial treatments.

TROVAN

In 1996, Nigeria experienced the largest epidemic of meningococcal meningitis 20th century Africa had ever seen. Between January and June of that year, 109,580 cases were reported, resulting in more than 11,000 deaths.[20] For clinical investigators at the most profitable American pharmaceutical

company, Pfizer, these statistics fell upon eager ears. Earlier that year, Pfizer had developed a potentially lucrative antibiotic called Trovan. Before they could make it available on the market, it had to be approved by the Food and Drug Administration through a process of clinical trials and toxicity testing to demonstrate the efficacy of the treatment.[21] To nullify concerns that Trovan causes joint damage and other dangerous side effects in children, Pfizer sought to prove its usefulness to the medical community by using it to treat bacterial meningitis. However, there were not enough cases of meningitis in the United States for Pfizer to conduct a statistically significant trial. Upon finding out about the outbreak across the Atlantic, Pfizer promptly opened up an unauthorized clinic in the Nigerian city of Kano.[22] Two hundred children were selected from an epidemic hospital; half of them were administered an untested oral dose of Trovan and the other half were given the standard treatment, a dose of intravenous ceftriaxone. None of the patients' parents were told that their children were receiving an experimental and potentially risky drug. Although Trovan proved fatal for eleven children and had detrimental side effects such as deafness, lameness, blindness, brain damage, and paralysis, Pfizer stated in its reports that the death rate was significantly low, and never attempted to conduct follow up examinations on the children to confirm long-term effects of

Committee. 2007 Meeting documents. (www.fda.gov/ohrms/dockets/ac/07/transcripts/2007-4327t-02-part2.pdf)

[17] Glickman, "Ethical and Scientific Implications of the Globalization of Clinical Research," 820.

[18] Ibid.

[19] Ibid, 821.

[20] Idris Mohammed, et al., "A severe epidemic of meningococcal meningitis in Nigeria, 1996." *Transactions of the Royal Society of Tropical Medicine and Hygiene* (2000): 265-70.

[21] "How Drugs Are Developed and Approved." U.S. Food and Drug Administration, 23 Apr. 2010. Web.

[22] William DuBois. "New Drug Research, The Extraterritorial Application of FDA Regulations, and the Need for International Cooperation." *Vanderbilt Journal of Transnational Law* 36.161 (2003): 161-207.

the treatment. [23]

After FDA approval was obtained in the U.S., Trovan was introduced to the market in February 1998 as an antibiotic with fourteen different uses. That year, Trovan was one of Pfizer's top-selling drugs, bringing in $160 million and expected to bring in $1 billion the following year. Within months, reports of liver toxicity in patients with Trovan prescriptions were submitted to the FDA, and the FDA responded by asking Pfizer to include liver toxicity in the list of possible side effects. The next year hundreds of reports of liver problems piled in. By the time the FDA issued a statement recommending that Trovan be used only in hospitals and in rare cases, fourteen patients experienced acute liver failure, and six died.[24] As accusations of unethical research practices began to crop up in 2000, Pfizer's researchers were blamed for not obtaining informed consent, keeping inaccurate records, and not explaining to the parents of the test subjects that their children were receiving an experimental and potentially risky drug.[25] Despite the clear violations of research ethics, the deceitful exploitation of children during a public health emergency, and the lack of authorization by the Nigerian government, the lawsuit filed against Pfizer was dismissed twice in U.S. Courts, and a Pfizer spokesman stated that the

trials were "sound from medical, scientific, regulatory and ethical standpoints."[26]

SYNFLORIX

Between 2007 and 2008, GlaxoSmithKline (GSK) conducted a trial in rural areas of Argentina, Colombia, and Panama on approximately 24,000 children between the ages of 6 and 16 weeks to study the efficacy of a pneumococcal vaccine, Synflorix.[27] This vaccine was developed to prevent both pneumococcal diseases, which includes meningitis, sepsis, pneumonia, and otitis media, as well as bacterial respiratory infections.[28] Most of the parents of trial subjects were under-age, illiterate, or did not understand the implications of the treatment received. "They are vulnerable sections of society," Jorge Yabkowsky, president of the Argentine Federation of Health Professionals, explained, "They were unable to read any kind of consent form."[29] Researchers received $350 from GSK for each subject they enrolled.[30] Fourteen babies who were randomly assigned to the placebo group died during the trial.[31] In 2011, Argentinian courts

[23] Ibid, 164.

[24] Melody Petersen. "Unforeseen Side Effects Ruined One Blockbuster." *The New York Times*. August 17, 2000. <http://www.nytimes.com/2000/08/27/busines s/unforeseen-side-effects-ruined-one-blockbuster.html>

[25] Anjali Kamat, "WikiLeaks Cables: Pfizer Targeted Nigerian Attorney General to Undermine Suit over Fatal Drug Tests," Democracy Now, 17 Dec. 2010. Web.

[26] "Nigeria sues drugs giant Pfizer." *BBC News*, 5 June 2007.

[27] Andrea Gerlin. "Glaxo to Appeal Fines in Argentina Case Over Synflorix Trial." *Bloomberg*. January 3, 2012. <http://www.bloomberg.com/news/2012-01-03/glaxo-to-appeal-fines-in-argentina-case-over-synflorix-trial.html>

[28] "Glaxo may not launch Synflorix vaccine in U.S." *Reuters*. February 5, 2009. <http://www.reuters.com/article/2009/02/05/g laxo-synflorix-idUSL577085220090205>

[29] "GlaxoSmithKline fined over trials on the babies of Argentinian poor." *The Telegraph*, 11 January 2012.

[30] Ibid.

[31] Natalie Fuertes. "World Report: GSK malpractice case raises questions about trial standards." *The Lancet*. 379 (2012): 508. <http://www.iapcoi.com/hp/pdf/GSK%20malpra

sued GSK $92,000 for "administrative irregularities" in obtaining informed consent. GSK is currently in the process of appealing the decision, claiming they "[conduct] clinical trials to the same high standards irrespective of where in the world they are run."

KETEK

In the 1990s, French company Aventis Pharmaceuticals (later Sanofi-Aventis) began conducting clinical trials of a new antibiotic, Ketek (telithromycin), developed to treat bacterial respiratory infections such as sinusitis, bronchitis, and pneumonia.[32] Most of the trials were done in Hungary, Morocco, Tunisia, and Turkey.[33] Several weeks before FDA approval of Ketek, an American researcher who had enrolled more than 400 subjects in one of Ketek's key clinical trials was sentenced to 57 months in prison for fabricating 91% of her trial data.[34] It was later revealed that she collected $400 from Aventis for every subject she enrolled. Even after her sentencing, the FDA approved Ketek as safe in 2004, primarily based on foreign clinical data, and it was introduced to the market.[35]

By 2006, the FDA received fourteen reports of liver failure, 23 reports of serious liver injury, and numerous other reports of liver damage, including four deaths.[36] A study done that same year examined three previously healthy patients who had taken Telithromycin. Within days, all three of the patients had acute hepatitis, jaundice, and "markedly abnormal results on liver function tests."[37] One of the patients recovered, one needed orthotropic liver transplantation, and the third died. Further examination of the second and third patients revealed "massive hepatic necrosis," or the premature death of cells in living tissue.[38] Dr. David Graham wrote an email in 2006, obtained by the *New York Times,* revealing he thought approving Ketek was a mistake and strongly advised its withdrawal. He explained, "We don't really know if the drug works; no one is claiming it works better than other, safer drugs; and we're flying blind as far as safety goes, except for our own A.D.R. data that suggests telithromycin is uniquely more toxic than most other drugs."[39] He went on to write, "For FDA to refer to its being assured by post-marketing data from Latin America and Europe as a basis for declaring 'Ketek is safe' is in my opinion a great abuse of such surveillance data." Several weeks after these emails were made public, the FDA added to Ketek's warning section to include adverse events such as "visual disturbances, loss of consciousness, and hepatic toxicity."[40]

ctice%20case%20raises%20questions%20about%20trial%20standards.pdf>
[32] KD Clay, JS Hanson, SD Pope, RW Rissmiller, et al. "Brief communication: severe hepatotoxicity of telithromycin: three case reports and literature review." *Annuals of Internal Medicine* 144.6 (2006): 415-20. <http://www.ncbi.nlm.nih.gov/pubmed/16481451>
[33] Donald L. Barlett and James B. Steele. "Deadly Medicine." *Vanity Fair,* January 2011.
[34] Hearn, "The Rise of Unregulated Drug Trials in South America."
[35] Ibid.

[36] Gardiner Harris. "Approval of Antibiotic Worried Safety Officials." *The New York Times.* 2006. < http://www.nytimes.com/2006/07/19/health/19fda.html?_r=1>
[37] Clay, "Brief communication."
[38] Ibid.
[39] Harris, "Approval of Antibiotic Worried Safety Officials."
[40] Food & Drug Administration. "FDA Announces Label and Indication Changes for the Antibiotic Ketek." February 12, 2007. <http://www.fda.gov/NewsEvents/Newsroom/Pr

It was not until February 2007, when more than 5 million Ketek prescriptions had been written, that the FDA announced that Sanofi-Aventis had to include a black box warning with the medication, as well as a Patient Medication Guide, and restrict its use for two previously approved conditions – acute bacterial sinusitis and acute bacterial bronchitis.[41] For these conditions, the FDA concluded that the risks of Ketek greatly outweighed the potential benefits. Iowan Senator Charles Grassley, a chairman of the Finance Committee who was involved in investigating Ketek, said, "It's no surprise to learn that the F.D.A. didn't listen to Dr. Graham on the dangers of Ketek. The F.D.A. has made it their business to discredit Dr. Graham and others who aren't willing to cater to the drug companies."[42]

DEVELOPMENT OF GLOBAL STANDARDS

In the past century, international efforts have been made to develop global standards of conduct for human experimentation. Current regulations for clinical research are derived from a series of international documents that form the foundation of research ethics. In this section, I will outline the historical contexts, important contributions, and fundamental gaps of each of these international documents to demonstrate why they fail to complement national regulations by reining in the pharmaceutical industry on a global scale.

Before World War II, no universal ethical document existed to guide research involving humans. When Allied troops moved to liberate Nazi concentration camps, they were horrified to discover that scores of prisoners had been subjected to ghastly medical experiments, carried out by Nazi researchers in an attempt to test the limits of the human body, develop weapons of warfare, and test experimental antibiotics. None of the prisoners gave consent or willingly volunteered to be exposed to diseases such as malaria, jaundice, and typhus, or to be operated on in a variety of dangerous surgical procedures.[43]

The subsequent Doctors' Trial (United States of America v. Karl Brandt, et al.), the first of twelve trials for war crimes held by American authorities before American military courts in Nuremberg between October 1946 and August 1947, illuminated the dire need for an international consensus on bioethics.[44] Of the twenty-three defendants, twenty were medical doctors charged with crimes against humanity, such as performing medical experiments without the subjects' consent on prisoners of war and civilians of occupied countries.[45] Sixteen of the accused were

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essAnnouncements/2007/ucm108842.htm?utm_c
ampaign=Google2&utm_source=fdaSearch&utm_
medium=website&utm_term=ketek&utm_content
=2>
[41] Ibid.
[42] Harris, "Approval of Antibiotic Worried Safety Officials."

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[43] Matthew Lippman. "The Nazi Doctors Trial and the International Prohibition on Medical Involvement in Torture." *Loyola of Los Angeles International and Comparative Law Journal* 15.2 (1993): 395-441.

[44] United States of America vs. Karl Brandt, et al. 1946.
[45] Opening Statement of the Prosecution by Brigadier General Teleford Taylor, 9 December 1946.
<http://www.mazal.org/archive/nmt/01/NMT01-T027.htm>

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indicted and sentenced to execution or imprisonment, despite their protests that there was no law that differentiated between legal and illegal human experiments.[46] In response, Dr. Leo Alexander, an American physician and medical advisor to the trials, proposed a set of principles to define legitimate and ethical medical research. Four more principles were added and adopted by the trial verdict, creating the Nuremberg Code.

This code was the first established set of ethical principles for research involving human beings and prompted international dialogue regarding the development of international standards for research on humans. It emphasized, above all, informed and voluntary consent, as well as the absence of physical and mental suffering of the patient, an analysis of risks and benefits, scientific validity, and beneficence of the researcher with regards to the subject.[47] However, as the interest in medical research and advancement of new research methods grew, the need for more developed guidelines grew as well. Physician-researchers found that the Nuremberg Code was too stringent and inflexible and hindered their research. It made no provisions or guidelines dealing with children or the mentally impaired as research subjects and overemphasized

informed consent.[48]

In 1964, the World Medical Association presented the Declaration of Helsinki. Rather than a list of uncompromising principles, the Declaration was intended to be a more versatile ethical model, which would serve as guidelines for physicians. American researcher Henry Beecher explained: "The Nuremberg Code presents a rigid act of legalistic demands... The Declaration of Helsinki on the other hand, presents a set of guides. It is an ethical as opposed to a legalistic document and is thus more broadly useful than the one formulated at Nuremberg."[49] The President of the Council for International Organizations of Medical Sciences (CIOMS) stated that the Declaration of Helsinki improved upon the Nuremberg Code's "circumstantial" guidelines by placing them "more correctly in the context of generally accepted medical traditions."[50]

The Declaration accomplished this versatility by isolating therapeutic and non-therapeutic, or scientific, research.[51]

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[46] Federal Research Division. Library of Congress. "Trials of War Criminals Before the Nuremberg Military Tribunals Under Control Council Law." October 1946 - April 1949. <http://www.loc.gov/rr/frd/Military_Law/NTs_war-criminals.html>

[47] Ibid.

[48] George J. Annas. "The Changing Landscape of Human Experimentation: Nuremberg, Helsinki, and beyond." *Journal of Law and Medicine* 92.2 (1992): 119. <http://connection.ebscohost.com/c/articles/9609042703/changing-landscape-human-experimentation-nuremberg-helsinki-beyond>

[49] Quoted in W. Refshauge, The Place for International Standards in Conducting Research for Humans, 55 Bull. World Health Org. 133-35 (Supp. 1977)

[50] Refshauge, supra note 5, at 137.

[51] Annas, "The Changing Landscape of Human Experimentation: Nuremberg, Helsinki, and beyond."

While therapeutic research is utilized strictly for the benefit of the patient, scientific research is done to acquire scientific data. The patient's consent is valued differently according to which type of research they are exposed: if it is therapeutic, the physician may make decisions for the patient without their consent, assuming that the physician has the patient's best interests in mind. It was thought that acquiring consent in these instances would be too cumbersome and would create unnecessary difficulty in caring for the patient.[52] If the patient is involved in scientific research, their complete informed consent is absolutely necessary because there may be no direct benefit to the patient at all.[53] But when it comes to types of research like drug trials, they may be difficult to label as strictly therapeutic or scientific. Experimental treatments may be given in a therapeutic treatment, but they may not be proven to be safe or effective and are therefore not expected to necessarily benefit the patient.[54] In the 1975 revision, another provision was added, pushing for formal peer review of research protocols, which would give institutional review boards the responsibility to consider and comment on proposed experimental procedures.[55]

During the 1990s, a series of trials were conducted in developing countries that incited international controversy and illustrated serious deficiencies in the newly revised global standards. In 1994, trials were conducted in Uganda to determine if zidovudine (AZT), an antiretroviral drug, would decrease the likelihood of mother-to-child transmission of HIV. Researchers found that administering the drug during pregnancy and labor reduced transmission to infants by two-thirds, and that it had the potential to save one out of every seven infants born to HIV-positive women.[56] These studies proved to be controversial because a number of study participants were randomly assigned to placebo control groups. Although the use of placebos allows for quicker and more accurate results than equivalency studies, which are done to determine efficacy of a treatment in comparison to a pre-established level of efficacy, it deprives those unfortunate enough to be randomized into the control group of any kind of treatment, even if one exists.[57] Placebo-controlled studies were justified because research subjects were not being denied a treatment they would have otherwise received. This logic proved to be problematic because it created an incentive for researchers to conduct studies in parts of the world with the least access to medical care, where locals would more willingly risk being put into the placebo group out of desperation for

[52] Dawn Joyce Miller. "Research and Accountability: The Need for Uniform Regulation of International Pharmaceutical Drug Testing." *Pace International Law Review* 13 (2001): 204.
[53] Ibid, 204.
[54] Ibid, 204.
[55] Annas, "The Changing Landscape of Human Experimentation: Nuremberg, Helsinki, and beyond."
[56] Peter Lurie, Sidney M. Wolfe. "Unethical Trials of Interventions to Reduce Perinatal Transmission of the Human Immunodeficiency Virus in Developing Countries." *New England Journal of Medicine* 337 (1997): 853-856.
<http://www.nejm.org/doi/full/10.1056/NEJM199709183371212>
[57] Brooks Jackson, et al. "Intrapartum and neonatal single-dose nevirapine compared with zidovudine for prevention of mother-to-child transmission of HIV-1 in Kampala, Uganda." *The* Lancet 362 (2003): 859-868.
<http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(03)14341-3/abstract>

even a 50% chance of receiving treatment.

Following these incidents, the Declaration's revisions in 2000 contained a provision that stated, "A new method should be tested against those of the best current prophylactic, dialogistic, and therapeutic methods," and that a placebo (no treatment) is acceptable only in cases where no proven method exists.[58] Another provision stated that all study participants, on the completion of a clinical trial, must be provided with the "best proven diagnostic and therapeutic methods."[59] Before the codification of this principle, most research participants in the developing world were not provided with the proven treatment after the conclusion of the study, while participants in wealthy countries were supplied with the proven treatment until their death or the end of their illness. Although these provisions were well intentioned, they failed to fully address the root problems. The banning of placebos or experimental treatments when a proven treatment already exists is meant to promote a global standard of care, granting every trial subject the same treatment they would have received anywhere else in the world. This principle does not consider the extremely high cost, sophisticated equipment, and advanced medical training that is necessary to provide many standard treatments or perform standard procedures. Thus, it effectively bans the development of more practical treatments that would be cheaper and easier to implement or administer in the less advanced

healthcare systems of developing countries.[60]

In 1949, the World Health Organization (WHO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) founded the Council of International Organizations of Medical Sciences (CIOMS), an international non-governmental organization designated to maintain "collaborative relations" with the UN, UNESCO, and WHO. In the late 1970s, CIOMS and WHO teamed up to establish bioethics as an integral part of medical research. They sought to develop an ethical framework "to indicate how the ethical principles that should guide the conduct of biomedical research involving human subjects, as set forth in the Declaration of Helsinki, could be effectively applied, particularly in developing countries, given their socioeconomic circumstances, laws and regulations, and executive and administrative arrangements."[61] In 1982, WHO and CIOMS published *International Ethical Guidelines for Biomedical Research Involving Human Subjects.*

The document is intended to guide research that involves human subjects, which includes "studies of a physiological, biochemical or pathological process; the response to a specific intervention... in healthy subjects or patients; controlled trials of diagnostic preventative, or

[58] World Medical Association. "Declaration of Helsinki: ethical principles for medical research involving human subjects." *Journal of Postgraduate Medicine* 48.206 (2002).
[59] Dismantling the Helsinki Declaration 30, 2003.

[60] David Wendler and EJ Emanuel. "The Standard of Care Debate: Can Research in Developing Countries be Both Ethical and Responsive to Those Countries' Health needs?" *American Journal of Public Health* 94.6 (2004): 923-928.
[61] Council for International Organizations of Medical Sciences in collaboration with the World Health Organization. "International Ethical Guidelines for Biomedical Research Involving Human Subjects." Geneva, 2002.

therapeutic measures; studies designed to determine the consequences of specific preventative or therapeutic measures; studies concerning health-related behavior".[62] The guidelines call for research to adhere to basic principles: 1) respect for persons: respect for autonomy and protection of those with impaired autonomy; 2) beneficence: the obligation to maximize benefit and minimize harm; 3) justice: the treatment of each individual subject with the utmost respect and dignity, the equal distribution of burdens and benefits between those involved in the research, and sensitivity to the specific needs of subjects.[63] Research protocol should clearly elucidate "the aim of the research; the reasons for proposing that it involve human subjects; the nature and degree of any known risks to the subjects; the sources from which it is proposed to recruit subjects; and the means proposed for ensuring that subjects' consent will be adequately informed ad voluntary", and the protocol should be scientifically and ethically reviewed by independent investigative bodies.[64]

However, due to the spread of HIV/AIDS, biotechnological advancements, and new research practices, CIOMS was obligated to publish two revisions: *International Guidelines for Ethical Review of Epidemiological Studies* (1991), and *International Ethical Guidelines for Biomedical Research Involving Human Subjects* (1993). Ethical issues that arose after 1993 exposed gaps in the revisions that were connected to clinical trials done in developing countries. Some argued for local decision-

making, the avoidance of paternalism, and the development of low-cost public health solutions in communities where research was done. After much deliberation and re-drafting, CIOMS published the latest revision in 2002, which is comprised of general ethical principles and twenty-one guidelines. Just like the first draft, the current document is intended "to be of use, particularly to low-resource countries, in defining national policies on the ethics of biomedical research, applying ethical standards in local circumstances, and establishing or redefining adequate mechanisms for ethical review of research involving human subjects."

The actual guidelines and their respective detailed commentaries consist of rules such as ethical justification and scientific validity of biomedical research involving human beings, ethical review committees, ethical review of externally sponsored research in the country sponsoring the research, individual informed consent, obligations of sponsors and investigators, benefits and risks of study participation, choice of control treatment, equitable distribution of risks and benefits, research on children, right of injured subjects to treatment and compensation, and more.[65]

At the 2001 Conference on Ethical Aspects of Research in Developing Countries, participants compiled a set of developed criticisms of the CIOMS guidelines. In particular, they focused on the idea of reasonable availability, explained in Guideline 10: "The sponsor and investigator must make every effort to ensure that: 1) the research is responsive to the health needs and the

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[62] Ibid, 19.
[63] Ibid, 18.
[64] Ibid, 18.

[65] Ibid, 25-82.

priorities of the population or community in which it is to be carried out; and 2) any intervention or product developed or knowledge generated, will be made reasonably available for the benefit of that population or community."[66] This guideline was criticized because of its reliance on a "mistaken conception" of exploitation – it focuses on the products of the research rather than the level of benefit.[67] While benefits are provided (i.e. "the fruits of the research"), they may not be necessarily fair or appropriate for the community.[68]

Reasonable availability not only "embodies a very narrow notion of benefits," it makes the benefit reliant upon the success of the clinical trial, ignoring other potential benefits such as "the training of health care or research personnel, the construction of health care facilities and other physical infrastructure, and the provision of public health measures and services beyond those required by the research trial."[69] Furthermore, it is not applicable to Phase I and II drug and vaccine testing, or to genetic, epidemiology, and natural history research.[70] The Conference ultimately contributed a few constructive recommendations, including "providing collateral health services unnecessary for the research itself; public health measures for the country or community; long-term research collaboration; and sharing of financial rewards from research results, including intellectual

property rights", as well as advocate for transparency of the research process, extensive deliberative dialogue with the subject community, and a publicly available record of research protocol and benefit agreements.[71]

Existing international guidelines have had a global impact. The Nuremberg Code set the precedent for an internationally accepted set of bioethical principles to guide human experimentation. The Declaration of Helsinki has been characterized as the "cornerstone of biomedical research for the past 30 years" and the indisputable foundation for ethical decision-making in research.[72] The CIOMS guidelines proposed suggestions for the application of ethical principles specifically for research conducted in developing countries. Although none of these ethical guidelines are legally binding under international law, they have in some part influenced or been integrated into numerous international, regional, and national legislation on human experimentation.[73] The Code of Federal Regulations, consisting of guidelines directing federally funded research in the U.S., is partly based on the Nuremberg Code.[74] In 1981, the U.S. Courts cited the Nuremberg Code when stating, "The

[66] Ibid, 51.
[67] 2001 Conference on Ethical Aspects of Research in Developing Countries. "Moral Standards for Research in Developing Countries." Hastings Center Report. (2004): 17.
[68] Ibid, 19.
[69] Ibid, 21.
[70] Ibid, 21.

[71] Ruth Macklin. *Double Standards in Medical Research in Developing Countries.* Cambridge University Press. (2004): 152.
[72] Francis Crawley & Joseph Hoet. *Ethics and Law: The Declaration of Helsinki Under Discussion.* 150 Bulletin of Medical Ethics 9.10: (1999).
[73] Delon Human and Sev S. Fluss. "The World Medical Association's Declaration of Helsinki: Historical and Contemporary Perspectives." 2001. <http://www.wma.net/en/20activities/10ethics/10helsinki/draft_historical_contemporary_perspectives.pdf>
[74] Protection of Human Subjects, 45 C.F.R. § 46 (2009).

international consensus against involuntary human experimentation is clear."[75] The Belmont Report, the foundation of the Food & Drug Administration's duties and functions, is based on the Declaration of Helsinki. While all have been widely accepted and recognized worldwide, they have been criticized for being devised in reaction to particular events, such as the Nazi experiments or the Tuskegee and Willowbrook scandals.[76,77,78] As a result, they inadequately or unevenly address certain principles according to the context of the document's conception: the Nuremberg Code relies too much on informed consent, while the Declaration is too ambiguous to allow for pragmatic application, and CIOMS does not fully address the needs of research participants from the developing world. Furthermore, the guidelines are almost entirely oriented towards the "integrity and judgment" of the researcher, and have no real methods of enforcement.[79]

The inability of global standards to act as effective regulatory mechanisms for foreign clinical trials place the burden of supervision on states.

THE ROLE OF THE FDA

In 1938, U.S. Congress passed the Food, Drug, and Cosmetic Act (FDCA).[80] This law gave the Food and Drug Administration the responsibility to guarantee: the safety and efficacy of human and veterinary drugs and medical devices, safety and proper labeling of food and cosmetics, and protection of public health from electronic product radiation.[81] The FDA is mandated to protect public health through product regulation and supervision. The FDCA endows the FDA with the authority to inspect and approve new drugs and medical devices before they may be made available to the public, including the clinical trials required to develop them, as well as the duty to promptly withdraw a product if it proves to be unsafe after being introduced to the market. FDA restrictions apply to: research involving human subjects that is conducted, funded, or bound to regulation by any federal agency, as well as research conducted, funded, or bound to regulation by the federal government outside the U.S.[82] Research that is not conducted or funded by the federal government, but subject to federal regulations, is required to be evaluated and given approval by an institutional review board according to

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[75] United States v. Jaffe, 663 F.2d 1226 <http://law.justia.com/cases/federal/appellate-courts/F2/663/1226/147056/>
[76] Emanuel, "What Makes Clinical Research Ethical?" 2702.
[77] The Tuskegee syphilis experiment was a 40-year-long study conducted by the Public Health Service to observe and record the progression of syphilis in African American men, who were never informed of the real purpose of the study and were deprived of effective treatment, penicillin, even when it became available in 1947. See "The Tuskegee Timeline," Centers for Disease Control and Prevention. 2011.
[78] Between 1956 and 1970, students housed at Willowbrook State School, a government-funded school for children with intellectual disabilities, were intentionally infected with the hepatitis virus in order to help researchers develop a vaccine. See *Medical Ethics and Humanities* by Frederick Paola, et al. (Jones & Bartlett Learning, 2010). Pages 285-286.
[79] Dominguez-Urban, "Harmonization in the

Regulation of Pharmaceutical Research and Human Rights: The Need to Think Globally," 274.
[80] Federal Food, Drug, and Cosmetic Act of 1938, 21 U.S.C. Chapter 9.
[81] Food and Drug Administration, 21 U.S.C. § 393(b)(2009).
[82] Protection of Human Subjects, 45 C.F.R. §46.101 (2009).

the same regulations.[83] Because all drugs must be approved by the FDA before being introduced into U.S. markets, any pharmaceutical corporations that conduct clinical trials to develop drugs to sell in the U.S. fall under the umbrella of restrictions as put forth by the Code of Federal Regulations.

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, established after the Tuskegee Syphilis scandal, was Congressionally mandated in 1974 to investigate all federally sponsored human subject research and review ethical research principles. The most prominent of their published reports is the Belmont Report, which is based on the Declaration of Helsinki and focused on three basic principles – respect for persons, beneficence, and justice – which were then applied to modern FDA research regulations.[84,85]

"Respect for persons" is actualized through the rule of informed consent. The FDA requires that research may be done only under the condition that "the legally effective informed consent of the subject or the subject's legally authorized representative" is obtained.[86] Informed consent is defined as disclosing to the patient information regarding the study's purposes and methodology, potential

risks and intended benefits, other alternative treatments, and the patient's right to withdraw from the study at any time, presented in a way the patient can understand.[87] The patient may not be coerced in any way. Informed consent may be bypassed only if the physician demonstrates that the patient was in a life threatening situation, the patient was unable to give consent, there was no time to obtain consent from another legitimate source, and there are no alternative treatments available.[88]

"Beneficence" involves respecting the integrity and autonomy of the individual, as well as promoting their well being and protecting them from harm. This principle is the basis of the researcher's obligation to maximize benefits and minimize harm to the study participants. A clinical trial may only be conducted if it is supported by a positive risk/benefit analysis and the subject is not exposed to an unreasonable level of risk. "Justice" involves the equitable distribution of research benefits and burdens, and calls for a fair and appropriate method of selecting research subjects. This principle gives rise to the researcher's responsibility to select research populations based on the relevance of the study to their specific conditions, and to avoid taking advantage of economic, social, racial, or sexual vulnerabilities.

These three principles are fulfilled by research protocol inspection by institutional review boards (IRB). IRBs, also called independent ethics committees or ethical review boards, are

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[83] Ibid.
[84] David Perlman. "Ethics in Clinical Research: A History of Human Subject Protections and Practical Implementation of Ethical Standards." Temple University School of Pharmacy. 2004. <http://www.socra.org/pdf/200405_Ethics_Clinical_Research_History.pdf>
[85] http://www.hhs.gov/ohrp/policy/belmont.html#xbenefit
[86] General Requirements for Informed Consent, 21 C.F.R. § 50.20 (1999).

[87] Elements of Informed Consent, 21 C.F.R. § 50.25 (2011).
[88] Exception from General Requirements, 21 C.F.R. § 50.23 (2011).

committees officially assigned by the FDA to review biomedical research proposals, approve, disapprove, or require modification of research protocol, and monitor clinical trials involving humans. IRBs provide, in theory, broad protection of the health and safety of clinical research subjects. In order to approve research proposals, IRBs must ensure: (1) risks to subjects are minimized by using viable research design; (2) anticipated benefits reasonably outweigh risks to subjects; (3) choice of research subject population is justified and valid, and vulnerable populations are not being taken advantage of; (4) informed consent will be obtained; (5) informed consent will be officially documented; (6) data collection monitoring techniques will ensure the safety or research subjects, and (7) subject privacy is ensured and data is kept confidential.[89] Furthermore, additional precautionary measures will be taken to ensure ethical research protocol if the research population is "vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons."[90]

When clinical research was still done primarily in the U.S., these regulations for the most part effectively protected trial subjects, ensured the scientific validity of research protocol, and verified the accuracy of trial data.[91] But as sponsors began to submit foreign trial data, the FDA had to scramble to adapt methods of supervision. The FDA

gives sponsors conducting clinical trials abroad two options. First, they may submit an Investigational New Drug Application (IND) and be supervised by an IRB, just as they would be required to if the research were conducted in the U.S. An IND must contain pharmacological and chemical information about the drug, the objectives and duration of the clinical trial, background information on previous human and animal testing, foreign investigational or marketing experience, and manufacturing information.[92] It must also include a comprehensive outline for the clinical investigation, detailing the motivation behind the study, the components being studied, names and qualifications of all clinical investigators, research methodology, detailed protocols and procedures, the number of subjects to be enrolled, any anticipated risks and side effects, and information on the drug's safety and effectiveness based on previous studies.[93]

The second option is the most commonly used – the clinical trials must be done in accordance with the Declaration of Helsinki, or the regulations of the host country, whichever provides more extensive protections of the research subjects.[94] If host country guidelines are used, the clinical investigator must explain the differences between the standards used and those put forth by the Declaration of Helsinki, and their reasoning in choosing those guidelines. To gain premarket approval based only on foreign clinical data requires that the data is relevant to U.S. markets and medical practices, the

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[89] Criteria for IRB Approval of Research, 21 C.F.R. § 56.111 (2001).
[90] Ibid.
[91] Dominguez-Urban, "Harmonization in the Regulation of Pharmaceutical Research and Human Rights: The Need to Think Globally."

[92] Investigational New Drug Application, 21 § 312.23 (2002).
[93] Ibid.
[94] Research conducted outside the United States, 21 C.F.R. § 814.15 (1986).

clinical investigators are competent, and the understanding that the FDA may conduct on-site inspections if deemed necessary.[95] However, the FDA is often not aware that a clinical trial is being conducted abroad until the drug application is being submitted for market approval, after the completion of research, preventing field inspectors from supervising trial sites.[96] Foreign regulatory bodies may also monitor and inspect trials, but they are not obligated to share information or collaborate with the FDA.[97]

The FDA is responsible for ensuring that these regulations are followed and is allowed to cooperate with foreign governments and agencies to "reduce the burden of regulation, harmonize regulatory requirements, and achieve appropriate reciprocal arrangements."[98] While this does not explicitly imply extraterritorial jurisdiction, it certainly necessitates some amount of inspection to ensure the validity of the scientific data that will be used to determine the safety and efficacy of that drug. In 1990, only 271 clinical trials were conducted abroad to develop drugs for American markets. But by 2008, the number of foreign trials escalated 2,000%, to 6,485.[99] That same year, 80% of approved marketing applications for new drugs involved clinical data from

foreign sites. The FDA inspected only 1.9% of domestic trial sites and 0.7% of foreign trial sites in 2008.[100] Without conducting onsite inspections, the FDA cannot consistently and fully ensure that clinical investigators, sponsors, and independent review boards are adhering to the proper regulations while completing research.

In many instances, a failure to adhere to ethical guidelines coincides with the falsification of data. For example, in 1995, South African researcher and professor Werner Bezwoda conducted clinical trials to test a new treatment on of women with Stage 4 (metastatic) breast cancer.[101] In the 1999 meeting of the American Society of Clinical Oncology, he reported extremely favorable outcomes as a result of an expensive treatment of high-dose chemotherapy combined with bone marrow or stem cell transplants.[102] When an on-site investigative team reviewed the trial data to verify Dr. Bezwoda's findings, they found "substantial evidence of scientific misconduct."[103] One-third of the trial subjects had not been officially enrolled and lacked any paperwork to verify their informed consent had been obtained or their eligibility to participate in the trial.[104] Many other patient files were incomplete or inconsistent with medical

[95] Ibid.

[96] Daniel Levinson. "The Food and Drug Administration's Oversight of Clinical Trials." Office of the Inspector General. 2007. < http://oig.hhs.gov/oei/reports/oei-01-06-00160.pdf>

[97] Levinson, "The FDA's Oversight of Clinical Trials," 5.

[98] Interagency collaboration, 21 U.S.C. § 393(c)(2009).

[99] Levinson, "The FDA's Oversight of Clinical Trials."

[100] Levinson, "The FDA's Oversight of Clinical Trials," ii.

[101] Richard Horton. "After Bezwoda." The Lancet 355 (2000): 942-943.

[102] Christopher Weir and Gordon Murray. "Fraud in clinical trials: Detecting it and preventing it." The Royal Statistical Society. December 2011.

[103] Raymond B. Weiss, Robert M. Rifkin, et al. "High-dose chemotherapy for high-risk primary breast cancer: an on-site review of the Bezwoda study." The Lancet 355 (2000): 999-1003.

[104] Ibid.

records.[105] Furthermore, Dr. Bezwoda never submitted his research protocol to the sponsoring university's Committee for Research on Human Subjects for review, and failed to report three deaths that occurred as a result of his treatment. Before Dr. Bezwoda's findings were disproved, more than 30,000 American women opted for the procedure, which cost about $100,000 per treatment.[106] Ten to twenty percent died after receiving the treatment, and the difference between the survival rates of those receiving the new therapy compared to the standard treatment was negligible.[107]

The FDA's attempt to divert responsibility, by requiring that researchers abide by the clinical regulations of the host country, is as ineffective as asking them to use their own judgment in making ethical decisions. Before 2005, the majority of African countries had no mechanisms in place to regulate clinical research at all, and those that did gave no authority to any one agency to approve, inspect, or terminate clinical trials if deemed noncompliant with research standards.[108] In 2007, 116 researchers were interviewed who were conducting trials in Sudan; it was revealed that 53 of them were oblivious to the existence of governmental ethical committees, which

had been established in Sudan in 1979.[109]

Because many African countries lack the infrastructure and resources to provide medical care to their citizens, in many cases the absence of regulation is deliberate. In efforts to supply their populations with health support and beneficial research, the governments of these nations often seek to attract pharmaceutical companies by stripping regulations and restrictions on research, or intentionally not enforcing them.[110] Today, 40% or more clinical trials are taking place in Asia, Eastern Europe, and Latin America, where there are no required registry systems in place to keep track of the research conducted.[111] This makes it easy to exploit the lax regulation and minimal supervision. Research subjects from developing countries are also increasingly vulnerable due to the flexible informed consent guidelines of CIOMS, adjusted in an effort to cater to the communal realities that exist in parts of the developing world. Additionally, regional agreements fail to represent shared values and a streamlined system of regulation. [112]

In April 2008, the FDA announced that they would no longer require clinical research conducted

[105] Ibid.
[106] Thomas H. Maugh II and Rosie Mestel. "Key Breast Cancer Study Was a Fraud." *Los Angeles Times.* April 27, 2001.
[107] Susan Dentzer. "A Questionable Cure: Bone Marrow Transplants." *PBS.* May 13, 1999.
[108] D. Maiga, BD Akanmori, L. Chocarro. "Regulatory oversight of clinical trials in Africa: progress over the past 5 years." *Vaccine* 52.27 (2009): 7249-52.
<http://www.ncbi.nlm.nih.gov/pubmed/1974858 0>

[109] DE Elsayed and NE Kass. "Assessment of the ethical review process in Sudan." *Developing World Bioethics* 7.3 (2007): 143–8.
[110] Benjamin Mason Meier. "International Protection of Persons Undergoing Medical Experimentation: Protecting the Right of Informed Consent." *Berkeley Journal of International Law* 513.20 (2002): 532–33.
[111] Keya Acharya. "India: Prime Destination for Unethical Clinical Trails." *Inter Press Service.* December 14, 2007.
<http://www.commondreams.org/archive/2007/ 12/14/5838>
[112] Meier, "International Protection of Persons Undergoing Medical Experimentation," 534.

abroad to comply with the Declaration of Helsinki. Rather, they must follow the Guideline for Good Clinical Practice, a standard "for the design, conduct, performance, monitoring, auditing, recording, analysis, and reporting of clinical trials in a way that provides assurance that the data and reported results are credible and accurate, and that the rights, safety, and well-being of trial subjects are protected."[113] The motives behind the shift were based on the idea that GCP provides more specific instructions and guidelines on how to responsibly monitor the trials and report harmful incidences, as well as ensures data quality and reliability by necessitating the submission of detailed information regarding adherence to protocol. Furthermore, since the Declaration of Helsinki is a document that is international by nature and privy to change independent of FDA authority, future revisions might conflict with U.S. laws and regulations, and GCP avoids this potential conflict.[114]

The FDA is the oldest, and one of the most powerful, regulatory agencies in the U.S., wielding authority over almost a quarter of Gross National Product and supervising more than one trillion dollars worth of consumer goods and one-third of all imported products.[115,116] Considering the vast number of economic and political interests affected by the practices of the FDA, the degree to which

they may influence policymaking and regulatory decisions requires examination. Capture theory, a model put forth by Samuel Huntington (1952) and Marver Bernstein (1955) in the 1950s, suggests that older and established members of industry are better able to make political connections, and thus more capable of influencing regulations that benefit them and restrict smaller firms.[117] The theory pertains to members of an industry sector whose dealings are affected by certain policy decisions, who then attempt to influence the process in pursuit of favorable policy outcomes. Regulatory capture occurs when these interest groups succeed in influencing public officials in "identifying with the interests of a client or industry."[118] There are two types of capture. The traditional form is "entry-barrier" capture, which strengthens regulation so that one section of industry is more privileged than the rest and market entry is more difficult. The other, more recently prevalent, form is called "corrosive" capture, which involves industry members pushing for deregulation and weaker enforcement.[119]

In recent years, industry capture

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[113] Foreign Clinical Studies Not Conducted Under an Investigational New Drug Application. 21 C.F.R. § 312.120 (2008).
[114] http://www.regulations.gov/#!documentDetail;D=FDA-2004-N-0061-0002;oldLink=false
[115] Food and Drug Administration. "Operations in a Global Environment." 2008.
[116] Gardiner Harris. "The Safety Gap." *The New York Times.* October 31, 2008.

[117] Daniel P. Carpenter. "Protection without Capture: Product Approval by a Politically Responsive, Learning Regulator." *American Political Science Review* 98.4 (2004): 613.
[118] Gary Adams, Sharon Hayes, Stuart Weierter, John Boyd. "Regulatory Capture: Managing the Risk." Australian Public Sector Anti-Corruption Conference. Sydney, 2007. <http://www.iceaustralia.com/apsacc2011/pdf/papers07/day1_24oct07/StreamA2/RegulatoryCaptureManagingTheRisks_JohnBoyd.pdf>
[119] Daniel P. Carpenter. "Corrosive Capture? The Dueling Forces of Autonomy and Industry Influence in FDA Pharmaceutical Regulation." In Daniel Carpenter and David Moss (Eds.), *Preventing Capture: Special Interest Influence in Regulation, and How to Limit It.* The Tobin Project, 2011.

has shifted to the corrosive direction. In Washington, the eagerness to deregulate has resulted in lax consumer and environmental standards, freeing the private sector from government oversight of food safety, controls on greenhouse gas emissions, offshore drilling, and drinking water quality.[120,121] Some argue that the promotion of the idea, "most regulation is unnecessary at best and downright harmful at worst," has reinforced the public's distrust of governmental involvement in industry, and delegitimized the idea of regulation itself.[122] Dr. Marcia Angell, former editor-in-chief of the *New England Journal of Medicine*, wrote that the pharmaceutical industry specifically targets the FDA and exerts its influence by pushing legislation drafted by industry lobbyists, as well as through the administrative management of agencies "that are beholden to industry, and sometimes...openly hostile to the very idea of regulation."[123] This has created a political environment in which agencies are pressured to cooperate with, rather than supervise, the industries they are obligated to regulate.

As recently as a couple of decades ago, pharmaceutical companies relied on academic researchers and physicians to conduct clinical drug trials. This reliance was based on the pharmaceutical companies' lack of expert staff and resources to design and execute the trials. Academic medical centers were able to supply their patients as research subjects, and the reputation of academic publications was needed to market the drugs.[124] But academic researchers, with many responsibilities (including teaching, research and patient care) in addition clinical drug trials, found it increasingly difficult to carry out trials and produce medicines at the rate pharmaceutical companies wanted. Academic research offices and institutional review boards continued to delay the commencement of trials due to their slow review process of proposals. A drug manufacturer, on average, loses $1.3 million every day a drug's FDA approval is delayed.[125] Once the pharmaceutical industry found that it was more cost effective to employ their own research physicians to design and oversee clinical trials much faster, their reliance on academia decreased considerably.[126]

Before 1980, the pharmaceutical industry had minimal influence on those who were recruited to research their products. Academic institutions that were paid to conduct studies had full responsibility and control over designing research procedure, analyzing and interpreting trial data, writing up results, and deciding where and how to report them. This allowed researchers and the institutions they worked for to have minimal ties to the companies that

[120] Jeffrey Smith. "A Last Push to Deregulate." *The Washington Post.* October 31, 2008.
[121] Dana Milbank. "Budget cuts as back-door regulation." *The Washington Post.* April 2, 2012.
[122] James Surowiecki. "The Regulation Crisis." *The New Yorker.* 2010. <http://www.newyorker.com/talk/financial/2010/06/14/100614ta_talk_surowiecki>
[123] Marcia Angell. "FDA: This Agency Can Be Dangerous." Review of *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA*, by Daniel Carpenter. The New York Review, 2010. <http://www.ahrp.org/cms/images/stories/articles/angell_fda_dangerous.pdf>

[124] Thomas Bodenheimer. "Uneasy Alliance— Clinical Investigators and the Pharmaceutical Industry." *New England Journal of Medicine* 342 (2000): 1539-1544.
[125] Ibid, 1540.
[126] Ibid, 1540.

sponsored them. But recently, pharmaceutical sponsors have strengthened their authority and input regarding product research; they often design the studies, analyze the data, write the report, and decide how and where to publish them. Recent studies have demonstrated that the industry's increased influence on the research of its products has created conditions in which sponsors may alter or frame trial data in order to make them appear safer and more effective.[127] While academic researchers had minimal financial ties to their sponsors before, now they often "serve as paid consultants and members of speakers' bureaus and advisory boards and sometimes even have equity interest in the companies."[128] Another study demonstrated that approximately two-thirds of academic medical institutions hold equity interest in pharmaceutical companies that sponsor research in those institutions, two-thirds of medical school department chairs receive departmental income from drug companies, and three-fifths receive personal income from those companies.[129]

In 1992, Congress passed the Prescription Drug User Fee Act (PDUFA), renewable every five years, which necessitates that pharmaceutical companies pay fees for regulation of their products. Companies pay around $300,000 to apply for drug approval, an annual fee of $145,000 for each manufacturing base, as well as a fee per product.[130] In return, the FDA must

adhere to stricter approval deadlines and improve responsiveness to companies during the drug development process. The new law was passed to help the FDA accelerate its costly monitoring and reviewing operations. In the late 1980s, drug approval times averaged at 30 months. In 1999, the median approval time was 11.6 months.[131] Marcia Angell, in her article "Taking Back the FDA," criticizes the law, which she says "puts the FDA on the payroll of the industry it regulates... [And] makes it more likely that drugs will be reviewed favorably."[132] Smaller pharmaceutical companies are put at a disadvantage; one British producer protested that the new user fees were even greater than revenue from U.S. markets.[133] Although user fees increased over the years, faster approval times are financially beneficial to the industry in the long run—"if you pay $500,000 in user fees and get your [New Drug Application] approved one month earlier, you make more money... [It's] one of the few examples of paying the government an outrageous amount of money and you get back more than you pay."[134] In 2002, the FDA was estimated to receive $162 million in user fees, which is nearly half the cost of reviewing drugs.[135] Because PDUFA is a renewable law and the FDA now relies so heavily on funding from

[127] Marcia Angell. "Industry-Sponsored Clinical Research: A Broken System." *JAMA* 300.9 (2008): 1069-1071.
[128] Ibid, 1070.
[129] Ibid, 1070.
[130] Ray Moynihan. "Science, industry, and politics at the FDA." *British Medical Journal* 327.160

(2003).
[131] Public Citizen. "Problems in the New Drug Approval Process: A Case Study of Lotronex." 2010.
<http://www.citizen.org/congress/article_redirect.cfm?ID=7442>
[132] Marcia Angell. "Taking Back the FDA." *The Boston Globe.* February 26, 2007.
[133] Fran Hawthorne. *Inside the FDA: The Business and Politics Behind the Drugs We Take and the Food We Eat.* John Wiley & Sons. (2005): 152.
[134] Ibid, 152.
[135] Moynihan, "Science, industry, and politics at the FDA."

pharmaceutical companies, industry is in a prime negotiating position and can threaten to challenge the PDUFA renewal and withdraw funding.

David Williams, in his 2001 Pulitzer Prize-winning *Los Angeles Times* article, revealed that the FDA was mounting enormous pressure on its drug reviewers to work more quickly. An anonymous pharmacologist working in the FDA's scientific investigations division admitted, "the devil is in the details, and detail is something we no longer have the time to go into."[136] William Schultz, the FDA deputy commissioner from 1995-1999, explained: "You can meet the goal by either approving the drug or denying the approval. But there are some who argue that what Congress really wanted was not just decisions, but approvals. That is what really gets dangerous."[137] Kathleen Holcombe, a former FDA legislative affairs staffer and congressional aide, pointed out that while historically, the FDA operated according to the motto, "'Regulate, be tough, enforce the law, and don't let one thing go wrong,'" the FDA more recently "sees itself much more in a cooperative role" with the pharmaceutical industry.[138]

In 1998, Public Citizen, a nonprofit, consumer rights advocacy group, surveyed FDA Medical Officers in charge of reviewing drug applications and found that out of the fifty-three who responded to the survey, nineteen officers recalled twenty-seven market-approved drugs

they believed should not have been approved. A study done in 2005, by Edmund Pezalla, revealed that that more than 51% of market-approved drugs may have had severe adverse effects that went undetected before approval.[139] In 2009, the FDA recalled 1,742 prescription medications from the market, growing 309% from just 426 in 2008.[140]

Most criticism directed at the FDA rests on its perceived inability to efficiently respond to the safety concerns surrounding already approved drugs and their failure in post marketing safety surveillance. This is perhaps due to the FDA's lack of "clear and effective processes for making decisions about, and providing management oversight of, post market safety issues."[141] Dr. David Graham, an epidemiologist working as the Associate Director of the FDA's Office of Drug Safety, condemned the FDA for dealing with safety concerns in a perverse way that makes consumer welfare a peripheral responsibility. He wrote that the FDA refuses to act on safety concerns and alarming evidence during the preapproval process that may point to potential complications unless there is "complete certainty" of an increased risk due to the medication. This practice fails to protect consumers, is partial to industry interests, "rewards drug companies for not aggressively pursuing safety questions, and guarantees that

[136] David Willman. "How a New Policy Led to Seven Deadly Drugs." *Los Angeles Times.* December 20, 2000. <http://www.latimes.com/news/nationworld/nation/la-122001fda,0,4840718,full.story>
[137] Ibid.
[138] Ibid.

[139] Edmund Pezalla. "Preventing adverse drug reactions in the general population." *Managed Care Interface* 18.10 (2005): 49-52.
[140] Parija Kavilanz. "Drug Recalls Surge." *CNN Money.* August 2010.
[141] BM Psaty, SP Burke. "Protecting the health of the public: Institute of Medicine recommendation on drug safety." *New England Journal of Medicine* 355.17 (2006): 1753-5. <http://www.ncbi.nlm.nih.gov/pubmed/17030843>

some drugs with major safety problems will be approved, and, once approved, will remain on the market, even in the face of extensive patient harm."[142] This serves as evidence that the FDA is more interested in getting drugs on the market, rather than thoroughly evaluating the drugs, especially once they have already been market-approved.[143]

In a report prepared for Rep. Henry Waxman in 2006 by the Committee on Government Reform, the FDA's enforcement record was examined over the course of a 15-month investigation. The Committee reported that FDA enforcement in every sector had declined by over 50% since 2000, during the Bush Administration.[144] The FDA issued 50% less warning letters for regulation infringements, and confiscated 44% less mislabeled, defective, or dangerous products. Furthermore, FDA officials failed to act on the recommendations of agency field inspectors reporting violations in 138 cases. The report also mentioned the decline in FDA enforcement was not a result of manufacturers' increased level of adherence to regulation, and that FDA field inspectors found no decrease in

violations from years before.[145] In response to these statistics, Dr. Jerry Avorn, an expert consultant, characterized the FDA as "an agency unwilling to exert its regulatory authority in defense of the public's health."[146] The only measure of FDA enforcement that increased in the five-year span was the number of drug recalls. In 2000, 3,716 FDA-regulated drugs were recalled. In 2005, the number of recalls increased by 44%, to 5,338.[147] This increase indicates the FDA's serious neglect of adequate pre-approval measures.

Dr. Sidney Wolfe, Director of Public Citizen's Health Research Group for more than thirty years, laments the unprecedented rise of health complications and deaths due to unsafe prescription drugs, emphasizing the number of clear warning signs that surface before and immediately after unsafe drugs come on the market. "In all cases, once they came on the market, there was a very dangerous and reckless slowness to respond to the signals that came after marketing."[148]The failures of the pre-approval phase as well as of the post-market safety surveillance phase contribute to delays in pulling drugs off the market – delays that cost thousands of lives. The U.S., compared to other first world countries like France and the United Kingdom, has an ineffective system of reporting adverse events of prescription drugs. Dr. Wolfe approximates that only between 1-10% of adverse reactions from prescription

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[142] Russell G. Thornton. "Preemption, tort reform, and pharmaceutical claims." *Baylor University Medical Center* 21.1 (2008): 82-92. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2190559/>
[143] Jerry Avorn. "Paying for Drug Approvals – Who's Using Whom?" *New England Journal of Medicine* 356 (2007): 1697-1700. <http://www.nejm.org/doi/full/10.1056/NEJMp078041>
[144] Committee on Government Reform, Special Investigations Division. "Prescription for Harm: The Decline in FDA Enforcement Activity." June 2006. <http://oversight-archive.waxman.house.gov/documents/20060627101434-98349.pdf>

[145] Ibid, i.
[146] Letter from Dr. Jerry Avorn to Representative Henry A. Waxman (May 25,2006).
[147] Committee on Government Reform, Special Investigations Division, "Prescription for Harm: The Decline in FDA Enforcement Activity," 9.
[148] Sidney Wolfe interview.

drugs are reported to the FDA. This increases the time it takes to pull the drug from the market or enforce a black box warning.[149] Dr. Wolfe goes on to claim that post-market surveillance analyses are often received poorly or with hostility by FDA officials, who "are wedded to the idea that when they approved the drug, it must have been OK or we wouldn't have approved it… [They] tend to take very, very negatively the criticism that comes from those people that do post-market surveillance."[150]

Jim Dickinson, an established columnist and the editor of *FDA Review*, has tracked FDA policy developments and deregulatory shifts for the past three decades, wrote in 2010:

> "It has taken almost a generation, but by now, the pro-industry infiltration of FDA's culture is firmly entrenched. Not only is collaboration in product reviews officially encouraged, but good relationships across the regulatory fence hold the prospect of a possible future career in a well-paid industry job – a connection that is less likely to be publicly noticed in news media that now have to line up for information that has been filtered through agency press offices. The arm's-length relationship that formerly ruled every contact between agency and industry has become a

fading memory."[151]

The FDA and pharmaceutical industry collaborate in other harmful ways – a phenomenon dubbed "the revolving door," which occurs in every regulatory agency and level of government. Many FDA employees find themselves working as consultants for pharmaceutical companies after their stint at the agency.[152] This is a concern especially when drug reviewers, still employed by the FDA, but looking to apply for jobs at large pharmaceutical companies in the near future, are hesitant to give unfavorable reviews. The Center for Responsive Politics published a report in 2006 listing fifty-three individuals who at one time worked for various government agencies, and had either before or afterwards worked for a private sector employer in the health industry.[153] Billy Tauzin, a member of the House of Representatives (1980-2005) and the Chairman of the House Energy & Commerce Committee, which was highly influential in drafting the Medicare drug benefit, went on to become the President of the Pharmaceutical Research and Manufacturers of America (PhRMA) in 2005.[154] Michael Friedman, the Acting Commissioner of the FDA (1997-1998),

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149 Ibid.
150 Ibid.

151 Merrill Goozner. "FDA More Pro Industry than Any Time in 35 Years." The Health Care Blog. January 16, 2010.
152 Hawthorne, *Inside the FDA: The Business and Politics Behind the Drugs We Take and the Food We Eat,* 150.
153 Consumer Project on Technology. "Revolving door between the U.S. Government and Industry." February, 2006.
<http://www.cptech.org/ip/health/politics/revolvingdoor.html>
154 William M. Welch. "Tauzin switches sides from drug industry overseer to lobbyist." *USA Today.* December 15, 2004.
<http://www.usatoday.com/money/industries/health/drugs/2004-12-15-drugs-usat_x.htm>

later became the Senior Vice President of the Pharmacia Corporation, and PhRMA's Chief Medical Officer for Biomedical Preparedness.[155] Gerald J. Mossinghoff, the former Assistant Secretary of Commerce and Commissioner of Patents and Trademarks from 1981-1985, became a registered lobbyist for PhRMA in 1998. Susan K. Finston, who formerly worked at the State Department in the Office of Intellectual Property and Competition, now works as the Assistant Vice President for Intellectual Property and Middle East/African Affairs at PhRMA. Edward Allera, the Associate Chief Council for Enforcement at the FDA from 1974-1978, later became a partner at a law firm with clientele including Pfizer and PhRMA, and a lobbyist for Johnson & Johnson in 1998. These are only a few examples of high-level state officials who later would go on to work for the very industry they worked for years to regulate.

Daniel Carpenter, a professor of government at Harvard, published a study in 2002 in which he reviewed 450 drugs approved by the FDA between 1977 and 2000. He concluded that the most prominent sources of influence were "the number of times a disease was mentioned in *The Washington Post*, the budget of the Center for Drugs, and the budgets of patient advocacy groups."[156] In other words, FDA approval rates are spurred by public pressure and available resources. Although Carpenter's study did not look at industry influence, he admitted, "Firm attributes undoubtedly sway the FDA's decision making in drug approval

cases."[157] Also, the pharmaceutical industry is known to make direct contributions and giving support to patient advocacy groups, which are often the parties that attract media attention.

Carpenter also studied the bias against small companies that permeates the approval process. It is an accepted fact that large, established companies face fewer obstacles in obtaining drug approval. Carpenter studied 766 drugs submitted between 1979 and 2000, and analyzed review times, political contributions from companies, the ownership of companies, and the budgets of patient advocacy groups. He found that large companies often complete the approval process much faster. After a 15-month review process, more than 40% of products submitted by large companies were approved while only 15% of products from small companies were given approval. He attributed this to "the greater regulator familiarity that large firms enjoy," explaining that having a prior relationship with the agency can result in a 55% advantage in approval times.[158]

To illustrate how the FDA appeases the pharmaceutical industry in regulatory practice, I will take closer look at the development, approval process, and post marketing surveillance measures of a drug called Lotronex. This case study epitomizes the FDA's heavy reluctance to act on the recommendations of its drug reviewers and in the best interest of the consumer population,

[155] "Michael A. Friedman: Profile." *Forbes.* <http://people.forbes.com/profile/michael-a-friedman/68507>

[156] Hawthorne, *Inside the FDA*, 154.

[157] Ibid, 158.

[158] Daniel Carpenter, Brian Feinstein, Colin Moore, et al. "Why Do Bigger Firms Receive Faster Drug Approvals?" *Harvard Medical School.* (2004): 29. <http://people.hmdc.harvard.edu/~dcarpent/whybigfast1.pdf>

prioritizing industry interests over safety concerns.

In July 1999, GlaxoWellcome (now GlaxoSmithKline) submitted a New Drug Application for Alosetron (Lotronex), a drug developed to treat irritable bowel syndrome in women. Irritable bowel syndrome is not a fatal condition, but Lotronex was given an accelerated review. Although 27% of the women in the clinical trial experienced constipation and 10% had to withdraw from the study, Glaxo labeled constipation an "infrequent side effect," even though constipation can cause severe complications in women with IBS.[159] The medical officer reviewing the drug noticed that there were four cases of ischemic colitis, a serious and rare condition, which occurred in the experimental group during the trials.[160] The review noted that this "[represents] a signal of a potentially serious problem that should be anticipated, perhaps even more severely expressed, if the drug is approved for clinical use."[161] Despite the fact that only 10-20% of trial subjects reported improvement due to Lotronex and women in one trial group reported a level of relief between 0.12-0.14 (on a scale of 0-4) higher than women in the

placebo group, the drug was approved in February of 2000.[162,163] Less than two months later, a multitude of adverse events were reported, including eight cases of ischemic colitis and six hospitalizations.[164] The FDA reconvened to review its decision, attempting to label Lotronex with a black box warning. Glaxo protested, and they agreed instead to include a Medication Guide with each prescription to describe symptoms of dangerous side effects.[165] But by November, five patients were dead and there were many more reports of adverse effects.[166]

In November 2000, FDA Medical Officers rejected Glaxo's risk management proposals and insisted, "the sponsor has not identified a subset of women who will respond to Lotronex therapy safety... a risk management plan cannot be successful that will eliminate deaths, colectomies, ischemic colitis, and complications of treatment that were never seen previously in the management

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[159] Sidney Wolfe, M.D., Director of Public Citizen s Health Research Group, in testimony before the U.S. Food & Drug Administration's Gastrointestinal Drugs Advisory Committee and the Drug Safety and Risk Management Subcommittee of the Advisory Committee for Pharmaceutical Science, April 23, 2002.

[160] Public Citizen's Health Research Group, "Petition to the Food and Drug Administration to remove Lotronex from the market," Publication #1533; August 31, 2000.

[161] John R. Senior, M.D., "FDA Medical Review: Lotronex, NDA 21-107, 90-Day Safety Update" November 30, 1999, p. 22.

[162] Joseph Shapiro, "A pill turned bitter: How a quest for a blockbuster drug went fatally wrong," *U.S. News & World Report*, Vol. 129, Issue: 23: December 11, 2000.

[163] Public Citizen's Health Research Group, "Petition to the Food and Drug Administration to remove Lotronex from the market," Publication #1533; August 31, 2000.

[164] Ibid.
[165] Ibid.
[166] Department of Health and Human Services. Lotronex (alosetron) safety and risk management summary. Memorandum PID [D000674, 16 November 2000.
<www.citizen.org/documents/1566.pdf>

of IBS."[167] Despite this, the FDA proposed the "restricted distribution" of Lotronex, although Glaxo opted to pull Lotronex from the market, having already made $56 million off the drug.[168]

In response to a public outcry and patients' willingness to accept the risks associated with Lotronex, Glaxo applied to re-market the drug in December of 2001. Although safety reviewers emphasized, "potentially everyone who takes Lotronex is at risk," the FDA advisory committee reapproved the drug in 2002, under the condition that the dosage would be halved and restricted to patients who had exhausted traditional forms of treatment.[169] As a result of his experience, Dr. Paul Stolley, who joined the FDA in 2000 as a senior consultant assigned to examine the post marketing safety of Lotronex, went on to become a contributing staff member at Public Citizen, a consumer advocacy group. He spoke out against the FDA, which he called "a servant of industry," after the re-approval of Lotronex: "I think it's a shame how it has fallen down on the job, and Lotronex is a perfect example. The FDA

was in partnership with industry. It should have been negotiating, not in partnership. Why was it in partnership? Because it's financially supported by industry."[170]

CONCLUSIONS

The era of globalization has facilitated the emergence of a new set of global health problems that challenge the traditionally unilateral and domestic approaches of state efforts. Regulatory agencies like the FDA are no longer able to fully address the public health threats that endanger their populations or the jurisdictional limitations that hinder their regulatory authority. The globalization of clinical research necessitates an expansion of ethical oversight. International codes of conduct contribute important substantive standards, but lack legal enforcement mechanisms, and fail to be widely implemented due to the absence of competent regulatory agencies in many parts of the developing world. The FDA has enormous potential to protect research subjects and enforce ethical standards due to its position as the gatekeeper to the most profitable market for prescription drugs in the world. In 2005, the U.S. spent more on prescription drugs than Australia, Canada, Germany, Netherlands, New Zealand, and the United Kingdom combined.[171] With this level of influence, any improvement in the FDA's regulatory efficacy would be valuable in

[167] Kathleen Uhl, Zili Li, Ann Corken Mackey, and Paul Stolley. "Lotronex Safety & Risk Management Summary." FDA. Center for Drug Evaluation and Research. April 23, 2002. <http://www.fda.gov/ohrms/dockets/ac/02/briefing/3848B1_02_FDA%20Lotronex.pdf>

[168] U.S. Food and Drug Administration, "Glaxo Wellcome Decides to Withdraw Lotronex from the Market," Talk paper: T00-65; November 28, 2000.

[169] Department of Health and Human Services, Food and Drug Administration, Center for Drug Evaluation and Research. Gastrointestinal Drugs Advisory Committee and Drug Safety and Risk Management Subcommittee of the Advisory Committee for Pharmaceutical Science, 23 April 2002. <www.fda.gov/ohrms/dockets/ac/02/transcripts/3848T1.pdf>

[170] Ray Moynihan. "Alosetron: a case study in regulatory capture, or a victory for patients' rights?" British Medical Journal 325 (2002): 592-595. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1124108/pdf/592.pdf>

[171] S. Morgan and J. Kennedy, Prescription Drug Accessibility and Affordability in the United States and Abroad, The Commonwealth Fund, June 2010.

ensuring ethical and technical clinical compliance internationally.

But as much as agency capacity is limited by resources, international collaboration, and jurisdictional limitations, it is even more profoundly debilitated by industry interests. As I have demonstrated, FDA control has been gutted by a complex process of industry capture. In a political climate brimming with anti-regulatory opinion, conflicts of interest are becoming more and more embedded into agency structure: the revolving door between industry and agency, and the Prescription Drug User Fee Act increasingly put regulators at odds with their duties. In order to pursue the expansion of regulatory oversight both domestically and abroad, industry influence must be limited. To prevent the occurrence of the revolving door paradigm, stringent conflict of interest laws must be implemented to restrict former high-ranking FDA officials from becoming pharmaceutical company board members. In the interest of consumer safety, the FDA should enforce and enhance post market safety surveillance, and expedite drug recalls when significant reports of adverse effects first emerge. Continued apathetic inaction regarding the industry's influence on pharmaceutical regulation is a gross disregard for consumer safety and research subject welfare.

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Taste and Odor Problems in Clinton Lake Reservoir's Drinking Water

Diana L. Restrepo-Osorio (McNair Scholar)
Department of Ecology and Evolutionary Biology,

INTRODUCTION

Water is a requirement for human health and welfare; however, an exceedingly large number of people around the world lack reliable sources of drinking water[1]. According to the World Health Organization, approximately 3.5 million people die every year, generally in developing countries, from diseases linked to poor water supplies[2]. The United States of America has one of the best drinking water supply systems in the world. According to the United States Geological Service (USGS), an average person in the U.S. uses 80-100 gallons per day[3]. Americans often take for granted the availability of water, and seldom do they question its quality. However, humans' keen senses are able to detect minute levels of chemicals causing taste and odor in water, and when this happens, institutions treating drinking water are often the first to be blamed. Great efforts are being made, however, to build public awareness that every person plays a major role in reducing pollution that leads to taste and odor problems, and that water treatment facilities alone may be inadequate to provide high quality drinking water to our communities.

BACKGROUND

More than 100,000 people in northeast Kansas get their drinking water from Clinton Lake reservoir. The Army Corp of Engineers built Clinton Lake reservoir in 1977 for flood control; however, it serves multiple purposes, such as swimming, boating, fishing, municipal water supplies, etc.[4,5]. The reservoir covers an area of 30.81 km^2 with an average depth of 5.1m. Clinton reservoir is located in the Wakarusa River watershed[6,7], which encompasses 95,320 ha, including Deer Creek and Rock Creek which are major tributaries [4,5,8]. According to KDHE, the watershed is primarily used for agriculture (Table 1)[9]. Most of the runoff that drains into the tributaries, therefore, comes from agricultural land, which generally contains elevated amounts of fertilizers, pesticides, manure, etc. Yearly weighted input of non-point fertilizer ranges from 1,604 to 2,312 metric tons for nitrogen (N) and from 269 to 325 metric tons for phosphorous (P) [8]. Local water-treatment plants have difficulty adequately treating this non-point pollutant runoff, and currently it is not adequately regulated by the Kansas Department of Health and Environment or the U.S. Environmental Protection Agency. In the US, non-point pollutants are the most challenging to control and the most significant cause of water pollution in the Kansas River [7].

In contrast, point source pollutants are those that drain into a river via an identifiable location such as a pipe or a conduit and are carefully regulated by EPA and KDHE. The types of pollutants and their amounts are regulated by the National Pollutant Discharge Elimination

System (NPDES) with the Clean Water Act permit program[7]. Although point source pollutants are regulated, immense amounts are discharged into the Wakarusa watershed; two wastewater treatment plants release up to 1.12 million liters per day into tributaries of the Wakarusa River, and there is an NPDES permitted hog feed yard situated in the Deer Creek arm [8], which is one of the main tributaries of Clinton Lake reservoir. These point source pollutants, together with non-point pollutants greatly affect the water quality of the reservoir.

Nutrients such as nitrogen and phosphorous are found naturally in water bodies and are needed by all aquatic organisms in low levels. When these nutrients rise to abnormally high quantities, however, the balance of the water ecosystem is disturbed [7]. Clinton reservoir is eutrophic (Table 2), which results from excess nutrients increasing the unwanted growth of blue-green algae (cyanobacteria) [4]. When conditions are optimal, these cyanobacteria are able to create large biomasses or algal blooms. When this large amount of organic material decays, it uses dissolved oxygen (DO), and if the DO level falls below a certain threshold, fish kills can happen readily[7]. Cyanobacteria biomasses are said to be responsible for taste and odor problems in drinking water and in addition, it also decreases recreational value[7]. Cyanobacteria produce an organic chemical called geosmin that dissolves in water. This is responsible for the earthy/musty taste and odor residents perceive during certain times of the year[8], especially during the fall and winter months [5]. Unfortunately, the water treatment

method used today has not been able to completely remove geosmin from drinking water. In December of 1995, the level of geosmin rose to such high levels that the City of Lawrence Clinton Lake Water Treatment Plant was shut down due to the high number of customer complaints[8].

There are three dominant taxa of cyanobacteria residing in Clinton reservoir: *Microcystis* sp., *Aphanizomenon* sp., and *Anabaena* sp. *Aphanizomenon* sp. was found to be most common during late spring (May-June) and *Anabaena* sp. accounted for over 90% of biomass during the summer and early fall (June-October) [5,10]. Cyanobacteria and algal blooms affect the aesthetics and, therefore, the recreational value of the reservoir. Clinton reservoir has a large economic impact on the City of Lawrence[11]. In 2007, this reservoir was the most visited out of 17 reservoirs around the area with 2,008,108 visits in a year. According to Smith et al. visitor spending generated $30.4 million and 423 jobs in the region[11]. It is in the residents' and authorities' best interest to successfully manage the state of cyanobacteria at this reservoir due to the multipurpose nature of the reservoir and the many impacts caused by the presence of blue-green algae.

The Army Corp of Engineers controls the public land surrounding Clinton Lake reservoir, which includes the lacustrine and transitional zones of the reservoir; however, riverine zones are mostly privately owned, and the local authorities are unable to monitor the pollutant input resulting from this land (Fig 1). Deer Creek, the Wakarusa River, and Rock Creek are

the main tributaries of Clinton reservoir. The smaller streams feeding these tributaries are commonly located in private land and much of the pollutants coming from these are thought to directly affect the reservoir.

METHODS

The study was carried out during the summer of 2010. Sites were chosen in places that seemed to account for input from all small streams that drained into Rock Creek (1,2,3,5); one (4) site was chosen to be in a larger stream that drains into the creek of interest (Fig 1). Sample site 1 was designated as the reservoir site, sample sites 2 and 3 were midstream sites, and sample sites 4 and 5 were headwaters sites.

Field Measurements of WATER QUALITY
Turbidity

A turbidity tube, which consists of a clear Plexiglass tube with a small Secchi disk at one end, was used. The tube was filled with water from the stream, the water level was slowly lowered through a release valve and when the disk became visible, the depth of the water was measured in centimeters. This provides a measure of suspended solids (such as sediment or algae) in the water column[12].

Phosphorous

Phosphorous (P) is one of the limiting factors for aquatic plant growth. This element enters a stream in several ways including: industrial waste, treatment plant wastewater, stormwater runoff, runoff from agricultural land, livestock waste, and others. According to the Citizen

Science Fact Sheet W-5, a major phosphorous input comes from soil runoff from erosion of areas that have been recently treated with fertilizer[13].

Phosphorous was measured by taking sample water from the sampling sites and was processed using a CHEMets orthophosphate test kit. Phosphorous is rarely detected in surface water unless it was recently added; therefore, any P detected with this kit was added shortly before testing took place. According to the Kansas Department of Health and Environment, 0.1ppm of phosphorous can have detrimental effects on aquatic life. The kit test used for this experiment tests for phosphorous in its PO_4 form which presents a chronic criteria level of 0.3ppm which is three times greater than the equivalent phosphorous value of 0.1ppm[13].

Nitrogen

Decomposing plants become organic debris and release ammonia (NH_3), followed by bacteria which converts it to nitrite (NO_2). Next, bacteria carry out the conversion of NO_2 to nitrate (NO_3), which is then used by plants such as algae for growth. Consuming excessive nitrate in drinking water (>10ppm) is not only dangerous to wildlife but to pregnant women who can develop serious health concerns such as blue baby syndrome[12].

Hach test strips were used for this experiment; nitrate is tested on a 1-50ppm range, nitrite on a 0.15-3.0ppm range on the same strip and ammonia on a 0.25-6.0ppm. According to the Citizen Science Fact Sheet W-4, there are no quantitative national or state standards established for nitrate/nitrite.

Velocity

Streams have characteristic higher velocities when compared to lakes, a factor that is important to this study given that the sampling sites vary in velocities depending on their location from the headwaters to the reservoir. In this study, velocity was measured along a 100 ft stretch at the sampling site using an ice cold orange, which used as a float, and a timer[14].

Chlorophyll a Concentrations

Samples were processed at the Kansas Biological Survey the same day they were collected using a five-sample vacuum by filtering approximately 200ml of sample with Gelman A/E filters, Daigger Catalog Number EF8583K, these filters were folded in half and placed inside a labeled Fisher Qualitative P8 filters, Fisher Scientific 09-795C. The corners were stapled and the samples placed in silica desiccant inside a black box and frozen to prevent disruption of the cells.

USGS (Lawrence, Kansas) helped with the *Chlorophyll a* sample analysis by providing a fluorometer. The USGS summer 2007 protocol was used to analyze the samples. *Chlorophyll a* levels are thought to be one of the best indicators of eutrophication and recreational interest since it is strongly related to algal biomass concentrations[4, 5, 8]. The Trophic State Index (TSI) used by the KDHE to classify trophic states for reservoirs and lakes served as a reference point for this study[8.]

Data Analysis and Quality Control of Historic Data Sets

Unanalyzed data sets containing information on geosmin, Chlorophyll a and nutrient input to Rock Creek and Clinton Lake reservoir were obtained for the months of June, July and August of 2010. The Army Corp of Engineers (ACOE) provided data on nutrient levels in Rock Creek, Kansas Department of Health and Environment (KDHE) provided data on Chlorophyll a and nutrient levels in Clinton Lake reservoir, and the City of Lawrence Department of Utilities provided data on geosmin levels. We subjected these complex data sets to quality control procedures and analyzed the data. This helped to put our results from our 2010 field season in context, and provided insights into possible relationships between the parameters.

Historical weather data were obtained using the Weather Underground web site at http://www.wunderground.com to carry out quality control based on rain/storm events during the dates chosen for analysis. Data providers were also contacted to obtain detailed information regarding methodology used in sampling, including whether samples were collected during rain/storm events. Dates and years with adequate and comparable data were chosen to investigate important phenomena over a long period of time i.e., Chlorophyll a and geosmin levels.

Spatial Visualization

Google Earth Pro was used as a Geographic Information System (GIS) to display and analyze possible patterns in complex data sets related to a physical location that may otherwise not be detected through other analytical methods[15]. Google

Earth Pro was used to record a tour as an interactive and easily retrievable spatial visualization. The tour illustrated the global and regional location of the Upper Wakarusa watershed and emphasizes the importance of Clinton Lake reservoir as the water source for important establishments. Rock Creek's watershed location and land usage was included as well as bar graphs and scatter plots of analyzed data sets. Colored polygons, pathways and photographs were placed in strategic geographical locations for better understanding of the material[16].

RESULTS
Field Measurements of WATER QUALITY

Velocity decreased at sites closer to the reservoir, allowing the sediment and other matter that is suspended on the water column to settle to the bottom. When this occurs, more sunlight is able to penetrate the water body and is available to plants and algae on the bottom and in the water column. Nutrients that runoff into Clinton Lake reservoir, in addition to extra sunlight, serves as the catalyst for overgrowth of plants, green algae, and cyanobacteria. Cyanobacteria is one of the organisms that forms blooms due to the excess nutrient supply in water bodies, creating multiple problems for the city of Lawrence. The excessive growth of cyanobacteria was observed in this study with the use of Chlorophyll a. A clear pattern of increasing Chlorophyll a while approaching the reservoir was seen, confirming the fact that upstream

events greatly affect downstream water quality (Fig 2).

Visit https://sites.google.com/site/shawneecountynria/rock-creek-comprehensive to see photographs of sampling sites during the three sampling dates. Major factors influencing sampling sites and a detailed upstream series of photos can also be found on that web site.

Data Analysis and Quality Control

Acquiring data and its analysis was challenging since the relevant data have not been made accessible to the public online. Additionally, data sets were challenging to analyze due to the fact that the methodologies used by the various government agencies are not standardized. By creating scatter plots and bar graphs, we identified specific areas for improvement in sampling methods, effects of nutrient input, and confirmed previous findings regarding the movement of contaminants entering the water body. During the month of July during the years 1997 to 2010, nitrogen input to Rock Creek was higher during rainy weather and lower on days without rainfall. No indication of these weather conditions, however, was included in the data sets released by the state and federal agencies. Phosphorous displayed similar characteristics, however, the effect of weather was not as extreme (Fig 3).

During the months of June through August of the years 1979 to 2009, levels of nitrogen input to Clinton Lake Reservoir seemed to have increased. During the same time period, levels of phosphorous input to

the reservoir did not show a specific pattern (Fig 4).

During the months of June through August of the years 1979 to 2009, more than half of the Chlorophyll a samples in Clinton Lake reservoir exceed the fully eutrophic levels, and samples for 1998 and 2003 exceed the hypereutrophic levels. Geosmin levels in tap water from the reservoir from 2006 to 2010 went over the human detection levels of 10 ng/L in more than half of the samples (2006, 2007 and 2009). The highest sample was that of August 2007 where geosmin levels was four times that of the human detection level (Fig 5).

Spatial Visualization

The Google Earth visualization allowed us to communicate the definition of the concept of a watershed, highlighting important geographical landmarks including Rock Creek as the site of interest (Fig 6). Although Clinton Lake reservoir is the draining point of the Upper Wakarusa watershed, the visualization highlighted the importance of this reservoir to institutions and businesses outside the watershed. Patterns were found through color-coded layers representing data set analysis, which were placed on appropriate geographic locations along Rock Creek coupled to bar charts/scattered plots (Fig 7,8). Photographic evidence of factors affecting the quality and quantity of Rock Creek's water supported previous findings of incoming pollutants to the water body, their trajectory to the public reservoir and the contribution made by anthropogenic activities along the

creek to the degradation of the reservoir (Fig 9).

DISCUSSION

Nutrient inputs from the Upper Wakarusa watershed have shown to be problematic for the past decade in spite efforts to alleviate this issue. The effects of nutrient input at Rock Creek have been reflected in Clinton Lake reservoir with elevated levels of Chlorophyll a and geosmin concentrations surpassing the human detection levels of 10ng/L multiple times during the past four years[4, 5, 8, 10, 17].

According the Kansas Biological Survey (KBS), Clinton Lake reservoir surpassed human detection levels 86% of the time, second to Cheney reservoir with 89% during the length of the study in 2007, long after improvement attempts had been put in place[8, 17]. Their findings included a correlation between cyanobacteria and turbidity as a method to predict the appearance of geosmin, which is the same model used in this paper where, as turbidity decreases cyanobacteria increases leading to the emergence of geosmin and therefore taste and odor problems during the winter season for Clinton Lake reservoir[4, 5, 10, 17].

There are several monetary and health related consequences of non-point pollution to consider, such as; the decrease of incoming revenue with algae-filled unusable recreational areas, toxic effects to humans and pets from a variety of blue-green algae species blooming in the reservoir, lethality to water dwelling organisms such as fish due because of decreased dissolved oxygen, higher water treatment costs to diminish the effects

of geosmin and the costs of dredging the reservoir as it fills with sediment from erosion [8,11,14].

The actual situation is often undetected due to inadequate methodologies used at the time of sampling. Weather conditions are often disregarded, resulting in a data set with a mixture of rain and non-rain event samples; sampling during dry periods minimizes the amount of nutrients in the sample and does not adequately detect nutrients in runoff. The effects of nutrient input during rain events can be seen in nitrogen levels in Clinton Lake reservoir from 1979 to 2009. Methodologies need to be revised to measure nutrients during runoff events, carry out quality control on data sets, and make them available to the public.

Further expansion and development of Rock Creek's subwatershed Natural Resource Inventory Assessment will serve as a basis for pilot projects related to city planning and development. Future work includes Natural Resource Inventory Assessments for Shawnee County and perhaps the remainder of the Upper Wakarusa in Douglas County (Fig 3).

Figure 1. Rock Creek Sampling sites

Land Cover	Acres	Percentage
Water	10,391	4.48
Urban/Developed	1,762	0.76
Barren/Transitional	164	0.07
Forest/Woodland	29,593	12.75
Shrub land	832	0.36
Grassland/Herbaceous	65,628	28.27
Pasture/Hay	60,364	26.00
Cropland	59,075	25.44
Urban/Recreational Grasses	1,118	0.48
Wetlands	3,259	1.40
Total	**232,286**	**100.00**

Table 1. Land Cover Statistics for Entire Watershed (9)
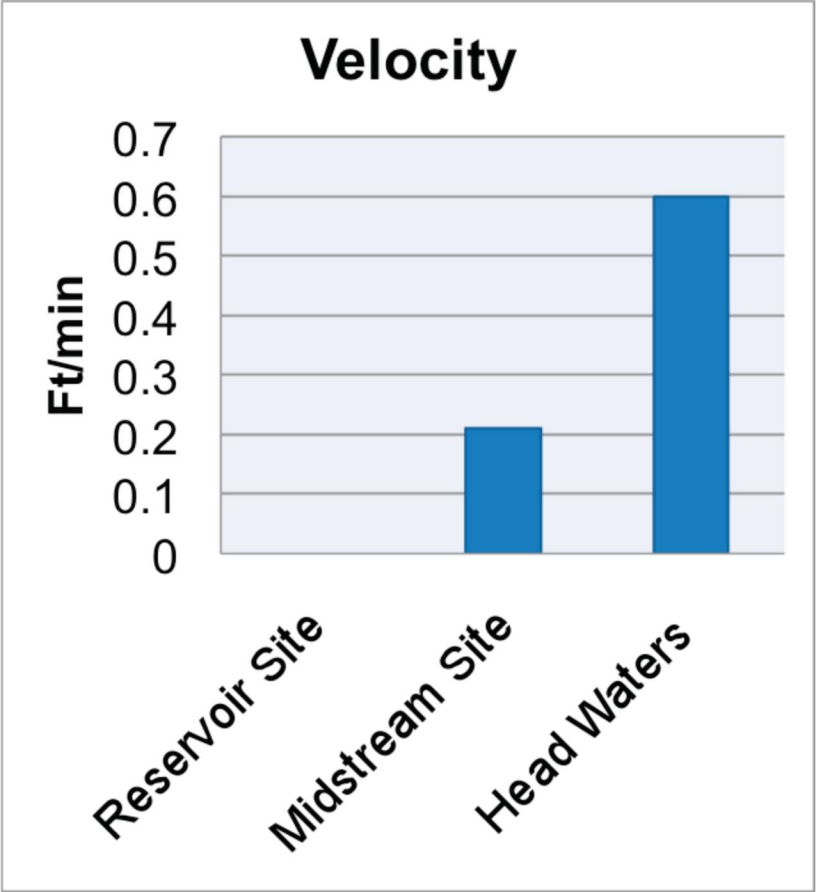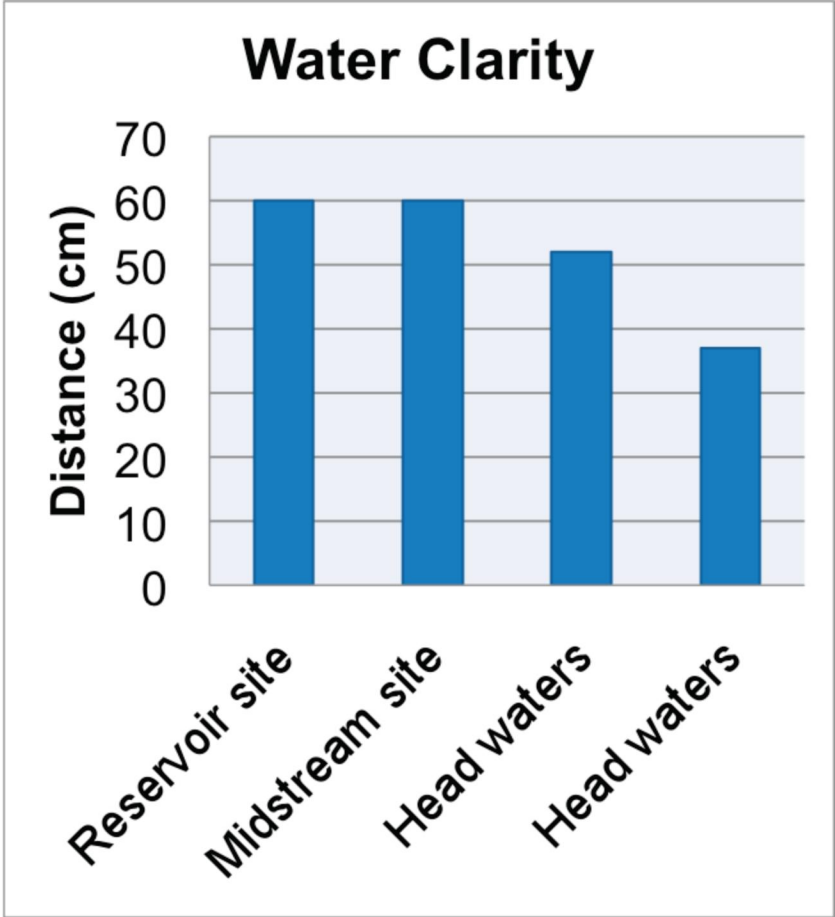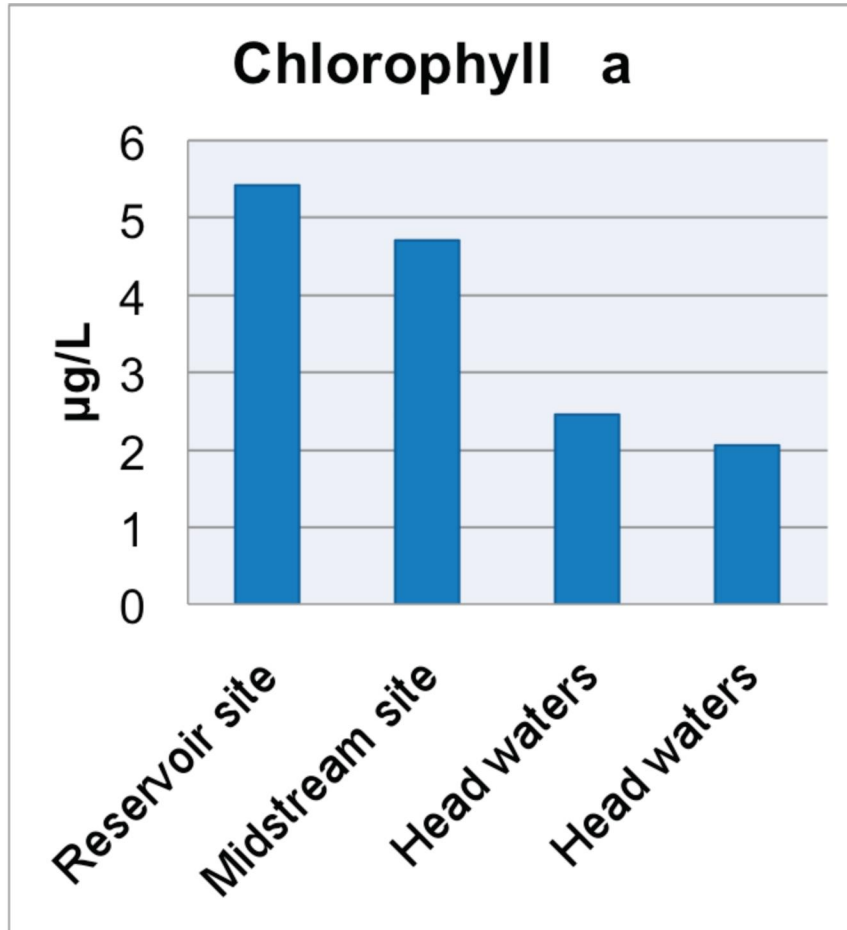
Water Clarity

Figure 2. Velocity, Water Clarity and Chlorophyll a (2010 Study Results)
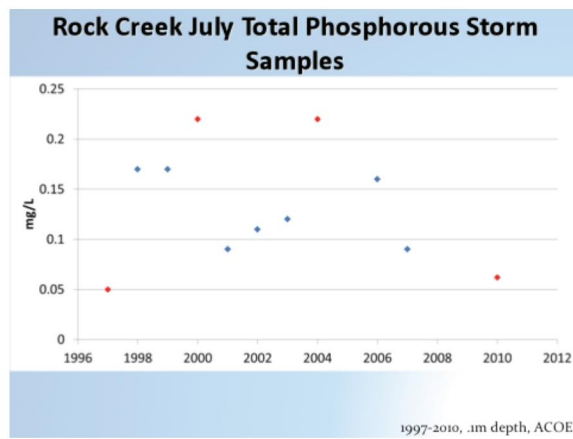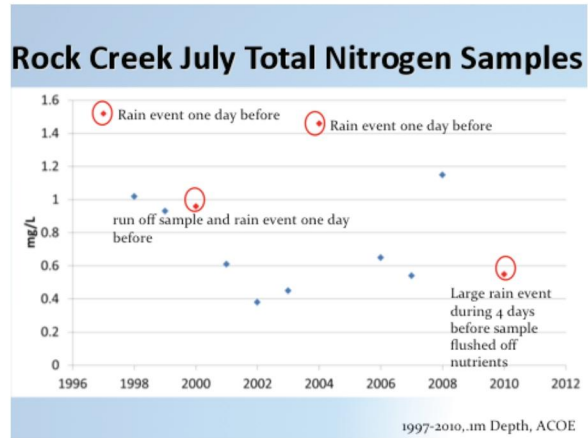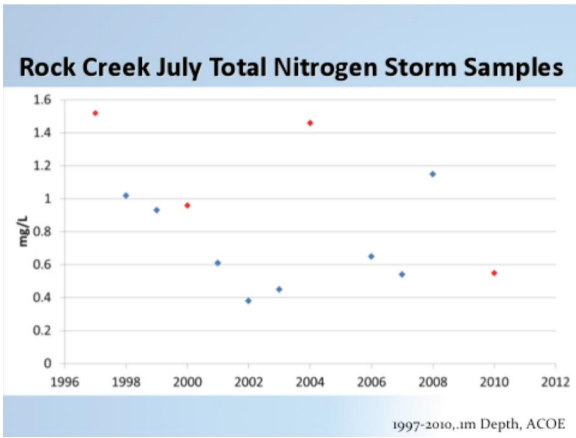
Figure 3. Rock Creek Data Analysis-Run off (N,P)-
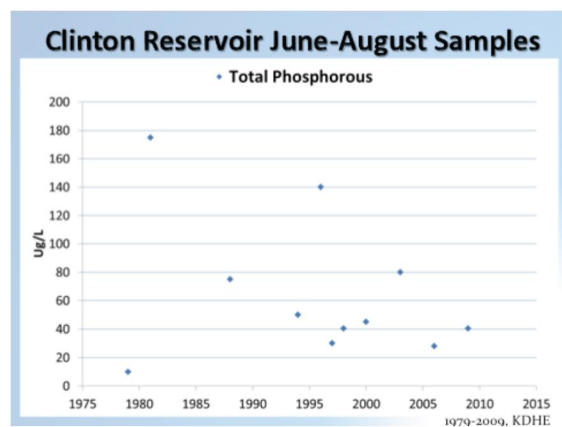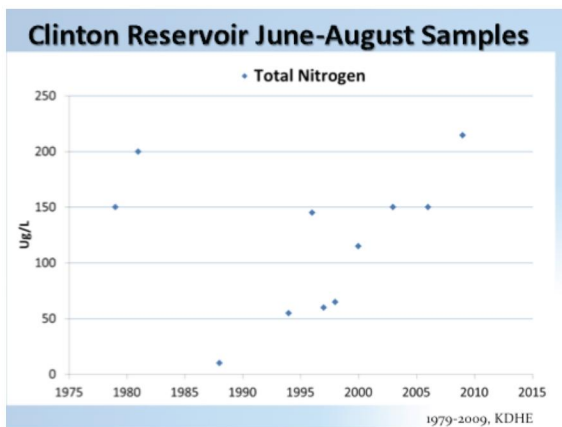
Figure 4. Clinton Reservoir Data Analysis- N, P-
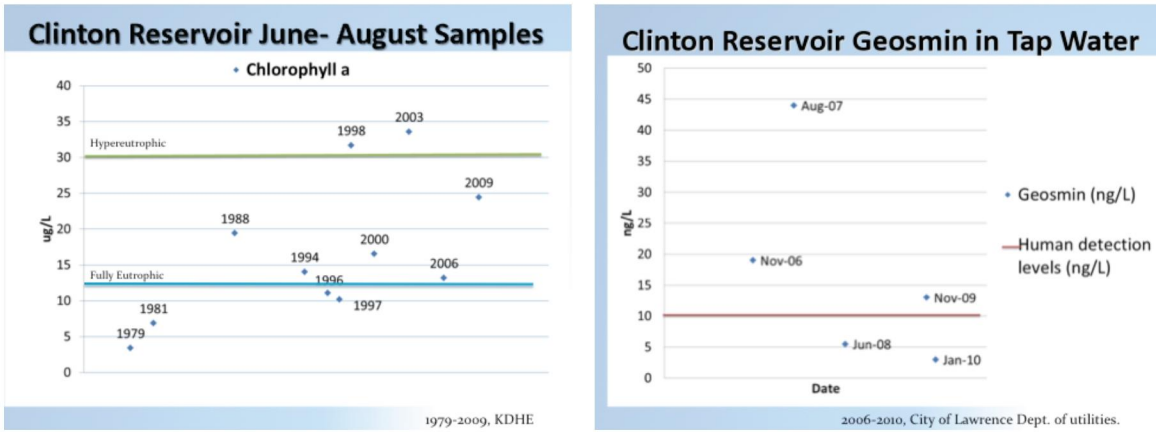
Figure 5. Clinton Reservoir Data Analysis Chlorophyll a and Geosmin
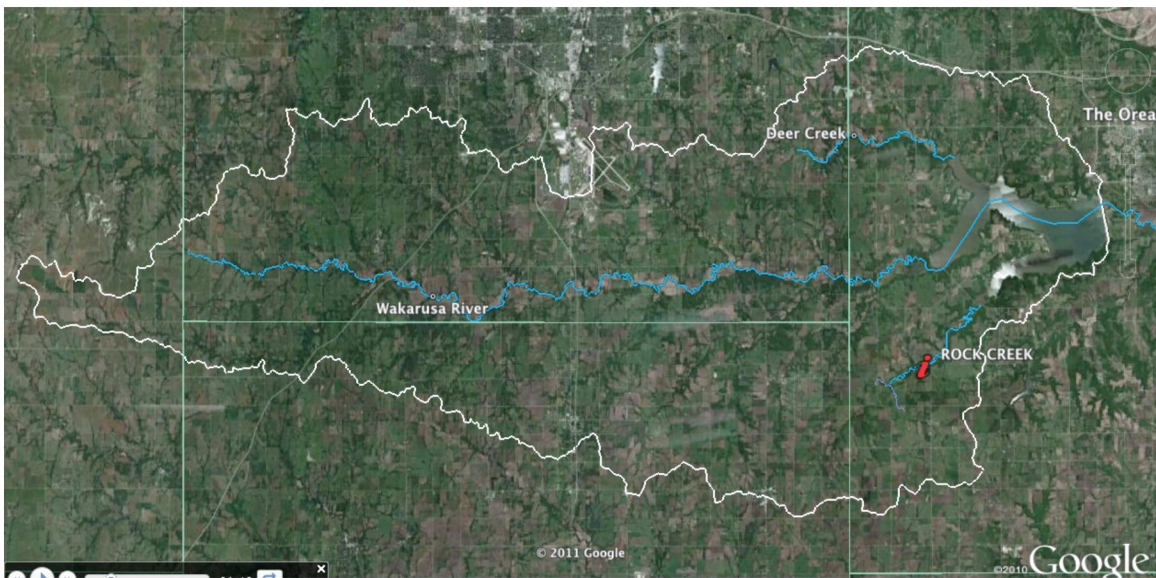
Figure 6. Upper Wakarusa Watershed and Major Tributaries
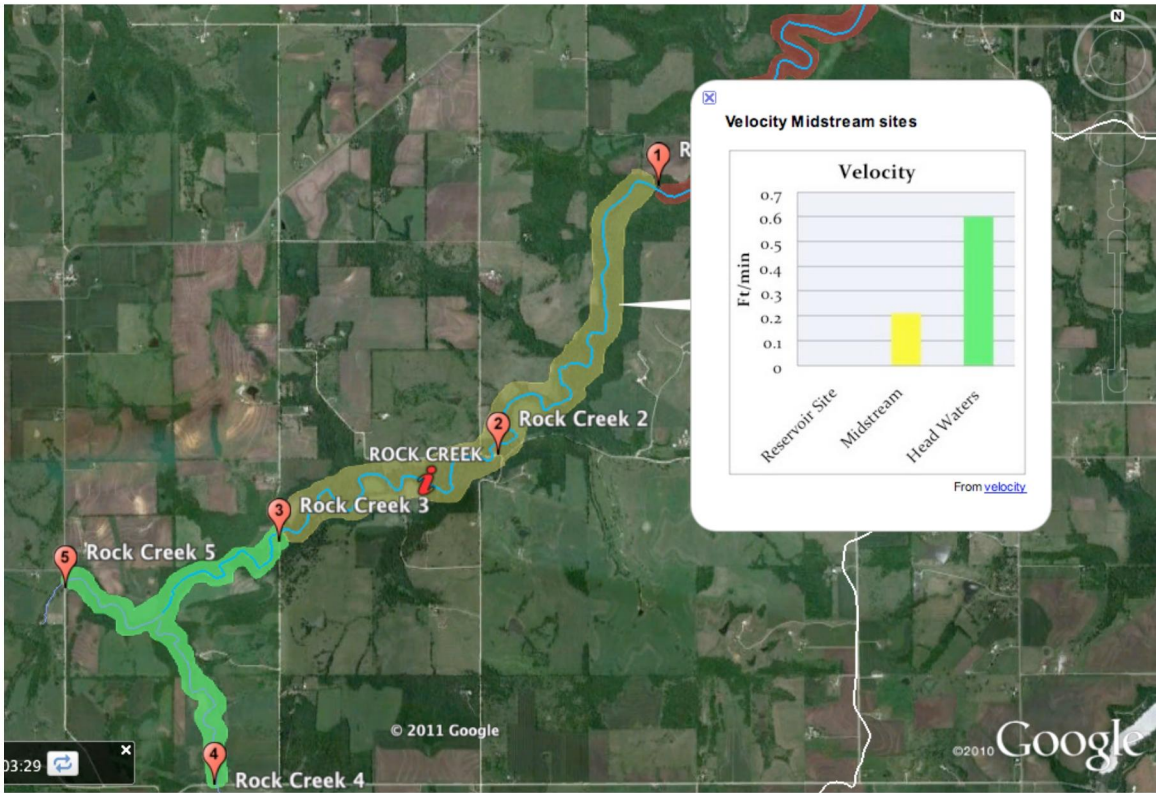
Figure 7. Velocity in Rock Creek
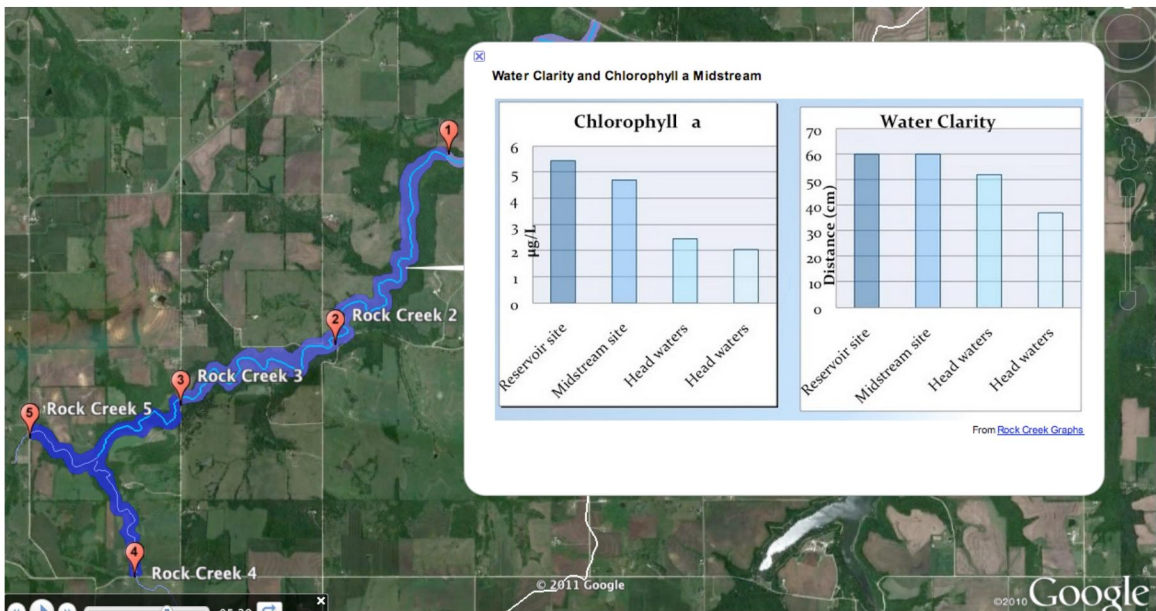
Figure 8. Water Clarity in Rock Creek- Summer 2010
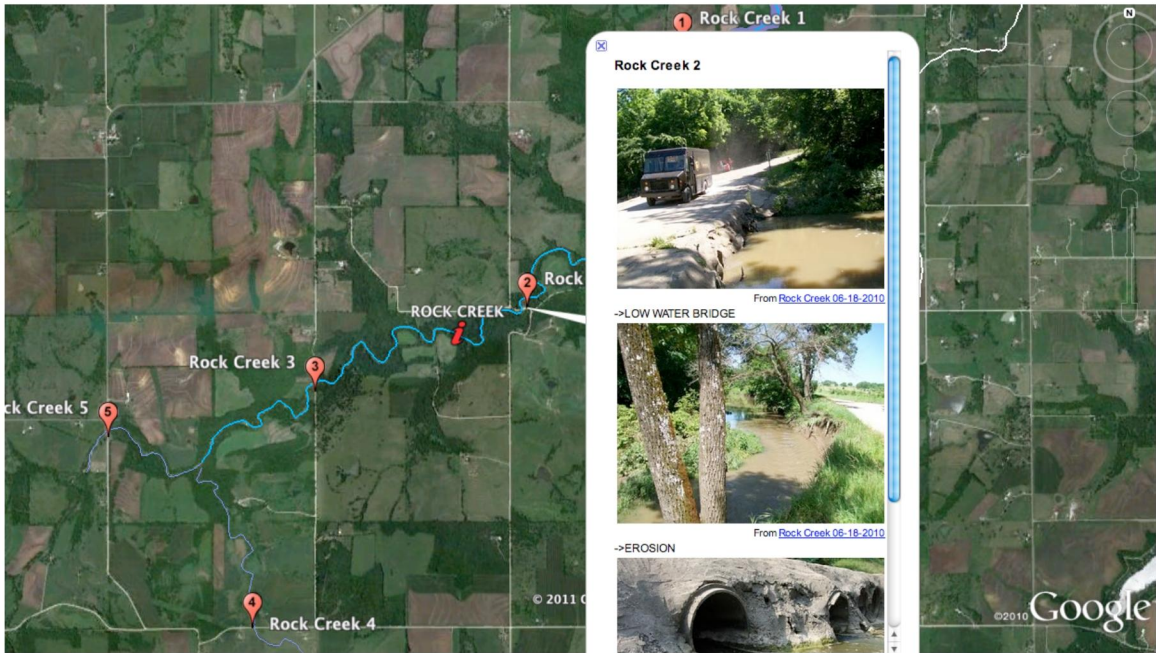
Figure 9. Factors Affecting Water Quality and Quantity of Rock Creek

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Evaluating the use of DNA Sequences for Species Identification in Medusozoans (Phylum Cnidaria)

Rhea Richardson (Faculty Advisor: Paulyn Cartwright)
Ecology and Evolutionary Biology

INTRODUCTION

The Phylum Cnidaria is comprised of two subphyla: Anthozoa and Medusozoa. Anthozoa are sessile polyps lacking a medusa stage in their life cycle. Medusozoa, which comprise almost 4000 species (Daly et al., 2007) can have a free-swimming medusa stage and a benthic polyp stage as part of their life-cycle. However there are many modifications of this life cycle in different species of medusozoans (Brusca and Brusca, 2003). The medusozoans are also unique in that they have a linear mitochondrial genome (Ortman et al., 2010). Medusozoa is divided into four separated classes: Hydrozoa, Cubozoa, Scyphozoa, and Staurozoa. Hydrozoans are the most diverse class of medusozoans (approximately 3,500 species) and comprise the groups: Filifera, Capitata, Aplanulata, and Leptothecata, Siphonophora, and Trachylina (Daly et al., 2007). Due to the variety of morphologies, life-cycles, and sheer number of species, understanding medusozoan diversity can be enigmatic and therefore interesting to study.

Identifying species based on DNA sequences, often referred to as DNA barcoding, has a variety of practical and theoretical applications. This technique can be used to identify endangered species targeted for poaching or illegal importing and exporting (Dalton and Kotze, 2010) as well as disease tracking (Alcaide et al., 2009), discovery of new species (Meyer and Paulay, 2005), and to reveal cryptic species (C.J. Moura et al., 2011). More generally, DNA barcoding can be used to quickly identify species by comparing a sequence from an unknown species to an existing database of DNA sequences from species that have been properly identified from a taxonomic expert and vouchered through a museum specimen. Once this database has been developed, further taxonomic expertise would not be required to identify a species through a DNA sequence. In other words, these DNA barcodes are auxiliary characters that allow identification of an unknown specimen in terms of a known classification (Bucklin et al., 2010). DNA barcoding also elucidates the possibility to test taxonomic hypotheses and provide new insights into evolution (C.J. Moura et al., 2011). This is especially relevant in organisms such as jellyfish, that can be easily damaged during collection; making species identification by subtle morphological traits impossible (Ortman et al., 2010). Although DNA barcoding has many applications, more investigations are needed to evaluate the ability of a relatively short DNA sequence to distinguish between species. Identifying a DNA barcoding molecule that efficiently and correctly categorizes species would allow for a relatively low cost way to identify species, where taxonomic expertise is lacking or the specimen is not preserved in a way to identify based on morphology alone.

Currently there are efforts to use molecular barcoding as the standard of identification of biological species. This initiative, called Barcode of Life, intends to identify all possible multicellular species into an online database (http://www.barcodeoflife.org). The standard molecular barcoding molecule used for this project is CO1 (Hebert et al., 2003). An ideal barcoding marker should have low intra-specific and a relatively higher inter-specific sequence variation (Meyer and Paulay, 2005). It is also necessary that variation within species is less than – and does not overlap with – variation between species (Ortman et al., 2010). This gap between genetic distances of intra-specific variation and inter-specific variation is termed the "barcoding gap". The larger the barcoding gap, the better the molecule at delimiting species. It has been suggested that CO1 is not the best barcoding molecule for all organisms (Hollingsworth et al., 2009; Vences et al., 2005; Shearer et al., 2008) and due to the variable rate of mutation between different groups of organisms, more research is needed before concluding that CO1 can be used as the standard molecular barcoding molecule for all multicellular life.

In plants, CO1 has a lower substitution rate of mitochondrial DNA and it has been seen that plastid genes are more efficient (Hollingsworth et al., 2009). CO1 is also inappropriate to use in the sister group of medusozoans, anthozoans, due to the slow evolutionary rate in the CO1 gene (Shearer et al., 2008). The overlap between intraspecific variation and interspecific divergence results in the inability to establish an appropriate threshold value for anthozoaons (Shearer et al., 2008). In amphibians, CO1 exhibits a high rate of variation both at the level of groups and similar species (Vences et al., 2005). Not only is CO1 unsuitable for use in amphibians, it is suggested that the 16S rDNA gene is better at delimiting between species.

For medusozoans, a study done by Ortman et al. suggests CO1 is sufficient and indicative of species delimitation for Scyphozoa and Hydrozoa. Due to a faster rate of evolution in the mitochondria, CO1 exhibits favorable levels of divergence within and between species. This allows CO1 to be seen as an indicator of speciation. The other barcoding molecule that is useful among medusozoans is the mitochondrial large ribosomal subunit (16S) rDNA gene. 16S has been found to be much easier to amplify than CO1, particularly in the hydrozoan clades Anthoathecata and Leptothecata groups (C.J. Moura et al., 2011). In addition, 16S genetic information of hydrozoans has been found to be consistent with nuclear genetic markers and morphology (C.J. Moura et al., 2011). This is extended evidence for the potential of 16S as a barcoding molecule. It has allowed for recognition and discrimination of nominal and cryptic hydrozoan species (C.J. Moura et al., 2011). In medusozoans, it has been sequenced extensively and is readily available in public databases.

We generated CO1 and 16S DNA sequences from medusozoan species and assembled large datasets of both CO1 and 16S sequences from newly generated and publicly available sequences. We used these large datasets to compare multiple groups of medusozoans including Cubozoa, Staurozoa, Scyphozoa, and the hydrozoan groups, Filifera, Aplanulata, Siphonophora, Leptothecata, Trachylina, and Capitata. We analyzed both CO1 and

16S to determine their utility to delimit species and thus to be used as a DNA barcoding molecule.

MATERIALS AND METHODS

DNA used for this study was from an existing collection provided by Paulyn Cartwright. PCR amplification was performed using the primers 16S: F2 ('TCGACTGTTTACCAAAAACATAGC') and R2 ('ACGGAATGAACTCAAATCATGTAAG') (Cunningham and Buss, 1993); 16S: SHB ('GACTGTTTACCAAAAACATA') and BR ('CATAATTCAACATCGAGG') (Cunningham and Buss, 1993; Schroth et al., 2002); CO1: F1 ('GGTCAACAAATCATAAAGATATTGG') and R1('TAAACTTCAGGGTGACCAAAAAATCA') (Folmer et al., 1994); and CO1: HCOcato ('CCTCCAGCAGGATCAAAGAAAG') and LCOjf ('GGTCAACAAATCATAAAGATATTGGAAC') (Dawson, 2005) . PCR conditions for primers CO1: HCOcato and LCOjf used a ramp-up program. The steps for this program are as follows: 1) 94ºF for 8 minutes 2) 49ºF for 2 minutes 3) 72ºF for 2 minutes 4) 94ºF for 4 minutes 5) 50ºF for 2 minutes 6) 72ºF for 2 minutes 7) 94ºF for 45 seconds 8) 51ºF for 45 seconds 9) 72ºF for 1 minute 10) go to step 7, 32 times 11) 72ºF for 10 minutes. For all other primers we used a different ramp-up program. The steps for this program are as follows: 1) 94ºF for 5 minutes 2) 94ºF for 50 seconds 3) 45ºF for 50 seconds 4) 72ºF for 1 minute 5) go to step 2, 4 times 6) 94ºF for 50 seconds 7) 50ºF 1 minute 8) 72ºF 1 minute 9) go to step 7, 29 times 10) 72ºF for 5 minutes. PCR fragments were evaluated by size using gel electrophoresis. Unpurified PCR products were plated and sent to the University of Washington DNA sequencing center for sequencing.

Sequences were edited and assembled in the software program Geneious (Drummond et al., 2011). DNA sequences were aligned using the algorithm Muscle (Edgar, 2004) in the program SeaView (Gouy et al., 2010). Pairwise distances were calculated using the Kimura 2-Parameter (K2P) and genetic distances were plotted using the R (R Development Core Team, 2012) package SPIDER (Brown et al., 2012). Graphs plot the genetic distances on the x-axis and the density on the y-axis. The density plot represents the amount of sequences, at a particular genetic distance, as a percentage of all the available sequences. Pairwise genetic distances were calculated between all CO1 and 16S sequences within a species to determine intraspecific variation. To determine interspecific variation, pairwise genetic distances were calculated between species for all groups except CO1 sequences in Cubozoa, where data was only available for a single species.

RESULTS

We generated DNA sequences for 16S and CO1 and combined them with publicly available sequences. Our combined database consisted of 864 16S sequences and 765 CO1 sequences from a variety of medusozoan species. There were 60 Capitata, 52 Filifera, 156 Scyphozoa, 219 Aplanulata, 69 Siphonophora, 21 Cubozoa, 153 Leptothecata, 26 Trachylina, and 4 Staurozoa DNA samples that were barcoded using CO1. There were 97 Capitata, 204 Filifera, 63 Scyphozoa, 47 Aplanulata, 49 Siphonophora, 57 Cubozoa, 257 Leptothecata, 63

Trachylina, and 21 Staurozoa DNA samples that were barcoded using 16S. A list of all species sampled, Genbank sequences numbers when available, and newly generated sequences are found in Supplemental Table 1.

Through plotting the density of genetic distances of pairwise comparisons of genetic variation within and between species of different groups of medusozoans, we can determine if the genetic variation within species is less than the genetic variation between species. If there is no overlap between intra- and inter-specific variation, we can conclude that there is a barcoding gap and the molecule can serve to delimit species of every pairwise comparison. We created graphs of density plots of genetic distances of pairwise sequence comparison within and between species in the different groups of medusozoans for 16S and CO1 sequences (Figure 1 and Figure 2).

Figure 1 depicts intra- and inter-specific genetic variation in the medusozoan classes Staurozoa, Cubozoa, Scyphozoa and in the hydrozoan subclass Trachylina. In Staurozoa a barcoding gap exists in CO1, in that there is greater and non-overlapping genetic distance between intra- than interspecific variation. There was no barcoding gap in16S sequences of Staurozoa in that there was substantial overlap in the intra- and inter-specific variation and the inter-specific variation was very wide ranging. For Cubozoa, CO1 sequence data was not available for more than one species, so this analysis could not be done. For 16S sequences in Cubozoa, there was substantial overlap in the intra- and inter-specific variation and inter-specific variation was very wide-ranging. In Scyphozoa, the CO1 data reveals two distinct peaks distinguishing intra- and

inter-specific variation, whereas there was substantial intra-specific variation in 16S, overlapping with the inter-specfic variation. In the hydrozoan subclass Trachylina, both molecules have significant intra-specific variation that exceeds that of inter-specific variation.

Figure 2 depicts intra- and inter-specific genetic variation in the different groups of the hydrozoan subclass Hydroidolina: Leptothecata, Filifera, Siphonophora, Capitata and Aplanulata. In CO1 comparisons of Leptothecata sequences, there are two distinct peaks distinguishing intra- and interspecific variation, with some pairwise comparisons falling outside these peaks for both the intra- and interspecific variation. The 16S data shows two distinct peaks with substantial overlap, and 16S also has an additional peak of intra-specific variation that surpasses that of inter-specific. In Filifera, CO1 and 16S have significant intra-specific variation whose range exceeds that of inter-specific variation, although the peak of intraspecific variation is less than the peak of interspecific variation. While both molecules display distinct peaks of genetic variation, there substantial overlap between intra- and interspecific variation. In Siphonophora CO1 and 16S comparisons, we see that the inter-specific variation spreads across the entire graph, overlaying with intra-specific variation. In Capitata, CO1 reveals two distinct peaks distinguishing intra- and interspecific variation with additional small peaks of highly variable intra- and inter-specific variation. Although 16S comparisons in Capitata display distinct peaks, there is considerably more overlap in intra- and inter-specific variation than displayed in CO1. In Aplanulata, the CO1 molecule displays intra-specific variation that almost completely surpasses that of

the inter-specific variation – the opposite of what is expected. 16S produces a variable amount of intra-specific variation, but distinct peaks are still present.

We estimated the average percent overlap, where intra-specific variation overlapped with inter-specific variation, for each graph (see Table 1). We then averaged the total overlap for each barcoding molecule. CO1 has a lower overlap on average, than 16S. We then performed a Two-Sample Student-t Test of the average means and found: T-Value -1.54, P-Value 0.148, DF=13. For CO1 the StDev=22.4 and SE Mean=7.9. For 16S the StDev=17.2 and SE Mean=6.1. Therefore there is no significant difference between 16S and CO1 in general as a barcoding molecule for average percent overlap.
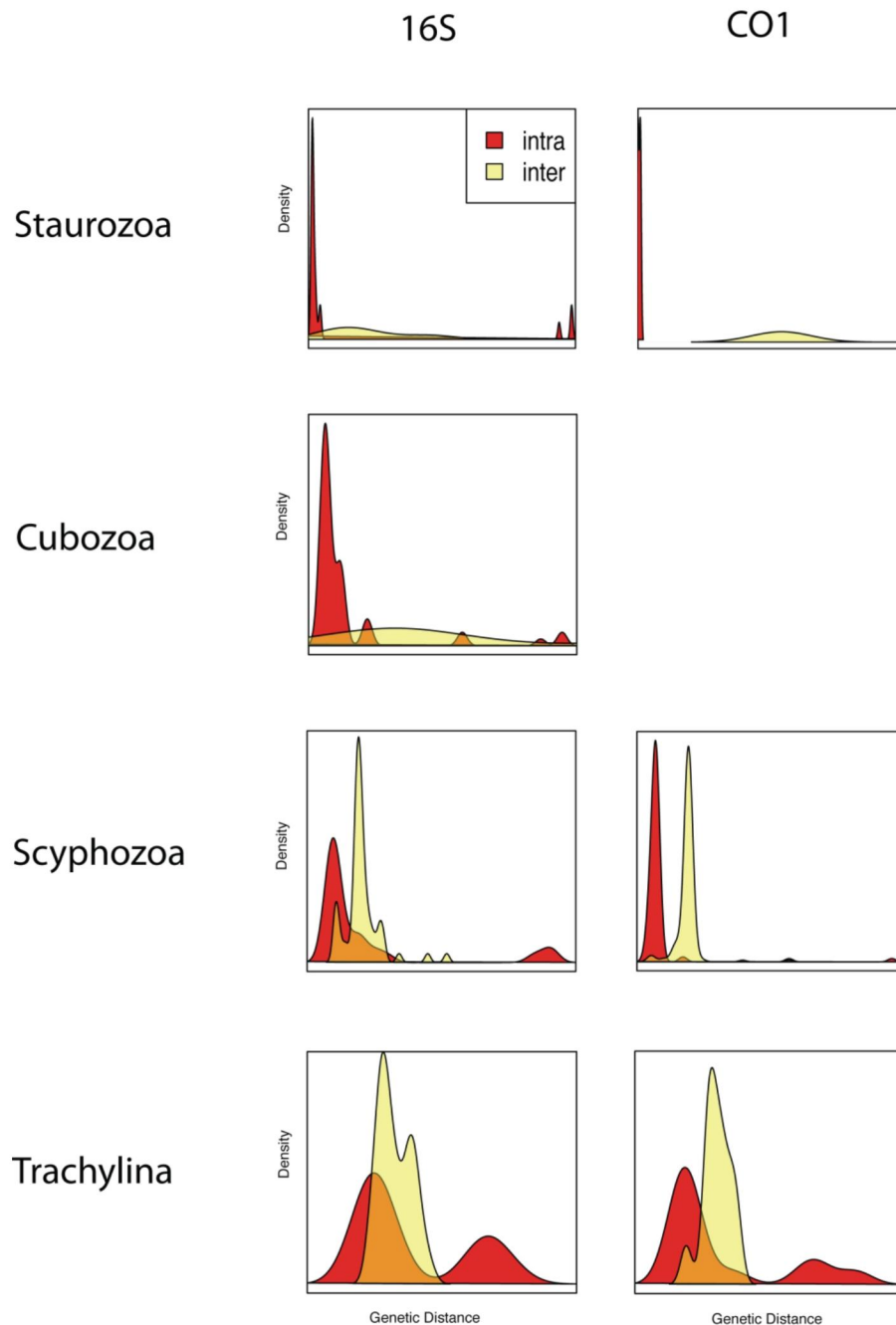
Figure 1. Density plots of pairwise comparisons of genetic variation of 16S and CO1 sequences for the medusozoan classes Staurozoa, Cubozoa, Scyphozoa and in the hydrozoan subclass Trachylina. The x-axis is "genetic distance" or genetic variation for pairwise comparisons. The y-axis is density of genetic distances of pairwise comparisons. Red indicates the amount of intra-specific variation and the yellow signifies the amount of inter-specific variation.
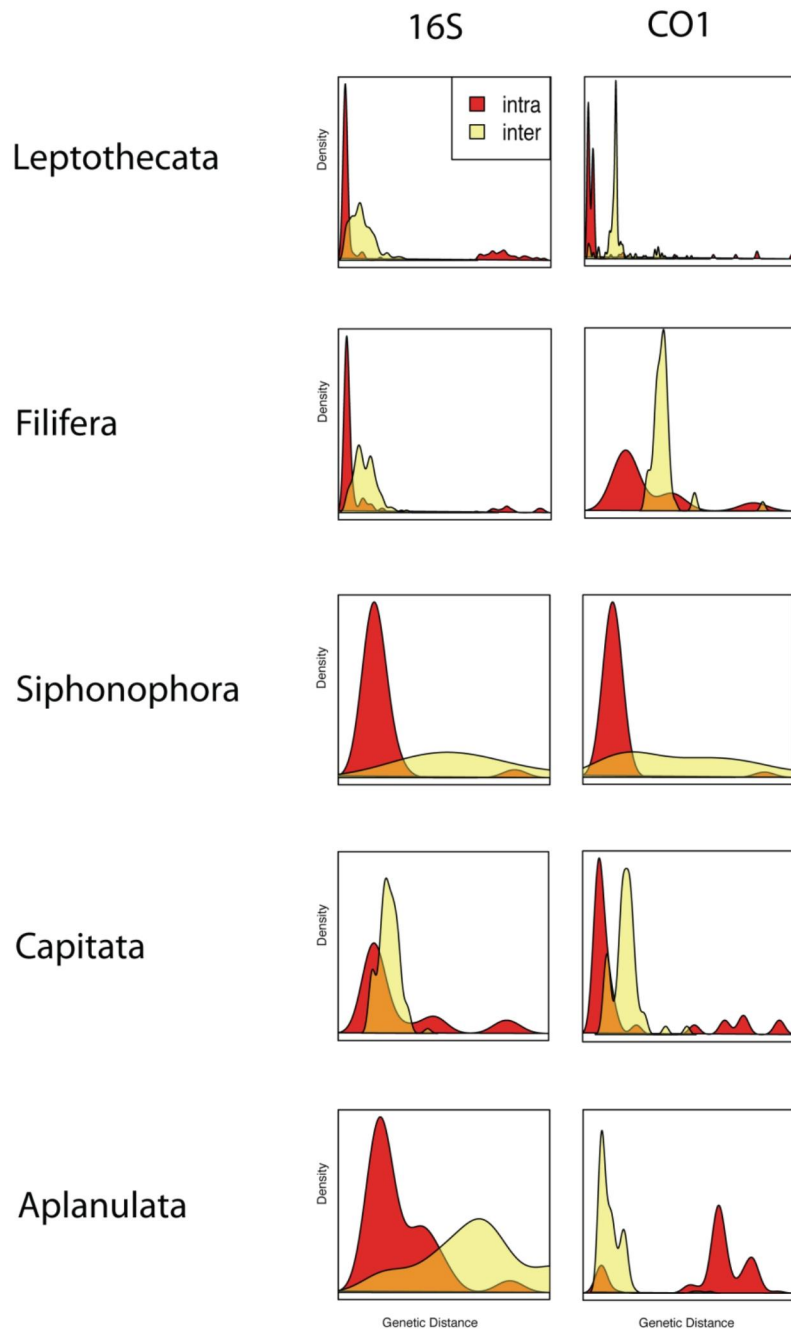
Figure 2. Density plots of pairwise comparisons of genetic variation of 16S and CO1 sequences for the Leptothecata, Filifera, Siphonophora, Capitata and Aplanulata, which are groups within the hydrozoan subclass Hydroidolina. The y-axis is density of genetic distances of pairwise comparisons. Red indicates the amount of intra-specific variation and the yellow signifies the amount of inter-specific variation.

Table 1. Percent overlap for each barcoding molecule in each group of organisms. The percent overlap is the total amount of intra-specific variation that overlays with the inter-specific variation. We averaged over all groups to find an average percent overlap for each barcoding molecule.

Group	CO1 % Overlap	16S % Overlap
Trachylina	20.93	40.00
Staurozoa	0	44.83
Leptothecata	10.07	46.86
Scyphozoa	7.22	31.25
Aplanulata	8.96	16.05
Capitata	71.43	43.70
Filifera	10.64	49.45
Siphonophora	1.03	21.05
AVERAGE	**32.30**	**18.79**

DISCUSSION

A perfect barcoding molecule would produce low intra-specific variation and higher inter-specific variation and no overlap between these two distributions (Meyer and Pauley, 2005). However, these seamless results are rarely seen, but can often lead us to interesting conclusions. The lack of a barcoding gap can help us to elucidate changes in an organism's evolutionary history, expose error in identification and suggest new classifications.

In Staurozoans, analyses of CO1 sequences shows that it displays a perfect barcoding gap (see Figure 1). However, this could be due to the low sampling size (n=4). Similarly, for 16S in Staurozoans, the substantial overlap in pairwise comparisons and wide-ranging inter-specific variation could simply be due to a lower sampling size (n=21). However, because an overlap also indicates that the barcoding molecule cannot distinguish if two organisms are of the same species or of different species groups, the large overlap could indicate that the rate of sequence evolution is not rapid enough to distinguish a more recent speciation event from two genetically distinct individuals of the same species. An ideal barcoding molecule should be able to distinguish closely related species for individuals of the same species. If the molecule cannot separate two different species, it is possible the molecule's sequence did not mutate at a fast enough rate to distinguish recent speciation events.

The same is true for cubozoans in analyses of 16S sequences. The inter-specific variation crosses the entire span of the graph, indicating that the group may have speciated over a large period of time, with some pairwise comparisons between more distantly related species exhibiting large genetic divergences whereas others more closely related species exhibiting low genetic divergence (see Figure 1). Also, there are tiny peaks of intra-specific variation that are very variable. This could mean that there are incorrectly identified species in Genbank, leading the graph to portray a wide intra-specific variation incorrectly.

In Scyphozoans, analyses of the CO1 barcoding molecule shows very little overlap between intra- and inter-specific variations (see Figure 1). Both intra-specific and inter-specific variations are in peaks, meaning that the majority of intra-specific variation is less than the majority of inter-specific variation. In 16S, a small peak of intra-specific variation that surpasses the inter-specific variation is likely due to misidentification.

In analyses of both 16S and CO1 in Trachylina, an interesting trend appeared where a very significant peak in intra-specific variation surpassed inter-specific variation. Although misidentification could explain this pattern, it also suggests that there are genetic distinct lineages within Trachylina that are currently designated within the same species (see Figure 1). The bimodal distribution is evident more drastically in 16S with a higher peak than in CO1. There is also significant overlap in both sequences as well, adding evidence to potential recent speciation events. These data suggest that further taxonomic investigations regarding species delimitations in Trachylina are warranted.

In Leptothecata, analyses of CO1 sequences demonstrate that it yields a clear barcoding gap. There is minimal overlap and what overlaps are tiny peaks

that likely represent misidentification. On the other hand, the 16S barcoding molecule expresses a clear overlap and high intra-specific variation. Within intra-specific variation we can see two distinct groupings, possibly indicating misidentifications and species delimitation issues that need to be further studied.

Analyses of the 16S and CO1 barcoding molecules both display a lack of a barcoding gap in Filifera. In 16S there is some intra-specific variation that surpasses the inter-specific variation, but it is insignificant enough to be considered misidentification. The complete overlap also indicates the molecule's inability to distinguish between and within species. CO1 produces a lot of variable intra-specific variation. It is possible that CO1 is indicating misidentifications.

The patterns of intra- and inter-specific variation in Siphonophora are almost exactly the same in analyses of CO1 and 16S sequences. A peak of intra-specific variation shows that the majority of intra-specific data is less than inter-specific data. There is a small peak in both graphs of intra-specific variation that surpasses the majority of inter-specific variation. This indicates possible misidentification. The wide ranging inter-specific variation is likely evidence that Siphonophora speciated over a large period of time with more closely related species displaying genetic variation less or equivalents intra-specific variation, whereas more distantly related species display significant genetic variation.

For Capitata, analyses of the 16S barcoding molecule, shows that there is no barcoding gap. The three separate peaks of intra-specific variation likely represent misidentification and/or undetected speciation events, sometimes called cryptic speciation. The complete overlap of intra- and inter-specific variation elucidates the inability of the 16S sequence to differentiate among and within species. The CO1 sequence produces two distinct peaks between intra- and inter-specific variations. The small peaks of intra-specific variation likely represent misidentification of species.

In Aplanulata, analyses of 16S sequences show two distinct peaks of intra- and inter-specific variation, however, there is still a large amount of overlap. The peaks simply mean that the majority of intra-specific variation is less than the majority of inter-specific variation. The wide-ranging inter-specific variation could mean that Aplanulata speciated over a long period of time and the rate of sequence evolution of 16S is not rapid enough to distinguish more recent speciation events. Using the CO1 sequence, we found an interesting phenomenon where the intra-specific variation completely surpasses that of inter-specific variation, creating a false barcoding gap. Within the group Aplanulata are many issues with species delimitation. For example, the genus *Hydra* contains cosmopolitan species. Molecular phylogenetic analyses have shown that many *Hydra* species actually contain several distinct lineages and most currently described species are polyphyletic (i.e. members of the species do not share a single common ancestor (Martinez et al., 2010). Given these issues with species limitation, the intra-specific analyses actually contain a substantial amount of actual inter-specific comparisons, confounding the analyses.

Based on our results, we find CO1 appears to have been a better barcoding molecule overall, producing more distinctive peaks and less average overlap between intra- and inter-specific

variation than 16S. Analyses on a group-by-group basis revealed many interesting issues that warrant further study. Many of our analyses suggested that there might be a significant number of misidentifications in the Genbank sequences. In addition, some of our analyses implied that there are issues with species delimitation and that there are likely unrecognized distinct species that are in need of description and taxonomic revision. Lastly, while barcoding molecules may be helpful in matching sequences to a database of sequences from specimens which have been properly identified, care should be taken when using percent divergence between either CO1 or 16S to determine species delimitations, as there is generally substantial overlap between intra- and inter-specific genetic divergences and no clear barcoding gap exists.

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A New Stabilization Approach to Cadaveric Shoulder Joint Testing

Cole Bittel (Faculty Advisor: Terrance McIff, *Orthopedic Surgery*)

(Co-Authors: Jessica Witherspoon & Jared Vanlandingham)

Mechanical Engineering

INTRODUCTION

Shoulder dysfunction is a significant health problem in the US and across most developed countries affecting an estimated 14-50% of the population[6][7][1]. For people who work in the industry or service sectors, the frequency is even higher with at least eight new cases per year for every 100 workers[2]. The pain and reduced function have a significant impact on people's lives and their ability to maintain employment[2]. In addition, shoulder pain is common in competitive athletes such as swimmers, and can continue throughout their lifespans[4].

The common location for shoulder injuries occurs at the socket between the humerus and scapula. This ball and socket mechanism experiences reoccurring stress and often leads to dislocations and rotator cuff injuries. The physiological mechanisms causing most shoulder dysfunction is poorly understood and in many cases, the structural degradation of the tissue surrounding the shoulder is the only focus of rehabilitation specialists as they try to restore function to the shoulder[4][5]. The research objective of the current study was to determine whether abnormal neuronal control and feedback leads to eventual shoulder dysfunction or whether the dysfunction is directly related to the wear on the shoulder capsule connective tissue. Simply, the focus was to determine whether shoulder injuries solely reflect structural failure of the tissue, or if nerve endings misfiring, leading to limited mobility, poor coordination, and higher pain stimulation, help contribute to these types of shoulder injuries.

A stress-strain curve describes the amount of resistance a material, in this case a shoulder within its socket, imposes on a force. Brittle materials like ceramics have great strength but little elasticity. Polymers have low strength but high elasticity. Stress-strain curves allow one to analyze features such as these in a systematic way. To answer questions posed in this research, the scientists must be able to compare stress-strain curves between multiple human shoulders from people of various sizes and anatomical features in a reproducible manner. The methodology poses a significant problem in itself. An Instron machine is a device that can be used to exert forces on a testing material and quantify the mechanical properties. Using a testing instrument like this on human joints can be quite challenging. To create a valid stress-strain curve, no other sources of applied force can be present throughout the Instron instrument's movement range. With the shoulder containing multiple planes of movement and unique anatomical attributes, that can be a challenging restriction. The focus of this project was to design, manufacture and test an accurate, reproducible, and reliable method for obtaining stress-strain curves of shoulders within their sockets, to allow further research questions to be answered regarding shoulder injuries.

METHODS

In designing this system, it was concluded that a bracket of stiff material would be needed to fix the human cadaveric shoulder. Requirements for the bracket included the need to lock the scapula into a static position, and prevent the distal humerus from moving, although rotation toward the Instron was required. The first iteration of the bracket was a wooden board with screws mounted into the distal humerus. The entirety of the bracket was a wooden 'L' shape with a small crest near the top of the 'L' for scapula fastening and two notches cut out of the sides to allow for proper functionality of the Instron. Screws were drilled through both the scapula and distal humerus to ensure proper fastening. The bracket's overall purpose was to allow a shoulder to be placed into an Instron machine, in which the stress-strain curve of shoulder dislocation would be created. Figure 1 provides the schematic of the wooden device aligned for the scapula, humerus, and distal ulna.

With testing, several limitations of the wooden model were discovered. One of which was that a newly constructed wood bracket was required for each new tested arm, because the screws drilled for one arm would not align with screws drilled for a different sized arm. It was concluded after the wooden brace had been tested that a new bracket design must be created to be reusable. Thus, numerous problems not considered previously, had to be overcome.

First, cadaveric shoulders have bacteria and fluid that can be harmful to a person working in contact with the tissue. This means that the material of the bracket, which will inevitably be layered with these, must be able to be completely sanitized. This rules out the previous wood model. Another problem presented

when considering the frequency the device would be needed; the system had to have high tensile strength and be unyielding. This requirement led toward the preference for metal. Third, because human upper extremities have great variation in bone length and shoulder anatomy, the bracket had to be able to accommodate a variety of shoulders and arm bones, while maintaining a rigorous alignment with the material testing instrument. Thus, it had to be adjustable at several locations and angles. Lastly, the bracket had to be able to fit into the Instron machine without contributing any stresses or strains on the shoulder.

RESULTS

Because of these requirements, aluminum was concluded to be most suitable material for the job. Aluminum is a metal allowing for desirable high stiffness, readily washable with high temperature sanitization techniques, malleable and lightweight, and easy metallurgy. Aluminum is also very inexpensive.

Picking the material for use was not the only problem to overcome in allowing a shoulder to be tested in an Instron device. One of the greatest challenges posed was designing a bracket to accommodate the drastically different lengths of the humerus bone in the test population. Into the new metal 'L' brace, two parallel slots were cut. A slider mechanism rested over the holes and lockable rods allowed the device to accommodate the humerus bone (Figure 2). This new single dimension of freedom was a great improvement from the initial wooden bracket.

In general, the wooden bracket served the purpose by allowing the shoulder to be freely stressed without contacting any of the wood or surrounding material. However, the screw that had previously

been drilled through the distal humerus into the wood to attach the base of the humerus to the wood had significant drawbacks (see Figure 1). Though, this technique of fastening was seemingly functional, it was discovered that this distal screw caused extra stress on the shoulder when forces from the Instron were not parallel to the screw. Essentially, the screw caused a considerable flaw in the produced stress-strain curve because of the moment of inertia it applied. This caused the Instron machine to calculate an elevated level of stiffness. With the screw locked in place, the axes of motion were reduced and the screw itself limited the direction of motion. Thus, the Instron was not only reading the stress that it took to push and pull the shoulder out of the socket, but also the stress that it took to bend the bone into the position resisted by the screw. This created additional dependent variables because long bone mechanical properties, including elasticity, vary greatly from person to person.

To overcome this problem it was noted that, as the Instron pressed up and down on the head of the humerus, the distal humerus normally rotated. For this reason, the new bracket contained a device with an independent block with one degree of rotation and was placed on top of the bracket at the point where the distal humerus connects to the base of the 'L'. The block, setting freely on a rod, then allowed the humerus to rotate freely from external forces of the brace (Figure 2).

Another necessity for the metal bracket was the requirement that the head of the humerus had to be placed in exactly a neutral position of the shoulder within the socket. This would eliminate any extra stress measurements from various muscles stretched when the shoulder was not in a neutral position. Neutrality

depended primarily on the tilt of the humerus toward or away from the scapula. This required another degree of freedom within the brace.

In attempting to solve this problem, fixing the distal humerus directly to the rotating block previously described would be obsolete and would not allow for neutrality to be accomplished. This problem was solved by allowing the block to rotate in a second degree of freedom. By placing a rod through the center to of the block, and allowing that rod to shift up and down on either side of the block independently, the block would then rotate in accordance with the rod (Figure 2). The rod could then be adjusted until neutrality within the shoulder occurred and was observed by a fluoroscope. At this point, the rod was locked to ensure complete neutrality throughout the entirety of the Instron motion.

As mentioned, shoulders and scapula vary from person to person, thus the new device had to account for these great variations. Most importantly was the difference in humerus length between people. To allow for this variation, the new rod and block were manufactured to slide back and forth on the short side of the 'L'. The block and rod were placed with a separate square of aluminum, in which two holes were drilled (Figure 2). These holes matched slots drilled into the bracket itself and the square was locked onto the bracket by connecting rods. The functionality of this square allowed the block and rod to slide to the necessary length required by a specific humerus.

Using these ideas, the shoulder bracket had three axes of motion. First, the sliding technique employed at the base of the device in which it could slide toward and away from the scapula. Second, the axle tilt method, in which a tilting rod attached indirectly to the distal humerus allowed

for different degrees of tilt on the humerus itself. Lastly, the ability of the humerus to tilt to and away from the motion of the Instron prevented any external stress occurring in the stress-strain curve. Figures 3 and 4 show a cadaveric humerus bone attached into the bracket device.

Lastly, the scapula had to be locked into place on the top of the 'L' bracket. Because scapulas are very incongruent with respect to size and shape, creating a locking mechanism to account for all geometries of scapulas was a difficult problem. The optimal design was built by placing two bars on the most predictable sides of the scapula (Figure 5). A crest was retained on the bracket behind the wing of the scapula to fasten for stabilization. The crest of the bracket (a block of aluminum screwed through the threaded 'L') fit firmly against the rise between the superior margin and medial angle on the scapula (slightly under the scapula between the two). From there, the two bars were placed and tightened.

Figure 6 demonstrates this locking technique with a human shoulder attached to the bracket at the scapular locking position.

Figure 7 provides a picture of the final product, a bracket that could lock a shoulder into the neutral position prior to testing and maintain that position through the course of the Instron test. Further, the bracket was reusable and sterilizable. It allowed for the necessary degrees of movement while maintaining the shoulder in a precise neutral position. Figure 8 shows a human shoulder mounted onto the bracket in the proper neutral position.

In summary, the aluminum bracket designed for the study allowed optimal fitting to the different shoulders to be tested. Following the manufacturing and testing of the bracket, the shoulder experiments designed to differentiate between neuronal and connective tissue disorders could be completed.
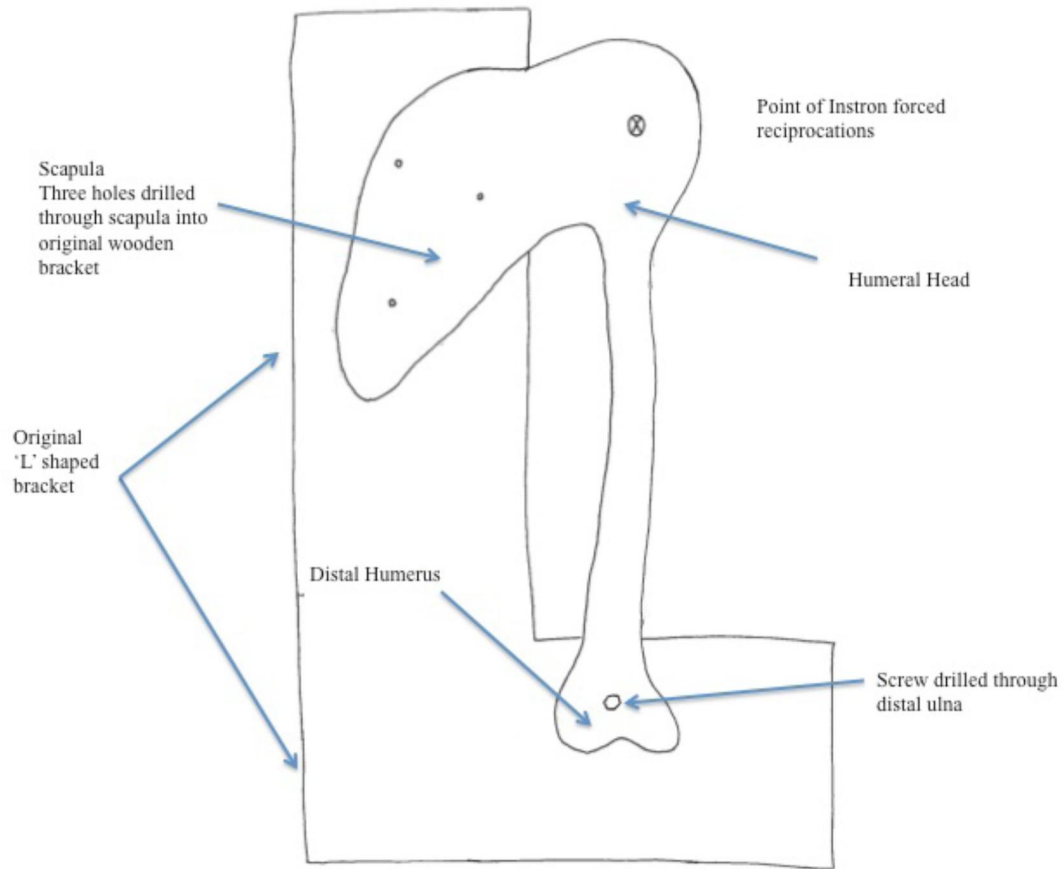
Figure 1:

The original model for the brackets used in shoulder testing included a wooden base with holes drilled through the distal ulna and the central part of the scapula. This method was found to be obsolete because a new base was needed for each shoulder r tested.
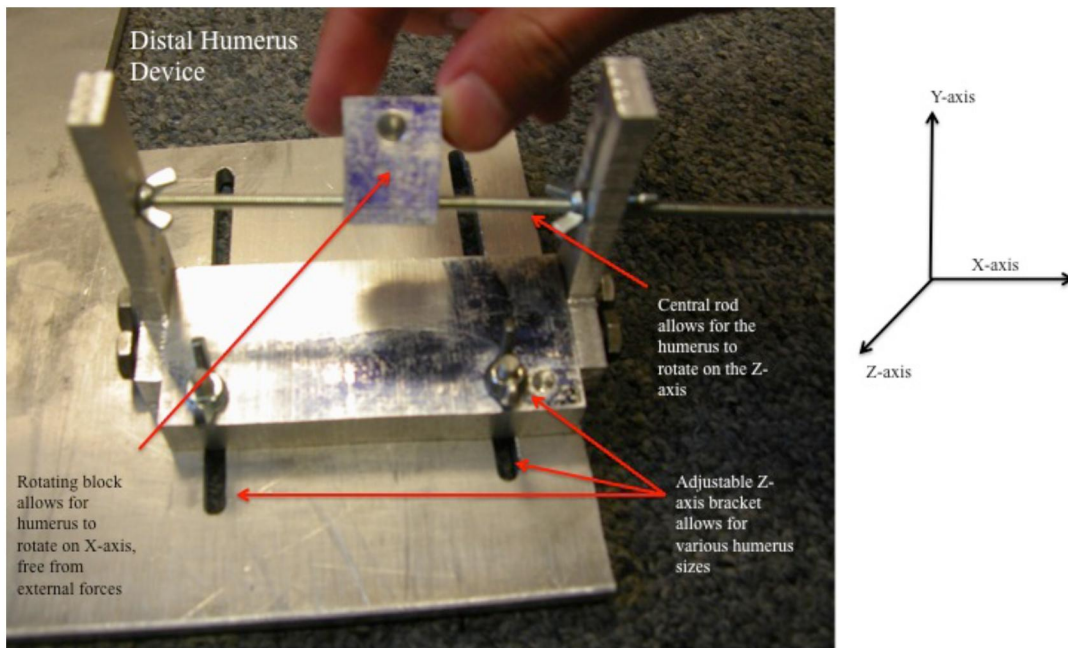
Figure 2:
The device created for mounting the distal humerus incorporates several axis of freedom. The slider mechanism allows for translational movement in the Z-axis. The adjustable rod that acts as the central axis for the block allows for rotation on Z-axis. Lastly, the block itself is able to rotate on the rod, thus allowing free rotation on the X-axis.
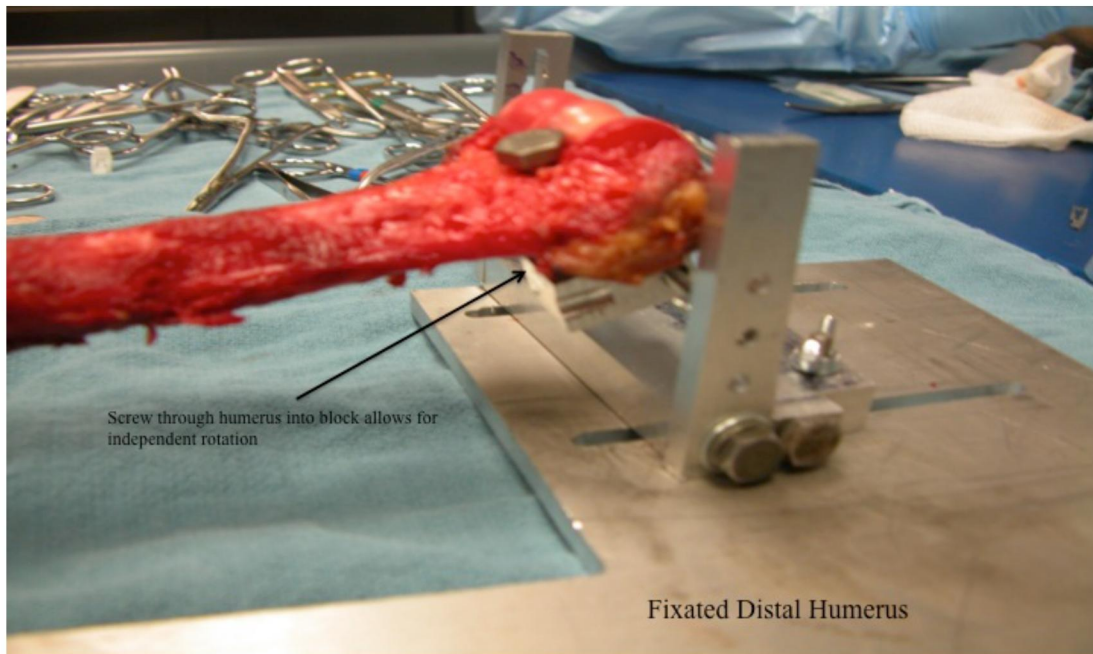
Figure 3:
Drilling through the recession in the distal humerus has no effect on the mechanical strength of the humeral head at the site of force measurements. The screw locks into the threads on the block below. The entire device slides toward the scapular stabilization so that the threads and the screw through the humerus are aligned.

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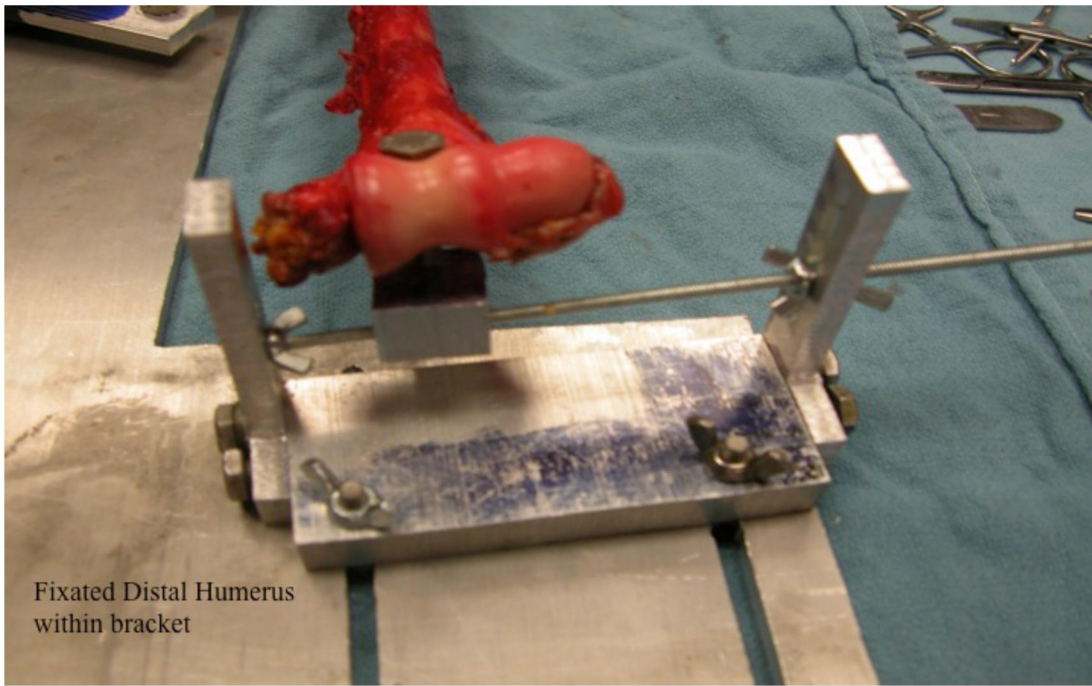
Fixated Distal Humerus
within bracket

Figure: 4
The distal humerus, now fixated on the bracket, is able to rotate freely as the block rotates on its central axis, the smooth rod. This rod can be moved toward or away from the scapula by simply loosening the wing nuts.

Scapula Fixation

Straps placed across the scapula
wing secures it from vertical
movement

A fixed block prevents the
scapula from sliding
horizontally
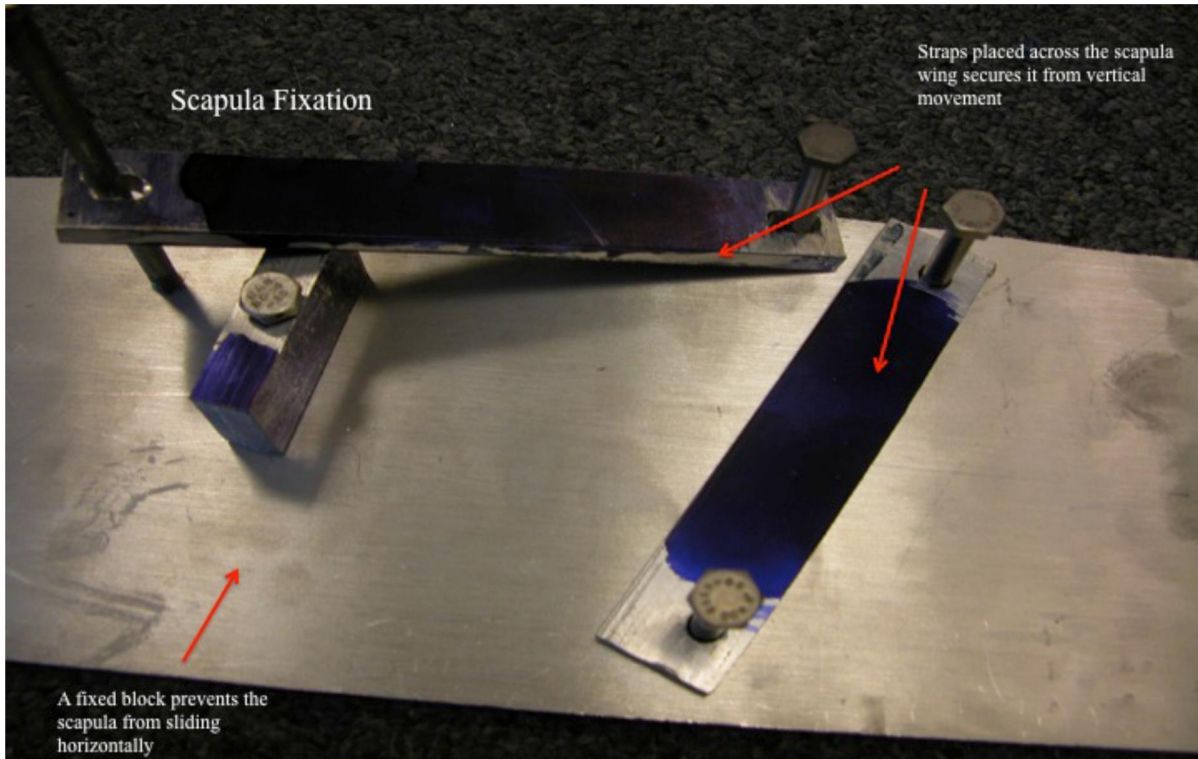
Figure 5:
The scapula fixation device was required so that no movement from the scapula occurred. Pressing the back of the scapula against the fixed block and strapping the metal bars across the scapula resulted in absolute fixation.
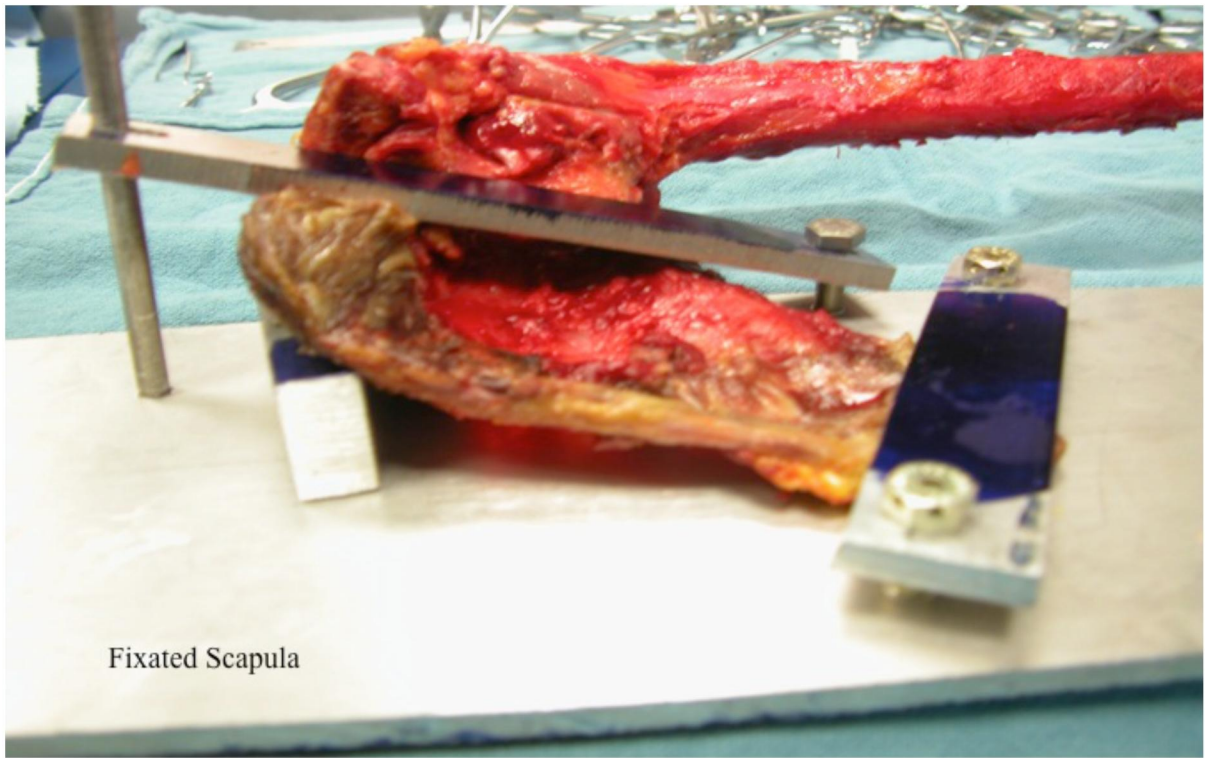
Figure 6:
The scapula, locked by block and straps, was unable to move or contour as forces were applied to the humeral head.
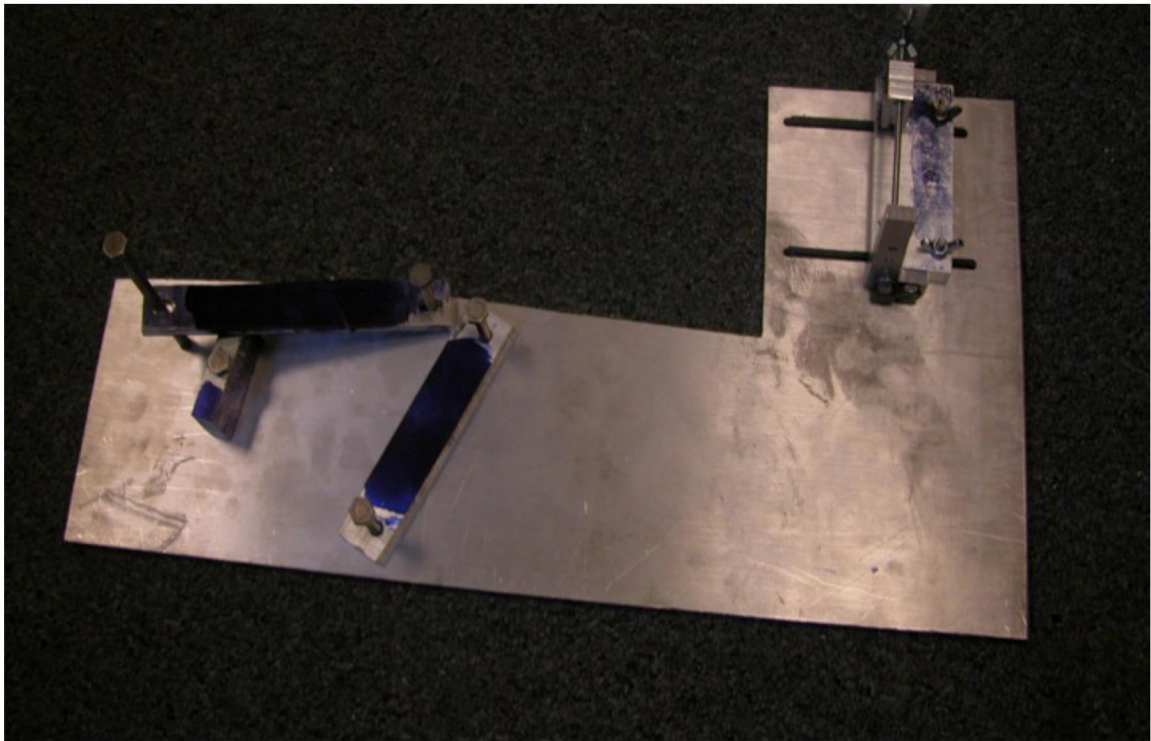
Figure 7:
The final bracket, made from aluminum, has multiple degrees of freedom at the distal humerus and none at the scapula. This model allows for further shoulder testing to be conducted.

Final Bracket with cadaveric
shoulder placed
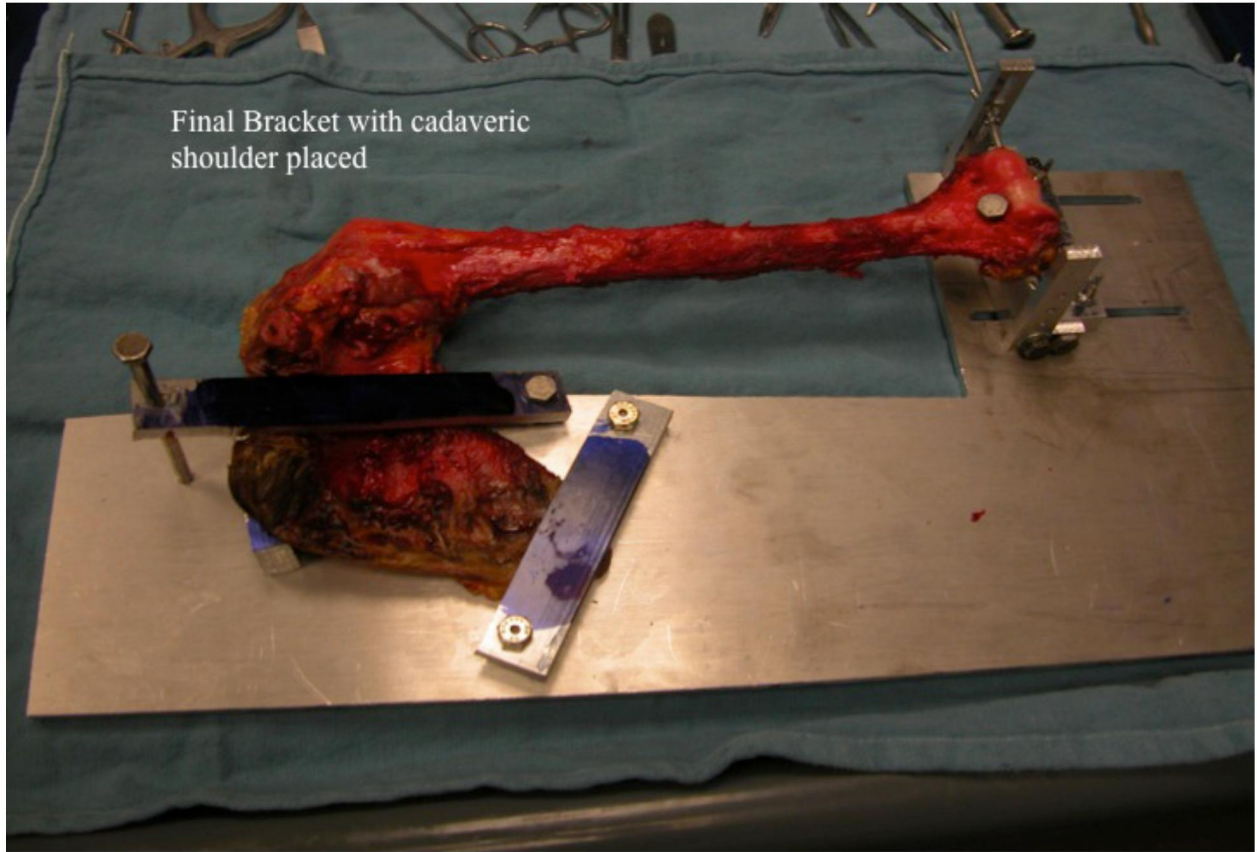
Figure 8:
The completed bracket with shoulder input.

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Underground Economies: Infrastructure, Equity, and Access in Kansas City 1871-1939

Julia Barnard

The first sewers were built in Kansas City in 1871 and, until around 1920, when the city began to gear up for the Ten-Year Plan, the city did not invest in any substantial way in the sewers and water systems. The Ten-Year Plan, a partnership between the Kansas City Chamber of Commerce and the Pendergast political team, expanded Kansas City's waterworks and sewer system and drew money during the Depression toward the metropolitan city on the rocky bluffs. The Plan can help us understand the real impetus behind public works projects in Kansas City and the way in which these projects changed the social geographical distinctions in the city. The Plan, that Kansas City passed during the 1930s and that became a blueprint for the national New Deal.

I present the Ten-Year Plan as an example of a successful re-imagining of urban space in the first part of the twentieth-century. Not without its faults, the project extended basic services to those who badly needed them and sheltered Kansas Citians from the hard brunt of the national Great Depression. The plan re-imagined not only urban space and infrastructure, but also changed governmental decision-making and opened up public access to power by allowing Kansas City women, select leaders of the black community, and labor representatives to participate in a project that had real meaning for the entire Kansas City community. In this way, the Ten-Year Plan was truly unique and can serve as an example of flexible and open democratic governance. The Plan also helps us understand why environmental

infrastructure was established and improved, and for what ends.

Kansas City 1871-1920s

The first sewers in Kansas City were constructed in 1871. The well-known City Beautiful Movement had transformed Kansas City's suburban districts into lovely subdivisions with green spaces and single-family homes, equipped with toilets and water coverage yet in 1910, many of Kansas City's urban poor in the West Bottoms and the larger Northwest District were still without sewers and other basic sanitary services, let alone planned neighborhoods (Figure 1). I will argue that the Ten-Year Plan unknowingly participated in the correction and the institutionalization of some of these inequalities. Not for environmental reasons, but rather for personal profit and development during a time of great economic stress.

The Country Club Plaza, has long been an infamous example of racist housing policies put forward by urban governments in the early twentieth century. The deeds drawn up in the early part of the twentieth century lasted until the 1960s and restricted racial minorities from purchasing properties in the Country Club Plaza district. In the same period, Kansas City's parks and boulevard projects razed many neighborhoods that minorities, immigrants, and the working poor called home.[1] A 1911 report from the Kansas City Board of Public Welfare, heavily influenced by Jacob Riis' 1890 publication *How the Other Half Lives*, states that "boulevards have been pushed through parts of the city where there were formerly bad housing conditions."[2]

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These "bad housing conditions" were most often in poor and working class communities and were underserved by city sewerage and water. The report exemplifies the relocation of one black family in Kansas City by contrasting a photograph of a mother with four of her children with a photograph of the same space after it had been razed for a boulevard (Figure 2).[3]

Displacement like Kansas City's of the poor for the benefit of the infrastructure of the white and wealthy, especially boulevards and roads, happened in many major cities in the nineteenth and twentieth cities. Famously, it happened in the mid-twentieth century in New York City during Robert Moses' controversial urban renewal project that resulted in the construction of the Brooklyn-Queens Expressway, or BQE, and in Los Angeles to the Mexican-American community in the Chavez Ravine, razed to make space for Dodger's Stadium. In this sense, Kansas City was an early variant of national efforts to "renew" urban spaces, often reinforcing and creating social dislocation and geographical segregation based on race and class. The picture of the family was likely taken in the first decade of the twentieth century, more than thirty years after Kansas City built its first sewers and roads, and illustrates the degree to which "development" was reserved for the white and wealthy.

Several images in the Annual Report from the Kansas City Board of Public Welfare illustrate the degree to which the poor residents of Kansas City were living without basic services. Many of the shanty-districts of Kansas City, Missouri were home to only one sewer vault connection and most commonly shared one privy vault as a toilet for several families. The Board of Public Welfare reported that "It is not to the credit of Kansas City that we continue supine and tolerate the existence of more than 15,000 privies." The report states that "actual inspection and tabulation force us to admit that...51.7 per cent of our contrivances for the disposal of human waste are of the kind which sanitary science pronounces an absolute menace to health."[4] In this era of Kansas City's "progress," the benefits of modern sanitation practices were reserved for less than half of Kansas City residents.

Engineers, city planners, and politicians in this period focused on the City Beautiful Movement, the birth of suburbanization, and beautiful parks and boulevards. The citizens in Kansas City who were excluded by suburbanization and wealth were also excluded from many basic sanitary services and were disproportionately poor and working class immigrants and minorities. Most of the time they were just underserved, but in some cases, the sewage pipes were literally funneling sewerage into their neighborhoods.

The engineers in the late eighteenth and early nineteenth centuries did not fully consider the health of the natural environment either and believed that the healthiest way to dispose of wastewater was to release it into rivers without treatment. Even during subsequent renovations, the effect of sewers and pollution on rivers was not a large topic of discussion, though it was now and then mentioned.[5] Although there were always voices for sewage treatment, for almost a century the government was content with temporary and fleeting repairs. Why, when the negative effects of the water and sewer systems of Kansas City were clear to many, did the city so persistently neglect to update its sanitary system?

Until the 1930s, Kansas City governments focused primarily on aesthetic concerns, informed by the City Beautiful movement in Kansas City, and on suburban development [rather than on improving working class neighborhoods. The beautification of the area around the Blue River, for example, figured most prominently in the minds of the politicians who asked Kansas Citians for tax money to make improvements. The districts that would benefit directly from the work were meant to pay the proposed funds. This meant that districts that did not or could not pay, including poor districts, could not access services or expect improvements. Before 1930, despite widespread sewer failures and inadequacies, bonds intended for more expansive sewer construction did not pass.[6] In such a time of neglect, the social geography of Kansas City—the lines of race and class--can be understood by looking at maps of sewer coverage.

Pendergast and the Ten-Year Plan

By 1930 the population of Kansas City was almost at 400,000 residents.[7] The density and growth necessitated more sanitation and water development. Enter the Pendergast machine, a political juggernaut that ruled Kansas City for many years through the concentrated power of Boss "Tom" Pendergast. Although there was rampant corruption in the Pendergast machine, the machine also made important contributions made to the working-class community. The Pendergast family was more concerned than its predecessors, for whatever reason, with public service projects in Kansas City than the old pre-boss politics had been. In large part this concern came from selfish motives. Pendergast owned construction company, and he saw that he could make a profit through constructing public works projects. This simple fact reveals something larger about the impetus behind public works projects in 20th century Kansas City.

The next phase of the development of Kansas City's sewerage lies with the so-called "Ten-Year Plan," passed by the public by a four-to-one margin in 1931. With a long history of voter fraud in Kansas City, and a political system run by "Boss Tom" Pendergast and his machine, the story of the Ten-Year Program is much more intriguing than it may seem at first glance. It is a story full of corruption, but also full of large Depression-era spending projects that put many men to work during a time of widespread unemployment and anticipated the Keynesian strategies of the national New Deal.[8] The Ten-Year Plan thoroughly changed not only the economic landscape of Kansas City, but also its social geography, largely institutionalizing the separation between Kansas Citians of different classes and races.

The Ten-Year Plan, as writer Amahia Mallea explains, was a truly a coalition formed of unlikely allies, a "bipartisan campaign of hundreds of individuals and organizations that pushed for voter approval of a 'unified plan' for city building."[9] The Planning Committee was run by a "Pendergast-leaning" Republican and Chamber of Commerce President Conrad Mann, who established the "Committee of 1,000" to oversee the production and determine the areas of need that were affected by the final Ten-Year Plan.[10] The Committee of 1,000 was said to include "all elements of the population and enlisted the best engineering, business and political minds to work out the details."[11] The Committee did include several leaders of women's organizations, along with business leaders from "nearly 100 civic, labor, and

business groups," but did not include, as a matter of policy at least, any committee members of color or of low socio-economic status.[12]

In my research for this study, however, I did find a sheet of paper that listed thirteen members of the committee in red pencil and had "Negro" scrolled across the bottom. Of the thirteen, two representatives were women. These representatives included Chester Franklin of the *Kansas City Call*; Ida M. Becks of the Kansas City Urban League; L. Amasa Knox, Missouri's first black man elected to represent Jackson County; Dr. William Thompkins, a well-known associate of Pendergast's who later represented Kansas City as a recorder of deed for President Franklin Roosevelt in Washington D.C.; Thomas C. Unthank, founder of two private black hospitals in Kansas City; and Reverend D.A. Holmes of the large Vine Street Baptist Church, an outspoken critic of the Pendergast machine.[13] This is certainly an impressive roster. Most of these representatives came from the Eighth Ward, an affluent black neighborhood, very different than the West Bottoms. In any case, though the Committee did not adequately include *all* aspects of the population, it was certainly more representative, and accessible, than previous development projects had been.[14]

City Manager Henry McElroy was all but appointed to his position as City Manager by Tom Pendergast in 1925. His involvement as one of three men organizing the committee and a man very involved in the project from beginning to end suggest that he represented machine interests in the Ten-Year Planning Committee meetings. The inclusion of representatives from organized labor suggests that Boss Tom's dedication to the laboring community was influential in

the final make-up of the Committee of 1,000 and in the details of the final plan.

The Plan proved to be especially aware of the working- and lower-class neighborhoods in Kansas City. Most of the work done in association with the Ten-Year Plan "served districts in which reside persons of moderate or less than moderate means. Even before the depression, construction of these projects had been delayed by the inability of property owners to bear the burden of special assessments."[15] This attention to the working-class and poor neighborhoods of Kansas City seems to line up with Pendergast's philosophy of leadership that explicitly privileged "consideration [of working class] troubles…paving, a water main," etc," and one can guess that this kind of attention was being encouraged and facilitated by Pendergast and McElroy.[16] Additionally, the final plan stipulated that "so far as possible without sacrifice to the interests of the citizens at large, Kansas City engineers and architects will be employed and contracts for improvements will be let to Kansas City institutions."[17] This policy was a major victory for Kansas City laborers who, due to the passage of the Plan, would be employed throughout the Depression at a level not seen in other metropolitan areas around the United States. At its peak, this landmark reform employed about 16,500 workers and expanded sewer and water coverage to many new neighborhoods.

The projects introduced under Boss Tom helped avoid massive and widespread unemployment in Kansas City during the Great Depression. This fact makes Pendergast a more complicated figure to understand, for his machine did profit from widespread corruption and voter fraud, but also attended to the needs of working class citizens, handling

"all sorts of individual and neighborhood concerns--everything from expediting garbage collection to the filling of troublesome potholes."[18]

Pendergast's team used their experience with elections to make sure that the bond issue passed muster with the public. One historian states that Pendergast's machine played a much larger role than was officially recorded in the planning process, and "machine workers made sure the proposal passed by a four-to-one margin, far more than the required two-thirds vote."[19] In the official history of the Ten-Year Plan published in 1938 by the Chamber of Commerce, *Where These Rocky Bluffs Meet*, Pendergast is not mentioned at all. On top of the enormous voting strength the machine had at its disposal because of the favors and friendships developed by the wards and precinct captains, the mere employment roster of the City Manager Emergency Fund endowed any machine-sponsored vote with enormous strength.[20]

Of course, the "city projects generated abundant business for Pendergast companies, especially" his Ready-Mixed Concrete Company.[21] Another author adds that "the Ten-Year Bond campaign which reached a successful climax in the summer of 1931, midway between the political campaigns of 1930 and 1932 that established Pendergast's position as the boss of Kansas City and the political power in the state."[22]

The Ten-Year Plan became a blueprint for the national New Deal, and helped Kansas City avoid the worst of the Great Depression. The Pendergast machine and the Ten-Year Plan were among the first to provide equal access to sanitation services in the late 1920s and 1930s. This is not to claim that the boss system effectively addressed all the issues of environmental degradation or path dependence. The original system that was expanded under the Plan was deeply flawed in environmental terms and disposed of wastewater, untreated, into the Missouri River. The Ten-Year Plan did not correct the flaws of the original system, but the old corrupt political machine did succeed in ending a long period of sanitation neglect among the poor neighborhoods of the city.

In 1931 the Pendergast political machine (City Manager McElroy and Judge Harry S. Truman, both loyal to Boss Tom), along with the Chamber of Commerce, succeeded in pushing a large reform package through the city's bond process and combined these funds with monies from the federal government in order to initiate a new phase of major infrastructure development. They had the support of the Chamber of Commerce, loaded with Pendergast's political partners, a support that suggests how deeply powerful the machine was. The machine, through its Ten Year Plan, made possible widespread employment in a time of great economic stress, extended public services to those who badly needed them, and put Kansas City on the national map as a city that used its Keynesian economic policy to better the lives of its citizens in a concrete way. It appears that despite corrupt economic monopoly and nepotism, the Pendergast political machine some positive democratic and environmental effects.

Figure 1.
This panorama is a bird's eye view of the West Bottoms area. The picture shows the Stockyards, the railways, the factories, and their interaction with the neighborhood. One can see the Kaw River in the background, while the Missouri River features in the front of the drawing.[23]
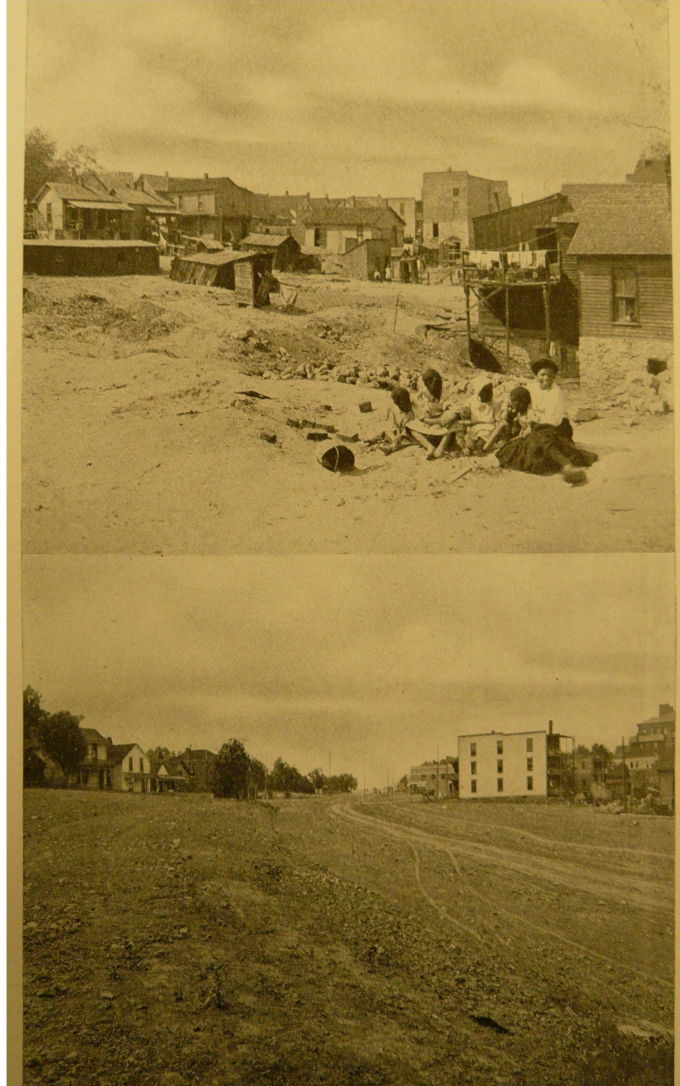
Figure 2.[24]

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Endnotes

[1] Kansas City, Missouri Board of Public Welfare. *Second Annual Report*. Kansas City, Missouri: Fratcher Publishing, 1911. Western Historical Manuscript Collection—Kansas City (hereafter WHMC—KC).

[2] Kansas City Board of Public Welfare. *Second Annual Report*, 22. WHMC—KC.

[3] Kansas City Board of Public Welfare. *Second Annual Report*, 23. WHMC—KC. See also Figure 1.

[4] Kansas City Board of Public Welfare. *Second Annual Report*, 35-38. WHMC—KC.

[5] *Where These Rocky Bluffs Meet: The Story of the Kansas City Ten-Year Plan*, 147.

[6] Mallea, Amahia. "Rivers Running Through," 120.

[7] *K.C.: A History of Kansas City, Missouri*, 183.

[8] *Where These Rocky Bluffs Meet: The Story of the Kansas City Ten-Year Plan*, 191.

[9] Mallea, Amahia. "Rivers Running Through," 135.

[10] Larsen, Lawrence H. and Nancy J. Hulston, *Pendergast!*, 88-89.

[11] Reddig, *Tom's Town: Kansas City and the Pendergast Legend*, 181.

[12] *Where These Rocky Bluffs Meet: The Story of the Kansas City Ten-Year Plan*, 95.

[13] Coulter, Charles E. *"Take Up The Black Man's Burden:" Kansas City's African American Communities 1865-1939.* Almost all of the thirteen names listed on the Committee of 1,000 memo are discussed at length in Coulter's history, although they are not mentioned as representatives on this particular committee, and were all exceptionally devoted activists for Kansas City's black community throughout their lives.

[14] Pendergast's administration was similarly ambiguous on the issue of racial integration and inclusion. In some ways, Pendergast helped institutionalize racial segregation in Kansas City. In others, he supported the American American community by helping to put "Kansas City's African Americans in the Franklin Delano Roosevelt camp long before most other urban areas." See Coulter, Charles E. *"Take Up The Black Man's Burden:" Kansas City's African American Communities 1865-1939*, 115.

[15] *Where These Rocky Bluffs Meet: The Story of the Kansas City Ten-Year Plan*, 202.

[16] Larsen, Lawrence H. and Nancy J. Hulston, *Pendergast!*, 72.

[17] *Where These Rocky Bluffs Meet: The Story of the Kansas City Ten-Year Plan*, 162.

[18] Larsen, Lawrence H. and Nancy J. Hulston, *Pendergast!*, 94.

[19] Larsen, Lawrence H. and Nancy J. Hulston, *Pendergast!*, 88-89.

[20] Fisher, Paul. "Built on Greed." *Kansas City Star*, 21 May 1939.

[21] Ibid.

[22] Reddig, *Tom's Town: Kansas City and the Pendergast Legend*, 180.

[23] Koch, Augustus. *Map of the West Bottoms area of Kansas City, Missouri.* Printed by the Reid Brothers Packing Company in 1895. Accessed on http://www.worldmapsonline.com/historicalmaps/1W-MO-KC-1895.htm.

[24] Kansas City Board of Public Welfare. *Second Annual Report*, 22. WHMC—KC.

Pavement Through the Prairie, Wheels in the Wetlands:
The battle over a road in Lawrence, Kansas

Kelly Heiman (Faculty Advisor: Leslie Tuttle)

Department of History

INTRODUCTION

On April 22, 1970, the United States celebrated its first Earth Day. Across the nation, Americans joined together, spoke and celebrated Mother Earth. On that day, 1500 colleges held Earth Day teach-ins. Others gathered in churches, temples, and city parks. Eventually, the celebrations involved millions of Americans. Designed by Senator Gaylord Nelson of Wisconsin, who had noted the effectiveness of the civil rights protests of the 1960's, Earth Day was designed to be an "environmental teach-in," which represented a federally approved and nationally organized "grassroots movement" aimed solely at cultivating public awareness of the environment.[1]

Earth Day coincided with the birth of national policies created in the late 1960's and early 1970's that focused solely on the consideration and protection of the environment. During the presidency of Richard Nixon, the federal government increasingly regulated environmental concerns via two significant mechanisms: the National Environmental Policy Act (1969), and the Environmental Protection Agency (1970). The creation of these institutions constituted a federal statement that environmental issues had become a national priority. At the same time public officials in Washington wrote legislation that recognized the environment as a critical national issue, historian Ann Vileisis argues, "... citizen activists in their communities dealt with broad choices facing the society at large: to embrace boundless growth with all its side effects or to protect remaining natural values before they were lost."[2] As a result of the space program, the first images of planet earth circulated in newspapers and magazines, serving as poignant evidence of human's place within the environment, and for the first time, people could visualize their largest home, planet earth, and conceptualize their place within the biosphere and ecosystems.

In Lawrence, Kansas, home of the University of Kansas and Haskell Indian Nations University, however, the first Earth Day events were overshadowed by civil rights protests at the University of Kansas. Just two days before, amid a series of racial protests, an anonymous individual set fire to the University of Kansas Student Union. With the community under a 7PM mandatory curfew, many of Lawrence's first Earth Day events were cancelled.

Despite these setbacks, KU hosted a six-person Earth Day panel that included professors of economics, political science, geography, architecture and business. The conversation centered on the how to resolve environmental

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[1] Adam Rome, "The Genius of Earth Day." *Environmental History.* (2010) 15 (2): 194.

[2] Ann Vileisis, *Discovering the Unknown Landscape: A History of America's Wetlands.* Washington, D. C.: Island Press. 1999. 228.

problems and each individual offered a solution given their academic and professional backgrounds. Economics professor Darwin Daicoff suggested that local government should incentivize environmental consciousness through tax policy. Political science professor Herman Lujan considered this solution naïve, stating, "In a representative majoritarian society, the government structure simply reflects the community."[3] Richard Pollay, assistant professor of business at the university agreed, conceding that it was unlikely that such policies would reduce environmental problems since, "sophisticated and expensive political campaigns depend on industrial sources for funding."[4] While panelists disagreed over the appropriate solutions, one fact remained unquestioned, environmental problems were "a natural consequence of the competitive market."[5] On this first Earth Day, Lawrence's environmental panel agreed that the natural features of the capitalistic marketplace and democratic polity were the root source of environmental problems in America.

In many ways, this conversation foreshadowed an environmental debate that would concern the city of Lawrence for decades to come, over a project known as the South Lawrence Trafficway. This proposed 15-mile arterial highway became the subject of controversy in 1986, when environmentalists began to protest its projected path through a virgin tallgrass prairie and several acres of wetlands held to have environmental, historical and cultural significance for important segments of the community. Two sides quickly formed in the debate over the South Lawrence Trafficway: those who valued the land for economic gain, and those who valued the land.

The two sides of the Trafficway debate represented conflicting ideologies, which had historically specific conditions that shaped the assumptions, values and the tactics available to achieve their goals. As Lawrence's Earth Day panel discussed, those who would economically benefit from the construction of the trafficway—especially real estate developers and local businessmen—had significant influence in the local community. Their viewpoint represented the ideology of classic American liberalism with roots in the 1940's and 1950's American housing boom. These individuals enjoyed the favor of local government, which promoted the South Lawrence Trafficway as a means to reduce traffic and facilitate planned growth within the community. Those against the trafficway, on the other hand, took advantage of post-Earth Day environmentalism and national acts like the National Environmental Policy Act, working tirelessly to stall the road's construction. By 1993, during a resurgence of national interest in environmental justice, and an effort to assert its cultural identity, Haskell Indian Nations University joined the environmentalists' struggle using similar tactics to stall and re-route the road.

This paper will argue that the story of the South Lawrence Trafficway reveals a system that favors development over preservation, despite the agencies and processes that were created in the late 1960's and 1970's specifically to protect environmental and historic landmarks. In the system that exists, the burden for preservation of ecologically, historically or culturally valuable landscapes falls on the shoulders of environmentalists and interest groups.

[3] "Environment In Spotlight at KU Event," *Lawrence Journal World*. 22 April 1970, p. 2.
[4] Ibid.
[5] Ibid.

Our political and social institutions prioritize development seeing economic growth as a natural force that should continue unless an opposing party can provide a compelling reason to halt it. This dynamic is clearly visible in the story of the South Lawrence Trafficway, where, despite the existence of federal processes designed to protect sensitive landscapes, the project's opponents found themselves forced to work constantly to prove that the environmental, historical and cultural significance of such landscapes outweighed the value of growth.

The first chapter establishes the ideological history of development and urban expansion in the United States, beginning with the post-World War II housing boom. It examines a wide variety of sources, reading city planning documents in light of sociological theories that suggest that the prioritization of growth and development are embedded in our political systems from local government to federal policies. Opinion pieces written by local media mogul Dolph Simons, Jr. during this era represent the business-interests within the community and indicate that developers assumed that these interests would be protected.

The second chapter highlights the efforts made by environmentalist groups to protect two different ecosystems threatened by the bypass from 1986-1990. It sets up Lawrence's history as a politically informed community of scientists and presents the value of the Baker Wetlands and Elkins Prairie. This chapter discusses several federal agencies and acts established in the 1970's to protect the environment, showing that the burden of proving significant value falls heavily to interest groups. The story of the Elkins Prairie and Baker Wetlands shows how our systems inherently favor

development and traces how environmentalists respond to these systems through protests and quests to alter public opinion through spectacle and the media. And eventually, when these approaches fail, it demonstrates that environmental issues often end up in the courts.

By the 1990s, the scope of the South Lawrence Trafficway controversy had grown to include issues of historical and spiritual significance. As national politics prioritized questions of environmental justice in the wake of President Bill Clinton's Executive Order 12898, Haskell Indian Nations University became a key player in the struggle over the trafficway. Haskell characterized its opposition as part of a movement to renew pride in Native American history and identity. Members of the Haskell community argued that the placement of a road through an area with such complex history was unjust, and that the agencies conducting the project had not adequately considered these values. The third chapter argues that, as with earlier clashes, developers' attitudes and efforts during this era changed very little in the face of new challenges to their project. In comparison, Haskell and environmental groups allied to enforce their position, and today, still continue to successfully to stall the project.

Because of the duration of this controversy, the number of interest groups involved, a history of local and national media coverage and the South Lawrence Trafficway's position as a subject of federal and local bureaucracies, its history has been exhaustively documented and there is abundant source material. Rather than include all of this vast range of primary and secondary source documents, this project highlights several key documents, stemming from

important moments in the conflict and analyzes them to understand each party's values, history and tactics. In particular, this paper studies city-planning documents to reveal how local government prioritized growth, and draws on secondary source material from environmental historian Adam Rome, sociologist Harvey Molotch and urban theorist Jane Jacobs. Dolph Simons, Jr. is used as a representative of business interests. Although it would be desirable to know more about the ideas of other business leaders, Simons' voice is readily accessible from his editorials in the *Lawrence Journal World*. Other sources I analyzed include unpublished articles, pamphlets, legal records, and newspaper articles; in every case, I tried to identify the assumptions, methods and biases of the authors. Finally, I have benefitted from the 2001 work of a University of Kansas Law student, Kelly Lynn, who published a JD thesis on this subject entitled, "Seeking Environmental Justice for Cultural Minorities: The South Lawrence Trafficway of Lawrence, Kansas." Drawing from these sources, Lynn's thesis discusses the legal inadequacies of the National Environmental Policy Act and the National Historic Preservation Act as regards the South Lawrence Trafficway.

Before launching into the story, some readers may wonder about the land that was the basic subject of contention. The proposed South Lawrence Trafficway is a 15-mile highway that connects Interstate-70 in west Lawrence to Kansas Highway-10 in east Lawrence, bypassing the city to the south. In its projected path stood two patches of land that represent some of Lawrence's most-valued ecological resources: an 80 acre plot of virgin prairie known as the Elkins Prairie and 640 acres of riparian wetlands known as the Baker wetlands. Historically, students and teachers from local schools, as well as the University of Kansas, Baker University, Haskell Indian Nations University used these landscapes as "living labs" with which to study rare plant species and wetland ecology. As later became clear, the Baker Wetlands had a longer social and educational history; it had been partially filled in the late 1880's to be farmland for young Native American boarding students at the Haskell Institute. In the 1950's, when Haskell no longer used the land for agricultural purposes, ownership moved from the Bureau of Indian Affairs to the United States Department of Health, Education, and Welfare. Today, several institutions own parcels of the wetlands: Baker University owns 573 acres (including the 15 acres the bypass most directly affects), Haskell Indian Nations University owns 27 acres, the Kansas Department of Wildlife and Parks owns 20 acres, now designated as a National Natural Landmark, and the University of Kansas holds 20 acres. The remnants of the Elkins Prairie remain private property. In 1991, construction began on the western nine miles of the Trafficway, but the remaining six that run through the Baker Wetlands are still, as of 2012, in contention, engulfed in legal battles.

Map of the Proposed South Lawrence Trafficway, from Ljworld.com

The Facilitators of Growth

In November 1990, local businessman and newspaper owner Dolph Simons, Jr., posted an opinion piece in Lawrence's local newspaper, the *Lawrence Journal World*. During the previous year, his Saturday Column frequently referred to one particular issue: The South Lawrence Trafficway. Simons' commentary that week discussed the latest controversy raised by the project, the plowing of Elkins Prairie. As the major voice for private and public development in Lawrence, Simons went on the offensive against the local environmental group Save the Elkins Prairie, justifying the plowing by Wichita land speculator Jack Graham. In this opinion piece, Simons cataloged the tactics of the people he called the "greens." They were, "negative, strident, even violent," flamboyant, and corrupted by ulterior motives.[6] To Simons, the environmentalists' protests indicated both disrespect for private property and a

disregard for basic infrastructure that he considered invaluable to the Lawrence community.

The editorials produced by Simons in the early 1990's represented one side in a common struggle between development and environmentalism that stretched back to the United States suburban housing boom of the late 1940's and 1950's. With technological improvements, aid from government agencies like the Federal Housing Administration and the Federal Highway Administration, and a heavy dose of advertising, the post-World War II housing boom allowed middle class citizens to participate in the "American way of life," via homeownership. As historian Adam Rome argues, the values of home and land-ownership during this era became tenants of classic American liberalism, "tied to ideas about democracy, freedom, and civic order."[7] In this way, consumerism and the ownership of private property became associated with nationalism. Developers during this era considered themselves heroes by "answering the prayers of millions," and making the American dream achievable. Thus, these developers assumed a commanding position over the development of American cities that still exists today.

This project examines Lawrence, Kansas as an example of broader national trends. As elsewhere, conflicting local priorities were worked out in a regulatory environment shaped by federal and state politics. As Dolores Hayden states in her book *Building Suburbia: Green Fields and Urban Growth*

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[6] Dolph C. Simons, Jr.m "Saturday Editorial Column." *Lawrence Journal World*, 8 December 1990.

[7] Adam Rome, *The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism."* Cambridge University Press: New York, 2001. 7.

1820-2000, federal housing subsidies enabled commercial developers and real estate moguls to take unrestricted suburban growth as a given well into the 1980's. She argues, "By the mid-1950's, federal tax supports for commercial developers and direct deferral support for highways provided incentives for unchecked growth on a scale that earlier entrepreneurs could never have imagined."[8] Hayden goes on to state that throughout the 1980's, both local and federal governments frequently subsidized private and commercial development.

This is certainly true in the case of Lawrence, Kansas, where federal housing subsidies greatly contributed to attitudes towards private and suburban development. Two well-known entrepreneurs often represented business interests within the community of Lawrence: Bob Billings, the 1960's developer of a high-end housing community and private golf course known as Alvamar and the very vocal businessman Dolph Simons, Jr. These individuals, along with land speculators within the community and abroad, held certain assumptions regarding the outcome of the bypass. The assumptions about progress, private property and the "American dream" embedded in this liberal ideology manifested themselves repeatedly in the debate over the South Lawrence Trafficway, coming into conflict with new concerns of environmental consequences. In summarizing Rome's argument, historian Mark Luccarelli stated that many of the environmental problems caused by suburbanization, including land-use controversies, traffic

congestion, and pollution "[had] everything to do with the (largely) unintended consequences of the American housing system, and the power of the real estate industry to perpetuate the system."[9] As Simons' editorials from the era suggest, frustration and surprise ensued when a group of environmentalists, and later Native Americans, threatened developers' pursuits and questioned their worldviews.

By the time these challenges arose in Lawrence, environmentalism was already well established. Rome argues that complaints over suburban environmental degradation began as early as the 1950's with the "open space movement," and grew to include concerns about pollution in the 1960's. This movement expanded further in the 1970's and 1980's to embrace a myriad of issues, including everything from endangered species protection to energy conservation.[10] A decade after the launch of this national struggle, the battle over the South Lawrence Trafficway represented the clash between traditional notions of private property and progress and concerns of environmental consequences of threatened and endangered species and native landscapes.

The proposed South Lawrence Trafficway galvanized the local movement. From its inception in the late 1970's, to its proposal in the mid 1980's, the South Lawrence Trafficway was a product of this community of private

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[8] Dolores Hayden, *Building Suburbia: Green Fields and Urban Growth: 1820-2000.* Vintage Books: New York, 2003. 4.

[9] Luccarelli, Review: *The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism. Organization & Environment.* Thousand Oaks: Mar 2003. (16:1), p. 126.

[10] Rome, 6.

businessmen and real estate speculators, supported by a city and county commission who viewed economic progress as a key priority to the growing community of Lawrence. Many agencies, both federal and local supported these economic priorities, including the Kansas Department of Transportation and the US Army Corps of Engineers. The Federal Highway Administration played an important role in the first phase of construction on the South Lawrence Trafficway by investing in the project. The Lawrence and Douglas County Commissions, with support from the Lawrence Chamber of Commerce pushed the project ahead despite protests, and eventually lawsuits from interest groups within the community. Simons, as the owner of Lawrence's only local newspaper, provided the voice for business interests regarding this development. As the drawn-out battle continued from the 1980s to 1990s, Simons' language reflected frustration and surprise that the community at large was not meeting the desires of Lawrence's pro-growth interest groups.

City Planning Priorities

Local historians had long-identified Lawrence as a pluralist community with a vast number of interest groups and a long history of participatory politics. Political scientist Burdette Loomis referred to Lawrence politics as a "bipolar model," which simultaneously supported urban growth while calling for historic and cultural preservation.[11] A brief look at the terms of members in the Lawrence City Commission in the 1980's

evidences this model. In 1979, Lawrence elected Don Binns, Ed Carter, Bob Schumm and Barkely Clark to the City Commission. The Lawrence Homeowner's Association supported this Commission, and its members typically identified themselves as "pro-growth." By 1981, a strongly "anti-growth" group including Marci Francisco, Nancy Shontz and Tom Gleason took hold of the Lawrence Commission. And by 1984, David Longhurst, Mike Amyx and Ernst Angino filled the City Commission seats, and once again represented growth and development interests in the community. These interests were maintained throughout the rest of the 1980's.

While members of the City Commission represented their constituency, some interest groups complained that local politics did not always represent their interests. According to sociologist Harvey Molotch, the opposing duties of the local government to its voters as well as to long-term priorities of growth often follow the outcome seen in Lawrence. Molotch argues that those in political positions of power often side with the "local elites," of which he states,

> ... The political and economic essence of virtually any given locality, in the present American context is *growth*... the desire for growth provides the key operative motivation toward consensus for members of politically mobilized local elites, however split they might be on other issues, and that a common interest in growth is the overriding commonality among important people in a given locale.[12]

[11] Steve Lopes, "Building Community Power Structures 1984-1998," *Embattled Lawrence: Conflict and Community.* Edited by Dormer, Dennis and Barbara Watkins. University of Kansas: Lawrence, Kansas, 2001. 277.

[12] Harvey Molotch, "The City as a Growth Machine." *The American Journal of Sociology*

Identifying growth as "a constantly rising urban-area population"—from job creation to the expansion of residential and retail industries—Molotch argues that land interest and profit are the key factors of all decisions made by what he terms the "political elite."[13] Members of Molotch's political elite include any individual who has a stake in land-use decisions; developers like Dolph Simons, Jr. would certainly be included, as well as local politicians who would reap the benefits of "a larger tax base to support necessary state and local government services."[14] While Molotch's biases are clear through his language, Lawrence's political history can be read through his discussion of the duties of local government and notions of growth. In Lawrence, despite the community's active involvement in politics, the business interests of powerful real estate speculators often enjoyed the support of local government.[15]

The prioritization of the South Lawrence Trafficway was a group-effort by both the Lawrence and Douglas County Commissions. The Commissions justified the need for a southern bypass for three main reasons: traffic control between two nearby cities, Kansas City and Topeka, population growth, and the need to attract private business and commerce to a developing area. Several city-planning documents represented these themes,

beginning with vague plans for development in southwest Lawrence in *Guide for Growth 1964-1985*. These plans grew more detailed and sophisticated with later planning guides for the city, especially the *Douglas County Guide Plan 1976-2000,* and *Plan '95.*

Guide for Growth 1964-1985 first proposed the South Lawrence Trafficway as part of the "West Circumferential Route" (later known as the "Haskell Loop"). This road would loop around the entire city, attaching Kansas Highway 10, east of Lawrence, to Interstate 70 on the west.[16] The text expressed a deep concern for Lawrence's position 20 miles east of Kansas' state capitol, Topeka and 32 miles west of the much larger Kansas City metro area, stressing that the West Circumferential Route would improve Lawrence's connectivity between the two. Intra-urban connectivity is valuable for a number of reasons, one being increased population diversity; urban thinker Jane Jacobs theorized that connectivity enabled economic and intellectual diversity in a "knowledge spillover."[17] For Lawrence city planners, connectivity enabled more efficient automobile travel between cities, which could increase economic conditions in Lawrence as people from larger cities traveled through, to and from the city. Connectivity was also related to local pride; the authors of *Guide for Growth* boasted of the "Above average cultural and environmental qualities of the community," due to Lawrence's proximity

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82, no. 2. (September 1976): 309. http://jstor.org/.

[13] Ibid, 310.

[14] Federal Highway Administration and State Highway Commission of Kansas, *Draft Environmental Impact Statement*, 1974 Project No. 59-23 F-DP-067-2. S-7.

[15] Burdett Loomis, "Lawrence Politics: Three Themes, Four Notions and a Handful of Stories." *Embattled Lawrence: Conflict and Community.* 277.

[16] Harland Bartholomew & Associates, Kansas Industrial Development Commission, Lawrence-Douglas County Planning Commission, *Guide for Growth 1964-1985.* 1964.

[17] Gerald A Carlino. "Knowledge Spillovers: Cities' Role in the New Economy." *Business Review*, Q4, (2001): 17-26.

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to several universities.[18] City planners viewed Lawrence as a city with great natural features and cultural advantages that deserved to rank among other populous and important nearby cities.

While the authors of *Guide for Growth* referred to Lawrence's environmental qualities, they did not provide any specific examples or suggestions on how to highlight them. In fact, neither this document nor any city planning documents from well into the 1980's ever specified or elaborated upon the environmental qualities that planners deemed so important to Lawrence. Rather, planners viewed the environment as a blank slate to improve upon, envisioning Lawrence as a city of, "... beauty and amenity, a city of which we can be truly proud... [Built] by the means of countless individual and corporate actions, public and private, extending over decades."[19] This document foreshadowed the complications for development in Lawrence, stating definitely that despite Lawrence's grand environmental features, "Nature gives us no excuse for mediocrity."[20] The authors also acknowledged that as Lawrence's cultural and economic position improved, it would require more open space to facilitate a growing community.[21] While the maps included in this document do not mention any natural features that the West Circumferential Route may threaten, this document was written before the federal government created agencies to consider these features. This document provided early and vague plans that would grow more definite in the future.

The Haskell Loop was a precursor to the South Lawrence Trafficway, a proposed road that would have circumvented Lawrence, and enable mainly commercial and residential growth to the west and industrial growth in the east. City and county commissions promoted the Haskell Loop as a means to facilitate commercial growth and move industrial and commercial traffic—like semi-trucks—on the outskirts of the city. This would divert industrial traffic away from Lawrence's major thoroughfares, 23rd street and Iowa street. City planning documents stressed that the Haskell Loop would, "reduce the time and cost of through travel," and further eliminate truck traffic while promoting safety and alleviating air and noise pollution and congestion.[22]

As with *Guide to Growth*, these plans discussed Lawrence's location between Kansas City and Topeka, yet fear grew within the community that without planned growth, Lawrence could be absorbed into a larger city's "inevitable urban sprawl."[23] If Jacob's theory of "knowledge spillover" was in fact true, then, without a bypass to facilitate commuter traffic, Lawrence could become a bedroom community to the much-larger Kansas City, Missouri. The assumed inevitability of suburban sprawl indicated that city planners viewed development and growth as a given, which should be planned for accordingly. To city planners, the land surrounding the South Lawrence Trafficway became a means to preserve the city's jobs, heritage and autonomy in the smartest and most-planned fashion possible. This attitude is embedded in all

[18] *Guide for Growth.* 1.
[19] Ibid.
[20] Ibid.
[21] Ibid.

[22] *Draft Environmental Impact Statement*, 30.
[23] Committee, "Third Community Forum Review of Strawman Plan," 10 November 1993.

of Lawrence and Douglas County planning documents.

After the Commissions voted to accept $4 million in federal obligation bonds to fund the South Lawrence Trafficway, it became a federal project, overseen by the Federal Highway Administration. According to the National Environmental Policy Act of 1969, before a federal agency can begin construction on a project, it must conduct an Environmental Assessment of the affected landscape. These assessments examine all aspects of the project—from threatened species to an extensive economic analysis, and often result in the creation of a comprehensive Environmental Impact Statement, submitted to the public for review. In 1987, the involved agencies hired a consulting engineering firm, Landplan Engineering, overseen by Brian Kubota, to research and compile a *Draft Environmental Impact Statement* for the South Lawrence Trafficway, and by 1990, the agencies filed a *Final Environmental Impact Statement* for public review.

The *Draft Environmental Impact Statement* built on arguments made by earlier city planning documents, providing specific information about population growth. It projected future population growth using travel pattern data from the *1971 Lawrence Area Transportation Study* and base year population and employment estimates from US Census data and zoning trends.[24] It estimated that population growth would continue at high rates, especially in Southwest Lawrence. In 1987, the population of Lawrence was 52,785 and

the 1990 *Environmental Impact Statement* estimated that by 2010, Lawrence's population would nearly double.[25] As the population maps below indicate, between 1980 and 2009, the bulk of growth did indeed occur to the southwest. While these maps do not indicate land use, they do suggest that since population density did not increase at a consistent rate with the population, much of Lawrence's southwestern development must be residential. It is also important to note that Lawrence's 2009 population fell over ten thousand people short of 1987's estimated population of 100,000.
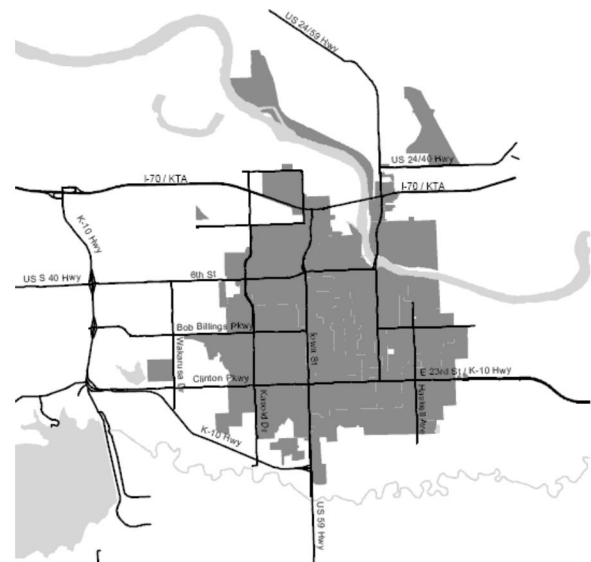
Lawrence 1980
Area: 12,485 acres (19.51 square miles.)
Population: 52,738
Density: 2,703 per sq. mile

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[24] US Department of Transportation, Federal Highway Administration, Kansas Department of Transportation, Douglas County and Lawrence, KS. *Draft Environmental Impact Statement.* 1987. 16.

[25] Ibid. I-15.
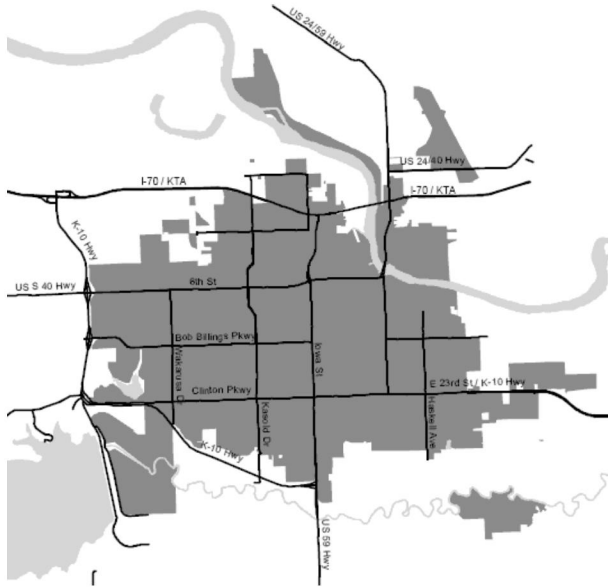
Lawrence 2009
Area: 20,883 Acres (32.68 square miles)
Population: 87,643
Density: 2,817 per sq. mile

Following a key argument made by city and county officials, the *Draft Environmental Impact Statement* recommended the South Lawrence Trafficway as a means to divert commercial traffic away from the center of Lawrence. With increased population, traffic safety was a concern for the Commissions; as the *Lawrence, Kansas Traffic Engineering Safety Plan* indicated in 1987, seven of the 25 intersections with the highest annual accident costs were on 23rd and 31st street.[26] It is not surprising that these roads produce the most accidents since they experience the most traffic, but planners used these statistics to promote the idea that the South Lawrence Trafficway would reduce traffic and accidents on two of Lawrence's largest thoroughfares.

With population growth and the prospects of development in southwest Lawrence came the potential for economic growth, both private and public. The 1990 *Environmental Impact Statement* stressed that while the South Lawrence Trafficway would cost $37,700,000, by 1986 prices, the jobs and commercial and residential development it would create would greatly benefit the community. The construction of the road would spur a short-term economic stimulus of about $150,000 annually, and provide jobs for contractors and construction workers, who would receive 25% of the overall cost of the road as salaries.[27] Beyond job creation, the authors of the *Environmental Impact Statement* argued that the project would spur "a multiplier effect, whereby those initially receiving construction money spend it for food, housing, clothes and durable goods," that would inevitably be spent within Lawrence.[28]

The *Environmental Impact Statement* also stressed the value of private business to a growing community. It presented attracting new business to Lawrence as a key duty of the city and county Commission, stating:

> The County has the opportunity to exercise a strong, positive influence over the character of the development of the area around Lawrence and in Douglas County.... [it] could play a major role in attracting new business investments to the County resulting in expanded job opportunities for all County residents and a larger tax base to

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[26] "Lawrence, Kansas Traffic Engineering Safety Plan." November, 1983.

[27] *Draft Environmental Impact Statement,* 3-4. These estimates made with dollar values from 1988.
[28] Ibid, S-6.

support necessary state and local government services.[29]

This document denoted the alliance between the Commissions and developers. As the above list of 1980's City Commissioners indicates, they often represented a constituency interested in local growth and development. Despite Lawrence's notoriously anti-development interest groups, the Commissions saw the trafficway as an investment in Lawrence's future that a large portion of the community wanted. By siding with developers from the beginning, they could promote a "strong, positive influence" over future development patterns.

By 1986, South Lawrence Trafficway construction appeared inevitable. That year, the Commissions voted to federalize the South Lawrence Trafficway project, and accept $4 million in obligation federal bonds. A year later, the *Draft Environmental Impact Statement* recommended constructing the road in two phases, beginning with the less-controversial nine-mile western portion. Years before, a two-lane temporary road was erected running through the Baker wetlands, on the southern portion of Haskell's land (today, this road is 31st street). The first Environmental Impact Statement proposed that the second phase of the road would replace 31st street.

This era elicited different responses from environmentalists and developers on questions of private property and ownership; developers altered the land adjacent to the project with tractors and bulldozers, while environmentalists questioned the environmental consequences, and argued that even private land can have public

value. Throughout the early 1980's, members of Molotch's "political elite" encouraged the communities prioritization of the bypass: rumors circulated that Billings utilized his connections in the United States Senate to federalize the project with the bond issue, Simons voiced his opinions strongly through the local media, and owners of private property near the proposed road began preparing for the economic boon. In return, environmentalists questioned the interests of those involved in the writing of the *Environmental Impact Statement*, indicting Brian Kubota, principal engineer of Landplan Engineering, as having two conflicts of interest; owning land near the original route of the trafficway, and serving Bob Billings as a client on other development projects.[30] By calling to question the personal interests of those involved in the project, environmentalists asked the community to consider whose interests were actually represented in the South Lawrence Trafficway.

The Commissions' prioritization of the Trafficway on grounds of economic progress had serious implications both within the community and upon the landscape. Members of the community had been vocal against earlier proposals like the Haskell Loop, however the bypass threatened not only aesthetics and neighborhoods, but also landscapes of ecological and historical value. One incident, described by local historian Clark H. Coan as the "first casualty" of the trafficway, occurred around 1987,

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[29] Ibid, S-7.

[30] Clark H. Coan. "Selected Chronology of the Haskell-Baker Wetlands and the South Lawrence Trafficway." *Genuine Kansas.* No date. http://www.genuinekansas.com/history_baker_w etlands_controversy_timeline_kansas.htm

contemporaneous with the initial release of the *Draft Environmental Impact Statement*, when landowners Charles Dunbar and Bruce Snodgrass filled in "several acres" of the Baker wetlands without receiving Clean Water Act 404 permits from of the US Army Corps of Engineers.[31] This began what Coan terms the "salami effect," of development in wetlands where, "a slice here, a slice there, and soon the entire roll is gone."[32] Coan documented these events in the "Selected Chronology of the Haskell-Baker Wetlands and the South Lawrence Trafficway." Coan was a major voice for the wetlands during the 1980's, calling himself a "local historian," and his bias is evident in this document, however this does not make the speculative filling of the wetlands any less of a reality. The United States Army Corps did little more than slap the three men on the wrists; they were fined $3,000 and retroactively issued permits for the filled land.

  While technically, those individuals illegally filled in wetlands without a permit, they did so on privately owned land. Editorials from these years by Dolph Simons, Jr. come to the defense of his fellow businessmen and entrepreneurs, using the *Lawrence Journal World* as an influential platform. As owner of the newspaper and a very successful local businessman, Simons was an obvious voice for the business community. His arguments regarding the development of the South Lawrence Trafficway are the product of a classical American liberal ideology, focusing on three main ideas: business, private interests and population growth. In one opinion piece from this era, Simons rhetorically asked, "When and where does the right of an individual to do what he wishes with his own property, as long as it doesn't break the law or create something bad for his neighbors, intersect with the wishes of others? Where is the line to be drawn on private rights versus public rights of public concerns?"[33] This question was a critique of environmentalists for halting private development, Simons stated, "The surest way for a community to deteriorate is to do nothing at all in the way of necessary growth and expansion... those in charge of community affairs had the foresight and courage to do what was necessary for sensible progress."[34] According to Simons, these private actions could benefit the public through development and potential growth, and the Commissions appropriately acknowledged this.

  Simons was a powerful voice in the community long before the incidents of the Trafficway began to split the community. A Lawrence institution, the Simons family started the *Lawrence World* in 1891,[35] today, known as the *Lawrence Journal World* of which Simons, Jr. was editor and publisher. Simons, Jr. is also chairman of the World Company, which owns several cable companies in the Midwest including Sunflower Broadband in Lawrence.[36] Simons is known for

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[31] Ibid.
[32] Ibid.

[33] Dolph C. Simons, Jr., "Saturday Editorial Column." *Lawrence Journal World,* 8 December 1990.
[34] Dolph C. Simons, Jr., "Not Funny to Everyone." *Lawrence Journal World,* 1 November 1986.
[35] David A. Anderson and Dolph Simons, Jr., *A Century of Newspapering the Simons of Lawrence: Celebrating the 200th Birthday of Our Nation's Bill of Rights.* Princeton University Press: 1991.
[36] In 2010, Sunflower Broadband was sold to Knology of Kansas, Inc. for $165 million. In

featuring conservative columnists, and periodically offering up pro-development editorials, once quoted as saying, "A newspaper should run conservative columnists even if the publisher or owner is a 'staunch, liberal Democrat.'"[37] Throughout the years, the *Lawrence Journal World* has been criticized as providing positive coverage of the business community, being resolutely pro-development and neglecting to cover environmental or peace efforts.[38] Because of his history and notoriety within the community, as well as his accessibility through the *Journal World*, Simons is an appropriate representative for business interests in Lawrence.

In many ways, Simon's summarization of environmentalist tactics was accurate. While he intended to discredit their efforts, he accurately summarized many of environmentalism's most successful methods of stalling development. Environmentalists and scientists, neighborhood organizations and members of the community unaffiliated with a particular interest group rallied against the South Lawrence Trafficway, making their voice heard through increased participation in public forums and political debates. The values of Lawrence environmentalists in the 1980's and early 1990's stood contrary to those individuals with a traditional ideology that expected economic growth as a given.

The growth of interest in the landscapes threatened by the bypass can be seen through attendance of public forums. Local dissent over the proposed South Lawrence Trafficway began slowly in the late 1970's, comprising mostly of members of neighborhoods near the proposed project. At the first meeting set up by the project's engineers, Howard, Needles, Tammen & Bergendoff (HNTB) and Landplan Engineering, on November 7, 1985, only 40 people attended; by the third meeting on April 16, 1986, 250 attended.[39] This rapid increase in local interest reflects the efforts put forth by residents of Lawrence, university professors and students to make their point within political mechanisms. After the release of the *Draft Environmental Impact Statement*, activists initiated large-scale protests. They criticized the lack of analysis of Elkins Prairie and the Haskell Baker Wetlands, and eventually sought legal advice and hired lawyers to ensure that their interests were represented. While the *Final Environmental Impact Statement* released in 1990 addressed these landscapes more completely, environmentalists, and three years later, members of the Haskell Indian Nations University—who had a vested interest in the project—remained dissatisfied. Haskell entered the protests after the release of the *Final Environmental Impact Statement*, arguing that the cultural and historical values of the wetlands had not been significantly considered.

To Simons, the typical environmentalist, with their protests, spectacles and lawsuit threats, was more nuisance than hero. The language of his opinion pieces from this time periods was frustrated, indignant that such trifling matters as an endangered frog or prairie plant stalled him and his fellow businessmen from achieving higher levels

April 2012, Knology was again sold to WideOpenWest for $750 million.
[37] Anderson and Simons.
[38] Stephen Lynn, "Citizen Dolph: A rare look at the media mogul who dominates the Lawrence information business." *University Daily Kansan.* 4 April 2006.

[39] *Draft Environmental Impact Statement,* 116.

of economic success. This represented a clash in values; while environmental protesters used a number of these tactics to protect their prized landscapes, Simons did not regard these attempts as valuable in any sense of the word.

The clash of priorities between environmentalists and local businessmen and pro-development institutions reflect two differing opinions on the definition of the word progress. To Simons, progress related directly to population and he strongly supported any document that stressed this matter. Simons wrote in one opinion piece, "As our country grows, there will be greater and greater demands for land use by a growing population."[40] This argument that public infrastructure and private projects are necessary to support a growing population placed value solely on economic progress. He placed no value in the Elkins Prairie or Haskell Baker wetlands beyond their role as land for development.

To an environmentalist, however, progress meant something quite different. Editor of the University of Kansas's newspaper, and current Attorney General for the state of Kansas Derek Schmidt had a different suggestion on how to approach the growing city: "As Lawrence grows, it needs an ambitious, systematic program to identify and purchase ecologically valuable lands."[41] This quote alluded to the creation of the Kansas Land Trust in the 1990's, and stressed progress towards better protection of those "environmental qualities" once deemed so

important to the city of Lawrence in the 1964 *Guide to Growth*.

As the documents analyzed in this chapter indicate, local government prioritized the South Lawrence Trafficway, assuming that the community would accept their justifications of traffic safety and population control. Environmentalists had a different agenda. Mirroring the strategies of environmentalism that began in the 1970's, Lawrence environmentalists used protest and worked with local government in an attempt to protect the Elkins Prairie, and worked within the context of the National Environmental Policy Act to protest the road's projected path through the Baker Wetlands. A discussion of Lawrence environmentalists' values, approaches and notions of progress is the subject of the next section.

A Frog for Commissioner, A Funeral for a Prairie

In the early hours of November 18, 1990, a group of 20 individuals huddled together outside of an 80-acre plot of land just southwest of Lawrence. Some held signs, some engaged in debate, and others stood silent, looking on at the object of their early-morning meeting: a lone tractor, resting in the middle of its half-plowed path. The plowing began around midnight, and halted as the group grew to include journalists, policemen and members of the Lawrence City Commission and Douglas County Commissions. The next day, the Commissions held an emergency meeting to discuss the fate of those 80 acres, where they decided to buy out the land's private owner, Jack Graham. After hours of debate, Graham refused their offer. The following day, the tractor resumed its

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[40] Dolph Simons Jr., "Saturday Column," *Lawrence Journal World.* 8 December 1990.
[41] Derek Schmidt. "Purchasing Power: County needs preservation program to prevent more land from meeting Elkins Prairie's fate." *University Daily Kansan.*

path, turning up 30 acres of virgin prairie soil.

The plot of land, known locally as the Elkins Prairie, was one of a few remaining virgin Big Bluestem prairies[42] in the world, argued by some to be, "... the most endangered biome in North America."[43] It supported over 150 plant species, including two federally listed threatened species, Meads Milkweed and the Western Prairie-Fringed Orchid. Environmentalists maintain that Elkins Prairie was an ecologically rich area threatened by city and county development and undervalued by city, county and federal officials. Though the damage made by that tractor cannot be undone, it provided a valuable lesson to local environmentalists: "Elkins Prairie is a symbol of preservation come too late... it's a lost battle... it provides us an occasion to make the public aware of environmental issues, and it reminds politicians that although we lost this battle, we are a force to contend with in Douglas County and in Lawrence and the state of Kansas."[44]

This chapter examines the historical basis for the environmental protests of the South Lawrence Trafficway and examines how environmental tactics are shaped by federal processes such as the National Environmental Policy Act, the perceived value of different types of landscapes and the expectations of development as discussed in chapter one. It highlights two protests made by Lawrence

environmentalists in the 1980's and the eventuality of legal battles to support the argument that environmentalists are limited to a specific set of tactics when fighting a battle against development.

The environmentalism that developed in Lawrence in the early 1980s centered on issues specific to the Kansas landscape. Landlocked, and with more space and less population density than other states, Kansas bred an environmentalist movement focused on the value of ecological landscapes in terms of suburban growth, residential development and highway infrastructure. Home to a major state university, the University of Kansas, Lawrence had the informed community of scientists and biologists necessary to early environmental movements. With the community of educators and students at KU, as well as the only multi-tribal university in the United States, the Haskell Indian Nations University,[45] Lawrence identified itself as a culturally rich, diverse and forward-thinking community.

Environmental protest in Lawrence grew out of a grassroots anti-growth movement in the community. Members of the community were notoriously preservationist, especially in matters of historical conservation; by the 1970's, neighborhood associations had cropped up throughout the city, both successfully and at times unsuccessfully protesting development. Actions taken by these neighborhood associations include protesting the construction of Bob

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[42] *Draft Environmental Impact Statement.* I-22.
[43] George F. Frazier, "Kansas Landowner Destroys Tallgrass Prairie Relict." *Earth First Journal.* 21 December 1990.
[44] Debbie Myers, quoting Dennis Domer, "Elkins Prairie's plowing mourned." *Lawrence Journal World.* 22 November 1992.

[45] Kelly D. Lynn. "Seeking Environmental Justice for Cultural Minorities: The South Lawrence Trafficway of Lawrence, Kansas." (JD Thesis, 2001). 222.

Billing's Alvamar,[46] the destruction of historically significant homesteads, and the development of a mall near Lawrence's major commercial center, Massachusetts Street. At times, these interest groups effectively voted their candidates for city and county commission into office, yet as the previous chapter indicated, those candidates who supported business interests most often enjoyed seats on the City and County Councils. Politically informed, interests groups were vocal about their values and interests, yet when business met grassroots preservationists, the business interests often won out.

　　　Lawrence was both politically aware, and also boasted a scientifically informed community of scientists and scholars from the universities. The protests from this era reveal that Lawrence environmentalists knew not only the ecological significance of their landscapes, but they understood the laws and regulations that protected their values. These laws and regulations included the National Environmental Policy Act of 1969, an act that requires any federal agency proposing development to prepare an Environmental Assessment, and potentially a more in-depth assessment in the form of a Draft and Final Environmental Impact Statement before beginning construction. The National Environmental Policy Act required that these assessments be released to all involved agencies, the Environmental Protection Agency and the public, to

ensure accountability. Established in 1969 with a string of national laws, agencies and policies that prioritized the environment for the first time in American history, the National Environmental Policy Act declared its purpose as,

> To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.[47]

The National Environmental Policy Act demanded unprecedented accountability by agencies to at least consider the effects of industry and development on the environment.

　　　This process provided a regulatory setting for environmentalists to form public opinion, influence local government and affect litigation. The creation of the National Environmental Policy Act was essential to the environmental movement, acknowledging that the consequences of development must be considered, however it remains only a process without regulatory influence. Since the National Environmental Policy Act is a process used to identify important landscapes, not necessarily to protect them, many critics argue that it "lacks substantive force."[48]

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[46] Barkley Clark, "Lawrence in the 1970's: Recollections of a Mayor." *Embattled Lawrence: Conflict and Community.* Edited by Dormer, Dennis and Barbara Watkins. University of Kansas: Lawrence, Kansas. 2001. 250.

[47] EPA, "National Environmental Policy Act." http://www.epa.gov/compliance/basics/nepa.html.
[48] Lynn, 224.

For this reason, the brunt of the work falls to the group or environmentalist concerned about protecting a certain landscape to ensure that its environmental values are recognized. Lawrence environmentalists used the National Environmental Policy Act process to ensure that developers identified all the potential environmental consequences of the South Lawrence Trafficway. As with other projects, environmentalists also used the process to stall the construction of the South Lawrence Trafficway however they were not able to use the process for any means beyond informing developers and stalling construction.

Opponents of the Trafficway utilized political maneuvers, working both within and against Lawrence's political system as needed. Protestors of the plowing of Elkins Prairie attempted to secure preservation by working closely with members of the city commission as well as national foundations, like the Nature Conservancy. Early protests over the Haskell-Baker wetlands took advantage of local politics to make a statement about the priorities of their government officials. Both relied heavily on the media to disseminate information about their cause, sometimes using spectacle to their advantage (i.e. running a frog for political office). Eventually, after the advocates of Baker Wetlands extended the reach of the Environmental Impact Statement into the court room, to ensure that developers where adhering to the NEPA process. Although the efforts to preserve Elkins prairie ultimately fell short, interest groups used the experience to fuel support against the project that destroyed it.

When discussing environmentalism, it can be easy to fall into a common dichotomy of progress versus preservation. This binary sets up two opposing ideologies as black and white, as historian Andrew Kirk states, "In this ideological tradition, wilderness became the ultimate symbol of environmental purity and abundance, with the polluted modern technological city its antithesis."[49] At first glance, Elkins Prairie protesters may appear to be strictly a preservation effort, and the city and county commissions staunchly progress-oriented. Yet, the Commissions initially rerouted the South Lawrence Trafficway to avoid the Elkins Prairie, and later worked with environmentalists to create the Douglas County Natural Areas program. This collaborative vision was broken when Jack Graham plowed those 30 acres of virgin prairie, but neglecting the nuances and moments of collaboration between the two different priorities does neither party justice. Likewise, Agnes T. Frog's campaign may appear to be a radical stunt, stressing a dichotomy of progress versus preservation however it turned out to be a savvy political strategy whose main achievement was not preservation, but rather a heightened awareness of the responsibility of Lawrence's citizens in development decisions that affect their community.

The bypass threatened two ecologically sensitive locations in Lawrence, the Elkins Prairie west of Lawrence and 15 acres of the Baker Wetlands. Environmentalists valued these for different reasons; the Elkins prairie was a virgin prairie, which contained many unique prairie plants, including two federally listed threatened

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[49] Andrew J. Kirk. *Counterculture Green: The Whole Earth Catalog and American Environmentalism.* Lawrence: University Press of Kansas. 2007. 13.

species. Haskell Baker wetlands, on the other hand, had less clearly defined ecological value—although it wetlands are essential for flood management, pollution control and wildlife habitat, and remains to be the home of federally listed threatened species the Northern Crawfish Frog. Nevertheless, its protectors argued with increasing vehemence that it had historical and cultural value to the surrounding community. As the controversy continued into the 1990's, environmentalists adapted their position by allying with Haskell Indian Nations University, which owned several acres adjacent to the proposed 31st street alignment. The alliance would facilitate a cultural and legal argument that linked the environment, spirituality, education and culture.

The Protests: Agnes T. Frog and the Elkins Prairie

The first large-scale protest of the South Lawrence Trafficway manifested itself during election for Douglas county commissioner. In fall of 1986, a group calling themselves the Committee to Elect a True Amphibian promoted their pick for county commissioner '86: Agnes T. Frog. Agnes ran head-to-head against previously unopposed Nancy Hiebert, Democratic chairman of the three-member county commission, who was running for her second term in the 1st district. Agnes represented a number of causes for the Committee to Elect a True Amphibian, the first of which was the committee's frustration over the commission's 1985 decision to issue $4 million in general obligation bonds to help pay for the South Lawrence Trafficway. Of this issue, "Agnes' backers say votes for the frog will be a sign to the commission that the bond issue should

have been put up for public vote."[50] Agnes' campaign fused Lawrence's political interests with environmentalism using the frog as a statement against what they considered to be a lack of political representation in their local government, and neglect of the constituency's interests.

However, the Agnes T. Frog campaign was not merely a political stunt. Running a frog for office also served as a reminder that the physical landscape of the Haskell Baker wetlands was a habitat for many creatures and thus more than just an empty plot of land. Agnes T. Frog gave voice in opposition to a traditional viewpoint about the environment that viewed open space not merely as a blank slate on which to improve on by infrastructure and industry. Admittedly, the "amphibian point of view" rejected the benefits promised by the trafficway, notably the jobs and commerce it would bring to the city, but ballots indicated that the message resonated with the community: Agnes received over 1800 votes to Hiebert's approximately 4800 votes.[51] Although Hiebert won the election, the result revealed that the community was more divided on the South Lawrence Trafficway than expected. Commenting on the close result, Agnes' Treasurer stated, "The fact that a frog was able to garner nearly 30 percent of the vote in this week's county commission election should be ample proof to our elected officials that the people of Douglas County do not

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[50] "Solo face isn't without issues," *Lawrence Journal World.* 3 November 1986.
[51] Committee to Elect a True Amphibian memos, on file at the Spencer Research Library. November 1, 1986.

uniformly support mindless paving of our environment."[52]

The budding public concern for the wetlands united Lawrence with other places in the United States. Nationally, wetlands benefitted from an educated and informed public who conducted protests in the increasingly politicized arena of environmental controversies, as historian Ann Vileisis states. She writes that, "like seeds in a fertile field after spring rain, concern for wetlands sprouted everywhere and citizens working to protect their local wetlands became a vital part of the new environmental movement."[53] The ecological benefits of wetlands were easy to identify, as they provided flood control, pollution control, and attracted interesting waterfowl.

If wetlands captured greater public attention, other landscapes did not fare so well in this political climate. Prairies, like the Elkins Prairie, excited less national awareness or concern, probably because of their less obviously exotic nature. In Lawrence, though, Elkins Prairie became a symbol for local environmentalists in the years preceding the plowing of November 18, 1990.

In the years before the Elkins parcel became a local *cause célèbre*, students, teachers and wildlife enthusiasts had recognized the value of the land as part of the remaining 2% of original tallgrass prairies in the United States.[54] Besides containing two federally-listed threatened species, Meads Milkweed and the Prairie Fringed Orchid,

the prairie was diverse and many of its species, as one activist poetically describes,

> ... Cannot be easily restored, since prairie plants are exquisitely tuned to season and place... once plowed, the root systems—and balance— are forever destroyed. More aggressive plants like thistle invade broken prairie and choke our fringed orchids, butterfly plants, compass plants, milkweed and many other edible and medicinal plants.[55]

As a part of Kansas' ecological heritage, tallgrass prairie is incredibly valuable, and scientists and students valued this landscape as a living laboratory within which to study a rare ecosystem. To an environmentalist, the idea that such a fragile and rare landscape was being threatened by a construction project was a travesty, since, as this quote indicates, once plowed, the value of a virgin prairie could not be mitigated or restored.

To speculators like Jack Graham, on the other hand, the issues surrounding Elkins turned on questions of private property. Graham purchased the land for $1200 an acre from the Elkins family several years before the release of the *Draft Environmental Impact Statement*. Before plowing, city and county commissions tried to buy the right of way, but Graham declined. Fearful that Graham would alter the land, activists in Save the Elkins Prairie, the University of Kansas' Environs club and the Lawrence chapter of the Audubon Society quietly appealed the Nature Conservancy, a non-profit organization that purchases biologically threatened land, though the alliance did

[52] "Frog Jumps into Politics," *Lawrence Journal World*. 7 November 1986.
[53] Vileisis, 212.
[54] Lynn Byczynski, "Ignoring Pleas of Environmentalists, Kansas Man Digs Up Virgin Prairie." *New York Times*. 23 November 1990.

[55] Denise Low, *New Tenants*. Unpublished document. 1993.

not produce any positive results for the Elkin's Prairie. In 1989, the Nature Conservancy offered Graham $3500 an acre, which he declined as well.

Two years before the issue escalated, local officials had tried to reconcile these opposing interests. The South Lawrence Trafficway Interlocal Agreement of December 1988, made between County and City Commission Chair, County and City Clerk, County Counselor, City Attorney, Attorney General and Secretary of Transportation, as well as Mayor Bob Schumm, reflected the cooperative approach that local government took to Elkins Prairie and environmental activists cause. This agreement proposed to develop the land within reason, promising that, "Urban and suburban growth will be constrained when it endangers the preservation of environmentally or ecologically sensitive land uses."[56] It established regulations for the proposed path of the South Lawrence Trafficway, to maintain open spaces 150 feet from right-of-way along both sides of trafficway, and preserve historical natural features such as prairie lands from encroachment of future development.[57] The South Lawrence Trafficway Interlocal Agreement represented local officials attempt to fuse progress and preservation, and following its publication, local officials attempted to reroute, and even condemn the Elkins Prairie two years before the plowing.[58]

Zoned as agricultural land, and protected under the Interlocal Agreement of 1988, Elkins Prairie appeared safe from the commercial and residential development that the South Lawrence Trafficway promised. Although Graham was tight-lipped about his motives for purchasing and subsequently plowing the land, vocal environmentalists in the community suspected that his interest was nonetheless tied to the economic developments surrounding the Trafficway.[59] In the early hours of November 18, 1990, city and county officials met with Graham in a last-ditch attempt to buy the right-of-way and save what they could of the half-plowed prairie. They offered a purchase totaling $480,000 (6,000 an acre) including a 10% down payment, but Graham did not want to sell, and the deal fell through.[60]

The plowing of Elkins Prairie provided another instance where federal regulations aimed at protecting the environment could not hold up against private development. In correspondences between Larry Kipp and United States Fish and Wildlife Field Supervisor William H. Gill, Gill explained that the Fish and Wildlife Service could not rezone, or protect federally listed threatened plant species located on private property, rather, "Only the plants themselves, or federally-designated critical habitat (which does not include Elkin's Prairie or any other parcel of land in Kansas)." Gill concluded that, "Once the plants were removed through the legal actions of the landowner, this federal nexus was removed, effectively ending the Services

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[56] Lawrence City Commission and Douglas County Commission. *South Lawrence Trafficway Interlocal Agreement.* December 1988.
[57] Ibid.
[58] Steve Buckner, "Legal Snags block land purchase." *Lawrence Journal World.* 2 November 1990.

[59] Kathryn M. Nelson, "Group hopes to preserve untouched prairie." *Kansas City Star*, 5 February 1989.
[60] Frazier.

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involvement with Elkin's Prairie."[61] The plowing of Elkins Prairie provided another example of the limitations of federal regulations that regard the environment.

These protests and the outcomes of Elkins Prairie and the Baker Wetlands differed because of attitudes towards private property and ecological value. Beyond the issues of private ownership versus public ownership that shaped the protests, another major difference was the physical landscape of the land they were trying to preserve. There is less interest in prairies, most of which are already gone and as one local environmentalist argues, are not appealing like other flagship landscapes: "[Prairies] aren't outstanding treasures like Yellowstone or Yosemite. The prairie's wonders are subtle, fragile, and now, extremely rare."[62] Those environmentalists trying to save the Elkins parcel argued that the prairie had less dramatic but significant properties, including biodiversity and rarity.

Another difference between these two protests and their landscapes was the extent to which a project like the South Lawrence Trafficway would alter the landscape, and the potential for mitigation. Activists intent on protecting the Elkins Prairie had a different focus than those wishing to protect the wetlands; Wes Jackson, the director of the Land Institute in Salina, Kansas, expressed his sentiments towards the permanence of Elkins degradation stating, "With the cutting of the roots... a new way of life opened that simultaneously closed probably forever a long line of ecosystems stretching maybe 30 million

years..."[63] In the case of wetlands, however, mitigation was feasible, and the creators of the *Environmental Impact Statement* offered a mitigation deal that would increase the acreage of the Baker wetlands in a nearby area known as the Santa Fe Site, and include a state-of-the-art educational facility with which to educate students in the surrounding community. In the case of the Elkins Prairie, however, one could not mitigate for the loss of an endangered species on one of its last remaining habitats.

Wetlands enjoy a certain level of protection under the Clean Water Act Section 404, which requires that any individual seeking to fill a wetland must first file for a permit with the United States Army Corps of Engineers.[64] As with other environmental acts, such as the National Environmental Policy Act, this does not protect the wetlands from development, and the US Army Corps of Engineers rarely denies a permit.[65] Even within the acts and processes that protect the environment, the status quo favors developers and places the work of protection to those who want preservation.

The local and national media coverage elicited by these protests suggests that the South Lawrence Trafficway was part of a national conversation about environmental controversies during this era. The shock value of running a frog for any

[61] Correspondence between Larry Kipp and F&WS Field Supervisor William H. Gill. 1999.
[62] Frazier.

[63] Debbie Myers. "Elkins Prairie's plowing mourned." *Lawrence Journal World.* 22 November, 1992.
[64] EPA. United States Clean Water Act, Section 404 http://water.epa.gov/.
[65] Section 404 does not necessarily regulate against improper filling, as the US Army Corps of Engineers retroactively issued permits for the illegal filling of the Baker Wetlands in 1987.

governmental position propelled Agnes T. Frog's campaign into the pages of the *Topeka Daily Times, Kansas City Star, Wichita Eagle*, the *Associated Press*, the *Wall Street Journal*, the *New York Times* and *USA Today,* while Elkins Prairie protestors found themselves on the pages of the *New York Times* as well, presenting Lawrence as historically environmentally conscious:

> In the past few years Lawrence residents have tried to balance urban growth and preservation of the environment. Home to the University of Kansas, Lawrence has grown 23 percent since 1980, but development has been tempered by strong community support for preservation. Preservationists have prevented construction of a suburban shopping mall, closed a riverfront promenade in winter to protect bald eagles and rerouted a proposed highway to save the habitat of a rare frog.[66]

It is significant that a city with a successful track record of tempering development was a newsworthy subject. Although the Elkins Prairie was a battle that environmentalists eventually lost, Lawrence entered a small group of cities known for questioning the status quo of suburban development.
When All Else Fails...

When environmentalists exhausted their other avenues of protest, they resorted to legal maneuvers in their quest to block the construction of the South Lawrence Trafficway. In 1985, the community experienced its first lawsuit

over the bypass. The two-year legal battle regarded the same bond issue protested by Agnes T. Frog. The plaintiff, Leslie W. Blevins Sr., a Lawrence resident, represented by attorney Donald Strole, sued the county on grounds that it exceeded its home rule power in issuing $4 million in bonds of the proposed trafficway without a public vote. According to Strole, the county used "legal slight of hand," in calling the road a "bypass" rather than an identifying it as an "arterial highway," which would require the bond issue to go to a public vote. Blevins argued that, "the county commissioners have skirted the law, in a blatant, calculated series of moves which were intended to thwart any challenge ever being made against the bonds, whether by voter petition or taxpayer lawsuit." As compensation, he requested that the County be restrained from spending the money from the bonds it had issued on the construction of the South Lawrence Trafficway, and that the City be submit the issuance of the bonds for voter approval.[67]

Ultimately, the Kansas Supreme Court sided with the plaintiff, stating that Douglas County intentionally avoided a public vote by calling a "trafficway," rather than highway and thusly the County Commission's 1985 bond issue was illegal because no vote was held as required by state law:

> The county attempted to circumvent a requirement in state law, which requires that elections be held on bond issues involving construction of arterial highways by calling its project a bypass and

[66] Lynn Byczynski, "Ignoring Pleas of Environmentalists, Kansas Man Digs Up Virgin Prairie." *New York Times.* 23 November 1990.

[67] Kansas Supreme Court, *Blevins vs. Hiebert. FindACase.* http://ks.findacase.com/research/wfrmDocViewer.aspx/xq/fac.19900713_0042131.KS.htm/qx

naming it the South Lawrence Trafficway... [The South Lawrence Trafficway] qualifies as an arterial highway... Douglas County chose not to make the required designations. Rather, it designated the proposed highway the South Lawrence Trafficway to try to extricate itself from the statute.[68]

The initial ruling found the County's decision to accept the obligation bonds unlawful. Rather than demand that the County and City return the bonds, though, the Court reversed their ruling in July 1990. The re-ruling stressed that the earlier ruling caused too much confusion, "in cases of constitutional and statutory home rule," and demanded that the County decided the fate of the bond issue in a public vote.[69]

The case polarized the South Lawrence Trafficway issue. Justice Tyler Lockett criticized the court for making an exception for Douglas County, especially after initially siding with the plaintiff. Others viewed the County as innocent in their choice of words. David Corliss, staff attorney for the League of Kansas Municipalities, and current City Manager of Lawrence, sided with the county and viewed the initial ruling as a threat to local governments' home rule power, arguing that, "local governments will have to have their legal counsel pore through law books to see whether there's a statue that applies to the action be considered."[70] This quote signifies the frustration felt by proponents of South Lawrence Trafficway, who expected to

sweep through the project without question. Environmentalists used lawsuits to ensure that local politicians acted legally within the system, and their lawyers knew the laws, much to Corliss' chagrin. This legal critique was (and remains to be) common among proponents of the trafficway, who complained that environmentalists were intentionally nitpicky, using any means necessary to stall the road.

The *Lawrence Journal World* frequently and exhaustively covered this lawsuit. The coverage of this battle represents how increasingly important and polarizing the subject had become within the community. The bond issue went up to a vote in 1990, and the county residents voted 13,679 to 10,815 in favor of construction.[71] This validated the Commission's 1985 decision, who believed that accepting the bonds was within the best interests of their constituency. This first case opened the floodgates for environmentalists, who would produce a deluge of lawsuits regarding the South Lawrence Trafficway in the following decade.

Although the plowing of the Elkins Prairie in 1991 was a small blip on the radar of controversies surrounding the South Lawrence Trafficway, the incident did affect some of those in the community, even changing the mind of some citizens who voted in favor of the bond issue. In a letter to the editor published in the *Lawrence Journal World* shortly after the plowing, Robert Redling, a community member who voted "yes" for the bond issue in 1990, thanked Jack Graham for escalating the issue and ensuring that the community at large was

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[68] Duane Retzlaff, "High court reverses ruling on trafficway." *Lawrence Journal World.* July 14, 1990.
[69] Ibid.
[70] Ibid.

[71] "Key events in the South Lawrence Trafficway's history." *Lawrence Journal World.* September 30, 2004.

aware of the environmental concerns regarding the South Lawrence Trafficway: "Although I cannot reverse my 'yes' vote on that trafficway project, there will be at least one more citizen from Lawrence this year urging his state, and federal elected representatives to toughen laws that are designed to protect fragile lands."[72] Redling's argument foreshadowed the increased polarization that would occur in the next decade of the debate, as highly publicized legal battles and public forums continued to fracture the community over the South Lawrence Trafficway.

The incident also encouraged environmentalists to create new, more effective means of protecting threatened landscapes. One of these efforts became the Kansas Land Trust. Formed in July 1990 the Kansas Land Trust sought to "identify sites such as prairies, woodlands and wetlands in the state for possible protection."[73] Led by Kelly Kindscher, the Kansas Land Trust would work alongside the Kansas Natural Heritage Program, to identify and purchase development easements from landowners so as to protect ecologically sensitive or threatened land within Douglas County. The Kansas Land Trust asked the County for $40,000 per year for five years to acquire threatened land within its borders, which the Trust would match with $20,000 donations of land, cash, materials and labor. The Trust also promised to cover secondary costs, including surveying the land and maintenance. Kindscher presented House Bill 35-12, a bill that would provide federal tax breaks to landowners using

conservation easements who promised to preserve, "significant tracts of land."[74] Stressing the value of a landowner's right to, "protect and preserve land of ecological, scenic, historical, agricultural or recreational significance,"[75] the bill passed the Kansas Legislature in 1993.

Two years after the plowing of Elkins prairie, 15 individuals met again in the cold at the corner of intersection US Highway 40 and County Road 13 for a funeral, of sorts, for the ruined treasure. At the event—covered by local and state media—poets spoke, lamenting the loss of the landscape, and other speakers focused on the future of environmental preservation in Lawrence. The loss of Elkins Prairie further fueled local support to protect the surviving Baker Wetlands. Activist Yohanna Shrader-Storm stated, "We need to take action because I don't want to be here a year from now holding a funeral for the Baker Wetlands."[76] Steve Hamburg, the first president of the Kansas Land Trust took advantage of the interest and to promote the Kansas Land Trust and encouraged the crowd to donate time and money to the Douglas County natural areas program and Kansas conservation easement legislation.

Shortly after the plowing, local artist Stan Herd and Daniel Dancer, with Kelly Kindscher created a piece of ephemeral art out of the plowed remains of Elkins' native grasses. Entitled Hexagon 47, the piece represented the Chinese

[72] Robert Redling. Letter to the Editor. Lawrnece Journal World. 1991.

[73] Steve Buckner, "Land trust proposal unveiled to county." *Lawrence Journal World.* 6 December 1990.

[74] Steve Swartz, "1990 loss of prairie remembered." *The Capital Journal.* 18 November 1991.

[75] Kansas Land Trust, "KLT Mission." *Private Landowner Network.* http://www.privatelandownernetwork.org/yellowpages/resource.aspx?id=85

[76] Elicia Hill, "People Lament the Loss of Elkins Prairie." *University of Daily Kansan.* 28 November 1990.

symbol for adversity from the ancient Chinese text, the *I-Ching*, or *Book of Changes*. Of the piece, Dancer recalled the deep ecological history of native prairies, stating, "Creating the *I-Ching's* symbol for adversity from bordering native grasses was a way to honor a wildness present since the last ice age."[77] The artists chose this symbol to encourage healing and restoration, stressing the relationship between the dead grasses that would eventually return to the damaged soil. These artists would work again in the coming years to create another larger piece of environmental art, The Medicine Wheel.

Hexagram 47, by Daniel Dancer, Stan Herd, Kelly Kindscher, 1990.

A New Era of Controversy

Not so long ago, when the white man began to plow the prairies, the Indians would watch in amazement. As a story goes, one warrior sat beneath a tree observing a man with horse and plow rip across a stretch of blooming spring prairie. In the waning light when the man had finished, the warrior approached

him and stopped at the edge of this new alien ground. He pointed to the black earth and said simply, "Wrong side up," and walked off.[78]

Lawrence citizen Daniel Dancer submitted this story as a letter to the editor to the Lawrence Journal World in 1990. A local artist and author of, *Desperate Prayers: A Quest For Sense In A Senseless Time*, Dancer's work focuses on indigenous art, culture, spirituality and environment. This letter to the editor represented a common perspective presented in the 1990's by the Native American students, alumni and faculty of Haskell Indian Nations University that stressed a convergence of education, spirituality and the environment. Dancer's story also recalls a deep history of conflicting notions about the earth and development between the Native American and the pioneer that persisted well into the debate over the South Lawrence Trafficway.

A response to the plowing of the Elkins Prairie, Dancer's article also represented the growing cooperation between environmentalists and Haskell Indian Nations University that grew during this time. During this era, the Haskell Board of Regents penned an official response that represented the institution as well as the 169 individual tribal nations that Haskell Indian Nations University represents. The document stressed the history and educational value of the wetlands adjacent to the proposed South Lawrence Trafficway. The period also witnessed the proliferation of interest groups devoted to protection of the threatened wetlands, including the Wetlands Preservation Organization, and

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[77] "In Concert With Nature: The Environmental Art Photography of Daniel Dancer." *Art for the Sky*. 2007.

[78] Daniel Dancer, "Letter to the Editor." *Lawrence Journal World.* 1990.

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a coalition between the local chapter of the Audubon Society and Sierra Club, the University of Kansas Environs, and the Wetlands Preservation Organization. The early tactics of these two groups differed; at the same time that the official representatives of Haskell sought to work with all the groups associated with the 1990 *Final Environmental Impact Statement* in an attempt to achieve more representation in the NEPA process, the interest groups increasingly engaged in legal battles to stall construction.

When the battle over the Elkins Prairie ended with the plowing in 1991, the controversy over the Baker Wetlands had only begun. In 1994, with the Elkins Prairie no longer an issue, the Kansas Department of Transportation began construction on the first nine western miles of the bypass. The eastern segment of the South Lawrence Trafficway, however, was not built, and the trafficway's dead-end at South Iowa street signified the future decades of challenges that the Kansas Department of Transportation and fellow development interests would face, as environmentalists' arguments took new shapes. Before 1990, the debate over the wetlands was defined by the interests of developers versus the largely ecological concerns voiced by environmentalists. As the preceding chapters argued, there were many subgroups and a myriad of interests represented in this debate, but the debate was carried out primarily in these terms. After 1990, and the public release of the *Final Environmental Impact Statement*, members of the Haskell Indian Nations University, under the leadership of Chuck Haines and the Haskell Board of Regents increasingly voiced their opinions and perspective on the project. Haskell and its allies altered the debate by posing questions about environmental

justice and the historical significance of the Baker Wetlands to Native Americans.

The environmental justice movement has sought recognition for the social inequalities perpetuated by an overabundance of "environmental hazards or undesirable land uses in minority-populated and low-income areas."[79] It charges that insufficient regulatory processes exist to prevent these undesirable outcomes. In this sense, the creation of the Environmental Protection Agency and National Environmental Policy Act in the 1960's was not just an environmental movement, but offered the potential for, "a hybrid between the civil rights movement and social justice concerns."[80] For this reason, attention to socioeconomic conditions and race were built into the National Environmental Policy Act process.[81] In the case of the South Lawrence Trafficway, opponents have capitalized on these possibilities to build a grassroots campaign over environmental issues and expanded their platform to address serious questions of civil rights.

Since the National Environmental Policy Act prescribes a process and is not in the control of a regulatory agency, it cannot on its own ensure environmental protection for minorities. Generally, however, it offers a means to stall a project until a more comprehensive Environmental Impact Statement can be completed. Historically, when development is proposed on/in indigenous lands, it has been a question of *when*, and not *if* the development will

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[79] Lynn, 225.
[80] Ibi, 224.
[81] Federal agencies are required, under NEPA to considering the culture and affects that a proposed project will have on minorities when drafting an Environmental Impact Statement.

occur. In the vast majority of legal cases regarding tribal nations and development projects that threaten their culturally valuable lands, the courts ultimately sided with developers.[82] Even in the face of this likely result, anti-trafficway forces used the tactics the law offered. Beginning in 1990, Haskell argued that questions of environmental justice were not sufficiently addressed in any of the developer's documents thus far, and the majority of their protest centered on this debate. This can certainly be seen in the case of the South Lawrence Trafficway, where Haskell demanded more intensive studies to be completed, even as the Kansas Department of Transportation was building the first nine miles of the bypass.

By the 1990s, the federal government made additional efforts to prioritize environmental justice, with President Clinton's Executive Order 12898. This order required all federal agencies to

> ... Make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...[83]

This order was not "judicially enforceable," but a procedural order similar to NEPA that demanded further accountability for environmental justice concerns by governmental agencies. Haskell's concerns over environmental justice centered on a disproportionate

amount of noise and traffic near the school and sacred areas such as the Medicine Wheel and sweat lodges, health and sanitation problems through pollution and sewage, and an overall misunderstanding by developers of "our identity, our spiritual beliefs and our cultures."[84]

A second legal basis for those seeking environmental justice is the National Historic Preservation Act of 1966, which could potentially protect culturally significant lands by adding them to the National Register and thereby protecting them from development. Haskell requested that a study be performed to include the Baker wetlands in the National Register of Historic Places. Beyond securing their legal rights within the environmentally oriented National Environmental Policy Act, Haskell and the Wetlands Preservation Organization also argued that their claim to the Baker wetlands was a historical one. However, the National Historic Preservation Act is similar to the National Environmental Policy Act, in that it is a process that requires agencies to consider their impacts on historic places, and does not, "[impose] any legal obligation to actually mitigate adverse effects on the environment."[85]

Haskell had a long and troubling history on which to found its claims. Founded in 1887, the school was known as the United States Industrial Training School, functioning as a boarding school, which taught students grades 1-5. In 1890, the school became the Haskell Institute. Its history traced an era of attempts to force assimilation on Native Americans. In a document prepared to

[82] Ibid, 227.
[83] Executive Order No. 12,898, 59 Fed. Reg. 7,692 (Feb 11, 1993).

[84] "Haskell and the South Lawrence Trafficway Facts," (unpublished pamphlet), 1997. 8.
[85] Lynn, 240.

support its claims regarding the historical significance of the wetlands, the group noted that, "according to the Indian traditions, sacred places are not declared by humans, but rather make their sacredness known to us through our experiences. The Wetlands area is considered sacred because it served as a critical place of refuge for Indian children, it now holds the physical remains of many of the children who died at Haskell, and it performs the natural function of purification."[86] Recalling a history of abuse and stifled spirituality, members of the school today honor these ancestors: "We are reminded of them when we pray and meditate at the Medicine Wheel and the Haskell-Baker Wetlands."[87]

Beginning in the early 1990's community interest in the South Lawrence Trafficway grew substantially. Originally appealing primarily to environmental and neighborhood interest groups, the broader community gradually became involved in the polarizing debate. Throughout the 1980's, environmentalists and concerned citizens raised awareness and gained national attention for their cause, even if the county's vote on the bond issue in 1990 suggested that the community at-large favored the completion of the trafficway. Haskell's entrance into the controversy augmented arguments by these interests groups, and strongly aided their cause. During this time, a new generation of younger environmentalists, students from the surrounding schools joined forces to create the Wetlands Preservation Organization. Arguably, without Haskell's vocal protests against the bypass

beginning in the 1990's, the eastern end of the trafficway would have been built a decade ago.

Members of the Haskell community proved early on that they understood the nuances of the National Environmental Policy Act and their legal savvy (directed by lawyers Chuck Haines and Bill Ward) protected their land throughout this era. Between 1990 and 1996, Haskell successfully protested and stalled the project through a number of prepared statements, legal battles and physical and artistic protests. Haskell entered the debate over the wetlands shortly after the *Final Environmental Impact Statement* was released to the public, in 1990. Frustrated over a lack of representation in the *Environmental Impact Statement*, representatives of the school demanded a *Supplemental Environmental Impact Statement* that would address the cultural and historical significance of the Baker Wetlands to the large number of tribes represented by Haskell Indian Nations University, and offer alternative route options, including a "No Build" alternative. In 1994, the Federal Highway Administration prepared the *Draft Supplemental Impact Statement*, which was released to the public for comment in 1995.

While Haskell fought hard to achieve representation in any new documents or Environmental Impact Statements, the developers—from the Federal Highway Administration to the city and county commissions and city planners—adapted their approach very little during this era. Although the Federal Highway Administration and Kansas Department of Transportation followed the procedures of the National Environmental Policy Act in creating the *Draft Supplemental Environmental Impact Statement*, they made little effort to

[86] "Haskell and the South Lawrence Trafficway Facts," 1.
[87] Students and alumni of Haskell Indian Nations University, *Interconnectedness*. 1997. 4.

collaborate or compromise with the bypass's opponents, and Haskell argued often that their efforts were not thorough. As with earlier lawsuits directed at Douglas County, the lawsuits from this era suggest that major parties involved in the controversy opted to use loopholes to achieve their goals rather than attempting a meaningful dialogue with their opponents. Furthermore, new city planning documents, aimed at directing growth in Lawrence, treated construction of the bypass as an inevitable given, following the approach and passive language of previous city planning documents.

This era of the controversy produced extensive paperwork. The large number of legal battles, written arguments, and various documents produced by the NEPA process, and city-planning documents can be overwhelming. For this paper's purposes, my analysis will focus on two major documents, one lawsuit, and one artistic protest in an attempt to sketch a broader image of the community and their values during this era, as well as track the means by which environmentalism and environmental justice fused to successfully delay construction attempts by developers. The documents analyzed include *Interconnectedness* (1997), Haskell's response to the 1990 *Final Environmental Impact Statement* and *Draft Supplemental Environmental Impact Statement* of 1995. *Interconnectedness* was produced by students and faculty of Haskell and is the most comprehensive and tangible position-statement by Haskell. This chapter also discusses *Horizon 2020* (1993), a collaborative effort between business, city planners, and citizens to address planned growth in Lawrence and Douglas County, which replaced *Plan '95*. It depicts the county's

future plans for the growth of Lawrence, and is an important reflection of city planning and political priorities in the new era of the South Lawrence Trafficway debate. These two documents were selected because they reflect the position of both Haskell and Douglas County on the South Lawrence Trafficway in a comprehensive and informative manner.
Lawsuits and the Supplemental Environmental Impact Statement of 1995

After the release of the *Final Environmental Impact Statement* in 1990, environmentalists and members of Haskell expressed dissatisfaction over the document. Haskell's Board of Regents requested the creation of a more comprehensive study, in the form of a Supplemental Impact Statement. Complying with rules of the National Environmental Policy Act, Federal Highway Administration, the Kansas Department of Transportation and Douglas County released the much-anticipated *Supplemental Environmental Impact Statement* to the public in October 1995. At the request of the Haskell Board of Regents, this document sought to answer questions relating to the Baker Wetland's spiritual and historical significance, and offered three alternative road options on 31st, 35th and 38th streets, as well as a "No-Build" option.[88]

During the 45-day comment-period, in which the public and officials have the opportunity to offer suggestions, the writers of the *Supplemental Environmental Impact Statement* decided to break the project into two sections: the western leg west of Highway 59, and the contentious eastern leg. Following this

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[88] Federal Highway Administration, Kansas Department of Transportation, Douglas County, *Draft Supplemental Impact Statement.* October 1995.

decision, Federal Highway Administration attempted to "defederalize" [89] construction of the eastern leg, and published a Notice of Intent to leave the project. A later document produced by the Federal Highway Administration defends its decision as such:

> Given the fact that all federal funds allocated for the project had been spent on construction of the western leg of the South Lawrence Trafficway, and based on information from KDOT that they did not anticipate seeking additional Federal funding, Federal Highway Administration determined that the eastern leg of the South Lawrence Trafficway was no longer Federalized and that their continued participation was no longer appropriate or necessary.[90]

This seemingly innocent decision had deeper implications: without federal funding or the presence of a federal entity, the rules of the National Environmental Policy Act would no longer apply, and the *Supplemental Environmental Impact Statement* would no longer be required to continue construction on the eastern leg.[91]

This decision caused uproar among the trafficway's opponents. A coalition of environmentalists and Haskell students sued in federal courts in 1997. In

Ross vs. Federal Highway Administration, the court sided with the plaintiff, arguing that the project could not be broken up, and on appeal sided again with the plaintiff adding that the project was too far advanced to turn into a local project, stating, "[t]he federal nature of the trafficway was so pervasive that the Kansas authorities could not rid the project of federal involvement simply by withdrawing the last segment of the project from federal funding." [92] The defendants appealed the decision on multiple occasions, but the verdict remained, and Federal Highway Administration maintained its oversight position until the release of the *Supplemental Environmental Impact Statement.* While the legal questions were different, this lawsuit hearkened back to *Blevins vs. Douglas County* in 1987, in which county officials were initially found to have used a loophole to circumvent the potential public opposition and thereby speed by construction of the project. The result of that case was favorable for the County in the end, but it is significant to note that those groups in charge of construction did not much alter their habits even after Haskell entered the debate. As proponents of the road criticized environmentalists for using the courts to delay, environmentalists sought to show that pro-road forces were also manipulating the law to achieve their ends.

As Dolph Simons, Jr. pointed out all those years ago, threatening or pursing a lawsuit was one of the most direct and successful means for environmentalists to stall a project. Native Americans, too, have a somewhat less-successful but still relevant litigious history in matters of

[89] *Ross vs. Federal Highway Administration,* (10th Cir. 2001). vLex.com.
According to the judges of the 10th Circuit, "defederalized" in this case meant, "redefined as an independent state project."
[90] Federal Highway Administration, Kansas Department of Transportation, "Draft Section 4(f) Evaluation." November 2006.
[91] Ibid.

[92] *Ross vs. Federal Highway Administration,* (10th Cir. 2001).

environmental justice.[93] This legal battle also represented the same ideological battle over the South Lawrence Trafficway that began in the 1980's. The names and parties involved had changed, but the expectations of developers and the tactics used by environmentalists remained much the same.

Interconnectedness and the Medicine Wheel

Even as the Wetlands Preservation Organization was working their way through the courts, a group of Haskell alumni, faculty and students published their first and largest statement against the South Lawrence Trafficway. Entitled, *Interconnectedness*, this document was a follow-up to, *All Things Are Connected: Response to the 31st Street alignment, South Lawrence Trafficway, Lawrence, Kansas* (1994). *All Things are Connected* was submitted to the Federal Highway Administration as a response to the 1990 *Final Environmental Impact Statement*, and *Interconnectedness* built on these arguments and also included a criticism of the 1995 *Draft Supplemental Environmental Impact Statement.* *Interconnectedness* lambasted both assessments as, "[u]njustified, discriminatory, misleading and fail[ing] to adequately address the Native American spiritual and cultural concerns."[94]

Interconnectedness is a two-inch thick, plastic bound document released by Haskell faculty, alumni and students to the Federal Highway Administration. Copies were also given to the Lawrence Public Library and Haskell's Tommaney Library for public review. Representing

the voices of 160 different tribes, *Interconnectedness* includes sections on academic issues, past and present, spiritual and cultural issues, and concerns of environmental justice presented by the South Lawrence Trafficway. The document also includes an appendix with a series of letters written by many different Native American tribes across the country to indicate that this document had tribal support. Another section highlights the "misuse of the media and public forums," offers a list of alternatives that would minimize impacts to the wetlands. This document also includes an annotated history of the university and its wetlands.

As had been true in the 1980's, when national environmental awareness found expression in the debate over the South Lawrence Trafficway, the growth of a national environmental justice movement also coincided with events in Lawrence. Executive Order 12898 indicated that national concern over environmental justice, as well as Native American culture and history was on the rise in the 1990's. Haskell's somewhat delayed entrance into the debate over the South Lawrence Trafficway coincided with this resurgence of national and academic interest in indigenous culture and history. The writers of *Interconnectedness* referenced this resurgence in a section entitled, "A New Era." In this section, the writers placed Haskell in this context, stating that, "the institution began a process of redefinition which embraced and validated the significance of Native American cultures and which reaffirmed the values of these cultures."[95] The writers argued that this reaffirmation was "appropriate and timely," given "the devastation incurred

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[93] See Lynn, pg. 227 for a list of recent cases that indicate the low success rates of cases where Native Americans sued over questions of environmental justice.
[94] *Interconnectedness*, 1.

[95] Ibid, 49.

by Native American as the result of the massive cultural oppression and the ensuing cultural loss."[96] By scholarly documentation of the history and cultural significance of the Haskell-Baker Wetlands, Haskell presented an authoritative account of a previously ignored perspective on the wetlands.

Interconnectedness presented a history of the wetlands that predated the creation of the Haskell Boarding School in 1887, recalling the dislocation of many Native American tribes to what is today the Haskell-Baker Wetlands with the Indian Removal Act of 1854. This dislocation represented a conflict not so different from the one they were currently experiencing; at the center of the Indian Removal Act of 1854 existed, "...struggles over the promotion of towns, the removal of the Indians and the opening of their reserves to purchase, the selection of choice land claims and the selection of railroad routes."[97] The writers of *Interconnectedness* revealed the history behind their present struggle, in which urban and transportation growth slowly and systematically consumed their land. By expanding the history of Haskell beyond its position as an institution, *Interconnectedness* highlighted the ancestors of Haskell students and alumni, and their experiences with Western ideas of progress and urban growth.

As *Interconnectedness* suggests, Haskell did not oppose the South Lawrence Trafficway as a whole; rather it was an affirmation that the institution and its people would not be subjected once again to the expectations of developers. Specifically, *Interconnectedness* argued that the 1990 *Final Environmental Impact Statement* did not adequately address Haskell's position in the construction of the South Lawrence Trafficway. The 1990 *Final Environmental Impact Statement*, it noted, proposed only one road option, 31st street. Since the land was owned by Baker University, the writers skirted the subject of Haskell altogether, noting only that Haskell conducted powwows on the land north of 31st Street. *Interconnectedness* called for a *Supplemental Environmental Impact Statement that* would address the cultural significance of the Haskell-Baker wetlands, and study alternative routes that would impact their land less: "Haskell is not opposed to the SLT," it announced, "we are opposed to the 31st street alignment that will intersect our campus and will devastate our culture, spirituality, academic programs and future development. It is our mission to protect the integrity of our campus for future generations of Native peoples seeking higher education."[98]

Those who had fought to preserve the Elkins Prairie as well as teachers, scientists, and those who participated in the Agnes T. Frog campaign found an ally in Haskell. As members of Save the Elkins Prairie stressed the value of virgin prairies as places for learning and experience, *Interconnectedness* addressed the value of experience-based learning to American Indians, stating that, "this is why the Haskell-Baker Wetlands area is so very important to the American Indian students of Haskell. It is a primary place of our education."[99]

Interconnectedness related Native American spirituality to its Western equivalent in an attempt to reveal that as American Indian traditions and religion are different from its Christian

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[96] Ibid, 50.
[97] Ibid, 18.

[98] Ibid, ii.
[99] Ibid, 2.

counterpart, their purpose and values are the same. The document argued that Native American ceremonies were as spiritually valuable as any religious prayer, and the location where these ceremonies take place were no less significant than a church or temple: "Each language, prayer and song are important, whether one prays in a church on Sunday, speaks to a fire at the Medicine Wheel or meditates or prays in the Wetlands. It is the fact that each of us communicates to the Greater Power, the Creator in the ways we were taught were proper that is important."[100] The Medicine Wheel became an important symbol in educating the community about Haskell's spiritual connection to the landscape, of which the authors state, "With... recognition of the complexity of creation and the Creator's power comes the obvious realization that we are but one part of the natural world, not necessarily a privileged part or even the only persons inhabiting the earth."[101]

The Medicine Wheel Prayer Work, based on the Sacred Circle of Life, was designed by students and Haskell instructors Leslie Evans and Dan Wildcat, and created by noted crop artist Stan Herd in 1992.[102] This land, simultaneously artwork and center of worship became a means of expressing Native American spirituality to a wide audience within the community. The work includes a ceremonial fire pit at the center, with four lines that radiate out in the cardinal directions, leading to a bear claw to the west and a spirit bird to the east, presented by the writers of *Interconnectedness* to be, "as significant as the crucifix, the altar, the candle and the

confessional,"[103] to a Western place of worship. Near this site, sweat lodges and stomp dances often occur, practices that Haskell argued would be greatly disrupted by the intrusion of a four-lane highway. While the creation of the Medicine Wheel coincides with Haskell's involvement in the South Lawrence Trafficway controversy, it was not created as a statement against the project rather it was created specifically for spiritual use. It should be noted, however, that the Medicine Wheel and Haskell's protests of the South Lawrence Trafficway both stemmed from a movement to reaffirm Native American spirituality at Haskell Indian Nations University, as discussed in the chapter "A New Era," in *Interconnectedness*.

The Medicine Wheel, by Stan Herd and Haskell Indian Nations University students, faculty and tribal elders, 1992.

A New Plan for the City: Horizon 2020
City planning documents from this era indicated that the attitudes of city and county institutions did not change much despite the mobilization of

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[100] Ibid, 6.
[101] Ibid, 38.
[102] "Haskell and the South Lawrence Trafficway Facts," 1.

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[103] Ibid, 1.

environmentalist groups and Haskell. The same year that Stan Herd and his group of Haskell students designed and created the Medicine Wheel, the city released its newest plan for Lawrence and Douglas County. City and county planners drafted and prepared extensive studies for Lawrence's new growth guide, *Horizon 2020: The Comprehensive Plan for the City of Lawrence and Unincorporated Douglas County* (1992). *Horizon 2020* reflected a deeper concern for the ecological value of both prairies and riparian areas however it lacked suggestions on how to resolve the ever-growing list of concerns regarding the bypass and lacked teeth for protection of habitat or significant places.

The drafting of *Horizon 2020* encouraged community collaboration by holding forums, and setting up subcommittees to discuss a range of priorities. Subjects discussed included rural and urban land use, transportation, education, environment and natural features. By including community members in the various subcommittees, *Horizon 2020* represented a more holistic approach to city planning than earlier documents yet it ultimately contained the same language and expectations of those documents when it came to growth. Produced by Chicago consulting group, Trkla, Pettigrew, Allen & Payne, Inc. *Horizon 2020* sought to promote "managed growth," while considering the impact of development on other facets of Lawrence society. Although this document addressed growth within the entire Douglas County area, as the highest-populated city in the county, Lawrence was the focus of its study.

This document provides greater consideration for the local ecology and a more intensive inventory of Douglas County's natural areas, including soils, flood plains, tallgrass prairies, wetlands,

forests, slope, and threatened species. The inclusion of soil maps indicated a more vertical consideration of the ecological landscape, topographic maps highlighted flood plains and watershed maps served to further indicate that the county better understood the crucial ecological value of riparian areas: "While areas in proximity to lakes, rivers and streams present attractive sites for development, they are also often areas most severely impacted by environmental constraints..."[104] Consideration is made to the ecological values of wetlands near the proposed bypass, as the document states, "Steps should be taken to plan for the protection of natural lands along the K-10 development areas and around Lawrence because significant growth is predicted there," however the writers did not offer specific solutions and processes for protecting natural land in these areas of future growth.[105] The passive language of this document recalled the semantics of the 1969 *Guide for Growth*, which hailed Lawrence's "natural features," without suggesting how to promote, protect or utilize these features.

The authors often referenced the areas near the proposed South Lawrence Trafficway in the Transportation section, but rarely referenced to the road directly. The expectations that the road will be built, however, remained evident throughout the text. When discussing the city's Transportation Plan, for example, the document stresses two main plans: the improvement of pedestrian, bicycle and public transportation access, and the collaboration between the city and county to, "pursue planned transportation

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[104] Trkla, Pettigrew, Allen & Payne, Inc., "Lawrence-Douglas County Horizon 2020: background studies." February, 1993. 155.
[105] Ibid.

improvements which add substantial capacity to the street and roadway system... [Including] the completion of a circumferential road system around Lawrence."[106] Other than these brief references, the South Lawrence Trafficway received very little attention. This may suggest that city planners viewed the project as inevitable, or that the city felt responsible for addressing opportunities for planned growth rather than discussing the project.

The lack of references to the South Lawrence Trafficway, a project that the city and county had pursued for so long, also indicates the controversy embedded in the project. In discussing broad approaches toward growth, rather than specifics, the writers of *Horizon 2020* avoided the controversy created by previous city planning documents, by avoiding the subject completely. By stressing planned growth throughout the text, the construction of the five eastern miles of the South Lawrence Trafficway could be inferred as part of this policy without directly referencing any terms that could elicit controversy.

In this new era of debate over the South Lawrence Trafficway, environmentalists expanded their position on the Haskell Baker Wetlands beyond ecological and educational value to include the historical and spiritual values of a community previously unheard in the debate. It is fitting that the Lawrence community at large, with its history of grassroots preservation wanted to include Haskell's history in their struggle, and arguably, this union stalled

the path of the South Lawrence Trafficway for another decade. In contrast, the federal and state agencies involved in the project maintained the assumptions of the 1980's, and gave into to Haskell and the Wetland Preservation Organization's demands slowly and stubbornly. New planning documents for the future wisely avoided the subject, however the assumptions remain embedded in the language of *Horizon 2020*.

As with the earlier events of the South Lawrence Trafficway controversy, the 1990's represented a clash between the expectations of urban development and the efforts of interest and minority groups to stall said development. During the 1980's, preservation efforts focused on the environmental consequences of development, but by the 1990's, the values of South Lawrence Trafficway opponents grew to include spiritual meaning, educational merit and historical significance. In *Interconnectedness*, Haskell argued that these values all existed simultaneously, and asked the agencies involved in the construction of the road to consider these issues before continuing with development. While Haskell students and faculty erected the Medicine Wheel as a symbol of their spiritual connection with the world, city planners released their newest plan for the city, *Horizon 2020*. While this document considered the "environmental qualities" of Lawrence, its passive language and omission of a discussion of the South Lawrence Trafficway and its impacts to the community indicate that the battle over the road had done little to alter the attitudes of developers.

EPILOGUE
At Lawrence's Earth Day environmental panel in 1970, geography

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[106] Lawrence-Douglas County Metropolitan Planning Office, *Horizon 2020: The Comprehensive Plan for the City of Lawrence and Unincorporated Douglas County.* May 22, 1996. 36.

professor Duane Knos made a prophetic statement that would characterize the next several decades of environmental conflict in Lawrence. Knos claimed that Americans would have to approach and frame environmental problems in new ways before solutions could be achieved: "The way we see the world is going to have to change," he challenged the audience, "We are going to have to change ourselves, and I don't know if we've got the guts to do it."[107] The story of the South Lawrence Trafficway exemplified and continues to demonstrate this statement today. The business community enjoyed the status quo of unchecked development provided by the local government, and neither group made concentrated efforts to consider environmental problems beyond those required by law. Environmentalists and members of Haskell Indian Nations University, on the other hand, approached the protection of the Elkins Prairie and the Baker Wetlands by working within the limitations of the National Environmental Policy Act, attempting to sway political officials and the public into caring about environmental protection, and finally going to court when these avenues did not produce the results they wanted.

As the current status of the debate indicates, the Lawrence community indeed did not, "have the guts" to impact change, and could not come to a consensus about the South Lawrence Trafficway. There are essentially two phases in the construction of the road, which coincide with Haskell's participation in the debate and the Federal Highway Administration's departure as oversight committee for the

project. The issue became increasingly litigious and in 1998, one year after the western segment of the road opened to the public, the United States District Court issued an injunction to stop construction until the *Final Supplemental Impact Statement* was completed. The project remobilized several years later without the oversight of the Federal Highway Administration, and by 2003, the United States Army Corps of Engineers in conjunction with the Kansas Department of Transportation released a *Final Environmental Impact Statement* for the eastern leg of the project. During this era, Haskell and environmental organizations focused their attention on alternative route selection south of the Wakarusa River and would not directly impact Haskell's portion of the wetlands or their sweat lodges.

Over a decade after the western leg was built, the debate over the South Lawrence Trafficway began to sound like a broken record; once again, the agencies involved in the project were dragging their feet and once again, the opponents felt underrepresented in the Environmental Impact Statements. In January 2012, the Prairie Band Pottawattamie Nation, along with the Wetlands Preservation Organization and other Lawrence environmental organizations filed an appeal in the 10th Circuit Court of Appeals in Denver, Colorado. The plaintiffs stated that the ongoing Environmental Impact Statement process insufficiently considered questions of environmental justice and did not accurately assess alternative routes, especially the 42nd street route that would run south of the Wakarusa River. Mike Caron of Save The Wakarusa Wetlands Inc. characterized the appeal as the most effective means of ensuring environmental justice protection, stating,

[107] "Environment In Spotlight at KU Event," *Lawrence Journal World.* April 22, 1970, p. 2.

"Federal NEPA standards were put in place explicitly to protect minorities from tyranny of the majority. They are the heart of our nation's protections against environmental injustices."[108] This is a very true statement however it does not address the inherent limitations of the federal standards and neglects the fact that despite a 24-year struggle, the National Environmental Policy Act has not provided any solutions to the environmental controversy of the South Lawrence Trafficway.

In the end, the debate over the South Lawrence Trafficway highlights the inadequacies of our federal processes and agencies that protect the environment, which cannot eternally stand up against classic American liberalism and a national identity that equates expansion and growth with national pride. The National Environmental Policy Act remains a federal regulatory process without teeth; while it has enabled environmentalists and cultural minorities to stall development so far, it alone does not have the authority to protect environmentally, culturally and historically significant landscapes from the long-arm of development. In conclusion, the South Lawrence Trafficway debate cannot remain in legal limbo forever. Who's to say how long the road will be swamped in legal battles, and what will its opponents do after this approach has run its course?

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Effects of Weight Cue Reactivity on Self-Report Measures of Body Dissatisfaction

Marshall Beauchamp (Faculty Advisor: Ric Steele)

Department of Psychology

ABSTRACT

This study is an investigation on the effects of weight cue reactivity on measures of body dissatisfaction in a sample of college-aged students. Self-report questionnaires of psychological constructs or ratings are administered to large samples of participants in experimental and correlational studies due to their efficiency and relative ease of use. However, research has shown that answers can be influenced by the participant's awareness of certain information or external forces, a phenomenon known as "reactivity." Currently, empirical literature has not identified the influences of weight cue information on self-report body dissatisfaction measures. 77 Participants (M_{age} = 20.22, 50.6% female) completed measures rating body dissatisfaction and were randomly assigned to experimental conditions of specific weight cues (i.e., being weighed) given before self-report measures; general weight cues (knowledge of impending weight measurement afterward) given before self-report measures; and no weight cues given before self-report measures. It was hypothesized that groups that received weight cues would report greater body dissatisfaction on self-report questionnaires than groups which received no cues, after controlling for BMI. There were significant differences between conditions, as those in the specific and general weight cue conditions were significantly more dissatisfied with their body shape than those in the control condition, and there were no significant differences between genders. These data appear to provide evidence suggesting that weight cue reactivity follows the same conditions as other, more extensively researched, cue-based reactivity

INTRODUCTION

Self-report questionnaires of psychological constructs or ratings are administered to large samples of participants in experimental and correlational studies due to their efficiency and relative ease of administration (Gorber, Tremblay, Moher, & Gorber, 2006). However, research has shown that a participant's answers on self-report measures can be influenced or altered by the participant's awareness of certain information or external forces (Simpson, Kivlahan, Bush, & McFall, 2005), a phenomenon known as "reactivity." Reactivity effects are similar to those elicited by demand characteristics, in which the participant's awareness of being observed may significantly influence his or her responses (Orne, 2009). The Hawthorne effect is an example of a type of reactivity, in which the participant's awareness of being observed causes the participant to amend his or her behavior. Such an effect can be damaging to a study's internal validity, as changes in the participant's behavior or responses may be due to factors other than changes in the independent variable (Heppner, Wampold, & Kivlighan, 2008).

Reactivity effects can be particularly detrimental to research regarding body dissatisfaction. Body dissatisfaction (BD) is defined as the degree of negative feelings associated with body shape, weight, or body image (Cash, Fleming, Alindogan, Steadman, & Whitehead, 2002). Body dissatisfaction research primarily focuses on the correlations between self-image and the attitudes or behaviors of those who may or may not be satisfied with elements of their body (Furnham, Badmin, & Sneade, 2002). However, the literature does not currently address the issue of reactivity on body dissatisfaction research, specifically regarding the degree to which these effects alter the validity of self-report questionnaires. The focus of this study is to observe and document the influences of reactivity effects on self-report measures of body dissatisfaction.

Cue-Based Reactivity

A reactivity effect that occurs directly in response to particular stimuli is referred to as cue-based reactivity (Carter & Tiffany, 1999). This effect, which is most commonly observed in drug-use behavior and addiction (Tetley, Brunstrom, & Griffiths, 2009), as well as eating behaviors/disorders (Jansen, 1997; Carter, Bulik, Lawson, Sulivan, & Wilson, 1995), has been extensively researched. For example, the presence of drugs, such as a cigarette for someone with a nicotine addiction, or various types of foodstuff, such as various high-calorie treats for someone who has an eating disorder, can elicit significant physiological changes and subjective responses on self-report measures that differ from when a neutral stimuli is presented (Tetley et al., 2009; Jansen, 1997; Carter et al., 1995). However, relatively little is known about weight cue reactivity; the effects of exposing

information on physiological measures of height, weight, or body mass index (BMI) during a weight-related study. There is a dearth of empirical data that has examined the influences of providing or withholding information of personal weight measurements (weight cue reactivity) when a participant is told to self-report their own perceptions of body image or, specifically, body dissatisfaction.

Relation to Other Research

Weight cue reactivity has a variety of implications for body image and obesity research. Studies have suggested that the extent of body image satistfaction or dissatisfaction can be altered within particular circumstances and is subject to fluctuation (Melnyk, Cash, & Janda, 2004), particularly among those concerned with their appearance or weight (Tiggermann, 2001). Similarly, certain contextual elements, such as the nature of the body image task, could potentially confound how an individual self-reports body image and could subsequently elicit greater body dissatisfaction due to the altered internalnalized perception or representation of the person's body (Waller & Barnes, 2002).

In obesity research, there have been variations in regards to procedures involving height and weight. Participants are often measured either before or after completing self-report questionnaires, and are sometimes even asked to self-report their own height and weight prior to filling out these questionnaires (see Waller et al., 2002; Larsen, Ouwens, Engels, Eisinga, Strien, 2008; Cash & Hicks, 1990 for examples). This methods of reporting height and weight could potentially cue feelings of body dissatisfacion, particularly among those participants who are overweight or obese. Evidence of effects from cued

atitudes of media-portrayed thinnness on women (Stice & Shaw, 1994) would help support this conclusion. Nevertheless, no studies were identified that have experimentally examined the magnitude of effects of weight cue reactivity on self-report measures of body dissatisfaction.

Purpose of the Study

The current study is an investigation on the effects of reactivity by providing or withholding weight cues on self-report measures, specifically between male and female college-aged students. The study will take an experimental approach on addressing the issue of reactivity, and it will be the first study to directly examine reactivity on body dissatisfaction. Participants will be given a battery of questionnaires to measure anxiety, stress, mood states, depressive symptoms, and eating attitudes, along with measures designed to assess body dissatisfaction. The participant will have height and weight measurements taken at some point during the study. The independent variable will be defined objectively by assigning participants to groups in which they will (a) receive no weight cues, (b) receive specific weight cues (i.e., being weighed) before completing self-report measures, or (c) receive general weight cues (knowledge of impending weight measurement after filling out questionnaires) before completing self-report measures. The dependent variable of interest is the level of perceived body dissatisfaction. It is hypothesized that groups that receive weight cues will report greater body dissatisfaction on self-report measures than groups that received no cues, after controlling for body mass index (BMI).

METHOD

Participants

Participants were recruited through the University of Kansas research participation system and were awarded credit towards the fulfillment of a research requirement component of their introductory course. 150 individuals indicated interest with 51.3% participating. 77 subjects (50.6% female, mean age = 20.22, SD = 3.43) participated in this study. The sample in this study was drawn from a pool of undergraduate students enrolled in an introductory psychology course. All participants consented to the study and participated fully. No follow-up was necessary with the participants due to the nature of the study. No participants were excluded in the analysis at the conclusion of the study.

Materials and Procedure

Participants were given a packet of questionnaires and self-report measures to analyze stress, anxiety, mood, eating attitudes, and body dissatisfaction.

Mood states. Mood states were measured using the Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1991), which was developed for use with individuals 18 years of age and older and has been well validated since its release in 1971. The brief form version was used, which consists of 30 items assessing affective mood states, such as tension, anxiety, depression, and anger. Participants respond to each item using a five-point scale (0=Not at all accurate, 4= Extremely accurate). Related items were compiled into six subscales (tension, depression, hostility, fatigue, vigor, and confusion), which were all summed (with the exception of vigor, which was subtracted) to give a total mood disturbance (TMD) score. Higher scores on TMD indicated greater negative mood disturbance (McNair, Lorr, & Droppleman, 1991). The measure has been shown to have internal consistency

of subscales ranging from .63 to .96 depending on scale (McNair, Lorr, & Droppleman, 1991). In the present study, subscale reliability scores ranged from .57 (confusion) to .89 (vigor).

Anxiety was assessed using the State Trait Anxiety Inventory (STAI – form Y-1; Spielberger, 1983) which consists of 20 items that assess the intensity of anxiety experienced by the participant at that moment by rating themselves on the following 4-point scale: (1) Not at all, (2) Somewhat, (3) Moderately so, (4) Very much so. The scores on this measure range from 20-80, with higher scores indicating greater feelings of anxiety. Internal consistency (α) for this measure has been reported as 0.77 (Spielberger, 1983), with this study recording $\alpha = 0.90$.

Depressive feelings were assessed using the Beck Depression Inventory II (BDI-II; Beck, Steer, & Brown, 1996) a measure composed of 21 items drawn from the depression criteria of the DSM-IV designed to assess the intensity of depression in participants. Possible scores range from 0-63, with higher scores indicating greater prevalence of depressive symptomatology (0-9=normal, 10-18=moderately elevated, 19-29=moderate to severe depression, and 30-63=severe depression). Internal consistency (α) has been reported as 0.92 (Beck, Steer, & Brown, 1996) and this study found $\alpha = 0.87$. The BDI was also used because it includes factors that reveal negative attitudes towards the self (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961).

Stress levels were measured using the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983), a ten-item measure that describes various examples of thoughts and feelings that participants may have experienced during the past month. Internal consistency (α) for this measure has been reported to be 0.84 (Cohen, Kamarck, & Mermelstein, 1983), with this study finding an alpha of 0.88.

Body dissatisfaction, appearance, and attitudes. Eating attitudes were assessed using the Eating Attitudes Test (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982). This test is a 26-item measure of symptoms and concerns associated with eating disorders and it is often used as a screening tool to assess "eating disorder risk" in high school, college and other special risk samples (Garner et al., 1982). Possible scores range from 0-78, with a score of 20 or above indicating the presence of potentially detrimental eating habits. Reported internal reliabilities ranged between 0.86 and 0.90 (Garner et al., 1982) with the present study finding $\alpha = 0.82$.

Body dissatisfaction was measured using an adopted form of Stunkard's Figure Rating Scale (FRS; Stunkard, Sorenson, & Schulsinger, 1983). This measure consists of nine gender specific silhouettes, ranging from very thin to very obese. Participants are asked to select two figures; the silhouette that they feel best represents their own bodies, and the silhouette that they feel best represents their ideal body. Body dissatisfaction is then rated as the numbered difference between the ideal body image and the current body image. Criterion-related validity is assessed by comparing figure selection with BMI and has been reported as $r = 0.72$, $p < .05$ (Scagliusi et al., 2006). Correlations from this study between FRS figure selection and BMI were found to be $r = 0.74$, $p < .00$.

The Perceptions of Teasing Scale (POTS; Thompson, Cattarin, Fowler, & Fisher, 1995) was used to assess general

weight and competency criticism. The measure consists of 11 items describing forms of teasing that individuals may commonly experience, most of which focus on body size (e.g., *People made jokes about you being too heavy*"). Participants rate the frequency for which they have experienced the forms of teasing on a scale from 1 (never) to 5 (very often). Participants reporting that they have experienced a form of teasing are asked to rate the degree to which it bothered them on a scale from 1 (not upset) to 5 (very upset). From the current study, this scale has demonstrated good internal consistency (α = 0.84 for weight-related teasing and 0.79 for competency teasing, while this study found α = 0.86 for weight-related teasing and α = 0.80 for competency teasing) and has been validated against psychological measures related to teasing (Thompson, Cattarin, Fowler, & Fisher, 1995).

Participants' attitudes of their appearance were also assessed using the Physical Appearance Comparison Scale (PACS; Thompson, Fabian, Moulton, & Dunn, 1991), which is a five-item measure of the tendency to compare one's own appearance to that of other individuals. Scores on this scale range from 5-25, with higher scores suggesting greater tendencies to compare with others. Internal consistency has been reported between 0.78 and 0.80 (Thompson et al., 1991), with this study reporting 0.77

Body mass index (BMI) was also recorded and calculated using the formula defined by the Center for Disease Control (CDC) (BMI = kg / m²) from students' height and weight measurements collected during the study (National Institute of Health [NIH], 1998).

Procedures

Participants arrived in a private clinic room, where they were given an opportunity to provide consent before taking part in the experiment. Participants were given an informed consent form, which had been approved by the University of Kansas institutional review board. The form utilized deception and indicated that the study was concerned with associations between measures of mood states on measures of body dissatisfaction, in order to mask the potential reactivity effects associated with the title of the experiment. The participants were informed that participation was voluntary, and that they were free to withdraw at any time without penalty. The conditional variable (knowledge of weight procedures) was not provided during the consenting process. Participants were also not informed about the specific purpose of the study until debriefing.

Participants were then given a battery of questionnaires to determine anxiety, stress, mood states, depressive symptoms, and eating attitudes, as well as how they viewed their body and how they compared themselves to others. The participants were randomly assigned to treatment conditions using a random number generator. Group one (control) received no information about weight prior to completing self-report measures of mood and body dissatisfaction. Group two (general cue) received general weight cues by being told that they were going to be weighed and have height recorded upon completion of the measures. The third group (specific cue) received specific weight cues by being weighed and measured before completing self-report measures (the weight was withheld to maintain consistency with the "general weight cue" group). The researcher utilized a script to maintain consistency when interacting with participants across groups. The

dependent variable of interest was body dissatisfaction, as defined by scores on the Figure Rating Scale. Height and weight information from all three groups was collected to control for BMI during analyses.

At the end of the experiment, participants were debriefed and given a debriefing form. In order to assess the degree in which participants became aware of the study's intentions, 20% of the participants were asked during debriefing if they could identify the true nature of the study. None were able to accurately identify the deception. Participants from the "specific weight cue" group were allowed to ask about their height and weight if they chose.

RESULTS

BMI

A univariate analysis of variance (ANOVA) was used to determine whether BMI was significantly related to the experimental condition (or independent variable). If the findings proved to be significant, then BMI would be included as a covariate with the rest of the analyses. If the findings were not significant, then BMI would not be used, as it would detract too much power from the rest of the analyses. There were no significant findings between BMI and the treatment conditions, $F(2, 75) = 1.30$, $p = 0.23$.

Current Body Image

Using the responses from the Stunkard Figure Rating Scale (FRS) as the dependent variable, a 2x3 ANOVA (Gender x Condition) was used to compared self-reported current body image, or what the participants denoted as the image that best represented their current body. There were significant differences between conditions in regards to current body image, $F(2, 75) = 4.58$, $p = 0.01$, $\eta^2 = 0.11$. Tukey post-hoc comparisons of the three groups indicate

that, specifically, those in the specific weight cue condition ($M = 4.33$, 95% CI [3.91, 4.74]) selected from the FRS a figure that was significantly larger than those in the control condition ($M = 3.41$, 95% CI [2.93, 3.89]), $p = 0.005$. Comparisons between the general weight cue group ($M = 3.91$, 95% CI [3.47, 4.35]) and the other two groups were not significant at $p < .05$. Females who received specific weight cues denoted no significant differences in body image *(M = 4.19, 95% CI [3.63-4.75])* compared to females who received general weight cues ($M = 3.75$, 95% CI [3.11-4.40]) or no cues ($M = 3.72$, 95% CI [3.05-4.40]). Males had reported higher current body image when they received specific weight cues *(M = 4.46, 95% CI [3.84-5.08])*, when compared to those who received general weight cues ($M = 4.07$, 95% CI [3.48-4.67]) or no weight cues *(M = 3.00, 95% CI [2.33-3.67])*, although these findings were not significant at $p < .05$ (See Figure 1).

Body Dissatisfaction

A 2x3 ANOVA (Gender x Condition) was used to test the hypothesis that groups which received weight cues would report higher levels of body dissatisfaction than those who received no cues. The experimental condition main effect was the result of interest, along with the interaction between the experimental condition and gender. There were significant differences between conditions in regards to a main effect of body dissatisfaction, $F(2, 75) = 5.83$, $p = 0.005$, $\eta^2 = 0.14$, with no significant findings for a main effect of gender, $F(1, 76) = 0.19$, $p = 0.66$, $\eta^2 = 0.003$, or interaction between gender and condition, $F(2, 76) = 0.46$, $p = 0.64$, $\eta^2 = 0.01$. Tukey post-hoc comparisons of the three groups indicated that those in the specific weight cue condition ($M = 1.40$,

Figure 1. Current Body Image Scores Across Condition
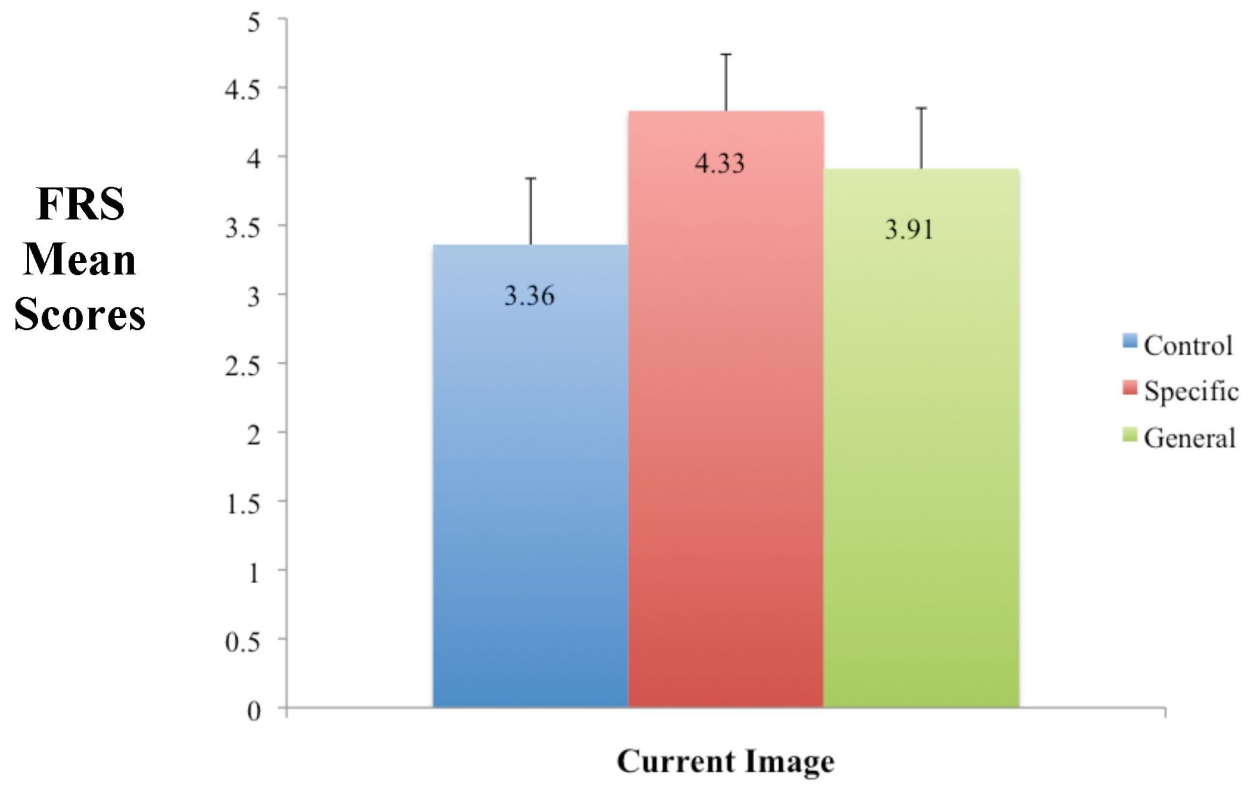
95% CI [1.09, 1.71]) and general weight cue condition ($M = 1.08$, 95% CI [0.75, 1.41]) were significantly more dissatisfied with their body shape than those in the control condition ($M = 0.59$, 95% CI [0.24, 0.95]), $p < 0.01$ and $p < 0.048$ respectively (See Figure 2).

Body Image, Appearance, and Attitudes

The relationship between body image and BMI ratings was evaluated by examining correlations between current body image scores on the Stunkard's Figure Rating Scale (FRS) to participants' BMI. There was a positive correlation between BMI and FRS current image scores ($r = 0.73$, $p < .01$). These results support the validity of the FRS, illustrating that as a participant's BMI went up, the likelihood of that participant circling a larger body type increased. BMI also positively correlated with FRS body dissatisfaction scores, $r = 0.474$, $p < .01$, and weight-related teasing (POTSW), $r = 0.45$, $p < .01$.

Body-related measures also correlated to some of the mood state measures collected. Eating attitudes demonstrated correlations with anxiety (STAI), body dissatisfaction (FRS-BD), mood (POMS), and stress (PSS). Body dissatisfaction also correlated positively with depression (BDI). Lastly, physical comparisons of others correlated positively with anxiety (STAI), mood (POMS), and stress (PSS) (see Table 1).

DISCUSSION

As outlined above, the current study was an experimental investigation of the effects of reactivity by providing or withholding weight cues on self-report measures, specifically between male and female college-aged students. It was hypothesized that groups that received weight cues would report greater body dissatisfaction on self-report measures than groups that received no cues, after controlling for BMI. The results supported this hypothesis by suggesting that weight cues elicited greater levels of body dissatisfaction between both male and female college-aged students. This strengthens the idea that reactivity effects influenced the resultant changes in body dissatisfaction. This study also demonstrated particular reactivity effects by revealing differences in current body image, as those in the specific weight cue condition selected a larger current body image on the Figure Rating Scale than those in the control and general weight conditions. These data appear to provide evidence suggesting that weight cue reactivity follows the same conditions as other, more extensively researched, cue-based reactivity (Tetley et al, 2009; Jansen, 1997; Carter et al., 1995), and fills a gap in the current weight-related literature.

Surprisingly, current body image scores increased significantly in the weight-cue conditions when compared to the control conditions. However, this increase was only demonstrated in the specific weight-cue group. This increase suggests that taking height and weight measurements before the study elicits strong reactivity effects which significantly alter the outcome of one measurement on a body dissatisfaction scale. A possible explanation for this is that some participants could have been primed by the weight procedure, which, given any already established positive or negative views about their body, might influence their internal representation of themselves and impact their self-perception of their body image, especially if that viewpoint is negative. Since this increase is not seen in the general weight cue condition, it is possible that just imagining the situation of being measured

Table 1.

Summary of correlations between self-report measures and BMI

Measures	BMI	EAT	BDI	STAI	FRSC	FRSBD	POMS	POTSW	PSS	PACS
BMI	--	-.061	.142	.017	.732*	.474*	.058	.445	.086	-.069
EAT	-.061	--	.419*	.310*	.001	.332*	.398*	.21	.336*	.600*
BDI	.142	.419*	--	.582*	.04	.281**	.676*	.353*	.696*	.624*
STAI	.017	.310*	.582*	--	-.062	.065	.753*	.093	.723*	.421*
FRSC	.732*	.001	.04	-.062	--	.543*	.068	.350*	.052	-.067
FRSBD	.474*	.332*	.281**	.065	.543*	--	.246	.293**	.226	.262**
POMS	.058	.398*	.676*	.753*	.068	.246	--	.221	.750*	.494*
POTSW	.445	.21	.353*	.093	.350*	.293**	.221	--	.241**	.187
PSS	.086	.336*	.696*	.723*	.052	.226	.750*	.241**	--	.568*
PACS	-.069	.600*	.624*	.421*	-.067	.262**	.494*	.187	.568*	--

Note. BMI=Body Mass Index; EAT=Eating Attitudes Test; BDI=Beck Depression Inventory; STAI=State-Trait Anxiety Inventory; FRSC=Figure Rating Scale, Current; FRSBD=Figure Rating Scale, Body Dissatisfaction; POMS=Profile of Mood States; POTSW=Perceptions of Teasing, Weight-Related; PSS=Perceived Stress Scale; PACS=Physical Appearance Comparison Scale.

*p<.01, **p<.05

150

Figure 2. Body Dissatisfaction Across Condition
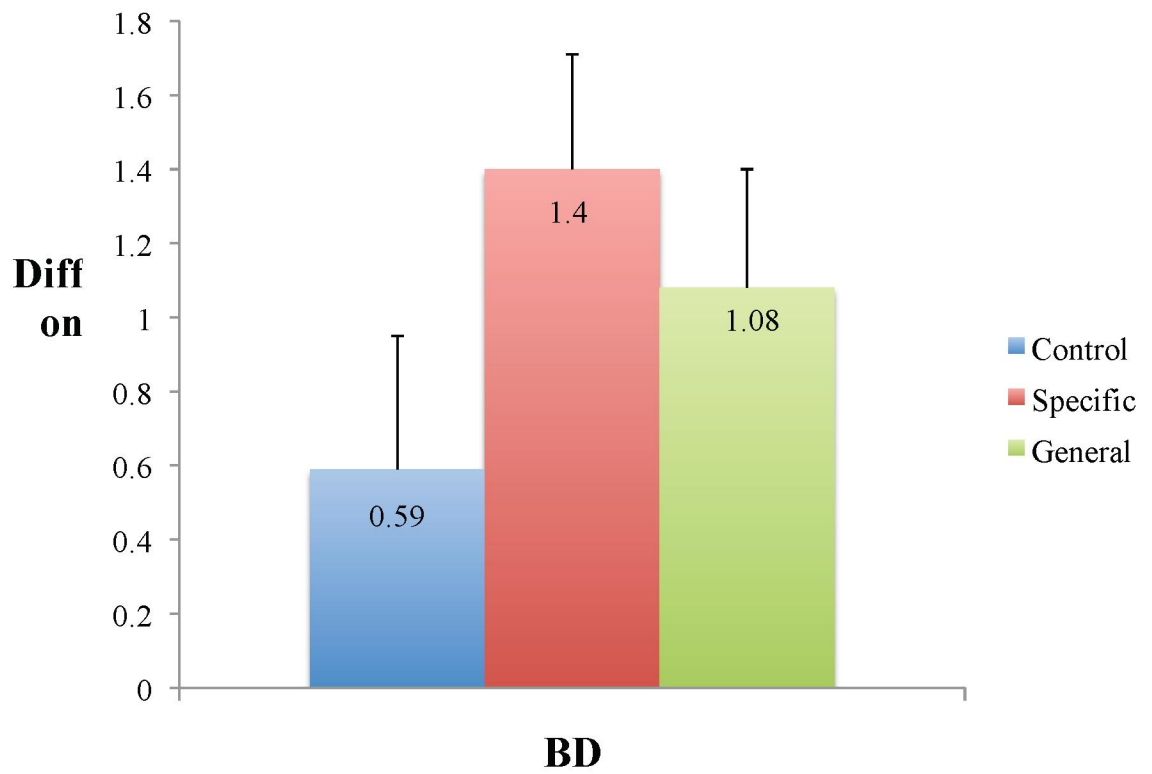
was not strong enough to elicit the same reactivity response, possibly because research has shown that participants generally have a poor time estimating their reactions to an imagined situation (Wilson, & LaFleur, 1995). The reactivity effect in the specific weight cue condition alone challenges the validity of the body dissatisfaction measure, consistent with previously outlined damage recorded in the literature (Heppner et al., 2008).

Our findings also indicated that both men and women experienced greater levels of body dissatisfaction in groups that received weight-cues, as opposed to those who did not receive any cues. There are conclusions regarding today's media that suggests women may be geared towards more dynamic self-perceptions of body image and perhaps may be more sensitive to self-conscious weight primes (Stice et al. 1994). However, women did not appear to experience any significant differences in levels of body dissatisfaction compared to men. Similarly, there were no significant differences between male and female current body images. This suggests that while those in weight conditions were influenced to be more aware of their internalized self-image and idealized image and were cued to feel greater discrepancies between the two, these effects were consistent between genders. These data support the current literature, which suggests that there are no differences between men and women in terms of overall levels of body dissatisfaction (Furnham et al., 2002; Silberstein et al, 1988).

The current study has several strengths. As there was a profound gap in the current literature, this appears to be the first study that empirically demonstrated significant reactivity effects in self-report measures dealing with both current body image and body dissatisfaction. Height and weight were collected from each participant to analyze BMI for use in validating the Figure Rating Scale, as well as to allow for a possible control during data analysis. It is of interest to note that, although BMI was highly correlated with the Figure Rating Scale, there were no significant effects between BMI and condition, which allowed for the removal BMI as a covariate in these analyses. This change added to the overall power in our analyses. In addition, the use of a variety of other self-report measures, along with a cover story, allowed for effective deception. A fifth of the participants were asked if they could identify any deception or the overall goal of the study, and of these participants, none were able to correctly identify the goal of the study and all believed the deception presented.

Some limitations present in this study should be addressed in future research. The sample was drawn from a pool of midwestern university students, typically in their first year of college, so the generalizability of the findings to other geographical locations or age groups is unknown. The study was also conducted between February and May, and any potential seasonal effects that could influence body dissatisfaction were not accounted for and may have also influenced current body image. Order effects between self-report measures were partially addressed, with no two measures relating to body image or dissatisfaction being placed consecutively. However, it is unknown whether the order of administration of measures might have influenced body dissatisfaction responses or the duration of reactivity experienced, as it is shown

that at least physiological recordings can affect the outcomes calculated by these self-report questionnaires.

While this study has implications on informing researchers about the extent of weight cue reactivity effects, future research on reactivity and body dissatisfaction is needed to investigate several factors not addressed by this study. First, although BMI and the Figure Rating Scale were correlated, a study looking at clinician-rated body image in comparison with the FRS might help determine if the participants were being accurate in their ratings of their own body image, regardless of reactivity effects. The usefulness of the FRS needs to be investigated, as there does not appear to be any indication of BMI in relation to each figure, and it is unknown if the figures increase in BMI at consistent intervals. Replication of the current study, utilizing a larger sample and adding a pretest/posttest element of weight-cues and body dissatisfaction should be done in order to more thoroughly explore and understand the extent of the reactivity elicited by weight cues. Finally, although not a main goal of the current study, data was collected on mood states, eating attitudes and perceptions/comparisons of body among peers, as well as perceptions of teasing. Future research of weight cue reactivity on these measures might prove useful for self-report reactivity literature.

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Islamabad: The Struggle for Pakistan's Identity

Eman Siddiqui

ABSTRACT

 "The capital of a country is the focus and the center of the people's ambitions and desires, and it is wrong to put them in an existing city," Pakistan's President General Ayub Khan declared the need for a new capital for a young Pakistan in 1958. General Ayub's desire required bringing about greater national unity by rejecting a cultural baggage of the past for a new national identity. This premise disqualified the cities of Karachi, a British colonial legacy, and Lahore, a link to the Indian past, for becoming the capital of Pakistan. And so, planned between 1959 and 1963, arose Islamabad. Pakistan envisioned that the new capital would assist in bringing East and West Pakistan together by becoming a symbol of national pride. Thus, the struggle for national identity as symbolized in the creation of Islamabad became closely tied to the Pakistani national struggle itself – inherent in both these struggles was a desire to start anew and fresh and the longing to claim what was uniquely its own. This led to an attempt to unfold a distinctively national style of architecture and urbanism which had two undercurrents: a drive to achieve modernity and progress as defined by the West; and the zeal for Islam as it was the driving force behind the creation of this new nation-state. This paper focuses on how Pakistan attempted to achieve these goals and how successful it was in creating this national identity.

The First Capital

In 1947, British India was partitioned on the basis of religious demographics. This led to the creation of the sovereign states of Pakistan and India - the areas with a Muslim majority population became a part of Pakistan whereas Hindu majority areas became a part of an independent India. As a result of this partition, Pakistan at the time was geographically divided into two parts: the West wing and the East wing. All major cities previously used as national capitals and provincial capitals, such as Bombay, Calcutta, and New Delhi, were now a part of India. Thus, Pakistan faced the task of choosing a capital for itself from a list of cities that had not functioned as national capitals before. The newly-created Pakistan had three main urban centers: Lahore and Karachi in West Pakistan and Dhaka in East Pakistan. Despite the economic and demographic weight of the East, Pakistan's government and military were largely dominated by the upper classes of the West. Friction between the two wings started in 1952 with the Bengali Language Movement and the Awami

League was pushing for autonomy as the political voice of the Bengali-speaking population in the 1960s. With such a volatile situation in the East, a government dominated by the West decided that the new capital be located in West Pakistan (Yakas 2001).

Figure 1 Map showing East and West Pakistan
(Source: Suburban Emergency Management Program)

This left the choice between Lahore and Karachi. Lahore, a main cultural center of the region, had a strong political history connected to pre-partition India: it had acted as the capital of Punjab for the various Indian empires, including the Ghaznavids in the 12th century, the Mughals in the 16th century, and the British in the mid-19th and early 20th century. But this regional capital for over a thousand years had a close proximity to Pakistan's new rival, India. The inherent distrust of its neighbor prevented Pakistan from picking Lahore as its national capital. However, Lahore continued to act as the capital of the

province of Punjab of the newly-created country (Yakas 2001).

Karachi, the only remaining choice, was much smaller than Lahore at the time. But it was a bustling, port city convenient for communication and transport between the two 'wings'. Furthermore, it provided ample opportunities for major growth through commercial development and was fast-growing as the center for industrial enterprise in the region. Thus, Karachi became the first capital of Pakistan (Yakas 2001).

Karachi's Diminishing Importance

Karachi emerged as one of the subcontinent's major cities during colonial times. However, colonialism was also the cause of the city's uncontrollable growth and environmental decline. Karachi bears the scars of the human catastrophe that accompanied the partition of British India like no other South Asian city. The partition caused the transfer of fifteen million people across the newly-drawn borders: one of the largest mass migrations of people ever in history. At least one million died during this exodus. People who settled into the areas bordering the newly created states were able to integrate into the communities fairly easily because of the common culture and traditions. The situation was much different in Karachi. People fleeing what now became central India chose Karachi as their destination. In terms of culture and religious practices, these people had little or nothing in common with the people of

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Sind, the province in which Karachi was located. Thus, Karachi's sectarian tensions started early on (Harding 2007).

Within a few months of independence, Karachi's population of about 450,000 swelled to over a million inhabitants. It became the center for General Ayub Khan's ambitious industrialization program after his *coup d'état* in 1958. This economic expansion led to an ever-increasing number of immigrants from other parts of the country. The impact of Ayub Khan's Green Revolution technologies also led to the migration of many rural workers to the cities. Karachi, on the other hand, was increasingly failing to provide adequate and secure housing for a significant proportion of its increasing population. Refugees occupied all open spaces including public parks, school buildings, and playgrounds. The government of the day was overwhelmed. The housing needs of government officials and civil servants who had moved to the new capital put additional pressure on the existing infrastructure (Harding 2007).
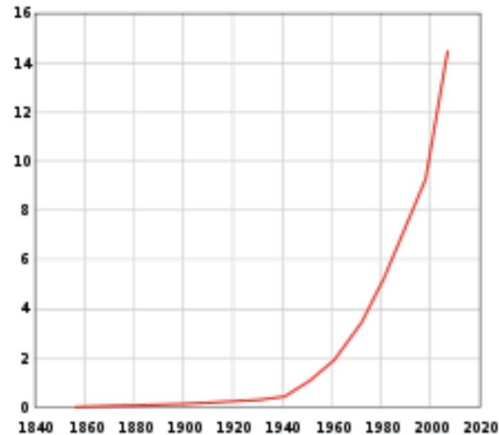
Figure 2 Trend of Population Growth (in millions) in Karachi (Source: Wikipedia)

With the realization that something had to be done soon to improve the situation, an authority specifically charged with dealing with the housing crisis was created in 1951. This new authority was initially called the Karachi Improvement Trust (KTI) but became the Karachi Development Authority (KDA) in 1957. KTI developed the Greater Karachi Plan in collaboration with MRV, a Swedish consultancy firm. The plan aimed to create a new administrative center outside Karachi which would be linked to the city by roads. This was to be accompanied by the construction of high-density, ten-storey apartment blocks in the central area of Karachi which would accommodate those who were occupying the central areas. However, the plan remained unimplemented due to a combination of political instability which prevailed in Pakistan until 1958 and because of a lack of funds (Harding 2007).

Figure 3 Karachi in the 1950s
(Source: Pakistani Defense Forum)

With the growing inability of Karachi to act as the capital because of overcrowding, sectarian differences, political tensions, and its inefficiency to accommodate the staff and equipment of a central government was the feeling that the capital was not a place merely to live and work. The capital had to symbolize the spirit of the people of the country. There was also an understanding that the capital city should aid towards the better organization and administration of the newly created state, represent the will of the people of the country, and become a symbol of the new state towards which all Pakistanis turn to for unity. All these reasons hinted towards the need for a new capital for Pakistan (Yakas 2001).

These aims for the new capital met with adequate opposition from economic divisions inside and outside the country. The critics of the idea felt that building a capital from scratch was an unnecessary luxury: Pakistan had its hands full in order to develop its nascent economy and could not afford the creation of a new city. Proponents for the new capital, however, said these arguments did not take into consideration the factor of time – a new town could not be built in a few years and thus, it was possible to prepare the first 5-year-plan in such a way so as to not hurt the country's economy. The proponents also felt that the current situation in Karachi had made the allocation of funds for administrative headquarters compulsory. The government was housed in old buildings, some not even designed for this purpose. These buildings were also situated far from each other and so made the functioning of the administration inefficient. Creating the new government buildings in Karachi would have incurred a higher overall cost as well because of the very expensive land values. All these factors signaled towards a city designed exclusively for becoming capital (Yakas 2001).

"A Common Platform"

When Pakistan's first Martial Law Administrator and second President General Ayub Khan came into power in 1958, he embarked on an ambitious, centrally planned program for the industrialization and modernization of Pakistan. The idea of a new administrative center near Karachi was abandoned and the Greater Karachi Plan was shelved. Instead he decided that there should be an utterly modern and

entirely new capital of Pakistan at a site near the town of Rawalpindi on the Pothwar Plateau (Harding 2007). He asserted:

"The capital of a country is the focus and the center of the people's ambitions and desires, and it is wrong to put them in an existing city. It must have a color of its own and character of its own. And that character is the sum total of the aspirations, the life and the ambitions of the people of the whole of Pakistan. With the two provinces of Pakistan, as separated as they are from each other, you want to bring the people on a common platform. The thing to do is to take them to a new place altogether" (Vale 2008: 147-148).

Figure 4 Map showing Rawalpindi (Source: Wikimedia Commons)

General Ayub Khan's reasoning to the public for the creation of a new capital was based on the new city's iconic role in bringing together national identity after independence. Furthermore, the vast difference in physical, economic, and social environments between the two 'wings' of the country produced the need for the creation of national unity on political grounds. This desired political unity demanded the establishment of a powerful administration in order to slowly decrease the differences and focus on features that people living in East and West Pakistan shared – the most important of which was Islam. Such a powerful administration realized the need for a national symbol and such a symbol would obviously be the new capital for the state (Yakas 2001).

The rhetoric, thus, focused on the new capital's symbolic role in the consolidation of national identity in bringing together the two 'wings' on a "common platform". It was highly unclear, though, how the linguistic, ethnic, and geographic gulfs between East and West Pakistan could be bridged when such a platform was situated to reconfirm the political and economic dominance of the western wing (Vale 2008).

A Military Mind

While General Ayub Khan's public justifications for a new capital centered on the city's role in the consolidation of a post-independence national identity, it was certain that there were other forces pushing for this move. It was not coincidental, then, the leading forces for this move were the country's top military men. The creation of a new capital was becoming less a consequence of the independence of Pakistan and more of the

military takeover of 1958 by General Ayub Khan. There were other reasons that interested the military mind more (Vale 2008).

Figure 5 General Ayub Khan inspecting a new site in Islamabad (Source: drug-trafficking.blogspot.com)

Karachi, although the country's economic hub, seemed very vulnerable to several internal and external threats. Tensions with India were still high and an attack from the sea could not be ruled out completely. The President also found that the bureaucracy and civil service in Karachi were exposed to political instigators, corrupting influences, and a strong hold by the influential business and mercantile community. By taking it north to a physically and morally healthier climate, General Ayub Khan intended to give his government a new clean standpoint (Vale 2008).

The shift of the capital into West Pakistan's interior seemed bizarre at first: the capital was being moved away from the country's most developed region instead of towards it. But the component that was the most developed in the interior, and hence, the deciding factor for the location was the army – Rawalpindi was the headquarters of the Pakistan Army. The move to the high plains was, thus, a move to a much safer location. There was an added advantage to the central location for travel to and from East Pakistan, the other half of this incredulously shaped country which had one thousand miles of India between its two "wings". In terms of transportation links, both real and imagined, the new Islamic leadership was also very interested in the new location's place on the historic trade route linking the great capitals of west Asia and the Arab world. Adding to the geopolitical and geostrategic attraction of the new capital's positioning was its closeness to the sensitive and disputed border areas of Kashmir, where Pakistan and India have fought several wars, the first one as early as 1947. The new site was also a safe distance away from the border Pakistan shared with the Indian province of Punjab. Considering all these reasons, the new site seemed befitting as a kind of a national citadel (Vale 2008).

General Ayub Khan's rationale did not rely on these kinds of reasons, however alluring they were to a military mind but on how the new capital would be "the focus and the center of the people's ambitions and desires" (Vale 2008: 147).

The City of Islam
Pakistan was initially a dominion in the

Commonwealth of Nations. With the adoption of a new constitution in 1956, Pakistan took on the title of *Islamic Republic of Pakistan*. With this newly added emphasis on Islam, at a meeting in February 1960, the cabinet decided to name the new capital *Islamabad* – "the city of Islam". With such advancements, the situation in Pakistan became such that there became an irrevocable connection between the idea of purity and the glorification of Islam. As Imran Ahmed puts it, "Islamabad attempts to naturalize the new nation-state of Pakistan; through the rhetoric attached to the choice of site, through the choice of site, through the reference to a supposed Islamic geometry in its grid layout; through the Islamic references of its architectural styles, and through the network of Sector mosques" (Vale 2008: 147). Much like the Pakistani national struggle itself was the struggle to conceive and execute the creation of Islamabad. Ahmed reflects that "In Islamabad, the ideological agenda and its vitalizing narrative in architecture and urbanism has two roots: the urge to Westernization, where nationhood with its ostensibly colonial origins is taken as a sign of modernity and progress; and a will to fundamentalism, where the religious community of Islam is the original and omniscient source of the Pakistani identity" (Vale 2008: 147). With Islamabad, the Government of Pakistan promised the people a modern and pure white city to the north.

The Capital Development Authority (CDA) was constituted in September 1960.

N.A.Faruqi, later to become its chairman, published the following note on the project and its outlook:

"Through a new country we, as a people, are an old nation, with a rich heritage. Inspired by a historical past ... (We are) eager to build a new city which, in addition to being an adequate and ideal seat of government, should also reflect our cultural identity and national aspirations" (Mumtaz 1985: 184-185).

Designing the *Dynapolis*
The master plan for Islamabad was designed by Doxiadis Associates, the firm established by Constantinos Apostolou Doxiadis, a notable Greek town planner and father of Ekistics. The approval of the master plan took place in May 1960. The goal of the master plan was to allow Rawalpindi and Islamabad to grow at the same time through the siting of Islamabad on a fan-shaped area rammed between a wall of steep hills and the existing city of Rawalpindi. This was a tacit criticism of nearly all of the designed capitals that came before Islamabad, such as Washington, Canberra, New Delhi, Chandigarh, and Brasilia, and were designed as bounded areas and presented as static entities which would eventually be filled out. Doxiadis, on the other hand, promoted Islamabad as a *'dynapolis'* – a city endlessly expanding in a linear fan shape from an initial fixed point. Thus, Islamabad would begin with one node in the top corner of the fan and, with time, spread to the southwest in one direction. Because it was being created near an

existing city, it would be a two-nucleus *dynopolis* and because growth would be guided and unidirectional, the two nuclei would spread in space and form a dynamic metropolis (Doxiadis 1965).
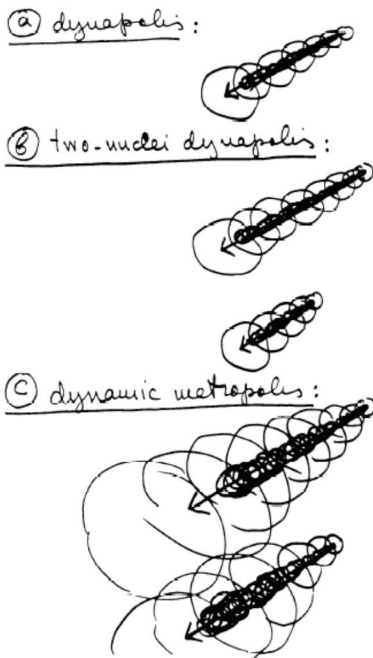
Figure 6 Towards a dynamic metropolis (Source: Islamabad: The Creation of a New Capital)

Doxiadis felt that a linear form could not be envisaged in dealing with a two-nucleus metropolis. He found the need to work with forms whose dimensions in two directions crossing each other at a right angle would not differ much. This led to the basic form of a concentric city with a pattern of radial and circular streets – very similar to a naturally growing settlement – or to a pattern of a grid of streets crossing each other at right angles The circular was excluded because Doxiadis thought that suited a static city and not a growing one (Doxiadis 1965).

The grid was then chosen but the question arose as to what kind of grid – the elongated city blocks of the past, square blocks, straight or curved streets. According to Doxiadis, various considerations showed that the traditional elongated city block was a rational product of the fact that the block consists of plots which are in two rows of the same orientation. He added that unless the form of the landscape compels one to, there was no need for the main roads to be curved. Thereafter, not only the basic form of a grid was chosen, but also the basic form of squares which by conception (of a grid of squares) are all equal; these were the cells of the city (Doxiadis 1965).

In choosing the grid, Doxiadis used historical precursors as well: Mohenjo Daro, one of the first cities in history was based on a typical rectangular grid; Lahore, a prime example of Moghul planning, was based on a two-axial system. Thus, both present day requirements and the cities of the past led to the same conclusion: full respect for a geometric grid. This gridiron layout divided Islamabad into sectors according to urban functions (Doxiadis 1965).
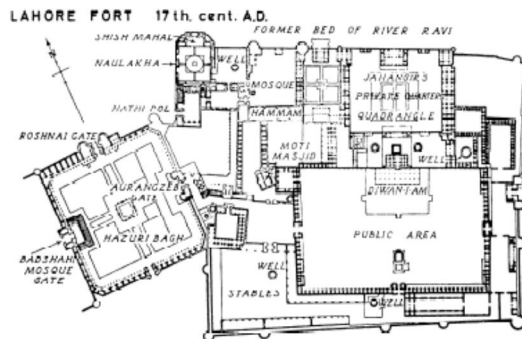
Figure 7 The forms of the past (Source: Islamabad: The Creation of a New Capital)

Islamabad's capitol complex acted as the culmination point of a long axial way named Capitol Avenue by Doxiadis (now known as Jinnah Avenue). The Capitol Avenue was intended to act as a ceremonial route ending at the capitol complex where the President and the Parliament were neighbors in Islamabad's elevated zone of government buildings, depicting Pakistan's Parliamentary republic form of government where both the Parliament and the President are elected by the people (Vale 2008).

Figure 8 View of model along Capitol Avenue with the administrative center in the background and the civic center to the left of the avenue (Source: Islamabad: The Creation of a New Capital)

Doxiadis started to rethink the sequence of building priorities and criticized the planners of previously designed capitals for beginning design with "government buildings, the monumental areas and the high income dwellings" (Vale 2008: 149). "This process," Doxiadis continued, "cannot lead to success for it is imperative that the lower income groups – those which can *build* a city are settled first. If this is overlooked, the result is a composite settlement consisting of a central monumental part and several other non-coordinated areas, including several with slums" (Vale 2008: 149). Instead, he claimed, "we must start by covering needs, and not by building monuments" (Vale 2008: 149). He thus, initiated a certain rethinking of the sequencing of building priorities, but his design did nothing to challenge previous attitudes toward the privileged position and the isolation of the capitol complex.

The process was adjusted but this part of the product remained routinely similar to the past ones (Vale 2008).
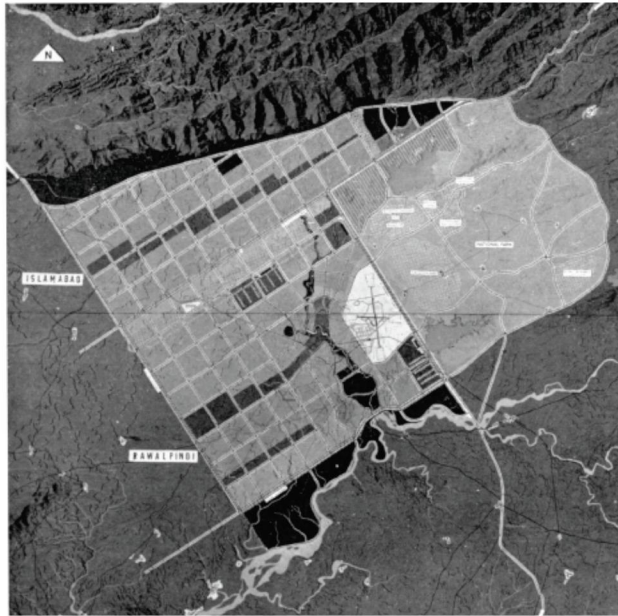
Figure 9 The metropolitan area of Islamabad (Source: Islamabad: The Creation of a New Capital)

Islamabad initially became a city only dominated by the institutions of government administration because other functions, such as housing, were directed towards Rawalpindi. As of 1968, the new capital could be described as "a little administrative island, neatly separated from the crowds of the big cities" (Vale 2008: 149) and affording "the feeling of complete isolation from life in the rest of the country" (Vale 2008: 149). A system of eight housing types correlated with civil service ranks was designed to include, at the least, a narrow range of income groups in each of the city's residential sectors. Provision was also made for exclusively high end residential sectors in the areas closest to the capitol

complex. Planner Richard Meier, in looking back at the first twenty-five years of the development of Islamabad, saw the convergence of a need to elevate the status of the government with the systems of rank in the military and the bureaucracy in the birth of most of Islamabad's structure. In his view, the rectilinearity of the plan was reinforced by the capital city wanting a processional way that leads to the seat of power and a classification based upon squares imposed by the long view lines (Vale 2008). Meier then adds,

"The rank of a person could determine the section of the city in which he would live. In the military hierarchy, ordinary soldiers were assigned places in the barracks on the periphery, but each level above merited increasing levels of privileges. Non-commissioned officers deserved a bit more space, according to the rank, and junior officers needed an extra room for a servant, but those at the top of the pyramid were allotted quarters for four servants. Civil ranking could exactly parallel the military, except that the unskilled workers were granted 1 ½ room flat roofed raw brick hutments instead of barracks! Islamabad's socio-economic segregation was not carried out in quite such rigid terms, but its inhabitation was initiated on the expectation that all comers to the city would be assigned a residence according to their salary and that, with the exception of the high government officials and diplomats already provided with special housing, all other would be

expected upon promotion to change house and settle into a higher class of community" (Vale 2008: 151).

"Public order in a capital city," Meier continues, "was easier to understand if like lived next to like" (Vale 2008: 151). This privileged treatment for residential districts became even more obvious when it came to the capitol complex. A new administration's desire to advance public order was established through the medium of urban design, exactly like designed capitals built before and after Islamabad (Vale 2008).

The Architectural Conflict
The most prominent public buildings of Islamabad are a great illustration of the conflicting and changing ideals that have defined a great deal of contemporary architecture in Pakistan: professional architects like to push the envelope towards what they consider to be modern whereas the people of Pakistan have an affinity for architecture that reminds them of their Islamic heritage.

Unlike Chandigarh and Dhaka where Le Corbusier and Louis Kahn prepared the master plans and also designed the major buildings, Doxiadis, not in any case known as an architect, did not design any major buildings in Islamabad. Unlike the other two capitals, a panel of international 'signature' architects of the time was assigned the task of designing the major buildings of Islamabad. Robert Mathew Johnson-Marshall from Britain prepared the overall plan of the administrative sector and also designed

the National Museum and the National Arts Gallery. The Government Hostel and the Secretariat Complex were designed by Italian architects Ponti, Fornarolli and Rosselli. Kenzo Tenge from Japan designed the Supreme Court, and following an international competition, Turkish architect Vedat Dalokay built the King Faisal Mosque. A team of architects working under the Colombo Plan was responsible for the municipal offices, schools, housing, and markets in various sectors. Derek Lovejoy and Partners from Britain were responsible for the city's extensive landscaping. Other famous international architects involved were Arne Jacobsen from Denmark and Louis Kahn and Edward Durrell Stone from the US. All of them prepared a number of proposals for the Parliament Building and the President's House, with Stone's design being eventually built (Malik 2003).

When the Parliament building was first proposed in 1962, for instance, it was suggested that, "if the Parliament House is then to be built ... the building will be of a substantial size and in order to be architecturally impressive, it will have to be carefully designed to reflect our past culture, at the same time utilizing modern methods of construction" (Mumtaz 1985: 187). Arne Jacobsen's uncompromising 'modern' design for the Parliament building was criticized for not being 'national' and the Capital Development Authority suggested that some "Islamic features be incorporated in the form of some arches in the cylinder, a dome

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above the cylinder, or some additions to the fore-courtyard" (Mumtaz 1985: 187).

Louis Kahn replaced Arne Jacobsen but even his final designs were not accepted because of their failure to reflect the demand of Pakistan to introduce Islamic architecture in Islamabad's public buildings. Edward Durrell Stone was then contacted because of his love for Mughal architecture and the spirit of grandness Mughal buildings casted. There was a strong sentiment, thus, connecting the desire for Islamic architecture to the subcontinent's Mughal past. This feeling was verified by the chairman of the CDA, N.A.Faruqi who said that "since we have lost the best specimens of our architecture in Delhi and Agra, we are anxious to have some semblance of our architectural treasure. It is the form that matters and not the details such as the use of precious stones, etc., which are no longer available" (Mumtaz 1985: 187). Mr.Faruqi's eagerness to have the Islamic heritage of architecture reflected in the public buildings of Islamabad led him to consider Stone for the design of all four buildings in the most prominent square of Islamabad: the Supreme Court, the Parliament building, the Foreign Office, and the President's Secretariat (Stone's designs for the Parliament building and President's Secretariat were chosen). Mr.Faruqi reminded that "there is a grave dissatisfaction in the Government and among our people regarding the architecture of the public buildings put up so far in Islamabad" (Mumtaz 1985: 187). He insisted on a modern internal arrangement of the buildings, yet, wanted aesthetics that looked "native to the soil" (Mumtaz 1985: 187). He stated that the buildings of Islamabad should be a reflection of the pride that the people of Pakistan take in their long and beautiful architectural heritage – he wanted the buildings not to look like they were cheap copies of buildings build somewhere else but like buildings that were inherently Pakistan's own.

In consistency with his understanding of Mughal concepts, Stone designed a layout for the capitol complex with a formal symmetry. At this complex, the President's Secretariat is flanked by the Parliament building and the Foreign Office. The pyramidal design of the President's Secretariat consists of receding tiers with white walls and louvered windows. The Parliament building takes a similar tiered form. Both the Parliament and the Foreign Office are given austere facades (Mumtaz 1985). Although the exterior of all three buildings was stripped of any ornamentation, they are all connected by means of very extensive landscaping. The interior of the Parliament building, however, is very reminiscent of Mughal ornamentation. The ceilings and walls are decorated by means of geometric patterns and calligraphy.

Figure 10 Stone's Parliament Building (right) and President's Secretariat (left) (Source: Architecture in Pakistan)

Figure 11 Interior of Parliament building (Source: www.urbanpk.com)

The Secretariat Complex designed by Italian architects Ponti, Fornarolli, and Roselli is a grouping of buildings into a well-integrated unity. The use of water and terraces at many levels is reminiscent of Mughal landscaping. The spaces are self-defined in a series of quiet enclosures which flow into each other through the building masses (Mumtaz 1985).

Figure 12 The Secretariat Complex (Source: Architecture in Pakistan)

The Government Officers' Hostel designed by the same team of Italian architects attains its architectural integrity from an organic unity of form, structure, function, and materials. The building also makes use of barrel vaults as lightweight sun protection in the form of a ventilated double roof, though barrel vaults are not a common form of traditional construction in the region. Also present is the traditional courtyard. The bricks used have the traditional slim proportions but are without the accompanying thick bed of lime mortar. The so-called Mughal Garden in one of the courts is only loosely derived from the traditional form (Mumtaz 1985).
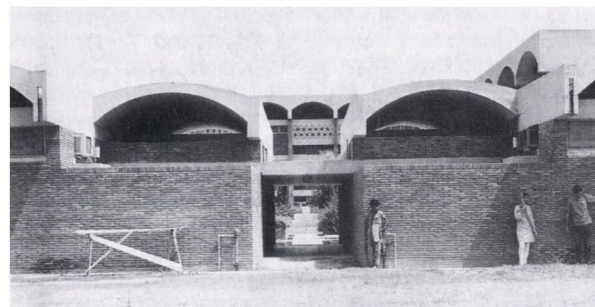
Figure 13 Government Officers' Hostel (Source: Architecture in Pakistan)

The Supreme Court building is flanked by the Secretariat Complex to the south and

President's House and the Parliament building to the north. Designed by Japanese architect Kenzo Tenge, the monumental complex consists of 13 peripheral blocks rising five stories tall and a high rise central block and gives to unexpected angles. The building is entirely covered in white marble.

Figure 14 Supreme Court

(Source: www.urbanpk.com)

An international competition was held in 1970 calling for designs for a Grand National mosque. The jury rejected designs that "could not carry the basic design ideas to their local structural and architectural conclusions" (Mumtaz 1985: 188), or "did not fit the contemporary planning and design ideals of the modern city of Islamabad" (Mumtaz 1985: 188). The winning design by Vedat Dalokay, a Turkish architect, with its "simply straightforward covering of a large space by four double diagonal supports counter-balanced by the four minarets" (Mumtaz 1985: 188) was appreciated as a satisfactory solution. According to the jury report "the classical approach of formal mosque architecture was blended

in this project with modern form and technology. The simplicity of the general layout and interior space was appreciated" (Mumtaz 1985: 187).

The mosque's architecture is strikingly modern and unique, lacking both the traditional domes and arches of most other mosques around the world.

Figure 15 King Faisal Mosque

(Source: Wikipedia)

Conclusion

With a scenic location in the foothills of the Himalayas, a world renowned master planner, a dozen world-famous architects, and a young country on the quest of building a capital expressive of its national identity, how should Islamabad be evaluated as a city? In terms of urban planning, Doxiadis may have derived his layout from sources that were native to Pakistan vis-à-vis cities in the Indus Valley Civilization and the Mughal Empire. However, the gridiron plan and separation of the city's functions into separate sectors are not very different from Le Corbusier's plan for Chandigarh that followed the modern city planning principles of *Congrès International*

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d'Architecture Moderne (CIAM) in terms of division of urban functions and an anthropomorphic plan form. As far as the major buildings of Islamabad are concerned, the architecture attempts to conform to the country's Islamic roots through geometric layouts, landscaping, and interior ornamentation. The majority of the design elements, however, are very much like the Modernist and Brutalist architecture of the time. All the major government buildings are very similar to what Louis Kahn and Le Corbusier were doing in Dhaka and Chandigarh respectively – monumental forms and simple construction and materials such as brick and concrete; the drama of grandiose geometrical forms; and "honesty of materials."

Hiring foreign architects and planners had as much to do with the desire to undo the old stigma of "backwardness" as it was by the lack of local architects and planners capable of undertaking projects of such elaborateness. Foreign consultants and their ideas of planning and design, methods and materials of construction, and dependence on foreign aid substantiated this move of architecture and urban planning from the environmentally more appropriate local to the ill-affordable and energy-intensive international modern. It was only later that the issues of the nature and relevance of modernity and modernization came forward and still need to be addressed today. While those in the urban professions in Pakistan seem to more culturally and socially aware, it is

hard to say whether this is because of the modernity brought about by Islamabad. Similarly, given the generally dominant modern ideology and foreign training of architects at the time, it is hard to say if the few local architects would have done things differently (Malik 2003).

With respect to lifestyle and urban environment, Islamabad does not relate much to the country in which it exists. In fact, it is least accessible to the vast majority of the people of Pakistan. Unfortunately, it is a city designed and built by and for the government, to be inhabited by those who govern. It thus, manifests the ambitions and goals of the politicians and decision makers who assumed power after independence and of the international planners and architects that were hired to design the city. Islamabad in its present form shows not only the prevalent ideas of the time but also what kind of impact political constraints and vested interests have on design (Malik 2003).

Islamabad neither produced a uniform urban character for Pakistan nor did it lead to any sense of national identity. It did however create a fragmentary hybrid character in a deliberate attempt to break away from history. It has not done much to improve architecture and urban design or provide any direction for the future (Malik 2003).

Cities are a realization of the culture and civilization of the people who build them and manifest the choices they make as a society about the built environment they

want to live in. Islamabad was not successful in showing how Pakistan learned from its history and in using contemporary technologies to deal with the spatial needs of its population. Islamabad may well be able to compete with other capitals when it comes to monumental chutzpah but missing is the dense urban web, the variety, the hustle and bustle. It does what a lot of other cities designed purposefully as an expression of identity rather than simply a good place to live and work do. Most of what has been published about Chandigarh and Dhaka, for instance, has been more about their brand name architects than for their relevance and appropriateness or otherwise as functioning cities. In hindsight, Pakistan needed a capital city that was more expressive of its history and culture and inclusive of its diverse population. It needed a city based on its own urban history that was well-suited to its climate and culture. It needed a city that could have been more affordable and less about exorbitant monuments for the government. Islamabad failed to do any of that.

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Social Factors that Encourage Post-High School Education:

What works across racial and socioeconomic divides

Beth O'Neill

ABSTRACT

In order to understand the social factors that encourage education post-high school, I conducted interviews among a strategic sample of University of Kansas students, selected to create diversity in race and economic status of the student body in their graduating high school, as determined by Department of Education data. Previous research explored factors including peer groups, availability of advanced placement courses and faculty attitudes about the perceived future success of students. None of this research took into account the ways these factors interact and for which groups these factors make the biggest difference. The interviews in this research explore influential factors including teachers, curricula, and peers. The information gathered from these interviews was then analyzed for patterns, including paying attention to factors that crossed racial and socioeconomic divides. I find that one important influence is that of teachers who also served students in an advising capacity in extracurricular activities. I also find that significant factors were more likely to cross racial than socioeconomic divides. Finally, it seems that students in lower socioeconomic categories express more positive attitudes about school and gratefulness for their chance at higher education than those from more privileged socioeconomic categories.

INTRODUCTION

Students of racial minority groups and lower socioeconomic status are disproportionately unlikely to attend college in comparison to their Caucasian peers or those of higher socioeconomic status. Concern about this has led policymakers and educators to look to find ways to combat this. While there are initiatives across the country to attract minority students to colleges and universities and studies examining their effectiveness in motivating students to attend college, I chose to take a different approach. Rather than studying the effects of specific formal programs and practices, I chose to focus on the question from the perspective of those who have made it to college. Better understanding their experience and their reflections on these experiences can provide information on strategies to encourage underrepresented populations to pursue college education. I sought their reflections on the factors they found influential in getting them to college and helping them persist.

Historically, counselors encouraged students of lower socioeconomic status to pursue employment after college, but evolved into the rhetoric of "college for everyone"

(Schneider 2003). Race and class differences still shape students' educational experiences and attainment. Students of lower socioeconomic status are more likely to delay college and less likely to obtain a bachelor's degree. Those who do attend college are less likely to experience the increased wealth accumulation and opportunities that more students from privileged backgrounds enjoy as a result of educational attainment (Goldrick-Rab and Han 2011; Walpole 2003). Although educational aspirations beyond high school are rising nationally, (Roderick et al. 2009) there are still gaps in desired educational attainment across race and income boundaries with fewer racial minorities and students of lower socioeconomic status looking to pursue the same level of educational attainment as students of more privileged backgrounds. However, none of the studies used examining racial minorities incorporate those of higher socioeconomic status when studying their aspirations.

Structural disparities among high schools can also impact the level of difficulty students encounter when applying to college. For example, researchers examining the impact of the culture in urban high schools find that they tend to lack structural and organizational arrangements that facilitate better access to grants, scholarships and other assistance programs in the college application process (Holland and Farmer-Hinton 2009). The research examined for this study does not examine the elements that counteract the structural shortcomings in disadvantaged high schools.

While certain skill sets are valuable to future college education, increasing access to advanced placement and college preparatory courses is not enough. Increasing opportunities for students to enroll in advanced placement courses tends to allow the same students to take multiple courses rather than encouraging a broader diversity of students to take at least one (Hallett and Venegas 2011). High schools deemed "at-risk" because they have lower graduation rates and test scores are more likely to leave students ill-prepared for college or employment regardless of course offerings (Williams 2012). These studies neglect to find the impact from the perspective of affected students- the differences they felt these initiatives did or did not make and the factors they found most important.

Another large body of research focuses specifically on the role of peers and their effect on students' aspirations. These studies find that more encouragement from parents and friends during adolescence is positively associated with increasing high school grade point average as well as educational aspirations (Witkow and Fuligni 2011, Holland 2011). The motivation levels of students and "passion, dedication, and commitment of staff" also play a vital role in pursuing a college education (Contreras 2011, Barile et al. 2012). I can find no research, however, examining whether these factors have equal impact across racial or socioeconomic status divides.

A great deal of research looks at the ways high school environments affect attitudes about college. Much of this focuses on the degree to which necessary skills are learned in the classroom including content knowledge and basic skills, core academic skills, non-cognitive or behavioral skills and "college knowledge"- that is, knowing how to effectively search and apply for college (Roderick et al. 2009). A 2012 report

found that when these "college knowledge" programs are implemented effectively, students attend college in greater numbers, are more likely to remain in college after the first year, more likely to earn a degree, become employed and earn higher wages (Johnson 2012). The idea of a college culture is becoming more prominent in high schools across the country, but we still do not know the impact of teacher support, individualized attention, and the broader support system in the school in helping students move forward. A broadly defined college culture results in greater numbers attending college, but researchers do not know which components are the most influential and how that might vary by students' race and class.

While research literature examines the disparities between advantaged and disadvantaged students in educational aspirations, college preparatory course enrollment and structural programs in college preparation, I could find none that explored the perspective and motivation of disadvantaged students who pursued education beyond high school. The research addresses the positive relationship between peer support and encouragement and teacher commitment, but I want to further examine the relationship between students in historically low-achieving areas wanting to separate themselves from their peers through higher education. I focus specifically on the role of informal factors in increasing students' confidence from their perspective, inspiring them to pursue further education and creating an interest in them to learn more.

METHODS

Qualitative interviews were used to collect data about participants' high school experience and college preparation. The advantages of this approach included greater possibility for discovering influential factors than numerical data can provide. It went in depth through anecdotal evidence, a feature quantitative research could not provide. Asking open-ended questions allowed participants to elaborate and take the interview in a direction the researcher may not have anticipated and would have therefore been left out of survey questions. By allowing the interviews to evolve naturally and using a less structured format, the participant-driven method could be analyzed through the ways in which participants gave importance to issues and where they elaborated most.

I conducted these interviews with a sample of 12 University of Kansas students (see Table 1). The participants were selected using snowball sampling techniques in which initial participants were referred through an advisor working with programs for first-generation college students and students of color. This selection method was chosen because the students referred were involved with programs to promote academic success, thus these students had a greater likelihood of persisting and succeeding in college. These participants then referred future participants.

The interviewees were from different years in their college careers, with an equal number of male and female participants. Of the participants, four were selected from each of three racial categories (Caucasian, Hispanic, African-American) strategically selecting students in each category that graduated from both economically advantaged and economically disadvantaged high schools.

Race was self-identified by the interviewee. The socioeconomic status of the participant's high school was determined using State Department of

Education data on free and reduced lunch rates. If the high school had more than 50% of students on free or reduced lunch, the school was classified as economically disadvantaged. If the school had less than 50% on free or reduced lunch, it was classified as economically advantaged.

Using what I knew from the information found in the research literature as well as topics I had not seen explored, I developed an interview guide to structure the interview and address key points (see Appendix A). In addition to general questions pertaining to their high school experience, interviewees were asked about the aspirations and support of their peers, as well as how closely connected they felt to their peers and pursuing education possibly at the expense of leaving peers behind. Interviewees were also asked to relate how close they remain to high school peers who chose separate paths. The level of detail in the college planning experience with advice and resources, the investment and commitment of the teacher or counselor, and what specific factors encouraged them to apply for college was important in analyzing the greater picture. As themes emerged early in interviews, the following interviews varied slightly in response in order to explore these themes in more detail.

Each of the interviews was audio recorded. The interviews lasted between twenty and forty-five minutes with the average lasting approximately thirty minutes. After each interview, I wrote a memo taking note of things that could not be captured on audio- participants' comfort level, their willingness to open up and other non-verbal gestures.

I transcribed and began to code the transcriptions early in the interview process. Initially I began to code for mentions of key words including influence/influential, relationship, and mentor. On the basis of those early interviews, I also began coding for references to meaningful, lessons and help/prepare. Then I looked for factors that recurred across interviews as well as when new ones emerged. The emerging themes that were not addressed in the literature added complexity to the research in determining why these factors had strong influence. Themes that were found when unsolicited with prompts were given special attention because they were of such importance to the participants they were mentioned without question.

In comparing across interviews, a few themes emerged consistently: teachers serving as advisors (often through extra-curricular activities), students surrounding themselves with like-minded peers and disassociating from those not sharing the same goals, and the degree to which the student was grateful for the access to a college education.

RESULTS
Finding a Mentor is Critical

The most prominent theme was something I never found discussed thoroughly in the research literature- the importance of informal advising. Teachers serving students in extra-curricular advising roles in addition to classroom teaching had the opportunity to develop relationships that eventually helped with the college planning process. However, these relationships looked different for students depending on their socioeconomic background. Take the experiences of two students who graduated from economically advantaged high schools.

Alicia, a white senior, talks about having a mentor in college preparation this way:

There were teachers [who helped prepare for college], but they weren't my own teachers. They were like friends of friends that I grew up with that just happened to be teachers. They were good mentors. They helped me establish a role to lean towards.

Penny, a white freshman, describes teachers' and mentors' role in helping with college preparation this way:

I don't know if [the relationships were] more helpful, as though they were more supportive. I mean, they weren't saying 'you should do this.' It was more like you can do whatever you set your mind to.

One of the stories that best encompasses the advising role described by many students from economically disadvantaged backgrounds was told by Clinton, an African-American student from an economically disadvantaged high school. Here he tells the story of his forensics teacher:

I spent a lot of time with my forensics teacher, so I guess I would say I was pretty close to her. Just because you gotta spend hours outside of school working on your craft in forensics, you start to share stories and get close with them that way…Well, you just, I don't know [laughs], you just start sharing stories about life pretty much. I mean, she kinda connected with me because she grew up the same way I grew up and those things translated to other stories and just connecting that way, and we had a lot of commonalities in that we were into forensics, we both did debate and involved in high school. It just

made our relationship grow stronger… I would say I connected with [her] the most. I remember I didn't get accepted to KU because it was like some, like, conflict with my, like, transcript and I knew it was wrong, because how could I not get accepted to KU? And then like she was the one calling admissions for me and actually, like, resolved the issue for me and ultimately, got me into KU.

Like Clinton's story of the relationship that developed with his teacher because of the time they spent together outside of the classroom, many students echoed similar relationships that began this way and resulted in advising for college. Like Gabby, a Hispanic junior from an economically disadvantaged high school:

So like my English teacher who was also my forensics coach, was also my Scholar's Bowl coach, so we spent a lot of time together inside of the classroom, outside of the classroom… It's something that we talked about and that, you know, even if it was just a casual conversation about what I wanted to do with my life he was very helpful with advice and with little helpful hints, stuff like that.

We see a similar experience from Ben, a Hispanic student from an economically disadvantaged high school:

My forensics and debate teachers I was pretty close to, because we used to go to tournaments that was like out of school like sessions or whatever for debate and forensics… They just offered me knowledge and asked me. They were kind of like mentors, just asking me how school was going, asking me how

my days went, what they could do help me and further my education.

From the relationships that formed from commonalities shared over extra-curricular activities, they also found common interests in the classroom that helped students flourish and would eventually lead to a course of study in college. This is the case with Max, a white student from an economically disadvantaged high school:

> I felt like at [my high school] it was essential to find a mentor.. to kind of move on and to kind of have guidance throughout [high school]... I found some of my English teachers were probably some of the greatest mentors I had in high school just because I'm an English major now. I've always loved to read and like it was something that we found in common and they were kind of able to foster.

Other close relationships with invested teachers were important to students when planning for college. Hugh, a Hispanic freshman from an economically disadvantaged high school explained his relationship with a math teacher this way:

> [I was closer to] my math teacher whose son goes to the University of Kansas... It was awesome. She was like my second mother whenever my mom was away.

He goes on to describe her help when preparing for college:

> In the end of it, it was really up to my decision, but my teacher really helped me out in choosing what I really wanted by asking me questions and kind of thinking through it myself... The application process was one of the most grueling things because my mom didn't attend college so it was a struggle for me and I asked them [for help].

The mentor relationship described by several interviewees is summed up by Zach, a Hispanic junior from an economically advantaged high school as he describes his choir teacher:

> So there's all these components, but you still have to balance that between also being a mentor, a friend, it's a really unique relationship, but that's what made it so great. You had that balance, but you could be more than just a teacher, because I think you see that in class. He was more than that and that was pretty influential.

The extra time spent outside of school makes a difference for many students. It provides an opportunity for teachers and students to form deeper connections and sets them up to help with college planning and preparation. Sharing a common interest in an extra-curricular activity creates an initial bond that opens up new lines of communication that can eventually lead to discussions about goals and college aspirations. In these relationships, teachers act as role models where they were one of few, if not the only, driving force behind students pursuing post-high school education.

Gabby, Ben and Max (all from economically disadvantaged high schools) all valued teachers who offered them advice and knowledge and fostered their talents while these were less critical for other participants in high schools of higher socioeconomic status. Alicia, Penny and Zach (all from economically advantaged high schools) all appreciated having a mentor but framed them as

playing a supportive and encouraging role in college planning while those from economically disadvantaged high schools were more likely to place a mentor as a driving and integral force behind their college planning process. The economically advantaged participants relied less upon teacher support when thinking about college as opposed to economically disadvantaged students who were in greater need of teacher support when applying for college and dealing with obstacles.

Clinton's story of his forensics teacher contains a critical element. Because the forensics teacher "grew up the same way [he] grew up" making them more connected, he could identify with his teacher. Seeing as his teacher would ultimately attend college after high school, it gave him someone with a similar background who pursued education post-high school. Having a person in authority take an interest in him and giving him the extra help to get to college motivated him. Identifying with someone like himself who attended college when he may not have had a significant number of people in his life who did so gave him encouragement to do the same.

The relationships that developed from the outside interaction between teachers and students led teachers to offer advice to students in the college planning process, write letters of recommendation, suggest programs of interest, and ensure they have everything in order for applications. Teachers could also fill roles that more privileged parents may be better able to play if they were familiar with the college planning process (as in the case of Hugh) or clearing up issues with admissions requirements (as in the case of Clinton).

This theme is significant in answering what factors make a difference across boundaries because it was mentioned by students regardless of race and class background. However, how these relationships were framed differed by class. Students of more privileged backgrounds were less likely to need a teacher to play an integral role in helping them get to college.

It's the Company You Keep

Across all participants, we see a common theme of the importance placed upon peer groups. This includes surrounding oneself with friends in college (whether at the University of Kansas or elsewhere) and disassociating oneself from peers who did not attend college. From there, the theme takes different shapes in regards to class differences that inform participants' actions.

For example, the expectations of friends' aspirations after high school are different among students of differing economic backgrounds. Take this example of two students who were asked about what their friends were doing now.

Tia, an African-American freshman from an economically advantaged high school describes her peer this way:

> I'm actually kind of disappointed because, one of my friends, she dropped out of college after the first semester. I guess it was too hard for her.

While Suzie, an African-American senior from an economically disadvantaged high school has a different attitude about a friend in a similar situation:

> My friend, she always talked about [going to college], but she never went... She hated school. So I never really expected her to keep going... Now I don't really

know why, I'm not really friends with [her] anymore.

There were a variety of responses when participants were asked about their friends in high school, their aspirations and their discussions about college. While many participants shared feelings of wanting to separate themselves from those who were unsure of what direction they wanted to take in life, Penny, a white freshman from an economically advantaged high school, was surrounded by peers who had a different way of dealing with the situation:

> Out of my group of friends a good chunk of us, like, knew what we loved, what we wanted to do. And then, you know, the one's that didn't, they tried everything until they found it out.

When asked about her relationships with high school friends who made different choices, Claire, a white junior from an economically disadvantaged high school said:

> Until last year, we had done really, really well about staying in contact, but it's kind of that thing where life goes in a completely different direction and the things that you have in common to talk about, you don't have any more and it's- it becomes a little more like your relationship is focused on the past than anything current in your lives.

Ben, a Hispanic junior from an economically disadvantaged high school expresses shares a similar loss of communication with friends who made different choices:

> I do have like a group of friends that are kind of just like homebodies that are in [my hometown] and have either not gone to school or dropped out of

school since then. And then kind of.. I have lost touch with them. Then the other ones, I can still keep in touch with that are at a university.

Ben's choice to only maintain relationships with friends who attended college is shared by other participants. Clinton notes that he purposefully surrounds himself with like-minded people:

> So, I mean, most of the people, the friends that I kept close to me, like came here with me or went to a different school and still have very strong values and like I don't associate with people that's not really doing anything with their life.

Lance, an African-American student from an economically disadvantaged high school shared this attitude as well:

> I've always set myself, like, taught myself that you're kind of looked upon with who you hang out and who you surround yourself with. So I've always thought of myself as being a driven person who wants to graduate from college and get a degree and get a nice job. I believe that's a lot of people's goal in college. So like you kind of are who you surround yourself with. I think I've surrounded myself with a lot of good individuals.

As they persist through college, students from economically disadvantaged backgrounds look to advance themselves through education and no longer share this commonality with their former peers. The differences that emerge between students who choose to pursue college education and those who do not become dividing factors

in relationships, making them more difficult to maintain, as mentioned by Claire. Max also expresses that he lost touch with the people who chose not to pursue college after high school.

Separating oneself from high school peers was common among students from economically disadvantaged backgrounds, but not all of these separations were as amicable as "losing touch" in the cases of Claire and Max. Clinton and Lance were more purposeful in disassociating themselves with people who did not share what were considered "very strong values" or were "good individuals." Their separation had a deeper meaning than casually losing touch over the loss of commonalities.

We learn a lot from Tia's remark about being "disappointed" in a friend who dropped out of college after a semester, especially when comparing her to other participants. While we see differences between Claire and Max and Clinton and Lance, we see even greater differences between these four and Tia. No matter the reasons for which they separated from former peers, they all seemed to detach themselves in an unemotional way. Whether it slowly faded away or they believed friends no longer shared their values, they gave very little insight to how they felt about this. However, Tia, most of whose friends are still persisting in college, expresses feelings of disappointment over a friend no longer in college. This feeling implies she had initial expectations for that friend to obtain a college degree as she expects all of her other friends will. None of the economically disadvantaged students expressed a similar feeling of disappointment. Suzie shares that she never expected her friend to go to college and expresses a feeling of detachment from the situation. We often see lesser

expectations of post-high school education placed on friends from participants of economically disadvantaged high due to different college cultures in their schools.

Clinton and Lance's reasoning of separating themselves due to a mismatch of values or not considering one a good individual because they chose not to attend college gives insight to the values systems both of these participants put in place upon attending college. They value their education and value peers who chose to further theirs as well. For peers who chose alternative lifestyles after college, they no longer consider these people to hold similar values or measure up to their standard of good.

Penny's description of friends who "didn't know what they wanted to do" also brings a perspective to the way class background influences what is considered uncertainty about the future. While she takes for granted that her friends would attend college even if they were unsure of what they wanted to do, participants from economically disadvantaged backgrounds never made the assumption their friends would attend college to explore their options. Thus they adopted the strategy of surrounding themselves with people who knew what they wanted to do with their lives.

This transition of separating themselves from peers who chose alternative options after high school changed significantly with students in their sophomore, junior or senior years as opposed to those who were freshmen at the time of interviews. Freshmen were less likely to have severed contact with peers who were not attending college. Those who had lost contact with high school peers did not connect that with whether or not they were attending college. Freshmen have not been out of

high school long so they have had less time to diverge from these peers or have not fully developed an identity as a college student giving them less motivation to separate from non-college attending peers.

The distance that came between students and high school friends grew stronger as the years in college increased. While these students were in college and had moved away from their hometown and began living independently while attending school, they report that their high school classmates often remained in their hometowns. Because they had less in common, they related them more with being a part of the past than the future.

Appreciation for High School Experience

At the end of the interviews, I asked interviewees to reflect on their high school experience. At this time, only one of the students from a privileged background expressed gratitude about her high school experience. On the other hand, a majority of the students from disadvantaged backgrounds expressed gratitude. Instead, many of students from economically advantaged backgrounds referred to superficial factors including friends, easy classes, or extra-curricular memories.

For example, Zach, a Hispanic junior from an economically advantaged high school:

I wouldn't say it's a positive or negative experience. It was, I think, it's kind of contextual in terms of, there were parts of it I really enjoyed, there were social parts, there were also parts that I wasn't so keen on in terms of social aspects.

Tia, an African-American freshman from an economically advantaged high school focuses on the "fun" aspect of her high school experience:

My high school experience I guess, it was fun. I had—I was with a lot of friends I was with since elementary school so I mean I kind of liked that, but some people didn't …And it was a really good environment, my school was really judged against for being the rich kid schools which that kind of sucked when you met other people or whatever, but it was still fun.

However, several participants from economically disadvantaged high schools took the opportunity to share broader reflections on their high school and stressed a similar point- although they came from high schools that were not as privileged as the high schools of many of their college classmates, their high school experience shaped them into the students they are today.

Claire, a white junior from an economically disadvantaged high school, mentions her experience in this way:

I just really want to emphasize… how much I appreciated it. Like it was such an amazing time, because I had all of these people that I cared about and cared about me and everyone. The whole community was very supportive and I think the fact that everyone there had so many opportunities to try so many different things was a really, really great thing about growing up in such a small town that I really appreciated.

Lance, an African-American junior from an economically disadvantaged high school talks about the ways his high school experience prepared him for college in relation to his peers:

Just one thing is that I really did have a good high school career. I believe the high school that I went to definitely prepared me for college and I think that's a strong kind of emphasis that that high school that I went to... is that they placed is that we're kind of prepared for college not only just to get accepted to college, but also to prepare you for what college is gonna bring to your doorstep. Like just the work, I was kind of used to it more, because some of the other freshman entries in my class and I was able to adjust more to the workload and like how college was set up because that was kind of how high school was set up as well.

Max remembers high school as a positive experience while also acknowledging its shortcomings:

[My high school] is a special place. I think that it's interesting, because it really has this AP program that really caters to the highest achieving students and then it.. it's probably one of the best at special ed departments, in [the state] and in [the county]. Which isn't really saying much, but then what the problem is with [my high school] is that it doesn't cater to that middle like eighty percent and that's where I found the dropout factory to really happen. And like those were the kids that I expected I would never see again and that's where they're trying to come up with programming for that and like I kind of experienced that because a lot of my friends were in that kind of gap. And like I wasn't in the gifted program and

they got like priority advising and I was going in the counseling office.

We see this same attitude from Penny, a white freshman who graduated from an economically advantaged high school, only after transferring from an economically disadvantaged school:

Because I was new to that school and the education I had before I moved [there], I'm one of the few I think, after looking at what people say, that I really appreciate my education.

While most of the students from economically disadvantaged high schools noted their high schools did not provide the same things economically advantaged high schools could provide, they were quick to add that this did not detract from the influence their high school career had on them. This acknowledgement led to an appreciation of where they came from and the ways it equipped them with skills they may not have gained in a high school of higher socioeconomic status. A comparable appreciation of their high school experience was not mentioned by any of the participants from economically advantaged backgrounds suggesting the level of influence does not cross socioeconomic divides.

The responses given by students from economically disadvantaged backgrounds can also be attributed to the fact that students from underprivileged backgrounds are among the minority in college. Because they are frequently surrounded by those who came from dissimilar backgrounds, they are more aware of their experiences and the way these shaped them. Conversely, we do not see this from students of economically advantaged backgrounds as they are among the majority of college students which makes it more difficult to see this background as a point of reflection.

Privileged students were probably more likely to have had someone in their family attend college and knew how to do apply and enroll and were expecting them to follow the same path. Students from disadvantaged backgrounds may be encouraged to go to college, but their parents may not be able to give them much guidance as to how to get there. Their background contributed to the development of their identity as a college student and allowed them to better understand and appreciate the work it took them to get there and the influences that helped them achieve this status.

While high schools of lower socioeconomic status are often looked upon as not being able to prepare students as well for college, Lance feels his high school experience prepared him well. Using this information, we can also understand this theme as a set of responses to societal stereotypes of economically disadvantaged high schools. As more pressure is placed upon students to attend high schools that are often regarded as best preparing them for college, we see students who made it to college more greatly acknowledge adequate preparation after attending high schools that are often less regarded in society because of the resources they are able to offer students.

DISCUSSION/CONCLUSION

From this research we find two critical factors and another important theme. Having a teacher in a mentoring role through extra-curricular advising can form a relationship that sets a student's aspirations for college in motion. College students coming from backgrounds that lack resources, both culturally and materially, found it important to separate themselves from friends who were not in college and surround themselves with other achieving students to help them

persist. As students persist through college, there is a growing recognition of the pride students from disadvantaged backgrounds have about where they came from. Each of these is important to better understanding how to narrow the gap between the amount of privileged and underprivileged students attending college.

One of the most critical themes found in this research is that race does not seem to make the difference that class does. While there are no significant differences among members of different racial categories, there are greater differences between participants of different socioeconomic status. Participants from advantaged backgrounds relied on mentors in determining majors and finding the top programs while those from disadvantaged backgrounds needed more help encouraging the idea of college and navigating the application process. Those from advantaged backgrounds were less likely to have peers who were not also in college and had expectations of their peers while participants from disadvantaged backgrounds separated themselves from a greater number of peers who were not in college. In their reflections on high school, privileged participants focused on more tangible factors unlike disadvantaged participants who reflected on how their high school experience shaped them. While a majority of the participants shared similar experiences in some respects, they were framed differently depending on the socioeconomic background of the participant and the value they placed on that. In addition to this finding, we see another issue presented when reading participant transcripts. While participants never acknowledge their race, they acknowledge their

socioeconomic status. This is often indirect, but still important to understanding the question because it is not only prevalent to the researcher but also a distinguishing mark for the participant.

My interviews showed how these factors to work together and complement each other, rather than a single factor influencing all participants over others. The combination of an encouraging mentor and surrounding oneself with like-minded peers led them to develop a skill set that helped them transition and persist through college. Having a mentor made the participants appreciate their high school experience because that person encouraged their development and helped them achieve their goals. We also see a trend of high school appreciation strengthening as participants began to surround themselves with like-minded peers who frequently have different backgrounds and thus gain a better awareness of what they overcame to get to college. The interweaving of these factors creates a structure in which each of these elements is critical in creating an environment for students to aspire to attend college and then thrive in the college environment.

The research also shows a pattern of themes being much more consistent among upperclassmen. They were more likely to elaborate on stories and include more insight in their answers which provided more room for analysis. I believe that this is due to the greater separation between their current status in college and their high school experience as opposed to freshmen who were interviewed and after only being in college for approximately a semester.

It also teaches how the college experience helps students develop an identity and that while in school their student status often becomes their master status. College students from economically disadvantaged backgrounds form a distinct identity. They are disassociating themselves from those with shared backgrounds as those peers infrequently attend college. However, they are the minority among college students because of this same background. These divides result in this demographic of students forming an identity through the combination of these two components.

This exploratory research creates a better understanding of the experiences of college students from diverse backgrounds which leads to hypotheses about what could make significant impact in high schools and colleges.

This research lays a foundation for future studies that could further examine how to promote these environments. It reiterates the theories of past literature on the importance of peers in achieving aspirations and can inform future studies of the changing nature of these relationships. It may also lead to future studies on the way these students utilize their background in their personal identity development and as motivation to further themselves. While this research brings about new questions to be studied further, it helps answer some of the basic questions and provides a solid foundation and gives direction to future work.

In addition to further studies on the impact of social factors, it can be used to develop smart experiments within high schools and colleges. These include explorations into how to prepare teachers to best serve in a mentoring capacity and successfully encourage college among underrepresented populations. High schools can provide training for teachers on mentoring students and helping them

with college preparatory issues while also encouraging opportunities for both teachers and students to become involved with extra-curricular activities and form relationships. Because we find that students of underrepresented populations are going through larger transitions in terms of peer groups once in college, programs should also be developed to more deeply immerse these students into the college experience, helping them disassociate from high school peers and connect with colleagues who share similar future aspirations. Overall, we find that when implementing different practices to promote either of these factors, more attention needs to be focused on socioeconomic status rather than race.

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Table 1- Participant Data

Psuedonym	Race	High School SES Status	Year
Alicia	White	Economically Advantaged	Senior
Claire	White	Economically Disadvantaged	Junior
Max	White	Economically Disadvantaged	Sophomore
Penny	White	Economically Advantaged	Freshman
Zach	Hispanic	Economically Advantaged	Senior
Hugh	Hispanic	Economically Disadvantaged	Freshman
Gabby	Hispanic	Economically Disadvantaged	Junior
Ben	Hispanic	Economically Disadvantaged	Junior
Tia	African-American	Economically Advantaged	Freshman
Suzie	African-American	Economically Disadvantaged	Senior
Lance	African-American	Economically Disadvantaged	Junior
Clinton	African-American	Economically Disadvantaged	Senior

Appendix A- Interview Guide

Tell me about your high school experience

Classes

What classes did you enjoy most?[life skills, specific knowledge]

What extra-curricular activities were you involved in?[academically enriching, leadership, opportunity to excel]

Teachers

Were there particular teachers you were close to? [dedicated, invested in future, concerned with welfare]

Were there certain teachers who were more helpful? [assist in college applications, provide resources for college planning]

Peers

Tell me about the kind of people you hung out with in high school.[involvement, aspirations, attitudes about school]

What are they doing now?   [separation due to different choices]

Is that what you expected when you were in high school?

Conclusion

Is there anything else you would like to tell me about your high school experience?

Scapegoat Theory and the Discursive Representations of Immigration

Kenneth Stowe (Faculty Advisor: Donn Parson)

Communication Studies

ABSTRACT

Scapegoat theory suggests that difficult economic and political woes cause majority populations to lash out against a convenient out-group. The rhetorical suppositions of scapegoat theory presented by philosopher and linguistic scholar C. Allen Carter are combined with relevant psychological literature in order to define six scapegoating strategies: indirect hostility, irritability, negativism, resentment, suspicion, and verbal hostility. A total of 414 published news articles were analyzed to determine whether or not the scapegoating strategies are found within the form, style, or content of the arguments presented.

A methodological approach consisted of four linear activities: locating artifacts, identifying material, analyzing, and evaluating. Artifacts were collected using Lexis-Nexis Academic database for the years between 2009-2011, and evaluated upon their relation the socio-political issue of United States immigration as a broad topic or the migrant population itself. Qualitative results indicate major themes analyzed according to publication year. Results concluded that many of the strategies defined to be parameters of scapegoating are present within the artifacts. However, these trends are confined to a minority group and were not seen qualitatively significant.

INTRODUCTION

Immigration, as well as many other issues surrounding the Mexican-American border, has once again come to the forefront of public debate since the introduction of Arizona's restrictive immigration legislation SB 1070, and the later revision HB 2162 (Corlett, 2010). This renewed political interest has served to reinforce many of the classic rhetorical constructions surrounding the Latino and Mexican migrant population. As one reads through the news media that followed this rise in political interest one would find many articles and editorials with titles like, "Don't Treat Immigrants as Scapegoats" and "Scapegoating behind anti-immigration laws". The theoretical presumptions of scapegoating are never discussed in the articles, thus leaving a gap between the presumed scapegoating act and the theory or strategies that make up scapegoating behavior. This gap in logical reasoning raised the question of whether or not scapegoating themes can be found within modern immigration discourse. Through the investigation of the base of knowledge that is used to support these discursive formations, one is able to better understand the scope and implications of scapegoat theory within the modern rhetorical representations of immigration and the migrant body.

Scapegoat Theory

Scapegoat theory suggests that difficult economic and political woes

cause people to lash out against a convenient out-group (Esses, Jackson, & Armstrong, 1998; Stewart, Pitts, & Osborne, 2011; Zawadzki, 1948). This feeling of prejudice is only increased if the individual perceives that the out-group is cognitively linked to the source of discontent (Demo, 2005; Zawadzki, 1948). Viewing racial prejudice as an accumulation of emotional defense strategies enables one to understand the phenomena as a strategy that brings multiple forces together to define the characteristics and parameters of inter-group dynamics and racial identities (Dixon, Schell, Giles, & Drogos, 2008). Scapegoat theory is closely tied to the notion of conflict theory; hostility towards the out-group will arise when the in-group perceives a conflict with the minority population for scarce resources (Esses et al., 1998).

Following the writings of Kenneth Burke, C. Allen Carter outlines three elements of the scapegoat process: hierarchical insecurity, a fear of death, and ethical guilt. Hierarchical insecurity can be simply defined as the feelings of insecurity that come with being higher on the ladder of power than others. The definition of a fear of death is the fear and insecurity with realizing the inevitability of one's demise. Finally, ethical guilt can be defined as the feelings of guilt that are associated with not being able to follow all of the rules and moral guidelines of society at all times. While Carter makes very clear and compelling distinctions between the ways these three elements interact with each other, I would argue that two of the elements can be attributed to the genesis of one: a fear of death. It does not seem possible to have insecurity within those at the top of a hierarchical structure without having a fear of losing one's power, and an imminent fear of

death is associated with this loss of power. Thus, a fear of death leads to a sense of insecurity among those at the top of the hierarchical ladder. This feeling of insecurity leads the hierarchical elite to enact laws and provisions that limit the movement of those persons below them. No one is able to honestly follow every commandment that is set by the forces of society, thus leaving a sense of ethical guilt for falling short.

Since, for the purposes of this study, a general fear of death will be seen as the genesis for all scapegoating projections, the two commonly cited feelings that represent a fear of death, frustration and hostility, will be used to measure scapegoating projections (Zawadzki, 1948). Hostility and frustration that are embodied by the majority populous are projected upon a minority community in six different ways:

1. Indirect Hostility: This is a roundabout way of projecting aggression, usually by devious means. Common indirect tactics have been shown to include practical jokes and malicious gossip
2. Irritability: This is a readiness to project negative attitudes with the slightest bit of provocation. This includes the projection of rudeness and exasperation.
3. Negativism: Direct opposition that is most often projected upon authority. This is most commonly seen as a refusal to cooperate that may span from direct to in-direct noncompliance.
4. Resentment: This is known as any sort of projected jealousy or hatred toward others. These feelings of anger usually refer to either a real or fantasized mistreatment.
5. Suspicion: This sort of projection of hostility upon others usually varies

from a simple feeling of distrust to a more direct belief of others planning harm.

6. Verbal Hostility: Negative feelings that are expressed in either the style or the content of speech. The style of speech would include such vocalic strategies such as a control over the tonality of voice. The content of speech would include everything from direct threats of harm to simply being overcritical.

Racial Prejudice and Symbolic Action

Racism and other prejudicial perspectives, by nature, are violations of the hierarchical structures that aim to protect the fabric of civility and society (Asma, 1995; Kenneth Burke, 1966; Meneses, 2003; Musolff, 2007). While racism is perceived with its appropriate negativity by most of the American population, one out of eight Americans still describe themselves as racially biased (Dovidio & Gaertner, 2002). Furthermore, 80 percent of white Americans have racially biased feelings that they might not even recognize (Dovidio & Gaertner, 2002). The rebirth of these conscious and unconscious racially biased perceptions can be explained through the lens of social learning theory. This theory asserts that the individual's perceptions about a certain out-group directly correlate with the attitudes that are expressed by the individual's parents or social environment (Gerstenfeld, 2002). By organizing complex social information through perceiving many disparate members of the out-group as being all the same, many individuals will adopt a view of out-group homogeneity often with ethnocentric characteristics (Asma, 1995; Gerstenfeld, 2002).

At the heart of all discourses is the action that is used to condense and form

reality from them. This is called symbolic action, a process of selecting one reality while at the same time deselecting another (Burke, 1966). The set of knowledge that one uses throughout this process is called a "terminstic screen" (Burke, 1951). These "screens" of knowledge serve as our justification or reasoning for selecting one reality over another. Any definition or terminology, no matter how much of a reflection of reality this terminology may be, is the selection of one's reality and the deselection of another (Burke, 1966). An expert and pioneer of discursive formations and symbolic action, Kenneth Burke discusses how the early Church forbad any persons to duel. Instead, the two challengers would merely go for a walk where the duel was to take place, arming himself in the case that he were to meet an armed enemy. By directing the intention of this "walk" enemies were able to have their duel without crossing the Church's sanction on the practice (Burke, 1966). The same sort of direction of racist intentions can be seen in modern immigrant discourse. While one of the dominant discursive formations selects and defines Latino and Mexican immigrants as criminals, the alternative reality that most of these migrants are peaceful and law abiding is not selected. This process of selection and de-selection allows one to direct racist intentions through discourse in order to narrow the "viewability" of the audience's reality, allowing one only to see the discursive structure of reality that is presented (Kenneth Burke, 1966; Hattery, Embrick, & E. Smith, 2008; Portes, 2009). This process of conditioning racist prejudice and discontent comes from a moralizing and meditative point of view (Hart, 1967).

Visual and discursive metaphors are often used to condense the complex

networks of information that surround issues of race and class (Arnold, 2007; Asma, 1995; Chavez, 2009; Corlett, 2010; Delgado, 2003; Musolff, 2007). Metaphors map from a conceptual "source domain" to a "target domain", resulting in conceptual "blends" that shape perceptions of one's worldviews, categorizing and interpreting life experiences; metaphor allows one to view source concepts as unproblematic presuppositions (Kenneth Burke, 1966). This conceptual blending is what is known as an inferential structure, the structure that is apparent in the continuum between the presuppositions in the source concepts, and the conclusions that are drawn at the target level (Musolff, 2007).

The history of one metaphor in particular highlights the way in which dominant discursive metaphors of Latino and Mexican migrants come to influence the dominant social and legal perspectives: the alien. The legal description was first introduced in the Immigration Act of 1924 (Hansen N., 2009). This restrictive immigration law used the term "alien" to describe the presumption that the national "body" was a sterile social and economic structure that needed to be guarded from the degenerate contaminations of foreign cultures, economies, and peoples (Goldberg & Solomos, 2002). Laws and discourse surrounding the process of defining an illegal immigrant are known to be problematic simply because illegal or undocumented immigrants look like other Americans (Chapkis, 2003). Thus, the boundaries between illegal and legal have much less to do with whether or not one is in fact a citizen, but rather have more to do with the perceived boundaries of race and class. The use of the "alien" metaphor gives one the ability to separate the human from the metaphor, stripping the human of individuality and making the "alien" a dominate-able specter (Chavez, 2009).

The majority of metaphors that have to deal with Latino and Mexican immigrants focus on the use of the migrant body as a sort of "text" from which dominant discursive meanings surrounding the migrant population are drawn from and translated (Chavez, 2009). These discursive constructions of undocumented migrants usually embody one, if not all, of the following forms: an economic unit, criminal, parasite or pathogen, threat to American culture, and an alien (Chavez, 2009). These discourses frame a basic understanding of migration issues, coming together in a cluster of persistent images and rhetoric that ultimately signal to the general population the contextual position in which the problem should be framed, further condensing a sense of identification within the majority in-group (Delgado, 2003).

Racial Profiling

Racial profiling is known to be the singling out of an individual for interrogation or arrest because of their perceived race; the assumption is that the individual is not being selected because of the description of some specific suspect, but rather as part of some preconceived notion of the criminality of a certain ethnic group (Arnold, 2007). Racial profiling and human rights violations reinforce the assumption that immigration restrictions and rhetoric are inseparable from domestic race relations (Hattery et al., 2008). A systematical abuse of human rights has not been found in research focusing on the interactions between both federally trained and non-federally trained immigration enforcement officers (Meneses, 2003).

While there may be no direct evidence between the metaphorical discursive formations of restrictive immigration policies and systematic human rights violations, it has been shown that there is a direct link between these formations of immigration discourse and civil rights violations such as racial profiling (Arnold, 2007).

In an attempt to separate racial profiling from color profiling, one author suggests that color profiling is merely a prima facie indicator of one's race and therefore is free from the morally problematic characteristics of discerning one race from another (Corlett, 2010). The author goes on to further suggest that the "matter of degree" nature that is problematic within racial profiling is not an issue in the light of color profiling (Corlett, 2010). While the author does attempt to ground color profiling within the boundaries of acceptable social practices, one cannot deny that an individual's color is no more of an indicator of that person's legal status than their race (Arnold, 2007; Chapkis, 2003; Delgado, 2003; Musolff, 2007). Whether one decides to call it racial or color profiling the main point is that these arrests, stops, and interrogations are often not made on the basis of the individual's behavior or actions but merely on their perceived legal status that is conceptually based on their skin color. In the end, no matter how accurate an officer may be in even correctly identifying a Latino individual from a Japanese individual, the individual is still being subjected to the discursive formations that simplify such social constructions as race and class (Arnold, 2007; Asma, 1995; Chapkis, 2003). Under this light, it is impossible to separate racial profiling from color profiling, because to profile one based upon the skin color is ultimately to profile them based upon the common skin characteristics of a particular racial group.

METHODS

A methodological approach consisted of four activities that follow a linear plain: locating artifacts, identifying material, analyzing the material, and defining the rhetorical situation. This open-ended methodological approach allowed for the development of theory through an iterative process of data and theoretical analysis, continually verifying the relationship between the data that is obtained from artifacts with the theoretical presumptions of scapegoat theory (Ott, 1998).

Locating Artifacts

As defined by Goetz and Lecompte (1984), an artifact is anything that may help illuminate research questions such as, but not limited to: legal records, written documents, memos, demographic information (Brock & Scott, 1989). For the purposes of this study a collection publishing's by major media outlets such as articles, reports, and editorials were used. Artifacts were gathered using LexisNexis Academic online database for the years 2009-2011. 532 results were displayed, of which 414 were found to specifically deal with American immigration.

Identifying Material

Not all discursive representations of immigration and migrants fit within the context of scapegoat theory. In order to identify relevant material, each artifact will be evaluated upon whether or not the artifact displays one, or all, of the following sentiments toward immigration and migrants: frustration and hostility(Greenwood, 1970; Zawadzki, 1948). These two categories have been

shown to be the basis for discursive scapegoating, and therefore are a way to identify which artifacts will be relevant for material analysis (Zawadzki, 1948).
Analyzing the Material

Once relevant materials were gathered they were then analyzed for one, or more, of the six scapegoating projection techniques: indirect hostility, irritability, negativism, resentment, suspicion, and verbal hostility. This approach toward analysis did not consider the internal factors that often drive prejudice and scapegoating (Zawadzki, 1948). This approach rather provided an understanding of the way that intergroup prejudice is discursively represented with respect toward the migration of minority groups.

RESULTS

The task of analyzing the major discursive representations of immigration within the current news media is a daunting task to say the least; with the topic itself being full of political rhetoric and historical taboos. Coupled with this sense of ambiguity are the endless personal, social, and economic factors that come along with analyzing racially charged theoretical frameworks such as scapegoating. Nevertheless, indirect inferences can be drawn between the most common of scapegoating projections and the way political discourse, and the subsequent news media, which surrounds the current immigration debate.

2009 A total of 229 articles were analyzed for the year of 2009. The most numerous scapegoating tactics throughout the year of 2009 were those that projected feelings of resentment, which is defined as either real or fantasized mistreatment. One example of this is a comment made by John Prigge, a city councilman for Elgin Illinois, when asked about the effects that illegal immigration has on the city: "It's killing Elgin. I firmly believe its killing Elgin" Elgin has a modest population of 108,000 with forty percent of the population of Caucasian decent and thirty-five percent listed as Hispanic. This simple view of the city's demographics proves that while the issue of illegal-immigration may truly be a burden on a few of the city's resources, it seems more likely that the growing legal Hispanic population, are being mistaken for illegal-immigrants. Nevertheless, there is no economical proof ever put forward to support the claim of the initial comment in question, and clearly portrays a feeling of anger because of a sense of mistreatment.

Strict opponents to illegal-immigration often argue that the legal Hispanic migrants that currently reside in the U.S. are in some way universally united in opposition as well. For example, Joe Miller (Alaska), when speaking on behalf of the legal migrant population stated, "...step forward and say 'you're screwing us up, you know." Comments of this nature clearly reflect a sense of irritability, one of the scapegoating projection strategies. The previous statement was actually stated in support of a then future rally where Miller had named several members of the Hispanic advocacy group You Don't Speak For Me as attendees and speakers of the rally. The very next day an article was published stating that the group had made no such promises to appear at the event. This supposed lie highlights an irrational scrabble, on the part of Miller at least, to do whatever is deemed necessary to make his claims sound the most appealing, thus hinting at a sense of irritability.

The scrabbling of misinformation in order to support one's claim would not be a strategy solely dedicated to the

projection of irritability, but verbal hostility as well. In an editorial published by the *Manassa Journal Messenger* of Virginia stated that the local police are, "using the drop in violent crimes in 2008 as proof that the county's illegal immigration policy is doing its job." First of all, this claim would have to assume that illegal-immigrants are disproportionally inclined to commit a crime than those persons who are within the U.S. borders legally; no proof has ever been put forward to support this claim. The article goes on to state, "Murders went up 20 percent -- from 10 to 12 -- in 2008. Rapes stayed the same. Robberies went down 8.8 percent and aggravated assaults went down 36.5 percent." The author states that since there was not an across the board cut in Part I crimes against persons and crimes against property than the local police are not justified in suggesting that this is a significant drop in crime. Linking illegal immigrants so intimately with a discussion of these Part I crimes enthymematically suggests that illegal-immigrants are not only more criminally inclined, but are also more inclined to commit some of societies worst crimes. This is a clear indication of overcritical verbal hostility.

Raymond Herrera, a national spokesman for the Minutemen Project stated that, "The travesty is that they're trying to embed a criminal element into our society at the expense of the real American," This comment clearly displays a belief that illegal-immigrants are not only disproportionally criminals, but also that there is a deliberate effort to corrupt the perceived sterile morality of American society, thus fitting the definition of direct suspicion. For the purposes of this study, feelings of

suspicion can be defined as a belief that others are planning harm.

Indirect hostility is a feeling that was not readily found within the artifacts of 2009, this could possibly be attributed to the polar nature of the subject, nevertheless there were a few instances found. One article of note was published by a local newspaper in Pennsylvania discussed how Voice of the People USA plans to hold a, "silent protest" during the trial of two Shenandoah teens accused of beating an illegal Mexican immigrant to death last July. In response to criticism brought fourth against the protest, the rally leaders stated that they, "are no in way trying to glorify those who killed Mr. Ramirez," but rather, "to counter other potential protests that are meant to encourage illegal immigration and demonize those who oppose it." The picketing of a funeral, on both sides of the argument, is a devious strategy to support one's argument, when considering the definition used for indirect hostility in this study.

On April 24, an article titled, "Gov. Brewer: Feds Denied National Guard request" was the first of many articles that discussed how the governor was "very surprised" that the Obama administration did not send the requested 250 additional National Guard troops to help with the enforcement of border protection. In retrospect, the act of requesting the increase in National Guard troops was an obvious stretch given the political environment and seemed to be more of an act to solidify a sense of identification among those who generally oppose the Obama administration as well as comprehensive immigration reform. Brewer would later make the comment, "I just feel very disappointed that the federal government has not stepped up and done what their responsibilities are,

and have left the control, if you will, left up to our local law enforcement." Not only this comment, but also the entire act of requesting military support from a government that has clearly expressed that it will deal with immigration enforcement at the governmental level, reflects a sense of direct opposition and a refusal to cooperate or what has been defined as negativism.

2010 A total of 276 newspaper articles were analyzed for the total year of 2010. SB 1070 reached the Arizona state legislature in January of this year, lighting a spark underneath the fermenting immigration debate that started after the disastrous events of 9/11. Most of the immigration debate during this year is focused around five key issues: SB 1070, racial profiling, assimilation, jobs, and the distinction between legal vs. illegal immigrants.

One interesting observation about this particular period is the cookie-cutter fashion by which news articles are written covering the aftermath of the Arizona bill, as well as the several states that would follow up with the introduction of similar bills. The articles would usually follow this pattern: X and Y are currently under fire after proposing a bill that is similar to Arizona's restrictive immigration bill SB1070." These articles would usually provide statistical data in either support or rejection of the proposed restrictive policy. For example, a more liberally leaning author stated, "According to a recent study by the Pew Hispanic Center...from 2007 to 2009, an estimated 300,000 illegal immigrants entered the United States annually, down from 550,000" while a more conservative author would cite, "The Pew Research Center estimated in 2008 that Nebraska had about 45,000 illegal immigrants, up from about 30,000 in 2000." As one

author for the *San Bernardino County Sun* states, surveys such as these only take into account those who are willing to come forward and discuss their illegal status, and therefore cannot be relied upon for any strong statistical representation of the illegal/legal migrant population. This back and fourth of statistical correctness hints at a general feeling of either real or fantasized mistreatment on both sides of the debate.

Another proliferate theme throughout the year was the number of articles that touched on the essential undermining of U.S. national law that illegal immigration presents. This argument is usually presented from the point of view of the legal citizen by usually noting how the undermining U.S. national law undermines the rights of all the citizens within its borders. For example, one editorial published in the *Washington Post* in May stated, "... the presence of so many illegal migrants in the United States without enforceable rights undermines the rights of everyone else." This line of argumentation is usually tied in with the issue of "sanctuary cities" or those cities who by either practice or by law protect illegal immigrants. Since the early 1980s over 40 cities and counties across the U.S. have adopted these policies, which basically state that they will not use local resources to enforce federal immigration laws. One example of this, published in the El Paso Times, points to an apparent hypocrisy within the Obama administration when dealing with these cities, "Everyone has noticed the hypocrisy of the government going after Arizona and ignoring the sanctuary cities" By paring the Obama administration with commentary about the undermining of national laws and rights, the discourse is able give justification for presenting a sense of

direct opposition to authority; a direct opposition to authority is defined as negativism.

Another argument that was also closely tied to the issue of undermining of national laws is the issue of assimilation. It is commonly argued, mostly from a more liberal perspective, that it would be impossible to deport all of those persons who are in this country illegally, and therefore there must be a mechanism developed to open a path to legal citizenship. Amnesty has also been commonly brought up as a solution to this issue. One editorial published in *The San Antonio Express* condenses this argument by stating, "It is physically and financially impossible to deport 12 million undocumented workers and their families. Our nation would be better served by fully assimilating these families into American society." On the other side of this argument the common statement is that granting amnesty or some other form of assimilation would simply justify the illegal act of entering this country dishonestly. In an editorial published by the Sacramento Bee it was stated that assimilation, as well as birthright citizenship, "for illegal immigrants is unjust and unfair to people who play by the rules." Statements such as these clearly show that there is a sort of perceived mistreatment is being thrust upon legal citizens every time someone enters the U.S. without going through the established routes. This is an example of the scapegoating strategy that has been defined as resentment.

2011 A total of 240 newspaper articles were analyzed for the months between January-June of 2011. A storm of immigration reforms seemed to sweep across the conservative US after the passage of SB1070, and thus during this time much of the political discourse surrounding immigration is focused on the aftermath of the passage of the bill. Much of the debate during these months has focused on three key issues: lack of resources, lawlessness, and governmental inadequacies.

Since it is currently law to grant citizenship to any persons born within the borders of the US, it has become a common argument that these "illegally born" children will ultimately have entire families that will become a burden upon social resources and cohesion. Most of this line of argumentation takes the form of statements of verbal hostility by displaying attitudes that are negatively overcritical. For example, one article published in the *San Gabriel Valley Tribune* stated that, "In 2010 there were over 300,000 births in the United States to illegal immigrant mothers. By granting children of illegal immigrants' citizenship, the child can eventually anchor an entire family into the United States, even though they gained access to our nation illegally." More direct statements of verbal hostility like what was stated by Rep. Daryl Metcalfe when discussing how the children of illegal immigrants are the most direct threat to our nation: "They are brought up in this nation and then tear it down," By framing the argument around tax payer dollars that go into the education of these children, one is able to draw the sense of humanity out of the debate in order to focus the public's attention around the issue of taxpayer dollars. By framing the argument around the assumption that the children of illegal-immigrants will grow up to deceive and cheat society the projection strategy moves out of the realm of verbal hostility and into the realm of direct suspicion.

Another key issue that was present was the apparent lack of governmental involvement in the enforcement of illegal

immigration laws. Thus, it is said, the states must take action in order to protect themselves from the economic and social woes of illegal immigration. A statement written by Rep. Lamar Smith highlights the central argument, "We have tools to limit illegal immigration, but the Obama administration is not enforcing the immigration laws on the books." Comments of this nature are most definitely meant to be an open rebellion against the conventions of current governmental policy, and thus are a negativistic hostility projection strategy. By making an "us vs. them" contrast between the conservative base that is aggressively pushing for strict immigration reform and the Obama administration, the author is able to condense and solidify a sense of identification among those who would agree with a stricter immigration policy. The Democratic political base uses a reciprocal argument to achieve the same cohesive effects among the growing Latino voter base. Building upon this, some have even suggested a premeditated and conscious effort by the Obama administration to disrupt state and local authorities from enacting these immigration policies; this emphasis on a premeditated effort shifts the effect that is being presented away from the realm of negativism and into the realm of direct suspicion.

Like any other strongly divided political debate, there were some strict instances of verbal hostility, and perhaps some of the most critically interesting. State Rep. Daryl Metcalf would make the curious distinction between legal and non-legal immigration by stating, "It's not immigration, [it's an] illegal-alien invasion." This comment condenses what would seem to be a common conservative affect of prejudice that assumes all Latino immigrants, no matter what their legal status, are criminals in nature and must be, if not physically, mentally separated from the rest of the American population. Another instance of particularly strong verbal hostility was a comment given by Kansas Rep. Virgil Peck during a press conference, "Looks like to me, if shooting these immigrating feral hogs works, maybe we have found a (solution) to our illegal immigration problem" Here, Rep. Peck is clearly projecting a threatening sense of hostility by directly comparing Latino immigrants to pest like feral hogs that are routinely shot from helicopters.

CONCLUSION

Issues such as immigration have, and possibly always will be, very polar in nature and thus has the tendency to attract at least a few instances intensely negative rhetoric. The six strategies defined as strategies used for scapegoating means were seen as an effective means to evaluate artifacts by focusing on the attitudes behind the projective behavior.

While using a basic search with LexisNexis Academic databases, for newspaper articles that simply contained the word 'illegal-immigration' were useful to identify that these scapegoating projective behaviors actually do exist within modern immigration discourse, it was found to omit many articles from major U.S. publications. For example, any given Lexis-Nexis Academic search will only display a maximum of one thousand results so naturally many articles will be omitted unless the search is more acutely defined. While this is not unexpected, what was surprising was what articles the search engine selected. Instead of first including those articles of the most popular U.S. news publications, the results would mostly include 'perspective' or 'opinion' editorials that are often little

more than biased rants in response to another previously published article. This could easily skew the results of the general evaluation of trends over time.

The transformation into a more positive discourse surrounding the immigration debate is not a burden that is imposed upon the general public, rather it is the discursive formations that are developed at the governmental level that will need to be changed before the dominant negative discourse will evolve into a more positive perspective (Burke, 1966). Public engagement is completely reliant on the answers that are given through political metaphors and proverb0s that surround civic problems (M. W. Smith & Waugh, 2008). Public attitudes are organizationally established through symbolic action, and because of this are usually sluggish to change unless there is a legislative body that oversees the publics mind (M. W. Smith & Waugh, 2008). Furthermore, the perpetual regeneration of negative immigration discourse, and the scapegoating strategies that are associated with it, simply serves to validate and magnify the feelings of aggression that are commonly presented throughout the American populace.

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The National Socialist Courtship of the Arab World: 1938-1943

Joe Siess

INTRODUCTION

The purpose of this article is to explore how, and to what extent, the Arab world responded to National Socialist influence during the Second World War. This research provides a unique perspective- from the viewpoint of the British Colonial, and Foreign Offices- derived from primary records dating from the Second World War era, located in the British National Archives at Kew. This research offers an interesting perspective in the field of historical research focused on the Second World War era, more specifically focused on the relations between the Arab world and the National Socialist regime. Further, examining National Socialist and Arab relations through the lens of the British Colonial and Foreign Offices, provides a unique perspective; as from the perspective of the leading colonial power in the region, brings into question not only German intentions in the Middle East, but British intentions as well.

BACKGROUND/METHODS

This project interprets records retrieved from the British National Archives in Kew, and contextualizes them within the historical situation in the Middle East during the Second World War. British intelligence files detailing the Muslim Brotherhood in Egypt, as well as a series of memorandums exchanged from prominent player's in the region, such as the Mufti of Jerusalem, Haj Amin el-Huseini, the Emir Abdullah of Trans-Jordan, and King Ibn Sa'ud of Saudi Arabia. Further, documents from a British Colonial Office file are examined, containing an exchange of telegrams and memorandums between Sir Winston Churchill, King Ibn Saud; as well as Arab, British, Zionist and American officials such as; President Roosevelt, Sir John Philby, U.S. Colonel Hoskins, Anthony Eden, Chaim Weizman, Ibn Sa'ud, and others. These archival sources are contextualized by the writings and explorations of historians such as Aaron Gillette, Jeffery Herff, Clive Leatherdale and others. This project strives to create a behind the scenes look at the situations developing in the Middle East during the Second World War, through the lens of one of the most meticulous bureaucracies in human history, that of the British Empire.

This specific article explains how relations between the Arab world and the National Socialist regime began to take shape, and the way in which questions of "race" and the definition of anti-Semitism aided in shaping such relations. It also provides an examination of how the fragmentation in the Arab world that resulted due to National Socialist influence; and how such relations affected the British, threatening their colonial power in the region. The factors that led to the opening of the forum between the

Arab world and the National Socialist regime were centered around notions of "race", and as a result, the National Socialist regime was forced to implement a substantial reconceptualization of their racial ideology in order to not only appease their allies in the war; namely Fascist Italy, but also to sway the Arab world to their cause. Furthermore, tenets of this reconceptualization of National Socialist racial ideology were integrated into the Nazi propaganda campaign implemented in the Middle East during the Second World War; designed to establish a sense of racial equality between the "Aryan", "Germanic" race, the Mediterranean "race", and the Arab people.

RESULTS, DISCUSSION, AND IMPLICATIONS

With the triumph of Rommel's Afrika Corpse against British forces in Egypt in 1942, the DNB (Deutsches Nachrichtenbüro) proclaimed: "The inspired Axis General, Rommel, deserves the title of honour which was once the attribute of Scipio: Rommel Africanus."[1] This small drop in the sea of propaganda employed by the Nazi regime is peculiar when considering the nature of National Socialist ideology. Simply put, National Socialist ideology dictated that the "Aryan", "Nordic" or "Germanic" race was superior in every way compared to all other "races", and due to this superiority, merited the right to excessive self-assertion. This propaganda seems to be indicative of a major reconceptualization of National Socialist racial ideology,

characterized by a fundamental transition from pure biological racialism to a racialism fusing spiritual and psychological factors with biological factors. While German racialists were intent on pushing the concept of biological racialism, and "Aryan" superiority, many Italian racialists insisted on a spiritual racialism, which invoked the glorious past of Rome, and the spiritual and psychological nature, which defined the Mediterranean "race" as a product of that great and ancient civilization. Thus a rift developed between the two regimes, producing the need for a reconceptualization of National Socialist racial ideology.

It is true that throughout history, aspiring empires invoked the Roman past as an inspiration; and though this may be the case, it is also likely that this bit of propaganda is indicative of this reconceptualization of racial ideology, as well as German capitulation with Italian racialists. Whereas before, Nazi racial policy dictated that no other race was equal to the "Aryan" race, now the National Socialist regime had to capitulate with their Italian allies by way of establishing a sense of racial equality; hence the Germans invoking the memory of a great Roman figure in their propaganda as apposed to an "Aryan" one. The Germans not only needed to appease the Italians in terms of their racial ideology, but they also found that they had to redefine their ideology in order to placate the Arab world as well.

Following The Nuremburg Race Laws of 1935 the fire was set for the intercourse that took place between the Arab world and the National Socialist regime. The Nazi regime

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[1] FO188, "Summary and Comments on German Propaganda to Germany", 1941-44.

observed that diplomats from Arab nations expressed no antagonism for the anti-Semitism expressed by the Nazi regime, as long as it was directed exclusively at Jews.[2] The Arab world was aware of Germany's obsession with anti-Semitism, and naturally the question arose of whether or not this vehement hatred for Semites, also applied to non-Jewish Semites such as themselves. Hitler had made it perfectly clear in his renowned book, *Mein Kampf,* what he felt not only about non-"Aryans" but also what he felt about the Arab people; which simply put was, disdain.[3] In order for the National Socialist regime to reach their goal of destroying the British Empire, it was imperative that they court the Arab world to their cause; and thus the redefinition of racial ideology attached to notions of Arab radical nationalism, were prescribed to the Arab world by the Nazi propaganda machine. This National Socialist courtship of the Arab world would take the form of a massive propaganda campaign, incorporating elements of both biological and spiritual/phsycological racialism, as indicative of the fundamental reconceptualization of National Socialist racial ideology respectively.

Furthermore, with the institution of the 1935 Nuremburg Race Laws, the definition of Aryan and the implications upon those who did not constitute as a member of the Aryan race began to emerge further into concrete reality from the dark depths of a perverted ideological delusion. Following the institution of the racial

laws, in 1935, there was a case concerning Johannes Ruppert, the son of a Turkish officer and a German woman who was ejected from the Hitler youth due to his Turkish ancestry. According to German citizenship law at the time, "A citizen of the Reich is only that subject, who is of German or kindred blood and who, through his conduct, shows that he is both desirous and fit to serve faithfully the German people and the Reich." As a result of the Ruppert case, the Turkish embassy demanded an explanation from the National Socialist regime, and German-Turkish relations were threatened; as according to historian Jeffrey Herf, "In the international context of 1935," ""placing a cloud" over Germany's relations with Turkey," would be a "likely development if the Turks were to be characterized as non-Aryan."[4] This incident also opened up the forum between Germany and other Arab and Muslim states including Iran and India, all of whom demanded an explanation of the National Socialist conception of racialism and the meaning of German "anti-Semitism". The next question, and possibly the most important in need of answering, is the question of the definition of anti-Semitism.

Contained in the first wave of Nazi broadcasts between 1939-41[5], the Nazis attempted to reassure the Arabs of North Africa that they were well informed about Islam and the political scene in the region, and they went as far as to extend their profound respect of the Islamic cultural and religious

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[2] Herf, *Nazi Propaganda for the Arab World*, 15.

[3] Adolf Hitler, *Mein Kampf, trans, Ralph Mannheim*, 658-59.

[4] Herf, *Nazi Propaganda for the Arab World*, 17-18.

[5] Herf, *Nazi Propaganda for the Arab World*, 36.

practices; not overlooking the opportunity to claim that "there were parallels and welcome affinities between National Socialism and Arab radical nationalism and the religion of Islam as the Nazis chose to interpret it."[6] Essentially, despite the fact that the Arab "race" was in fact a member of the "Semitic" "race", the Nazis speak of the "Arab nation" united as one with "clean blood."[7] This notion of racial purity, and "clean blood" is indicative of this fusion of biological racialism and spiritual/psychological racialism, as on the one hand, the Nazis stressed the biological purity of the Arab people, and on the other hand, invoking a perception of equality between the Arab civilization and National Socialism. Thus the National Socialist propaganda machine utilized the element of anti-Semitism as leverage to sway Arab leaders to their cause, as they differentiated the Jews and the Arabs- both Semitic peoples- though excluding the Arab people from the category of Semite, as it related to the National Socialist conception of anti-Semitism.

With the issue of redefining race and anti-Semitism to accommodate the Arab world more or less solved, the Arab world became fragmented with supporters of both the National Socialist regime and the Allies. Thus a rift began to form in the Arab World between fundamentalist Arab nationalism as prescribed by the National Socialist regime, within its newly defined racial paradigm, and Arab leaders who retained their trust

in the Allies. Further, Arab nationalism was beginning to spread throughout the Middle East, and the Nazi propaganda machine wasted no time antagonizing the British colonizer, and promising the Arab nation that freedom would be achieved if Arab leaders sided with Germany. Furthermore, the situation in the British mandate of Palestine, which was the strategic center of British Imperial control in the Middle East, was the focal point for many of the situations arising in the region at British expense, as a result of National Socialist influence in the Arab world.

As the National Socialist regime began to threaten British interests in the Middle East, the British were forced to devote valuable attention to dealing with developments in the Middle East, in addition to the rapidly unfolding situation in Europe. Furthermore, Palestine afforded the most strategic significance in the region for the British; and the British were in no way planning on relinquishing such an important component of their Empire. An Italian broadcast in Arabic, for instance, proclaimed that, "the Arabs have one leader and he despises the British and defies the threats of the British forces—he is the Mufti,"[8]

Mufti Haj Amin el-Husseini was utilized by the Third Reich as a titular figure to rouse anti-British and anti-Zionist sentiment throughout the Middle East in the context of pan-Arab nationalism as prescribed by the National Socialist regime. The only problem with investing so much power and support into one individual

[6] Ibid.

[7] Herf, *Nazi Propaganda for the Arab World,* 108.

[8] Herf, *Nazi Propaganda for the Arab World,* 104.

is that that individual may not remain loyal to his patrons of support, in this case, the National Socialist regime. Further, the Mufti is the quintessential exemplification of an Arab leader who at certain points, willingly acquiesced to National Socialist influence. Not only was he pronounced leader of the Arab people on Italian and German Arabic broadcasts, but also German aid in the form of weapons and funds, were funneled into Palestine via the southern boarder.

Contained in a British intelligence file from the Colonial Office, dated August 8th 1938, it is stated, "Early in November a Palestine Arab source...reported that consignments of ammunition had recently arrived in the South, and that a ship containing arms and ammunition was shortly expected near Gaza. This source had also heard that a certain amount of war material, including explosives and cartridge filling machines, had recently been received from Germany..." Furthermore, "A very reliable source in Cairo has reported that Jamal el Hussaini, when he was in Cairo in October, said that Ahmed Hussein, the Egyptian Green Shirt leader, had offered to recruit a number of young volunteers into Egypt and send them in small parties to Palestine to fight against the British."[9] The Green Shirt party was an Egyptian political party, which modeled and emulated its political organization based on other Fascist regimes including the National Socialist regime; thus it is clear from the British intelligence files that not only was Germany supporting the Mufti monetarily and militarily, but

also an Egyptian fifth column allegedly offered the rebels support as a result of National Socialist influence in the region.

Further, according to a British intelligence file detailing the Muslim Brotherhood, the founder of the organization, Hassan el Banna, "made a careful study of the Nazi and Fascist organizations. Using them as a model, he formed within the Ikhwan (The Brotherhood) the Gawwala and Katai'b, specially trained and trusted men who correspond respectively to the Brown Shirts and Black Shirts of the late Adolf Hitler's party troops."[10] Thus these Colonial Office files demonstrate how the Mufti was favored, perhaps exclusively, by the National Socialist regime, and how he was designated as a champion of the radical Islamic nationalist movement spreading throughout the Arab world; hence support from the Muslim Brotherhood.

Within a British Colonial Office file dated September 13th 1939, the Mufti allegedly made a pro-British proclamation, stating "that he was willing to sign a proclamation ordering the rebels in Palestine to lay down their arms and declaring the British cause to be just." A side note in the same file also indicates that the Mufti had made no "mention of any conditions upon which the Mufti might wish to make issuing of the proclamation depend."[11] Thus it seems as though the Mufti was caught between devoting himself to the Nazis

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[9] PF NE, 932/V1 (Haj) Amin file, KV2/2084

[10] Political Intelligence Center Middle East, *"P.I.C. Paper No. 49, The Ikhwan El Muslemin,"* Cairo (February 25, 1944), NA, FO 371/41329.

[11] PF NE, 932/V1 (Haj) Amin file, KV2/2084

or the Allies, and both sides could sense his irresolute position.

Furthermore, a British Colonial Office file dated the 31st of August 1939, questioned the Mufti's alleged pro-British proclamation, but it also reported German anxieties over the Mufti's allegiance to them: "Local D.N.B. (Deutshes Nachrichtenburo) representatives were becoming increasingly dissatisfied with the Mufti's leadership. In their view his lack of decision at the present juncture was the worst feature: he was merely "sitting tight", yet at the same time showing signs of holding out an olive branch to the British in order to secure his own position in the future. The Germans were beginning to feel that they had put all their eggs in one basket by backing the Mufti exclusively, and that it would have been better to support also other Arab leaders who, although keen nationalists, were not blind followers of the Mufti."[12]

From this document it is clear that via German anxiety, the British were aware of the weakness of National Socialist influence in the Middle East, and as a result, the British were more inclined to stand their ground in regards to the "Palestine problem"; their policy being the strict adherence to the stipulations outlined in the 1939 White Paper, as well as the obstinate refusal to acquiesce either Arab or Jewish demands in Palestine. The British knew well that developments in Palestine would have serious consequences in the broader Middle East; threatening their colonial holdings in the region, and they were not willing to back away from their

holdings as a result of National Socialist influence. Further, as previously mentioned, other Arab leaders sided with the allies, mainly to secure their own demands of independence in the future, but also due to positive experiences with Britain in the past.

Emir Abdullah, the pro-British leader of Trans-Jordan, replies to a message sent to him by Mufti Haj Amin el-Husseini through one of his delegates, asserting, "although he does not deny that his Eminence (Haj Amin) is a most loyal leader of the "Cause" and is convinced that his obstinacy is due to his intense devotion to the "Cause", yet he feels that greater success would be obtained by the use of more diplomatic means. At the same time he realizes that all leaders deal with their problems in their own way, but feels that with greater political experience His Eminence would have adopted other methods."[13] From this source it is clear that certain Arab leaders such as Emir Abdullah understood that extreme devotion to the "Cause", meaning the goal of Islamist, Arab-Nationalists, as prescribed by National Socialist propaganda- namely the destruction of the British Empire- is not the way in which to position oneself to insure that one's "bread is buttered." Also, according to Herf, "The key point was that the outcome of the battles was a decisive factor in the effectiveness of propaganda efforts of all the warring powers. An Axis victory at El Almein might have set off an Arab and Muslim revolt against the Allies all over the Middle

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[12] PF NE, 932/V1 (Haj) Amin file, KV2/2084

[13] PF NE, 932/V1 (Haj) Amin file, KV2/2084

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East."[14] Thus, as demonstrated by the British archival sources above, as well as Herf, Arab leaders seem to be acting out of self-interest when determining which side to support in the war effort. For Haj Amin, Germany seemed the greater side to align with, perhaps due to the immense power Hitler placed in the Mufti's hands; for Emir Abdullah, the British had a history of meeting his demands as he was appointed leader of a British protectorate, which later became Trans-Jordan, so naturally he would place his faith in the British.

It is obvious why Arab leaders would align themselves with the victorious side in the war, and come 1943, the odds were against Germany; though victory meant different things for different leaders throughout the Middle East. Haj Amin el-Husseini was willing to negotiate with the British, "but only on condition that he should be the head of the Arab negotiating body;" though it was unlikely that this condition would ever be accepted by the British;[15] but perhaps it would be part of the package if he were to side with Germany. As pointed out by the Emir Abdullah through his delegate, Haj Amin's "obstinacy" to refuse negotiations with the British, demanding what was clearly impossible, demonstrates Haj Amin's acquiescence to National Socialist courtship; though at the same time, Germany was becoming disenchanted with their titular leader in the region, as he seemed to be handing the British an "olive branch".

Haj Amin was proclaimed the leader of the Arab world in German and Italian propaganda, and his relationship with the Third Reich demonstrates the incredible amount of power and responsibility the Nazi regime placed in his hands. The Emir Abdullah on the other hand, was deemed by the Nazi propaganda machine as "'Rabbi' Abdullah, the buffoon of Transjordan;" and as one of the "Mohammedans willing to sell themselves to Britain and, by so doing," proving "false to Islam."[16] Thus despite this increase of anti-colonial fervor as prescribed to the Arab world by the National Socialist regime, the British still viewed themselves as residing in an advantageous position in the Middle East; as they could offer what the Arabs wanted; independence, and as long as they had this to offer; they had no reason to abandon their colonial policies in the Middle East. Germany on the other hand was not a colonial power, and though this situation aided them in their relations with the Arabs in the past; Germany could not undoubtedly claim that they could offer any Arab leader independence.

Lastly, this project covers a wide range of original sources located at the British National Archives in Kew, and this specific article demonstrates how National Socialist relations with the Arab world developed as a result of a fundamental reconceptualization of National Socialist racial ideology, and how these relations affected developments in the Middle East, through the lens of the British Foreign and Colonial Offices. This article also

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[14] Herf, *Nazi Propaganda for the Arab World*, 225.

[15] PF NE, 932/V1 (Haj) Amin file, KV2/2084

[16] Herf, *Nazi Propaganda for the Arab World*, 98.

demonstrates the existence of the rift between Arab leaders created as a result of National Socialist influence during the war. Finally, the further implications of this research endeavor are contingent on the execution of further archival research at the British National Archives, or elsewhere. These implications include the possible contribution to this particular field of inquiry, specifically National Socialist and Arab relations through the lens of the British Empire during the Second World War.

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Biomimicry: Finding Inspiration for Innovation in Nature

Brittany Hodges

Currently, in popular culture, there is a positive trend of green awareness. As global warming and humanity's impact on the environment have become more apparent, people have started to grow in their attentiveness towards the Earth's current dilemmas. Yet, still unheard of by the general public, and even by many professionals, is the concept of "biomimicry." Coined by Janine Benyus, biomimicry is the idea of imitating the processes of nature in human technology and architecture. By mimicking nature, there is hope that innovative and sustainable design will result. The use of biomimicry requires certain guidelines to be met so that the use of biomimicry contributes to sustainability and efficiency. The definitions for biomimicry, its guidelines, and the current uses of biomimicry in technology and architecture will be discussed in this paper.

Janine Benyus's book, <u>Biomimicry,</u> defines biomimicry in three ways: nature as a model, nature as a measure, and nature as a mentor (1). By this she means that biomimicry "is a new science that studies nature's models and then imitates or takes inspiration from these designs and processes to solve human problems, uses an ecological standard to judge the 'rightness' of our innovations, [and] it introduces an era based not on what we can extract from the natural world, but on what we can learn from it" (Benyus 1). Biomimicry, therefore, is a paradigm shift from thinking we, as humans, have all the answers and instead looking to nature as the supreme source of knowledge and solutions.

Presently, biomimicry is mostly theoretical, as the amount of research and proven uses of biomimicry is minimal at the moment. However, the potential of biomimicry is strong. Especially when combined with engineering, biomimicry could increase efficiency of energy use and decrease our ecological footprint significantly. Maibritt Pedersen Zari, a professor of architecture at Victoria University, believes "design that mimics how most ecosystems are able to function in a sustainable and even regenerative way, has the potential to positively transform the environmental performance of the built environment." However, what is crucial to productive biomimicry is adaption of the biology to technology, not just reproduction of its forms. For instance, designing a ship in the shape of a leaf could be defined as biomimetic, but it does not adopt the chemical and biological processes of a leaf. If a design lacks the aspects that make nature sustainable, then the design really isn't sustainable. Therefore, there are a few guidelines established by Benyus and others in order to assure "correct" and useful biomimetic design.

First of all, the guidelines are designed to fit the goal of biomimetic design, which is "to produce engineering that has basic attributes of biological systems such as low energy usage, easy recycling, extreme

durability and versatility from few readily available starting materials" (Vincent). The guidelines, which are defined by Benyus, are also based on what many organisms already do— more precisely, what makes the natural world interact in a balanced, yet functional way. First off, some organisms use waste as a resource. This ensures that there is no excess waste that is polluting the environment and it also minimizes the amount of available resources consumed. Many organisms also are efficient users and gathers of energy. Efficient use of energy is very important, especially in the current age where society is consuming energy quickly and unsustainably. The goal to use energy with little of it wasted is crucial. Along with being efficient energy users, most organisms use materials sparingly. Whereas in the United States we live off the glamorization that "bigger is better," most organisms do not exceed nature's limits. It is also important to keep toxins in mind. Many organisms have poisonous substances for defense, yet they keep the toxins out of their homes. We capitalize on synthetic, hidden toxins and are surrounded by them every day. By mimicking the traits of the aforementioned organisms, we would be careful with how materials are used and how they intoxicate our living environment. A limiting factor in nature is the fact that a majority of organisms must "buy" locally—that is, they can't travel far distances to get the resources they need. Therefore, we should do the same. This would minimize on transportation energy and support local economies. All of these traits that organisms exhibit are guidelines that we as a human race could use to create technologies, systems, and buildings more sustainable.

To begin to apply biomimicry, it is important to have some scientific knowledge of the organisms that are inspiring the design. Although it may be easy to mimic the forms and shapes of different organisms, when chemical processes get involved, some professional help is needed (Zari). The Biomimicry Institute has made finding solutions to problems easier by creating a database called *Ask Nature.* This database allows the user to search for the problem, and the search engine will give results of solutions found in nature. This public database allows biomimicry to reach all levels of education and is a good introduction for serious innovations.

There are numerous ways of categorizing and judging different types of biomimicry. Maibritt Pedersen Zari believes there are three levels: organism, behavior and ecosystem. The "organism" level is usually represented when a part or whole of an organism is mimicked. Then there is the "behavior" level, which is mimicking how an organism works in the ecosystem. The "ecosystem" level is mimicking the general principles that allow an ecosystem to function. In terms of building design, there is a second "dimension" to the ecosystem level. It basically entails applying a general ecosystem principle of all ecosystems to the built environment. This has promise to decrease a building's environmental impact since the building would balance the resources used with its waste and make contributions to the environment like an organism would.

Benyus also outlines several factors to consider when applying a natural trait to an engineered innovation. She suggests that the process should mimic the manufacturing process that organisms

use. After research into the subject of how organisms "manufacture" themselves, the results show the underlying factor for an organism's structure is due to proteins and amino acids. Proteins allow for crystal structures to be densely structured, and they even work their magic in our bodies by creating strong, yet flexible tendons. Benyus mentions that in order for us to use biomimicry to the fullest extent, we must become experts on how proteins build structures and code for the natural processes and balances among species and the environment. Because of the natural structures of organisms, energy is not a concern. In fact, "energy is the controlling factor in only 5 percent of all problems in biology" (Vincent). From this statistic, it is apparent that organisms are naturally energy conserving, and therefore, a valuable inspiration.

Although biomimicry is a new concept, there have been many studies and there are many examples of biomimicry at work. These illustrate the potential biomimicry holds for the future sustainability initiative that the world is responsible for. Benyus lists several broad inspirations for biomimicry that cover various types of uses. For instance, she suggests farming similar to how a prairie grows, collecting energy like a leaf, weaving fibers and strengthening structures like a spider, storing what we learn like how a cell stores information and closing loops in commerce by running a business akin to how a redwood forest works.

One example of a completed product based off of biomimicry is the product called "Kinetic Glass." The glass is "based on animal respiratory systems and made with a slit silicone surface that lets air

pass through" and uses "gills" to let out polluted air (Muntaneau). Another company, "Kyosemi," developed a "a power-harvesting solar cell that imitates the way trees collect sunlight" called Sphelar (Munatneau). Unlike traditional photovoltaic panels, these spherical cells that are incorporated into windows can absorb the sun's rays from multiple directions. This enables a more consistent energy consummation as the sun relatively changes its position in the sky. There is also a promise to stop air pollution with the product called "SuperAbsorber" (Munatneau). This is a highway barrier that uses a process called "photocatalyzation" (Munatneau). It is claimed "that the airborne pollution of a large city could be cut in half if pollution-reducing cement were to cover just 15 percent of urban surfaces" (Munatneau). Even automobiles are starting to see a biomimetic presence. For example, airplane engineers are looking to birds for innovative aerodynamics, and the car company, Daimler Chrysler, is looking to a fish. The design Chrysler is using mimics a box-fish (*ostracion meleagris)*, which "a uniquely aerodynamic fish despite its box-like shape" (Okonsky; Zari). In addition to this, the structure of the car is also biomimetic. The structure is based on how trees grow, which minimizes stress concentrations, and there are gaps of structure because the material needed is minimized (Zari).

Much of biomimicry's inspiration and success is based off of materials that mimic the skins and membranes of organisms. There are a few guidelines based off of nature that we can learn from, as stated by Benyus. The first is a "life friendly manufacturing process," which means, no harsh chemicals, or high pressures and a strong reliance on water

and room temperature (Benyus 88). Benyus also suggests self-assembling. Whereas we rely on a top-down approach to manufacture materials, organisms do the opposite and self-assemble the materials they need (Benyus 91). The last guideline is a hierarchy of structures, organized by the structure of proteins to make crystal (Benyus 92). Controlling proteins is critical, and to gain that control would most likely be through the use of genetic engineering—used responsibly, of course (Benyus 93). A good example of how biomimicry is used in materials is a new swim suit material inspired by shark skin. Although sharks have very rough skin, the swim suit material based off the texture worked so well that they were banned by the FINA—the governing body for world swimming (Pawlyn 8).

Architecture also has a strong potential use for biomimicry. Right now, buildings are a huge consumer of energy. In fact, "in 2001, new building accounted for about 40% of annual energy and raw material consumption, 25% of wood harvest, 16% of fresh water supplies, 44% of landfill, 45% of carbon dioxide production" and were responsible for half of the greenhouse emissions in industrialized countries (Deolankar). The key to biomimicry in architecture is to consume the least amount of energy as possible. Biomimicry is still a new concept in architecture circles, but they are making ground as colleges start to introduce the concept.

One architect, Mick Pearce has been the ground-breaking key person for biomimicry in architecture because of his building, the CH2 and Eastgate Centre. His inspiration is termites. Termite mounds must maintain the temperature in their mounds to 87 degrees Fahrenheit, even though their native Zimbabwe has temperatures ranging from 35 to 100 degrees in a single day (Lefaivre). Yet, termites are able to maintain this temperature because of their natural ventilation process of opening and closing spaces throughout the day (Lefaivre). They also control moisture through ventilation, their own respiratory systems, and even re-eating the mound material (French).

Mick Pearce attempts to mimic this system in his buildings, the Eastgate Centre in Harare, Zimbabwe, and the Council House 2 building (CH2) in Melbourne, Australia. Eastgate Centre uses the "mass of the building for heat and the temperature changes to keep the building uniformly cool" (Lefaivre). This natural ventilation system is very successful, to the point that it "costs 1/10th of a comparable air conditioned building" and uses 35 percent less energy than six comparable Harare buildings combined (Lefaivre). In the CH2 building, he uses vertical frames for plants to grow to act as a "living sun screen" (qtd. in Morris-Nunn). Both buildings use a "rock store" that is cooled at night by the outside temperatures, and the hot air coming in during the day is cooled by the rocks (Lefaivre). Pearce now aspires to apply the termite model to the whole town. These two buildings stand as biomimetic icons which show that sustainability in architecture does not just have to be boxes with eco-tech doodads. They show that sustainability, and more specifically, biomimicry can be aesthetically pleasing as well as incredibly efficient.

Biomimicry can change the way we see technology and the built environment.

Nature's systems work efficiently for a reason. The ecosystem services our earth provides give us exactly what we need. We, as a race, just need to change the way we see nature. Instead of trying to control it, we should look to it for guidance and wisdom. In our current predicament of dire environmental issues, we need innovative solutions to combating climate change and ecosystem destruction. With biomimicry, we can appease our desires for faster, bigger, and cooler things, without destroying the planet we are given. Biomimicry can change the way we approach technology and invention. It can change the way we live.

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Hannah Vick (Faculty Advisor: Cheryl Lester)

English and American Studies

INTRODUCTION

When I started to identify areas of interest for me to write about for my honors thesis, I decided that I wanted to work at the intersection of my two majors: social welfare and English. Yet, I quickly realized that for many people there is not a readily available relationship between the two. I recognized this same issue when I took a service learning class in the English Department; many students did not recognize how the skills, theories, and manners of thinking that we were learning could be applied outside of the classroom in a non-profit organization, which is the primary environment for the application of service learning. Yet, some of my greatest and most impactful academic experiences at the University of Kansas have been in service learning classes, which enable students to volunteer or create their own project to do good in the community. To me, service learning should be implemented in classrooms even when the connection to the community is not entirely clear, especially with the current trend toward increased instruction on civic engagement in higher education (Braskamp, 2011). Larry A. Braskamp, president of the Global Perspective Institute and senior fellow at the Association of American Colleges and Universities, explains this phenomenon: "When it comes to forming and informing future citizens of the United States and of the globe ... now is not the time for hesitation. Now is the time for higher education to be both responsible and responsive to society at large, a critic of societal ills and a voice of what is good and worthy within current economic, political, social and religious contexts" (2011, p. 1). Now it is time for students and instructors alike to respond and interact with the community surrounding their education.

I aspire to make it easier for instructors and students to understand and communicate the goals of service learning and reflect on them in the classroom, specifically when there is not a readily available connection in the community. My intention is to design a template that students and instructors can utilize during service-learning classes in order to build a successful relationship and to promote effective service learning practices with an organization in the community. In order to do so, I have I researched key concepts, conducted interviews with primary constituents, and deciphered the necessary components to include in the template. In doing so, I hope to enable more students to build strong connections in the community, practice classroom skills in real-world contexts, and strengthen their ability to reflect on their work, as well as increase the benefits of service learning for students, instructors, community organizations, and the university.

Service Learning

Service learning is not easily defined, because a vital concept of service learning is its flexibility in application. In 1990, "Jane Kendall wrote that there are 147 definitions in the literature [for service learning], and there has been no falling away of interest in this endeavor

since" (Eyler, et al., 1999, p. 3). One of the most common references used to define service learning is from the *National Service Clearinghouse: America's Most Comprehensive Service-Learning Resource*. According to this organization, "Service-Learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities." This is also the definition that the University of Kansas utilizes in the Center for Service Learning. Although I agree with this definition, it ignores the potential personal growth that students may have when taking service-learning courses, which is frequently reflected in the literature. Another definition offers the incorporation of personal development: service learning is an educational strategy involving youth programming that encompasses a philosophy of youth empowerment. Service-learning can help students develop the assets needed for a productive future (Byers, Griffen-Wiesner, & Nelson, 2000). This definition incorporates the potential for the personal growth of a student, which is vital in my understanding of service learning.

In order to better comprehend the ever-evolving and redefined concept of service learning, it is important to inspect its two primary components: service and learning. Service can be better understood as community service, and learning as field education. Janet Eyler and Dwight E. Giles, Jr. "have embraced the position that service-learning should include a balance between service to the community and academic learning and that the hyphen in the phrase symbolizes the central role of reflection in the process of learning through community experience" (1999, p. 4). There are clear aspects of connection and distinction between both community service and learning through field education, and both must be defined in order to better comprehend the overall concept of service learning.

Community service

Community service is an integral fixture of service learning. Community service can be defined as "the engagement of [people] in activities that primarily focus on the service being provided as well as the benefits the service activities have on the recipients" (Furco, p. 13). Community service programs imply altruism and charity, much like volunteerism, so it is vital to differentiate between the two. Although the understanding of volunteerism and community service are largely similar, community service in the context of service learning involves the additional goals of reflection on the meaning of the service activities and the larger social issues surrounding the service project. For example, what is hindering or oppressing the recipient of the service, is there a lack of social services aimed at the needs of particular recipients, or is there a better solution to the problem that the social service agency is not providing? Volunteerism, while beneficial, does not require the same type of consideration and understanding that is put forth in community service in a service learning setting. It can also be inferred that community service requires more time and the application of more skills, research, and knowledge, because a service learning participant will need to utilize external resources in order to fully comprehend the significant social issues involved in their community service projects. Community service also implies the personal growth of a participant,

because participants independently learn to make knowledge and reflection meaningful in a setting other than in the classroom. In this way, students have the opportunity to demonstrate their success through action.

Within the realm of service learning it is expected that students will involve themselves with community service; "one of the major forms of service-learning practice from its beginnings has focused not only on learning about social problems, but on addressing them in the community through social action" (Eyler, et al., 1999, p. 11). It is expected that students do not only research the social issues related to the population they are working with and that their organization attempts to alleviate, but they must also implement strategies that they deem as effective. A student's ideas about addressing a social issue or about addressing a problem with the way their organization is addressing a social issue must mirror the action they commit to at the organization. There is a vital action element that students must partake in in order to effectively complete the community service component of their service-learning course.

Learning: Field education

Learning is also a major component in service learning, and it is typically demonstrated through field education in service learning courses. It is important to note, however, that field education is most commonly used as a model in the service learning courses that have a practical application. Liberal arts and humanities should, like engineering or medicine, define and practice its application to social life. This would make teachers, students, and the general public more aware of the importance of areas of study whose practical application is not immediately apparent. Yet, humanities

and liberal arts are difficult studies to apply in the community. Field education programs "provide students with co-curricular service opportunities that are related to, but not fully integrated with their formal academic studies. Students perform the service as part of a program that is designed primarily to enhance students' understanding of a field of study, while also providing substantial emphasis on the service being provided" (Furco, p. 13). Field education allows students to take the skills and knowledge they learn in their courses and implement them outside of the classroom. This enables students to recognize the impact their implementation of skills can have in a community, as well as cement those skills for a student; when they practice them in a community environment then they can better incorporate them into their future careers and challenges. This also enables students to understand what skills work for them and what they need to improve upon.

The service learning approach to learning is not traditional in academia because it is concerned with the personal development of a person, as well as the connectedness of lessons learned in the classroom to realistic applications in the community, rather than simply cognitive development. Service learning is a method of education that rests on the principles of learning established by experiential learning theorists (Eyler, et al., 1999). Dewey, an experiential learning theorist, "was convinced that learning is a wholehearted affair, linking emotions and intellect; an educative experience is one that fosters student development by capturing student interest—indeed their passion—because it is intrinsically worthwhile and deals with problems that awaken student curiosity" (Eyler, et al., 1999, p. 8). Learning within the service-

learning context supports the personal development of students; students are both encouraged to find their passion and to apply it to learning within the classroom. In this way, the goal of service learning "is to link personal and interpersonal development with academic and cognitive development" because the two are inherently related (Eyler, et al., 1999, p. 9). Personal growth and cognitive growth are both outcomes of effective learning, yet cognitive growth alone is the primary concern of the majority of faculty members at universities. Service learning courses, however, also incorporate the personal outcomes of learning, which is unique to this type of program.

Service Learning in the Classroom

Service learning can take many forms in a classroom context; in fact, Amanda Schwegler, the Assistant Director of the Center for Service Learning at the University of Kansas, recognizes that there is a lack of consistency between the different service learning courses because there are no strict guidelines; she does not view this as problematic (personal communication, October 10, 2011). The only guidelines that exist at the Center for Service Learning at the University of Kansas include: the necessity for students to utilize their classroom skills to meet community needs, the need for students to volunteer at least 20 hours of their time, and the opportunity for reflection after students complete their volunteer work (Center for Service Learning). If a faculty member meets these requirements in a course, then the course is eligible for service learning designation, and students then have the opportunity to take the course in order to fulfill an aspect of their certification.

Jeffrey Howard is the Associate Director for Service-Learning at the University of Michigan's Edward Ginsberg Center for Community Service and Learning, where he is responsible for faculty development, publications, communications, and the Center's service-learning portfolio of academic and co-curricular service-learning initiatives (Campus Compact). He offers his opinion on principles of good practice in community service learning pedagogy. These include: (1) academic credit is for learning not service; (2) do not compromise academic rigor; (3) set learning goals for students; (4) establish criteria for the selection of community service placements; (5) provide educationally sound mechanisms to harvest the community learning; (6) provide supports for students to learn how to harvest the community learning; (7) minimize the distinction between students' community learning role and the classroom learning role; (8) rethink the faculty instructional role; (9) be prepared for uncertainty and variation in student learning outcomes; and (10) maximize the community responsibility orientation of the course (Howard, p 102-104). When these principles are incorporated into service learning classes, then Howard believes the students and faculty can achieve the greatest outcomes. Primarily, students need to draw connections between learning and service in order for students and faculty to effectively implement a service-learning course. There should not be a clear distinction between these aspects of the course, and faculty should support their students through their recognition of the connectedness between the two. These principles also offer students the opportunity to explore various roles as learner and instructor, as well as invest in their own learning. The outcomes of these principles are incorporated into effective

service learning classes, and any service learning faculty member should strive to implement them in his or her courses.

There is still a significant challenge in incorporating service learning into certain classrooms. Faculty that have had the most positive feedback of service learning classes are "in disciplines with logical connections to external issues and audiences: social work; nursing, medicine, and other health professions; public administration; education, and so forth" (Holland, p. 253) A question that needs to be answered, then, is how can professors in disciplines that lack "logical" or established connections to external issues and audiences effectively incorporate service learning into their courses? What does that look like for their students? Considering that service learning has so many benefits, it would be good for students if faculty in other academic disciplines would develop connections outside their disciplines and work them into their teaching.

Beneficiaries of Service Learning

It is my belief that service learning is a mutually beneficial process. Service learning promotes benefits for students, faculty, the university, and the community, and all beneficiaries support the growth of each other. The Center for Service Learning at the University of Kansas and other service learning program models provide commentary on the benefits of service learning for these various participants.

Benefits to students The benefits for students in service learning are the prominent concern of most projects and courses. The KU Center for Service Learning recognizes the benefit in students' receiving service learning certification; "certification in service learning offers a chance for students to utilize their classroom skills to address community needs and gain recognition at the same time. It allows students to apply classroom knowledge in 'real-world' settings and gain experience and familiarity with their community" (Witczak, 2008, p. 8). Service learning provides students with the means to utilize the skills they gain in a course outside of the walls of a classroom. Also, students have the opportunity to gain certification in service learning to honor the time, energy, and effort they put into service learning courses and projects. Not only does service learning enable students to gain skill, proficiency, and academic credit, but it also enhances their personal development.

Although documenting personal growth and development is challenging, Judith A. Nelson and Daniel Eckstein, both professors in the Educational Leadership and Counseling Department at Sam Houston State University, sought to discover how service learning could benefit at-risk adolescents and students in secondary school. The status as an "at-risk" adolescent is indicated when a student faces challenges in completing graduation and requires support from outside resources in order to achieve graduation eligibility. Nelson and Eckstein created a competition among students as a model for service learning; they announced to students that they had the opportunity to receive funding for service projects. Students completed a checklist about various social and environmental issues that concerned them in order to decide which organization they would like to work with and what type of project they would like to complete. After the proposals were finalized, students made presentations to the Service-Learning Advisory Board, who voted to fund two projects. After the projects were chosen, every student had the opportunity to get

involved in helping with each project. Students reported feeling greater importance, self-confidence, and responsibility then they had before. Nelson and Eckstein noted, "service-learning allows youth to have a 'voice' in the school and community, which increases the chances for them to feel connected and important to the workings of their schools, neighborhoods, and cities" (2008, p. 235). Therefore service learning gave these at-risk students positive outcomes that any student, including those at the university level, could benefit from, including a sense of empowerment and personal growth.

Benefits to faculty The Center for Service Learning at KU also recognizes the advantages of service learning for faculty; "through developing and executing service learning courses, faculty members gain appreciation for their discipline and for their students, become engaged in their communities both locally and globally, develop diverse connections with the community and other faculty members, and are provided with additional research and funding opportunities" (Witczak, 2008, p. 8). The interconnectedness of service learning largely benefits faculty, as they have the opportunity to build stronger relationships with students and can incorporate the lessons they teach into real-world environments and situations. Each student will react differently to service learning, and students should have the opportunity to address these variations in the classroom. Faculty can learn from the incorporation of service learning into classroom discussions. Some faculty have said, "that outreach and public service is relevant to the success of their discipline and the quality of their teaching and research agenda" (Holland, p. 253). Faculty can greatly benefit from

incorporating service learning into their courses not only to demonstrate effective skills and lessons to their students but also to further their own research and quality of teaching. For example, service learning helps faculty articulate the authentic and genuine importance of their discipline, which can enlighten the public and effectively advocate for resources to support education.

Benefits to the university When assessing benefits for service learning, assets to the university are largely absent in most research. The Center for Service Learning at KU, however, strives to recognize its impact on the university. For example,

> The benefits of service learning provided to the University are nationally recognized.   According to the Princeton Review's 2006 edition of 361 Best Colleges, the University of   Kansas was named a 'College with a Conscience,' placing KU among the top 81 schools   in the country in regards to service learning programs and blending academics with   community service. Additionally, over 7,000 University of Kansas students donated their   time to community service during the 2005-2006 year, earning the University a spot on   the President's Higher Education Community Service Honor Roll. (Witczak, 2008, p. 8)

As the Center for Service Learning expands its curriculum and certification opportunities for students, the university is largely benefitting. The University of Kansas is now a consistently recognized campus for its positive impact on the surrounding community of Lawrence, as well as its increased rates of volunteerism among its students. Any positive publicity that KU can receive will ultimately make it a more successful university that will attract more students. Any university that

incorporates service learning can also expect to have greater connections to the community as more students volunteer at local agencies. Community connection is a worthy benefit for the University of Kansas as community support, financially and otherwise, plays a key role in maintaining the university.

Benefits to community When students partake in a service learning class or project then they are expected to serve in the community. Receiving willing volunteers is the initial advantage for communities, and the Center for Service Learning recognizes this positive aspect:

Service learning projects utilize the knowledge and capabilities of the university to meet   specified community needs. In doing so, service learning creates beneficial relationships between members of the university and members of the community. These relationships   foster a variety of other positive outcomes for community organizations including allowing organizations to identify and access additional resources necessary to achieve   their mission and goals; creating a larger base from which to draw future volunteers,   leaders, and supports; and allowing organizations to play an integral role in shaping how students perceive current world issues and topics. (Witczak, 2008, p. 8)

Community is of vast importance in the success of service learning, as students must apply their skills from class into a community setting. Yet, the community also benefits as they receive encouraging, supportive, and engaged volunteers from campus. Schwegler explains that many students continue to volunteer and offer support to the organizations they get involved in during their service learning projects (personal communication, October 10, 2011).

Therefore, the relationships that are built in these classrooms often continue beyond the course itself, and the student and community organization greatly benefit from their bond.

Case Study: Working with KU Audio-Reader and the Center for Service Learning

I personally have continued my relationship with my service learning community organization, and I will use that relationship to fuel my understanding of service learning at the university. I have taken four service-learning classes in the past and am certified in service learning. One of my former service learning classes is Jewish-American Literature and Culture with Professor Cheryl Lester. Students in this class met with KU Audio-Reader to undertake and complete service learning projects. I intend to build off of my relationship with them in order to demonstrate what service learning should look like in and outside of the classroom. My objective in meeting with KU Audio-Reader and Center for Service Learning representatives is to evaluate what effective service-learning relationships look like between students, faculty, local social service agencies, and the university. The information I receive will ultimately enable me to create a template that can be used to implement or improve service-learning classes at the university. Although this is only one example of a service learning relationship, it provides me with the means to have in-depth conversations with various involved constituents and to have access to their personal perspectives.

The University of Kansas Center for Service Learning

Before I delve into the discussion of my personal experiences with service

learning, it is important to establish how service learning works at KU. The Center for Service Learning at the University of Kansas opened in July 2005, so it is a relatively new feature of the university. The center resulted from a culmination of public and community service projects that started at the university in 1990. Since 1990, the university has provided prominent resources for students and faculty that contributed to the creation of service learning. These include the creation of the Center for Community Outreach, course credit offered for participants of Alternative Breaks, financial support provided by Student Senate to start a student-run Office of Service Learning in conjunction with the Center for Community Outreach, and Service Learning Institutes held for the faculty of the university (Center for Service Learning). Now, the Center for Service Learning offers students and faculty support and resources in constructing and implementing service learning courses. They also assist the Registrar in documenting service learning classes and student participation in those classes.

Different universities view service learning in different ways, so it is important to clarify the mission statement of the Center for Service Learning at KU as well as their understanding of service learning in the classroom; "Our mission is to make service learning a priority and core practice at the University of Kansas. Service learning fosters better understanding of classroom material, is a catalyst for innovative leadership and social responsibility, and drives positive change in the world. We inspire action by creating initiatives that connect, advocate, elevate, and challenge" (Center for Service Learning). Although much of the mission

statement is similar to previously mentioned definitions of service learning, their mission does include the potential for service learning to sponsor leadership. Students taking on a leadership role could exemplify their personal growth and development, so it is a significant thought to consider.

One of the most imperative features that the Center for Service Learning offers is a certification to recognize students that participate in service learning classes and requirements. Students must complete three of the following components in order to get certified: enrollment in and completion of at least one designated service learning class, completion of an independent project, and reflection (Center for Service Learning). Each of these components can be achieved in various formats. For example, if a student takes more than one service learning class, then his or her second class can fulfill the independent project requirement. The Center for Service Learning also addresses various reasons why students should get certified. Certification recognizes that students have "gone beyond the classroom to help [their] community and to further [their] own education; assisted community agencies in better serving their clients; exposed [themselves] to societal inadequacies and injustices; better prepared [themselves] for [their] career or further education; taken greater responsibility for [their] learning and for [their] community; and applied [their] course content in the context of the real world" (Center for Service Learning). The certification will appear on a student's transcript so future employers or graduate school admissions committees will be able to identify a student's efforts in service learning.

The Center for Service Learning faculty prides themselves in their student-centered certification, and they have greatly expanded the program since 2005 in order to incorporate more participants; in the beginning, the Center for Service Learning included 20 designated service learning courses, and they now offer about 65 service learning courses per semester (Center for Service Learning). More students than ever are receiving certification and participating in service learning courses, and the Center for Service Learning hopes the growth of the program will continue at KU.

Previous Service-Learning Experience with KU Audio-Reader

During the spring semester of my junior year, I took a Jewish-American Literature course that incorporated service learning into the curriculum. Every student in the course got involved in a service project at KU Audio-Reader, a local non-profit agency. Many students in my course did not understand the relationship between the lessons we were learning in class and our work at KU Audio-Reader. The connection between the two was not obvious, so it was our task as students to learn how our role at KU Audio-Reader might enhance our understanding or reading of Jewish-American literature, or vice versa. This was difficult for many of us. We must clarify the purpose of both KU-Audio Reader and the Jewish-American Literature class in order to understand the conflict and harmony of the two.

KU Audio-Reader "offers print-disabled persons the opportunity for greater personal independence by providing access to the printed word and visual information, via electronic media and other technologies" (Audio-Reader: Radio for the blind and print-disabled). Primarily, volunteers read daily newspapers, magazines, and books on the air and on the internet, which are available 24 hours a day. Clients also have the opportunity to receive a radio to hear the readings or to call into an automated newspaper reading by telephone. Services are free and available to anyone in the listening area, which includes individuals in Kansas and western Missouri (Audio-Reader: Radio for the blind and print-disabled).

The Jewish-American Literature course served as an English, an American Studies, and a Jewish Studies class. According to the syllabus, "this course focuses on the role of literature, language, and culture in the construction of modern Jewish identities in the United States, focusing primarily on the period from 1880 to the present. The role of literature, language, and culture in the formation of identities is a key area of inquiry in both English and American Studies." The course was split up into units including: Lech Lecha! Immigration tales, Mass Culture and Jewish Embodiment, Zachor! Memorializing Survivors, Amnesia and Remembrance, and By the Rivers of Babylon: Zionism and post-Zionist Discourse. There is also a description of the service learning component in the syllabus: "It is your responsibility to volunteer 20 hours outside of class in a setting that provides opportunities for you to take an active part in a process through which we both serve the needs of the agency and contribute to its transformation with regard to such matters as the content of the readings, delivery of services, self-promotion, representation of their constituencies, etc." Previous students of the course started a service learning relationship with KU Audio-Reader, and it was our duty as the most recent course to continue that relationship.

When my class first went to KU Audio-Reader, we met with the Programming Manager, Lori Kesinger and the Coordinator of Volunteers, Jennifer Nigro. We learned about the overall program and had the opportunity to take a tour of the facility. Then the class split into smaller groups that focused on different projects that we would be completing at KU Audio-Reader. I found myself in the Outreach group. The purpose of the Outreach group was to find more listenership across the community by producing press releases for newspapers in the Lawrence, Topeka, and Kansas City area.

My fellow group members and Kesinger determined which newspapers we would try to contact via press releases in order to advertise and increase the audience interested in Jewish programming. We jumped to the obvious choices: *The Kansas City Jewish Chronicle* and *The Forward*. Each student in the group focused on one or two different newspapers to contact, but *The Kansas City Jewish Chronicle* and *The Forward* were the only newspapers we contacted that had a strong connection to diverse audiences. I contacted *The Lawrence Journal-World*, and they did in fact respond to my press release. Although my press release was reflected in the newspaper, the article was more about service learning at the university and there was no information on why people should utilize KU Audio-Reader services. In our final oral presentation to the class about our work at KU Audio-Reader, my group largely agreed that we could have done more to enhance KU Audio-Reader through our service learning project. Our intention was to broaden the diversity of KU Audio-Reader listeners, but I think we had two major faults (1) we only sought out Jewish newspapers to reach our

diverse audiences, and (2) we only reached out to newspapers, instead of newsletters or community meetings.

It is easiest in service learning classes to address the readily available connection and concern with a local social service agency, such as reaching out to Jewish audiences in a Jewish-American Literature course. However, students might be more active and empowered if they had a chance to propose other material and communities that should be targeted for inclusion. We were discussing ideas about diversity, but in our service learning we did not focus on any diverse issues beyond the idea of getting more Jewish listenership at KU Audio-Reader. It is my belief that more can be gained from these relationships, if only instructors, students, the university, and local social service agencies had an understanding of how service learning should work or could work in various contexts.

KU Audio-Reader and Service Learning

In order to better understand service learning from the perspective of social service agencies, I interviewed Kesinger about her experiences with service learning at KU Audio-Reader. As the Programming Manager, she regulates what is presented out of KU Audio-Reader. She helps with the book selection, and she reads the newspapers every morning to determine what articles need to be broadcast.

First, Kesinger expanded my understanding of the population KU Audio-Reader serves. She explained, "we primarily work with people 70 and over, usually from rural communities, and they tend to be conservative" (L. Kesinger, personal communication, October 10, 2011). Although KU Audio-Reader is able to serve any vision impaired person, the population that is served is typically from

the aging community; people that once had clearer vision that are now losing their sight. Kesinger also noted that these populations are not technologically savvy. She says, "They won't access podcasts" (L. Kesinger, personal communication, October 10, 2011). Therefore, they need to offer other means for obtaining their resources, which is why they offer radio and telephone options. Outside of the aging community, Kesinger noted that they have also recorded textbooks onto flash drives for students in the surrounding area.

Before delving into more specific questions, I asked Kesinger "How do you view service learning at KU Audio-Reader?" Kesinger has had lots of experience with service learning, and she was particularly involved in it when she worked in Virginia. Since then, "it has evolved a lot" (L. Kesinger, personal communication, October 10, 2011). In Virginia, Kesinger ran a class where she invited service agencies to come into the classroom and speak. Now, service learning is focused on students going out in the community to enact a service project in relation to the material they are learning in the classroom. Kesinger thinks "this is good for students to participate in, but it is difficult to create a program that is useful to students and organizations. It is a challenge because you want to lead [students] to make conclusions on their own, but it is hard to teach them about service learning without directly saying the purpose" (L. Kesinger, personal communication, October 10, 2011). Kesinger wants students to create their own projects at KU Audio-Reader, but when students do not recognize the connection or purpose in doing so, then the value of the activity is put into jeopardy. Kesinger recognizes how KU Audio-Reader and Jewish-American

literature intersect, but what is she to do when the students do not make this connection on their own?

During our conversation, Kesinger noted that "blindness is a culture" (L. Kesinger, personal communication, October 10, 2011). This is a valid place to start, but a place that we never addressed during my Jewish-American Literature class. As a group, we focused on the idea of incorporating more Jewish listenership into KU Audio-Reader rather than broader cultural connections. The Assistant Development Director, Feloniz Lovato-Winston, did acknowledge a stronger connection; she sees "literature as a passing down of culture; literature is linked to identity" (F. Lovato-Winston, personal communication, October 10, 2011). Both Kesinger and Lovato-Winston recognized that these service-learning partnerships also enhance their understanding of KU Audio-Reader, because it forces them to evaluate their view of the organization's purpose and the changes that could benefit their organization.

Outside of the Jewish-American literature course, KU Audio-Reader has hosted a marketing class that made brochures for their agency as a final class project. Three different groups created brochures after learning more about KU Audio-Reader, and then KU Audio-Reader representatives had the opportunity to choose which group's brochure they would like to use. KU Audio-Reader has also hosted PR interns in the past. Kesinger stated, "we love having these partnerships" (L. Kesinger, personal communication, October 10, 2011). There is a significant distinction between the partnerships KU Audio-Reader hosts with a Jewish-American Literature class versus a marketing class. The marketing class was able to serve an instrumental goal for

KU Audio-Reader, by providing them with material that serves the organization as it's defined. The Jewish American-Literature course serves a civic or philosophical goal for KU Audio-Reader by providing them with material that challenges them and potentially reforms the organization as it's defined. KU Audio-Reader is able to work in two very different partnerships with one course using action based on critical thinking and the other course using action based on instrumental reason. This also exemplifies how service learning can be problematic for disciplines without readily available connections in the community; while the marketing class was able to achieve a concrete goal, the Jewish-American literature course has had slower progress and continues to define and redefine their relationship with KU Audio-Reader.

Kesinger recognized three key areas that students have supported KU Audio-Reader in: (1) several students have stayed on to volunteer as readers for the program after their service learning project was completed, (2) students act as good ambassadors of the program to community groups, student organizations, and the university, and (3) students sponsor publicity, especially to Jewish members in the community. Kesinger also noted that students made a video one year that KU Audio-Reader continues to use, which has left a lasting impact on their organization (L. Kesinger, personal communication, October 10, 2011).

I asked Kesinger to evaluate KU Audio-Reader's relationship with students, faculty, the Lawrence community, and the university, because I see these four as the primary service learning constituents. I wanted to hear how they are connected from the view of a social service agency. KU Audio-Reader has limited interaction with students, unless they are volunteers. They do work with volunteering youth groups for their major fund-raising events during the year. As for faculty, they have even more limited interaction. Kesinger noted, "some faculty members do volunteer here. I think it is a good way to get away from what they do academically" (L. Kesinger, personal communication, October 10, 2011). KU Audio-Reader gets the vast majority of volunteers and listeners from the Lawrence community. Other agencies also make referrals for visually impaired Lawrence residents to use KU Audio-Reader services. However, Kesinger would like more input and conversations with the Lawrence community (L. Kesinger, personal communication, October 10, 2011). According to Kesinger, the university likes KU Audio-Reader because they serve all of Kansas. Former Chancellor Hemenway particularly appreciated KU Audio-Reader, and when he would travel across Kansas he would recognize how many listeners used KU Audio-Reader in the cities he travelled to. In order for service learning to be effective, then every constituent, students, faculty, the university, and the social service agency, need to be invested in the process.

My final question for Kesinger was: "What aspects of service learning are worthy to assess?" She immediately stated, "students doing the work need to understand the mission of the organization" (L. Kesinger, personal communication, October 10, 2011). Students do not take the time to facilitate their own understanding of the organization they are working with. This lack of understanding can hinder the partnership in service learning. Again, Kesinger noted that she does not want to

define service learning at KU Audio-Reader for the students that volunteer; the organization, student, and instructor leading the course should define each service learning experience.

The Center for Service Learning's Understanding of Service Learning Courses

In order to comprehend the university's application of service learning, I interviewed the Assistant Director of the Center for Service Learning, Amanda Schwegler. As stated previously, the only guidelines that exist at the Center for Service Learning at the University of Kansas include, the necessity for students to utilize their classroom skills to meet community needs, the need for students to volunteer at least 20 hours of their time at one location, and the opportunity for reflection after students complete their volunteer work (Center for Service Learning). Service can come in various forms including direct service, indirect service, and advocacy. How these guidelines are applied and implemented is largely up to the instructor of the course.

Schwegler offered me insight into the service learning guidelines, which enabled my understanding of the purpose for these guidelines. First, the course must be credit bearing. Second, the effort of the student needs to be for the common good, and surprisingly this area has been rather gray in past experiences. Thirdly, students must commit their 20 volunteer hours to one specific location, because it provides the students with a better sense of the social service agency. Fourthly, there is a reflection component that differentiates service learning from volunteering. This enables students to take their experiences back with them into the classroom (A. Schwegler, personal communication, October 10, 2011).

Schwegler recognizes that students must be invested in the partnership for service learning to be successful. Students "can expect to get out what they put into it. They may or may not allow it to impact them" (A. Schwegler, personal communication, October 10, 2011). The hope is that students relate their course discipline to the real world to serve the community, yet many students struggle to draw these connections, particularly in courses without readily available applications in the community. If a student commits to service learning, then they can also expect to "broaden their horizons and gain new experiences" (A. Schwegler, personal communication, October 10, 2011). This is a representation of personal growth.

Faculty, the university, and the community also have expected outcomes according to Schwegler. Faculty members "get the same experience as students because they relate their discipline to service" (A. Schwegler, personal communication, October 10, 2011). They also benefit by seeing the impact service learning can have on their students, which enables them to incorporate it into their future curriculum. Schwegler discussed the town-gown split in relation to service learning's impact on the university. The town-gown split implies that there are distinct differences between the community and campus in university towns. Service learning can ease the divide as students are encouraged to go into the community to do service. According to Schwegler, the community benefits in two major ways: they receive volunteers and students encourage good publicity by getting the organization's mission out. It is also my belief that students can critically engage

with the mission, scope, and reach of the organization in order to potentially reform and better the organization itself. This is particularly relevant in the application of the liberal arts and humanities in service learning partnerships.

Schwegler would like to see some changes to service learning at the university. Schwegler noted that the Center for Service Learning could benefit from an assessment. In service learning, "it is hard to show cause and effect and which service learning techniques work; we need to refine it" (A. Schwegler, personal communication, October 10, 2011). Schwegler would also like to see more faculty involvement. If the Center for Service Learning reaches out to faculty that might be interested, then it will "broaden the appeal of incorporating service learning into the coursework" (A. Schwegler, personal communication, October 10, 2011). *Bold Aspirations*, the new KU Strategic Plan, seeks to establish a new KU core curriculum for all undergraduate students that could also encourage more faculty to incorporate service learning into their courses. One of their six educational goals for undergraduate students is "practice social responsibility and demonstrate ethical behavior." It is my belief that an increase in service learning courses could aid the university in achieving this goal in core curriculum.

Schwegler agrees that there is a lack of consistency in service learning courses, because "the faculty define what it looks like in their classroom, so a huge range of service learning is implemented" (A. Schwegler, personal communication, October 10, 2011). Schwegler views the reflection component as the most varied; some choose to write, some host a discussion, and some present on their

work. Schwegler does not view the variation as altogether problematic, because "we want students to have an element of choice" (A. Schwegler, personal communication, October 10, 2011). The only way variation could be problematic is if the instructor does not follow the guidelines of service learning, which include the amount of hours that must be committed to service work and the necessity for a reflection component.

A couple weeks after our first interview, I asked Schwegler "What steps do you think are necessary in building a positive working relationship between a student and an organization?" She included four elements that help to sponsor good relationships: (1) students need to have an understanding of the organization, its purpose, and the larger issues it is trying to address, (2) students need to understand service learning and its use as a teaching method, (3) student voice and choice should be implemented in all stages of planning and implementing the service learning project when possible, and (4) the relationship is more effective when students are able to work with the same organization across multiple semesters (A. Schwegler, personal communication, October 28, 2011). Taking these elements into account, it seems that the major concern of Schwegler is misunderstanding and miscommunication between faculty, students, and community organizations. In order for a service learning partnership to be effective, then, there needs to be an understanding between each constituent.

Template Components

Taking my interviews with KU Audio-Reader and the Center for Service Learning into account, I have established areas or components that I would like to include in my template for building

positive working relationships in service learning projects:

1. Students need to have an understanding of the organization. Before starting the project, students should have a grasp of the mission and vision of the social service agency. They should also recognize the larger issues that the organization is addressing. Students should have the opportunity to ask questions of the organization.

2. Students need to have an understanding of service learning. This should be a facilitated discussion with the instructor of the course and other students. Service learning is malleable, so students should determine their understanding of service learning and how it should be applied in their classroom.

3. Faculty should include students in the planning and implementing stage of service learning whenever possible.

4. Faculty should encourage students to demonstrate their learning at the social service agency in the middle of the course, so fellow students and faculty have the chance to respond to their work before the end of the semester.

5. Students should be encouraged to continue their relationship with their social service agency beyond the end of the course.

6. Representatives from the social service agency should be invited into the classroom whenever possible, so they can understand the course structure.

7. Students, faculty, and the social service agency need to sign a contract that explains how their service learning relationship will work and what the ultimate goal is for each of the constituents.

Template

Considering that service learning is intended to have elements of choice, I have constructed a timeline on how to implement a service learning course. During each set date, instructors, students, and the social service agency will have the opportunity to decide exactly what they would like the day's event to look like, but the template will provide general guidelines and ideas. The template is constructed for a typical 15-week course, and it should be applicable to any discipline or any course that meets at least once a week. Although this timeline only includes the weeks in which the course is taking place, a service learning instructor should also plan to meet with a representative from the Center for Service Learning before the course to ensure that he or she understands the guidelines and that the course is registered as a service learning course.

Week	Goal	Activities
1	Introduce students to the course and service learning	• Go through the syllabus, and highlight service learning assignments • Explain the general service learning guidelines to the student • Prepare them to reflect on their understanding of service learning for next class
2	Define service learning for the course	• Host a discussion where students are encouraged to define their idea of service learning and how it relates to the course • If the instructor has not already decided which social service agency students will be working with, then the students should decipher that relationship after their discussion of service learning • Students and instructor should decide how they would like the reflection component of service learning to look in the class, as well as decipher how other service learning assignments should work in the classroom setting
3	Finalize service agency choice(s)	• Students and instructor should clarify if they will seek out a social service agency as a class or individually • As a class, decide what the relationship should look like with a social service agency in a service learning setting • Students or instructor will contact the social service agency they intend to work with and confirm that the agency is comfortable with the relationship and commitment • Set up a time to meet one-on-one with a social service agency representative
4	Invite Center for Service Learning representative to class	• Service learning is a complicated program to define, so the instructor should invite a Center for Service Learning (CSL) representative to speak in class about how service learning works at KU • The CSL representative will also provide students with information on service learning certification • Students should be encouraged to ask questions about service learning
5	Draft and sign contracts with social service agency	• Students need to collaborate with their social service agency representative to draft a contract, which will include goals, tasks, and opportunities for the student in working with the agency • The student, instructor, and social service agency representative all need to sign the contract to ensure that it is implemented in the remaining weeks
6	Include service learning experiences in class discussions	• Instructor should always encourage students to discuss their service learning experiences in relation to the class discussion about readings, course materials, etc. • Instructor can pose questions within the lecture or discussion about service learning to support students in drawing their own connections between their work in and out of class
7	Midterm assignment/exam (include aspects of service learning)	• Service learning should be included in the midterm assignment or exam *or* instructors can host a mid-semester evaluation where students reflect on the incorporation of service learning into the classroom and their own service learning experiences
8	Instructor leads discussion on service learning given the midterm information	• Given the midterm assignments or evaluations, the instructor should host a discussion where students can verbally reflect on the incorporation of service learning into the classroom and their own service learning experiences

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		• The instructor and students alike should contribute to the conversation recognizing that every person has a unique experience with and understanding of service learning
9	Include service learning experiences in class discussions	• Instructor should always encourage students to discuss their service learning experiences in relation to the class discussion about readings, course materials, etc. • Instructor can pose questions within the lecture or discussion about service learning to support students in drawing their own connections between their work in and out of class
10	Students should complete at least 10 hours; instructor follows-up on their work	• Instructor requires students to turn in confirmation of at least 10 volunteer hours completed at the social service agency • Instructor should follow-up on students' work individually via e-mail, in-class discussions, or informal write-ups to ensure that the students feel comfortable in their service learning settings and that they are completing their tasks
11	Students need to revisit the contract and make sure they are meeting their collaborative goals	• Students should review their contract with their social service agency to confirm that they are striving toward their goals and demonstrating a healthy working relationship • If students have already completed their goals or if the goals are too ambitious, than the student and social service agency representative should take the opportunity to redraft the contract • Update the instructor if the contract is revised in any way
12	Include service learning experiences in class discussions	• Instructor should always encourage students to discuss their service learning experiences in relation to the class discussion about readings, course materials, etc. • Instructor can pose questions within the lecture or discussion about service learning to support students in drawing their own connections between their work in and out of class
13	Include service learning experience in class discussions	• Instructor should always encourage students to discuss their service learning experiences in relation to the class discussion about readings, course materials, etc. • Instructor can pose questions within the lecture or discussion about service learning to support students in drawing their own connections between their work in and out of class
14	Students should complete 20 volunteer hours; instructor and students prepare for final reflections	• Instructor requires students to turn in confirmation of at least 20 volunteer hours completed at the agency • Although the reflection component should be decided by the students and instructors in the second week of the course, the class as a whole should clarify how the reflection will work • Students should also prepare to ask their social service agency representatives to come to the final class
15	Final reflections; invite social service agency representatives to come to class	• Students should reflect in the manner that is determined by the class, but an element of discussion is encouraged • Social service agency representatives should also contribute to the reflection component • Students and social service agency representatives can discuss how they would like to carry on their relationship in the future

Application

Using my service learning experience in my Jewish-American Literature course I will provide an example for the possible application of this template. I have also noted when one of the previously defined template components is included in a given week.

Week One On the first day of class, the instructor should go through the syllabus to ensure that students understand the expectations for the course, including the sections on service learning. Some students do not have the time to commit 20 extra hours outside of class to do the service learning component. Make sure that this piece is clearly understood, because some students may choose to drop out of the course if they do not have time. Also, keep in mind that some instructors for service learning courses choose to host class for two 50 minute sessions a week instead of the usual 75 minute courses. This allows students to use the leftover 50 minutes to complete the service-learning project. If time is a deterrent, than this provides more students with the opportunity to take the course.

Before students leave for the day, remind them that they will need to decipher how they would like service learning to work in their class.[1] This is a group-defined project, so they should come with ideas next week on how Jewish-American Literature can be applied at a non-profit agency like KU Audio-Reader. Ask them to reflect on the similarities between the two and to consider how the service learning assignments should work in the course.

Week Two Begin class with a discussion on service learning.[2] As mentioned previously, service learning is not an easily defined term and there is purposefully an element of choice in application. Each class needs to decide how service learning will work in their particular class. In this scenario, the instructor had already chosen that every student would work with KU Audio-Reader. However, some courses may allow students to each pick where they would like to complete their service-learning project and if they would like to complete their projects as groups or individuals.

Instructors should also host a discussion where students are able to decipher how they would like their service learning assignments to work. There are possibilities for written or oral reflection, as well as projects or presentations. The opportunities are endless for the application of service learning in the classroom. Although students did not define the application in our class, we completed a written reflection, but we also had a discussion about service learning at the end of the semester. It was apparent to us during our first couple weeks of the course that we would invite representatives from KU Audio-Reader to speak with us during our last session.[3]

Finally, it is important that students start to make their own connections between service learning and the course material. For some, this might be problematic, particularly in an English course such as Jewish-American literature. Decide as a group with students and the instructor which avenue

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[1] Template Component 3

[2] Template Component 2
[3] Template Component 6

makes the connection clear for most students. Yet, also allow students to make their own connections on an individual basis. In my course, we had to present on a topic of our choosing during the semester. One connection that I was personally drawn to is between Jewish-American and social justice literature. Although I had the opportunity to construct a presentation on this topic, service learning did not need to be included, so most students did not mention their work at KU Audio-Reader in their presentations. Forcing students to include aspects of service learning in their presentations would have been a good opportunity to hear from our diverse perspectives, so it is something to consider for future courses. Whatever the students decide, however they see service learning working, then allow them the opportunity to do so.[4]

Week Three After deciding which social service agency students will work with, the students and instructor need to clarify what that relationship should look like.[5] Will the students, instructor, or social service agency representatives plan the project? Will students volunteer or complete a project outside of the social service agency to benefit them? Can students work in groups or individually? Once these questions are answered, then students should have a better idea on what they can implement as a service-learning project.

As is previously mentioned, I think my service learning group could have better implemented a project to support KU Audio-Reader. Upon reading this section of my thesis, my advisor and Jewish-American literature professor explained to me that I was ignoring the

work that prior classes had done at KU Audio-Reader. After reflecting with her, I discovered that the previous Outreach group did complete community meetings to obtain more listenership, which was something I thought my group should have done, but they failed to send out press releases, which is something we successfully completed. In hindsight, our press releases may have been a beneficial project for KU Audio-Reader, but this issue of misunderstanding exemplifies the importance of having an open discussion between the community organization, faculty, and student. Although my fellow students were aware that a previous course had worked with KU Audio-Reader, to what end we did not know. These points of clarification are vital to successful service learning partnerships and to continuing those partnerships across various courses and students. Clarify these relationships as early as possible.[6]

Once the relationship is clarified, the students and/or instructor need to contact the social service agency that they intend to work with. They need to clarify with the agency that someone at the agency feels comfortable with the relationship and commitment of a service learning partnership. During this conversation, students and representatives need to set up a time to meet one-on-one to decide what their relationship will look like. In the Jewish American-Literature course, my instructor already set up a relationship with KU Audio-Reader and we took a class period to meet at the agency to discuss our relationship and projects.

Week Four After students have taken the first few weeks to decide what service learning means in their classroom, it is

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[4] Template Component 3
[5] Template Component 3

[6] Template Component 5

important that the instructor invites a speaker from the Center for Service Learning to inform the students on how to receive service learning certification. Although I have watched these presentations on service learning certification a plethora of times, it always feels rushed and disconnected from the course material. It is best to invite a speaker after students have had the chance to reflect on the idea of service learning so they can ask any questions when the speaker comes into the classroom. Also, instructors should reiterate the benefits of receiving service learning certification, so students are more apt to consider it. Instructors are also encouraged to explain how they benefit from instructing a service learning course. The instructor and student alike can invite the Center for Service Learning representative to visit on the last day of class for reflection.[7]

Week Five During the one-on-one meetings, students need to draft a contract with their social service agency representative.[8] Contracts should include goals, tasks, due dates, and opportunities for the student in working with the agency. The contract needs to be signed by the student, instructor, and representative to ensure that it is implemented. Although our instructor required a contract, students should also be encouraged to revisit the contract to confirm that they are working toward their goals throughout the semester. The contract provides the framework for the representative and student to have an open discussion about service learning.

During this meeting, students should also clarify the mission and purpose of the organization.[9] It is best to facilitate a discussion with an organization representative to decipher his or her perspective on the organization and on the larger social issues or problems that the organization is attempting to alleviate. Students are encouraged to consider their own understanding of the organization and how it could better address the larger social issues.

Week Six, Nine, Twelve, Thirteen Instructors should continually pose questions during class discussions that will encourage students to draw connections between their work at service agencies and their classroom materials.[10] For example, how does culture apply to your work at KU Audio-Reader? How does this novel support your understanding of service learning? What information can you draw from the context of this novel that could also apply to KU Audio-Reader? The instructor does not need to have a specific answer in mind when asking these questions. In fact, it is best for the answers of these questions to both support the instructor's understanding as well as the fellow students' understanding.

Week Seven The instructor should incorporate service learning into the midterm assignment. We did not have a midterm assignment in my course, but throughout the semester, my instructor required us to turn in reflection papers on readings. Each of our papers also had to include a piece on our service-learning project, which forced us to draw connections between our work inside and outside of the classroom.

Week Eight The instructor should start a discussion based on the information he or

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[7] Template Component 6
[8] Template Component 7

[9] Template Component 1
[10] Template Component 2

she received about service learning from the midterm assignment. All students should contribute and evaluate how the relationship is going so far.[11] If an instructor so chooses, he or she can also distribute evaluation forms in order to decipher how students are feeling about their service learning partnerships.

The intention of this discussion is to show that different students have different understandings of service learning and different experiences with their social service agency. Students are all able to learn from each other as they each discuss their experiences so far. Also, other students might be able to incorporate similar activities and understandings into their own agency. Although similar discussions should be held throughout the semester, it is important to have a setting in the middle of the course where students understand that service learning is the central fixture in the conversation. This will encourage them to reflect after having more experience at their organization.[12]

Week Ten Instructors should check in to confirm that students are completing the appropriate amount of hours to be on track, as well as to make sure that students feel comfortable in their service learning setting. It is up to the instructor and students on how this is implemented.

Week Eleven Students should review their contracts with their social service agency representatives to decipher if they are reaching their intended goals or not.[13] At this point, students are able to make additions or subtractions if the goals are unattainable or already achieved. If the students and representatives choose to revise the contract, then they will need to send a new copy to the instructor. In my course, we did not revisit our contract but many of our goals were changed. It is vital that students and the organization be held accountable by updating their contract.

Week Fourteen Instructors should require students to turn in a confirmation of their 20 hours signed by the social service agency representative. During the second to last week, the instructor should reiterate what the final reflection component will be, which was decided in the second week of the course. Again, this can be a presentation, discussion, or written piece. Students should also ask their social service agency representative to join in the last day of class.[14] Considering that this is a partnership, it is important to hear from their point of view as well.

For example, in my Jewish-American Literature course, we invited representatives from KU Audio-Reader. We completed our projects in groups, so each group stood up and presented on the final product. Then our fellow students, representatives, and instructors provided us with feedback on our project.

Week Fifteen The instructor and students should conduct the reflection. It is best to include the opportunity for discussion no matter what type of reflection is incorporated. Students may want to take another service learning class in the future or instructors may want to continue the partnership with the organization, so there should be a discussion on how to continue the service learning relationship in the future.[15] This was a particular issue with my course, because my fellow students and myself did not have an understanding of what

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[11] Template Component 4
[12] Template Component 2
[13] Template Component 7

[14] Template Component 6
[15] Template Component 5

the previous course had completed. Therefore, clarifying these ideas is vital to the continuous success of the relationship. Also, having these concrete ideas will encourage students to continue their work beyond the class itself.

CONCLUSION

After reflecting on my interviews and discussions with service learning constituents, there are four primary conclusions that could most positively impact the current methods for implementing service learning courses: (1) students need to be included in deciphering the form and content of their service learning experience. This allows them to have more invested in their service learning projects and encourages them to fully engage with their work in and outside of the classroom; (2) teachers must provide multiple experiences of reflection throughout the semester in order to provide students and the instructor with opportunities to revise their current project and understanding of their service learning relationship; (3) it is important for service learning to be integrated more holistically into the class structure. There should not be designated service learning days, but rather service learning should be consistently questioned and discussed in the classroom; (4) students must understand the mission, purpose, and goals of the organization they work with. If these changes are implemented in service learning courses then students, instructors, and the social service agency will benefit. These create a more positive working relationship, and they enable students to have a larger impact on the organization and the course itself. Most importantly, these methods encourage students, instructors, and social service agency representatives to critically evaluate the organization, the teachings in

the classroom, and the role of an active citizen.

Although my thesis is arriving at its end, my work with service learning is not. I have received an Undergraduate Research Award that will enable me to continue my work into next semester, so I can expand my understanding of service learning at the University of Kansas. It is my intention to interview more constituents and to incorporate a feedback loop on the template that I have created in order to construct the most useful aid for the implementation of service learning in the classroom. Service learning has enabled me to build strong connections in the community, practice classroom skills in real-world contexts, and strengthen my ability to reflect on my work. I aspire to continue the growth of service learning at KU so more students can share the worthy experiences that I have had. This is not only necessary for the world of academia, but for the purposes of graduating a class of informed, concerned, and actively engaged students with the skills to address and reflect on the social ills of their community.

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Ich bin nicht ein Berliner: A Reconsideration of Marsden Hartley's *Portrait of a German Officer*

Sean Kramer (Faculty Advisor: Marni Kessler)

Art History

Figure 1. Hartley, Marsden. *Portrait of a German Officer*. Alfred Stieglitz Collection. Metropolitan Museum of Art, New York.

This painting, executed in November 1914, shows Hartley's assimilation of both Cubism (the collagelike juxtapositions of visual fragments) and German Expressionism (the coarse brushwork and dramatic use of bright colors and black). In 1916 the artist denied that the objects in the painting had any special meaning (perhaps as a defensive measure to ward off any attacks provoked by the intense anti-German sentiment in America at the time). However, his purposeful inclusion of medals, banners, military insignia, the Iron Cross, and the German imperial flag does invoke a specific sense of Germany during World War I as well as a collective psychological and physical portrait of a particular officer.[1]

This quotation comes from a section of the description that accompanies an image of Marsden Hartley's *Portrait of a German Officer* from late 1914 (fig. 1) on the Metropolitan Museum of Art's official website. I use this description here because to me it represents a tendency in recent scholarship to privilege the artist's (Marsden Hartley's) biography as well as a precise historic moment (the beginning months of World War I) in interpretations of this painting.[2] My main purpose is not to critique scholarship but rather to reopen the potential for exploring meaning within the painting that biographical and socio-historic readings might otherwise overlook.

I begin my own reading of *Portrait of a German Officer* with a formal analysis of the painting. I then use semiotic theory to begin to unpack notions of a singular, "correct" interpretation of the painting and to emphasize the multiform nature of reception. In this section, I seek to establish that the artist's personal connection to the artwork is not necessarily the most important interpretive guideline for working with this image. I then use examples of letters and numerals within the work to illustrate the plurality of cultural and linguistic processes which inform viewership of the painting. Meanings in a text, I posit, rely on the interaction between the contexts of the viewer and of the author. These meanings consequently change as we pass from the creation of the work of art to the contemporary consumer—i.e. the viewer. Still, semiotics often only concerns itself with a specific, ideal viewer and for that reason the theory only allows for a finite number of interpretations.

I conclude with a postmodern analysis, as I feel such an analysis addresses the discordant, almost cacophonous interplay of meanings which Hartley's *Portrait* visually suggests. Postmodernism, in many ways, deals with the processing and reprocessing of sources, imagery, and borrowed material on all levels of consciousness. Therefore, I examine Hartley's quotations from preexisting visual sources and his engagement with various forms of spectacle in pre-Great War Berlin as seen in *Portrait of a German Officer*. Finally, I consider the fragmented (literally and metaphorically) subject of the painting and complicate the neat, one-on-one associations which scholars often make between the objects represented on the canvas and a specific person in Hartley's life.

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[1] *"Portrait of a German Officer,"* Metropolitan Museum of Art, accessed April 5, 2012, http://www.metmuseum.org/Collections/search-the-collections/210008711.

[2] Throughout this essay, I refer mainly to the work of a handful of art historians, namely, Bruce Robertson, William H. Robinson, Patricia McDonnell, Jonathan Weinberg, and Donna Cassidy. These historians, however, also note the work of others which I feel compelled to mention. These include, but are not limited to, Gail R. Scott, Barbara Haskell, and Townsend Ludington.

Formal Analysis

Marsden Hartley's *Portrait of a German Officer* conveys an intricate complexity which I find simultaneously chaotic and ordered. The main composition hangs in front of a decontextualized, though highly textural black void. The background is essentially little more than two long regions of scumbled dark paint on either side of the canvas. These dark regions of paint only give a limited sense of space, an effect which adds to the cramped and overcrowded atmosphere of the painting. The shapes and images in the painting likewise are bunched up toward a central, vertical axis. This axis follows a white line from the top center of the painting through the vertical bar of a black cross directly below; it then traces the outline of two rectangular shapes which contain numbers; it later becomes muddled in overlying flag shapes but finally rejoins the image along the border of a white-and-red cross image at the bottom center of the canvas. The arrangement of shapes along the left and right margins of the composition conform to the confines of the canvas edges and further emphasizes this same verticality. While the establishment of this axis gives the painting a clearly upward orientation, the composition is still overwhelming. The erect orientation of the image nevertheless endows the painting with a sense of a stately vigor that works against the otherwise riotous, constrained confusion. In fact, I see a sort of imposed order upon the shapes within the composition. It appears as though the images and shapes struggle to break free from the boundaries of the picture plane yet are contained within the painting against their will. Only at the top and barely at the bottom do the forms seem to escape. In all other sectors the dark regions of the background hold these shapes tightly in check.

Other rectilinear objects mirror the overall erectness of the painting. In the top half of the painting, three narrow bars of alternating black and white each recall this linear quality. So too, do the long, narrow shapes that are reminiscent of poles and spikes which frame the semi-circle at the very top of the canvas.[3] As my eye travels downward toward the center, I see two narrow and elongated rectangular shapes below a large triangle which also repeat this motif. To the left of these shapes is another long, thin sliver of gold which mirrors the left edge of the canvas. Just below, another narrow strip of gold outlines a path toward the bottom center of the canvas, though this band is interrupted by the red, white, and black of an intersecting horizontal flag. Just to the right of this flag-image, a narrow shaft latticed in white ends in a bulbous, rounded form and suggests a phallus. Two other white forms also near the bottom right corner share the same phallic suggestion. The artist repeats this motif directly above in the red and gold protrusion emanating from an ambiguous green, red, and white circle.[4] While to me these are the most identifiable references to linear, phallic imagery in the painting,

[3] Bruce Robertson identifies these shapes as lances while William H. Robinson reasons that they may refer to the *pickhelhaubes* on the helmets of German soldiers during the First World War. See Robertson, Bruce, *Marsden Hartley*, New York: Harry N. Abrams, Inc., 1995, page 56, and Robinson, William H., "Marsden Hartley's *Military*," *The Bulletin of the Cleveland Museum of Art* 76 (1989): 14.

[4] This motif recalls an interesting statement of Marsden Hartley's: "It was the smell of leather made a man of him. Stiffened his spine, gave him the orgiastic sense of being without which nothing happens, and with which all is as it should be. No one can get through anything being soft all the time." Quoted in Robertson, *Marsden Hartley*, 63-64.

horizontal bands of white and various colors used to render flags also repeat a horizontal configuration, which intersects the vertical one I have already described. The intersection of these two directional arrangements further forms a cross-like schema that visually mirrors the actual depicted Iron Cross which dominates the composition.

The painting confounds any sense of three-dimensionality and many of the shapes even seem to compete for the same level on the picture plane. The black background is mainly visible only along the peripheral edges. As a result, the painting is in a way suffocating. The black-and-white alternating squares which form a checker pattern along the edges dissolve at times into the black area of the background, further making ambiguous any sense of separation among the planes. To a large extent, the repetition of black within the shapes in the foreground confuses a stable reading of the large regions of black along the outer edges of the painting. As I look closely at the image, I also see that the black strips in the flag-images are actually darker than the more charcoal shades of the background. To my mind, these black regions in the foreground objects—the dark bands in both the upper and lower flags, the black Iron Cross in the top portion, and the smaller dark shapes directly above—should seem to recede more so than do the dark regions of the background. As if to confound the viewer's expectation however, the artist places these objects in the foreground. This intensified darkness makes the objects stand out all the more.

The painting contains evident instances of overlap, yet these seem to move and shift and the relationships of the intersecting shapes often come into question. The waving, black-and-white flag-image in the top half of the painting appears positioned behind other rectangular shapes, yet the viewer cannot accept—given the undulating manner of its representation—that this flag is lying flatly. The image which these curving bars evoke quite naturally recalls a banner flapping in the wind, which contradicts the static nature of the other elements in the immediate vicinity. The rectangular shapes which foreground this waving flag, on the other hand, appear motionless and seem either to sit on top of the flag (which as we have already seen is impossible) or to hang at an undefined distance in front of it. This second option is equally confusing to the eye as the two regions do appear to be directly touching. As a result, space in this region of the painting remains uncertain. The other flag-image toward the lower half of the painting (this one red, white, and black) also complicates the spatial arrangement of the overall painting for it does not exhibit any of the same waving characteristics as the other flag near the top. This bottom flag appears far more languorous, whereas the top flag flutters energetically. Consequently, the locations of these two flags appear to differ, though they exist within the same painting and appear to be on the same level behind the picture plane. This disparity of behavior upsets any sense of a unifying, temporal setting, as the viewer cannot even ascertain a consistent wind pattern.

The artist keeps the detail within the painting to an essential minimum. The viewer is given just enough clues to recognize certain elements that are representative of flags, banners, medals, and other objects, but the artist provides little further information. For the most part, forms are not even modeled as illusionistic or three-dimensional. Tonal changes exist within the painting but

these seem primarily to be arbitrary and in any case do not convey an illusion of three-dimensionality. There are few instances of tonal modulation which might give three-dimensional form to the otherwise flat shapes and these occur mainly near the top right corner of the painting on the images that seem to portray pikes or flagpoles. In fact, these value changes achieve a sort of ominous effect, as though a shadowy presence loomed over and behind the objects in the painting. This region is the only part of the painting which possesses any hint of a cast shadow. The fact that these two shapes are partially shadowed indicates to me a sort of movement: a figure either emerges from a shadowy area or retreats into one.

The artist's brushstrokes are clearly identifiable throughout the entire painting. The paint application is thick and mobile, which imbues the shapes with a rich texture and increases the sense of a dynamic, moving force. "Straight" lines have borders which slip and are not clearly defined, such as those in the triangle shape at the apex of the image. The white-and-blue bars at the right-center of the painting demonstrate a variation on this example. The bars do not have consistent lengths and for that reason the overall shape does not have a stable edge. Another type of slippage occurs in the brief negative spaces of black paint between many of the colored regions throughout the entire painting. Hartley does not delineate outlined borders between the regions; rather, he accentuates the layers of paint by allowing the black background to show through. These spaces emphasize the artificiality of the image. In many of the regions which have black in them, such as the background, the flags, and the Iron Cross, white can be seen just barely

seeping through to the surface. Inversely, this quality is even more strongly the case in areas of white (as well as in regions of other colors) where black is clearly present below the surface. This effect is most noticeable in the white band of the lower-middle horizontal flag-image as well as the white tassel shapes toward the lower right-hand corner of the painting. This quality of paint handling only further confuses the other elements of overlap in the painting.

Though the modeling of tones, for the most part, appears to be arbitrary, the color choices do not. Hartley evidently chooses local colors which relate specifically to the objects which his shapes represent. Accordingly, the colors in the flag-images explicitly refer to the flags which they signify.[5] The image of the Iron Cross must also logically be black with a white border. The gold of the painted flagpoles is meant to mimic the gold of actual flagpoles. This principle no doubt holds true for the white tassels (lower right), the white feathers (lower left), the white stripes (throughout), the white diamonds (lower center), and the white squares (left and right edges). In my estimation, this mimetic use of coloring, as well as the sparse, though precise use of detail facilitate many of the identifications which have become so fundamental to interpretation of this painting.

While black and white are the most prevalent colors within the work, primary colors dominate the viewer's attention and generate the energy which the painting visibly exudes. A muted, jade green appears only in three small circular shapes and one barely noticeable triangle toward the right middle. Slate blue recurs

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[5] Robinson provides a list of these flags which I cite below in my postmodern analysis.

throughout the painting in much larger areas than the green yet even this color is subdued and seems to act merely as a support for the more dominant hues of red and yellow. Overall, except for the vivid crimson, the vibrancy of the colors within the painting is interrupted by the seepage of black to the surface. This formal decision has a neutralizing effect on the colors and restrains the painting from becoming overly garish, as the composition already borders on overwhelming. Nevertheless, each colorful shape carries its own pulsating energy that makes it seem as if someone has caged or glued these objects into place against their will.

Semiotic Analysis

The most overt interpretive guideline we possess for working with this painting may be in the title itself: *Portrait of a German Officer*. It is the first sign we encounter. Here, we are *told* by the author that we are looking at a portrait. We are also *told* that it is of a German officer. We often take this statement as undeniable truth and, in turn, that information frames our entire investigation of the painting. We, the viewers, are now able to begin identifying each element of the painting in order to establish who exactly this "German officer" is. I do not have to be the one to say that it is Lieutenant Karl von Freyburg; that work has already been done.

Arnold Rönnebeck, the cousin of von Freyburg and another friend of Hartley's while in Berlin, provides much of the information we need to establish this context. The art historian has figuratively found a cave of gold. Rönnebeck—in his correspondence with Duncan Phillips—informs us that the Iron Cross shape which figures so prominently in the painting references the medal which Rönnebeck himself lent to Hartley.

Hartley, in turn, uses this image to refer to the death of his friend, von Freyburg. In truth, both von Freyburg and Rönnebeck were awarded the honor, though historians are divided regarding whether this occurred before von Freyburg's death or after.[6] Rönnebeck further tells us that the checker pattern refers to von Freyburg's love of chess. The number 4 references von Freyburg's regiment in the Kaiser Guard. *Twenty-four*, as Marsden Hartely once told Alfred Stieglitz (also in a letter), signifies von Freyburg's age at the time of his death.[7] We also have the spur of von Freyburg's boot and the plume of his helmet which seem to fit nicely within this arrangement of mementos.[8] Art historians often repeat these identifications which now form the backbone of many interpretations of the painting.

Thus, from the written title of the painting to other written, personal correspondences by the artist and his associates, we have relied largely on written texts in order to understand a visual one. These texts, moreover, serve to reinforce the painting's subject as a portrait. Nonetheless, the lack of overt figuration within the painting itself complicates its own subject. Figuration and abstraction work visually with each other and against each other in the painting and strain the ideological structures which might otherwise

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[6] Robertson claims von Freyburg received the medal upon his death while Donna Cassidy and William H. Robinson say he received it the day before he died. See Robertson, *Marsden Hartley*, 56; Cassidy, *Marsden Hartley: Race, Region, Nation*, (Lebanon, New Hampshire: University Press of New England, 2005) 229; and Robinson, "Marsden Hartley's *Millitary*," 16.

[7] Hartley also once stated that 4 was his house number in Berlin. See Robinson, "Marsden Hartley's *Military*," 16.

[8] Robinson, "Marsden Hartley's *Military*," 16.

characterize these two modes of representation. In figuration, we have the possibility for a narrative. In abstraction, on the other hand, we want to deny that such a narrative exists. In *Portrait of a German Officer*, forms and shapes, which refer overtly to national flags and military insignia, appear to explode just as they implode in a manner that cannot be easily organized into a recognizable figure. Still, many scholars do read an anatomical ordering to the image. For instance, Bruce Robertson asserts that the arrangement of elements seems to mimic the curvature of a torso and hips, with the lower half of a face reduced to a semi-circle.[9] Robertson's reading, nevertheless, relies upon the contextual narrative of biography which the title of the painting suggests. Without the title, I surmise that the reading of the painting as a portrait would become much less stable.

Art historian Jonathan Weinberg notes that Hartley's own contemporaries outside of his private circle would likely not have understood much of the particular signification within *Portrait of a German Officer*.[10] Indeed, as many historians even assert, the painting is a memorial to a personal, private relationship. How, then, does a twenty-first century viewer have access to his experience? Indeed, now we near a century from the events encapsulated by this painting. What is to be our response? Nothing in my own experience gives me the access to the codes or to the "dropped hairpins"[11] in the painting. To me, it remains a sort of inside joke. While the motifs of military insignia and German nationalism may have certain personal significance to Hartley, these elements make the painting meaningful to the artist in a different way than to the viewer. Upon the painting's completion, furthermore, Hartley no longer functions as part of the historical event (the creation of the artwork), but now joins its host of interpreters. Therefore, even if he has special insight given him due to his role as author of the painting, the object is now separate from him. In temporal terms, he has become disaggregated from his creation and now his only role in connection to the painting is that of spectator. In that light, the identifications which Hartley might make for each sign or for each element on the canvas are merely part of his own interpretation. They do not take us to the end of meaning.

We do, as viewers, possess interpretive signals for decoding this text in the initials and in the numerals. In the bottom left corner the artist depicts the letters Kv.F. In the center of the canvas, a letter E with a suggested Q are depicted next to the number 4 while the number 24 appears toward the bottom right. The shapes used to render these characters

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[9] Robertson provides his eloquent description of the formal elements: "It presents the body of Freyburg—headless—as a battle trophy, larger than life: the breastplate or cuirass, defined by flags, becomes the shield behind which the tips of lances project. At lower left and right are a helmet with Freyburg's initials and tassels from the sash, placed to mimic the iliac crest of his hips; at the bottom and center, covering his genitals, is a red cross, with a spur from his boot next to it. And over his heart, on a triangular plate from which hangs regimental tags, is the Iron Cross Freyburg won with his death; instead of a head, there is a circle cut in half." Robertson, *Marsden Hartley*, 56.

[10] Weinberg, "Marsden Hartley: Writing on Painting," *Marsden Hartley*, ed. Elizabeth Mankin Kornhauser et al. (London, New Haven: Yale University Press, 2002) 130.

[11] Patricia McDonnell references George Chauncey's term "dropped hairpins" to indicate subtle messages within artwork or literature which signal homosexual underpinnings. McDonnell, "Essentially Masculine: Marsden Hartley, Gay Identity, and the Wilhelmine German Military," *Art Journal* 56 (1997): 65.

are themselves arbitrary linguistic signs, mostly limited to use in languages originating in Western Europe. In that sense, they contain within their own existence the presence of a Western (a confluence of German and American, as we will see below) orthographic system; and the presence of this system thereby excludes most other forms of written communication. These figures, nonetheless, function in the painting as components of a visual image and not say, as those printed on the page of a book or in a newspaper. The letters are *painted* on. This new context alters their communicative role and destabilizes their meaning as pieces of text. But these letters are not depicted separately on the canvas. They are shown together and in a certain order. The K and the F too, are capitalized while the v is lower-cased. This arrangement implies a specific meaning, or a set of specific meanings, which simultaneously limits as it un-limits the potential interpretations of these signs. Within the codes of that Western language system there are only certain combinations which make sense. Yet we have two language systems with which to potentially work here: English and German. I say this since Hartley was an American yet many of the painting's first audiences would likely have been German.[12] Today, however, access to the image is open to individuals of many more nationalities through journals, magazines, books, the internet, and other sources. Thus the potential linguistic codes which inform viewership of the painting are far more numerous. While this opens possibility for new readings, understanding the letters and numbers as

they would function in a text still restricts the painting's interpretation to individuals with access to the visual codes of Euro-American languages.

Other linguistic signs act similarly within the painting, notably the number 4, the number 24, and the letter E. The letter E appears twice in the painting, which distinguishes it from the other letters in the lower left.[13] In the first instance where the letter E appears just below the triangle and cross, a smaller letter Q accompanies the larger E, while in its other incarnation the E stands alone. In this manner, the letter E might very well function differently in each case; on one hand the letter stands alone while on the other, it serves with the letter Q as part of a pair which has a conjunctive meaning.

In a pictorial sense the numbers (or the representation of digits, such as the numeral 4) possess a greater possibility for variation than do their forms written out (such as the word *four*). In reality, these letters and numbers engage with processes of inclusion and exclusion on cultural and linguistic levels which go far beyond Hartley's own personal experience. They entail, as a matter of course, all experiences and all histories which those signs contain in their own right. For one thing, while we might interpret the character 4 as meaning *four*, the painting would have originally been seen by many German audiences, for whom this character signifies *fier*. However, only one system can act upon

[12] As Robertson mentions, Hartley had one final exhibition in Berlin before his return to the United States. Robertson, *Marsden Hartley*, 66.

[13] Weinberg indicates that this letter "E" also functions as an initial. Where he cites Rönnebeck identifying the letter as a sign for Queen Elizabeth of Greece, the patron of von Freyburg's guard, Weinberg also makes mention that it stands for Edmund, Hartley's first name before he had it changed to Marsden. See Weinberg, "Writing on Painting," 130.

the painting at a time. The interpretation of the character 4 as *four* necessarily precludes the interpretation of the character as *fier* and vice versa. Additionally, in the presence of *four*, there is the absence of *fier*. Similarly, the number 24, which English-speakers read as *twenty-four*, might also have been taken to mean by its original audiences in Berlin as *fier-und-zwandzig*. Though a similar situation exists, the interpretive potential is even further complicated in this example since Hartley connects the two characters, 2 and 4, to each other. And so the two numbers act in concert. In this situation, our interpretation of the 2 relies upon our understanding of the 4. Thus, our interpretation of one element affects our interpretation of others. On a larger scale therefore, our interpretation of the 24 in one section of the painting consequently affects our interpretation of the 4, which stands alone in another section. The implications are larger with the initials Kv.F, however, for they affect the interpretation of the entirety of the canvas and not just one single element. Hence, if we accept that the initials Kv.F stand for Karl von Freyburg, then the number 4 must signify an element which fits into that interpretation or, in other words, it must refer to von Freyburg's regiment in the Kaiser Guard, as Rönnebeck states. On the other hand, if we do not accept that fact and return to these initials as formal elements of visual imagery, the possibilities for meaning in these letters and numbers open and we are free to construct new interpretations for the painting which do not rely on Hartley's biography or on his relationship to von Freyburg.

Postmodern Analysis

As the museum description cited above as well as several art historians note, Hartley engages with the visual vocabulary of Cubism, remolds it, and mixes it with his own incarnation of Expressionism.[14] Robertson, McDonnell, and Weinberg make cases as well for ties between Hartley and militaristic, homosocial undercurrents in Berlin. McDonnell in fact explains that Hartley's painting interacts with certain motifs of homosexuality that pervaded popular images of the German military before World War I.[15] Still, these artistic and social influences are only two veins of culture with which Hartley's painting engages, though they are the main two on which recent scholarship seems to focus. Nevertheless, *Portrait of a German Officer* clearly engages with other elements of artistic and visual culture. Almost every single object in the painting is an appropriated image. Indeed, as Roland Barthes would say, "The text is a tissue of quotations drawn from innumerable centres of culture."[16] A strand of this "tissue" which we might consider is Hartley's use of flag imagery. As I have mentioned previously, William H. Robinson has provided a list of the flags which we might expect to find:

Many of the color patterns in these paintings also evoke associations with specific subjects: black-and-white stripes with the historic flag of Prussia (and the

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[14] Cassidy, *Marsden Hartley*, 2; Robertson, *Marsden Hartley*, 64; Weinberg, "Marsden Hartley: Writing on Painting," 129; also, see museum description from the introduction.

[15] McDonnell claims, "...during the time that Hartley lived in Berlin, the German military symbolized homosexuality. It was a deeply rooted trope on the street as well as in popular press and international journalism." McDonnell, "Portrait of Berlin: Marsden Hartley and Urban Modernity in Expressionist Berlin," *Marsden Hartley*, ed. Kornhauser et al. (London, New Haven: Yale University Press), 53.

[16] Barthes, Roland, "The Death of the Author," *Image, Music, Text*, trans. Stephen Heath (New York: Hill and Wang, 1977), 146.

Hohenzollern monarchy); black, white, and red in horizontal bands with the national flag of the German Empire (adopted in 1871); black, red, and gold horizontal bands with the flag of the German Socialist movement (later the Weimar and Federal Republic); and blue-and-white diamonds with the flag of Bavaria.[17]

Hartley appropriates these flags and recasts them for his own artistic purposes. Though the personal significance of such images might lie implicitly within his representation of them, Hartley cannot remove the signification already intrinsic to these flags. His representation of various flags engages with elements of distinctly German social and political culture at the beginning of the twentieth century. If Hartley encountered these flags on parade in the streets of Berlin, they would have been to him simultaneously a type of presence and a reminder of absence for the German states which they were to represent. In this sense, the flag images function within Hartley's painting as remnants of borrowed cultures, of *appropriated* cultures. However, in this appropriated setting, Hartley converts the images of the flags so that they no longer function as stand-ins for particular German states, they now become elements in his own artistic vocabulary. This vocabulary, furthermore, has personal significance for Hartley and becomes interpretable by viewers in different ways.

Another image clearly appropriated by Hartley is at the very apex of the composition: the Iron Cross. Rönnebeck tells us that Hartley uses the medal designed by Schinkel in 1813 as his

inspiration.[18] This Iron Cross itself comes from an appropriated image which descends from a long lineage of appropriations with its own history that exists outside of Marsden Hartley's sphere of influence. Furthermore, the cross has not ceased its interaction with culture and history upon Hartley's completion of his painting. Honestly, the association of the Iron Cross with the German military reminds me of the shades of Nazism which hang like a shadow over modern history. While that association is obviously not intrinsic to the sign of the Iron Cross itself, nor does it figure into Hartley's own original use for the image, I would argue that it is still now part of the reality which potentially informs viewership of *Portrait of a German Officer*.[19]

Other objects and patterns as well function in a similar manner. For instance, the checker pattern from a chessboard is evidently cited by the artist. As noted above, Rönnebeck states that for Hartley the pattern signifies von Freyburg's love of chess. Perhaps Hartley was in fact inspired by his intimate knowledge of von Freyburg's pastime. Even so, this does not mean that von Freyburg is solely responsible for the game's association with a pattern of

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[17] Robinson, "Marsden Hartley's *Military*" 14.

[18] Robinson, "Marsden Hartley's *Military*," 16.

[19] To illustrate this, an artist from recent years, Anthony Viti, has enlisted Hartley's imagery of the Iron Cross in his own work commemorating the tragedy of AIDS. Here, the Iron Cross is once again appropriated, just as Hartley has done, and it once again has its meaning changed through use. This is not the Iron Cross of the German military that Marsden Hartley himself appropriates. No, Viti *re-*appropriates Marsden Hartley's already appropriated image of the Iron Cross. See Meyer, Jerry, "Profane and Sacred: Religious Imagery and Prophetic Expression in Postmodern Art," *Journal of the American Academy of Religion* 65, (Oxford: Oxford University Press, 1997), 33.

white-and-black alternating squares. Von Freyburg cannot be the only source upon which Hartley draws for this motif. Further, when I see the pattern, I also think of a racing flag or a mid-century diner's floor tile. While these associations are mundane, banal, and possibly irrelevant to the painting, I feel they demonstrate the plurality of sources of inspiration for any single image. The other objects, often interpreted as accoutrements of a German military uniform, no less exemplify this principle. Hartley cannot, through his painting, have securely patented the meaning for these articles of military regalia nor claimed the monopoly on their signification. In fact, I contend that what makes such objects so clearly identifiable for historians and other viewers is the fact that these images have existed for a long time in places other than *Portrait of a German Officer*. Viewers must have already had access to these codes before the painting existed in order for these images to be understood.

Hartley paints a canvas full of imagery that embraces German military traditions and idolizes German soldiers yet, as I have stated, Hartley himself was American. Still, McDonnell and Robertson both note that Hartley found himself quite at home in Berlin. McDonnell states that Hartley seeks to capture the spectacle of a city that was alive and vibrant, teeming with "crowds, colorful pageants, cleanliness, and beautiful men."[20] In *Portrait of a German Officer*, remembrances of these parades abound

with all the banners and motifs of what some might call "empty public rhetoric of war and patriotism."[21] This active and energetic city was the Berlin that Hartley observed while living there intermittently for a period of more than two years.[22] For others, nevertheless, Berlin was an industrial city that functioned "'with the regularity of a motor,' a city where (unlike Walter Benjamin's Paris) people do not promenade."[23] I believe that both of these perceptions of Berlin work upon the painting. With its cascading patterns of squares, triangles, bars, and curves, *Portrait of a German Officer* visually acknowledges all the teeming activity and bustling spectacle which McDonnell maintains was characteristic of Berlin at the time. However, the objects which these shapes represent—their signifieds—are all clearly synthetic and man-made. Their existence in the painting thus reminds the viewer of production and industry. As Robertson states, the military uniform itself represents "the most regimented and institutionalized expression of governmental power."[24] Hartley expresses this static rigidity within his painting yet he imbues it with a passionate rebellion of that same uniformity. While Robertson posits that in the army, the individual becomes a "standardized product," in Hartley's painting, the military uniform is "endowed with a private, erotic power."[25] The spectacle of the city which Hartley captures therefore has two sides to it, one of voluptuous energy, the other of standardized uniformity.

If the military uniform provides the

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[20] McDonnell makes an accurate assumption; Berlin was a young city and in many ways it was welcoming to and full of outsiders. Jay Winter and Jean-Louis Robert note that "33 percent [were] under the age of twenty," while "about three of every five Berliners came from elsewhere". Winter and Robert, *Capital Cities at War: Paris, London, Berlin 1914-1919* (Cambridge: Cambridge University Press, 1997).

[21] Weinberg, "Writing on Painting," 131.
[22] McDonnell, "Portrait of Berlin," 39.
[23] Winter and Robert, *Capital Cities at War*, 48.
[24] Robertson, *Marsden Hartley*, 63.
[25] Robertson, *Marsden Hartley*, 63.

most apparently unifying motif of *Portrait of a German Officer*, then the repeated suggestions of buttons, epaulets, helmet plumes, and other paraphernalia formulate a certain military identity for the subject of the portrait. Donna Cassidy shows that the military uniform in Hartley's painting connotes the idolization of the "masculine ideal."[26] She notes too how Hartley depicts the uniform without a body, or the ideal without a corporeal subject. Furthermore, I suggest that the subject of the portrait does not actually exist. The painting is a signifier without a signified. Recent scholarship nevertheless asserts that Karl von Freyburg is the subject of the portrait in order to construct narratives of an ill-starred (possibly unrequited) love story between the artist and his deceased friend. However, while I have maintained that this is a possible interpretation, it is not the only one. Moreover, I do not believe that the painting fundamentally requires a subject to unify its contents under the status of portrait. What if we let the subject remain *un*-unified, fragmented beyond recuperation? This seems more in keeping with the visual and formal elements of the painting itself. All of the objects which we have discussed appear as fragments of a whole, thrown into a jumble, a flurry of discordant imagery. Letters, tassels, feathers, flags, shapes, medals, and all manner of objects bombard the viewer on all levels of representation. They exist on a visual battlefield within the image. Still, where is the subject in all of this? If clothes, flags, and medals create the identity of the subject, then we have the identity without the person. For no *person* is at all represented, despite the aforementioned efforts by art historians to render a

human figure from the arrangement of objects.

Conclusion

I began my discussion of *Portrait of a German Officer* with a formal analysis in order to root my subsequent arguments in the painting itself. The use of two theories—semiotics and postmodernism—on the other hand, has presented several challenges to my reading of *Portrait of a German Officer*. One primary challenge in working with semiotics came from determining essentially *whose* semiotics. To formulate my own discourse, I looked to Ferdinand de Saussure for help, as well as Rosalind Krauss, Norman Bryson, and Mieke Bal as I tried to blend my understanding of these differing approaches into my own synthesis of the theory. I found it necessary to restrict my analysis to a treatment of the letters and numerals or, the elements of written language represented in the painting. In my estimation, art historians often use these elements merely to reinforce their interpretations which favor the artist's biography and scholars often seem to overlook the characters' potential implications as signs. Still, in order to maintain a clear and succinct argument, I felt obliged to occlude an examination of the roles of other signs which also exist in the painting but which function differently, in particular the flag-images.

I sought then to address the flag-images as objects of appropriation by the artist in my postmodern approach to the painting. My obstacles with using postmodernism to read this image primarily sprang from my own temptations to place the painting within the context of Hartley's biography. Several sources which I considered, including McDonnell, Robertson, Cassidy, and Weinberg, deal with Hartley's visual

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[26] Cassidy, *Marsden Hartley*, 229.

quotation and appropriation, though they mostly broach the subject from biographical perspectives of Hartley as an individual. This tendency seemed directly at odds with my previous semiotic analysis in which I sought to separate interpretation of the painting from the artist's biography. My goal became, therefore, to show how several elements in the painting itself demonstrate Hartley's appropriation and distillation of imagery and how the painting, not Hartley, interacts with specific visual and cultural processes.

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Time Capsule

Timothy Barta

Table of Contents

Hello to the reader who happened upon this miniscule book drenched in criticism and activism. These pages are not happily laced, but laced by necessity with one person's awareness of this world. This world is a good one, but far from the best. These are eyes of privilege, a white, middle class male with a family accepting of his alternative characteristics, in a town that doesn't shun him for his traits. And if the eyes of privilege can see just how much there is to fix, then I think it should be within reason to hope that the whole world can open their eyes, too.

I am an activist and through poetry and other means, I hope to inform. The world we live in is a good one, but not the best one. I don't seek to change the world, not alone, anyway. This is a global life we live and I hope to open the eyes of whosoever digs up this small tome of commentary of the world as it is, or as it was when an observant, curious, and critical twenty-one year old penned it. It's a good world, but not the best one. I hope the reader's world is better and lament the reader whose world is worse.

If the reader is from the now of this writing, I hope that person, whatever race, gender, creed, nationality, class, education, age, or whatever other societal box holds that person, that they learn, question, get angry, act, communicate, and sympathize, not with me, but with the countless victims who suffered enough that a landlocked Lawrencian put pencil to paper and broadcast his heart and mind for the world, however small, to see. And the world is a good one, but certainly not the best.

I tell the story of the snapshot of this world my eyes could see, and as grim as it is, no photographer, no matter how skilled or ambitious, can take a comprehensive, detailed photograph of everything, no matter how small the world is. A single person's eyes cannot see all the problems or express them in a single manuscript, no matter how small the world is.

And the world *is* small and beautiful, good, but not the best. Certainly, though, our world is small. Our barriers are more synthetic than the bottle that holds your water. Those plastics form on a physical level; our barriers are often solely conceptual, and we can't make them real.

Instead of building these walls to differentiate, we should seek sameness, unify, and act together for change. I can hazard a guess about you, dear reader, you are hopefully curious, likely hopeful to see justice for everyone, and passionate about things important to you: loud about what upsets you, active to change it, doting on your interests and willing to share.

I hope you share your response with everyone. I hope you break the barriers between the "us" and the "them" and let the world know that this is a good world, but not the best. It's not easy to stop "themifying" others, and it's an eternal, internal struggle to fight off the barriers. I'm not innocent, I still do it from time to time, but it's crucial to acting, unification. Alone we're left to our own devices. Together we are us; we are *all* of us.

And all of us are powerful, many of us alone, but united far more formidable. Woman, man, child, it doesn't matter, if you have something worth fighting for, I hope if and when the time comes, you fight for it. If you won't do it, who will? Don't surrender to the bystander effect. The ones all around you expect the same as you do, so meet their expectations, don't wait for someone else to meet yours.

This world is a good one, but not the best. There are many flaws, many concerns, many worries, far more than one could list alone. The list is ever changing, once one thing is fixed, eyes must be drawn to whatever else will follow in its wake. I feel obligated, for context's sake to list a few things that are worth knowing about my now, that you, the reader, may not have in your own.

At the time of writing this, there is still wetlands

in Lawrence, fracking is
legal, Africa (pick a
country) is struggling,
Joseph Kony is still alive,
we have had only one nonwhite
president (still in office,
running for reelection) and
no female presidents in the
United States. Gay marriage
is legal in some states, but
not all, some places have
legalized bullying on behalf
of religious beliefs, people
are arguing a woman's right
to choose, and a woman has to
work nearly seventeen months
to make a man's yearly
salary. Further, certain
groups argue against
contraception, even in lands
where HIV is rampant, the
cover of People Magazine is
more important to most than
malaria, we still use gas
powered cars, all unleaded or
diesel, some hybrid, very few
hydrogen and electric cars,
leaders seem to fear solar
and wind power, fuel for
vehicles is around $4 a
gallon. These are just a few
situations two American eyes
see, and it's nowhere near
comprehensive. I hope my
children can see the
wetlands, and I hope my wife,
should I have one, makes as
much as I do for the same
work, and I hope there's a
woman president, or a non-
Christian president, or
another nonwhite president,
or even a nonpartisan
president. I hope I live to
see a day when most Americans
don't consider socialist or
communist inherently bad
words, but rather just
economic and political
philosophies.
   So I bury this time
capsule in a pit of books,
hoping that, one day, I, or
someone else reads it. I hope

when it is read again, that
things have changed and for
the better. I hope that I,
and others like me now and
later stand up for what we
hold dear and don't let
intimidation or ignorance or
apathy (worst of all,
apathy,) be the loss of
whatever we respect. Once
things are taken, it is far
more of a challenge to get
them back than to fight to
keep what we already have and
love.
   These are things to
consider and I hope they are
better off in your now than
mine, but to make them that
way, those of my now need to
act on what hasn't yet
improved, and preserve what
is already improved, and
those of your now need to do
the same where necessary.
This is a good world, but not
the best. So I hope that one
day a reader reads this from
a *better* world, since best is
asymptotal. Just because we
can't reach the best world
doesn't mean we can't be
striving for something
better.
   So with that in mind,
read these pages, and, carry
with you in life, the idea
that this world *is* a good
one, just not the best.

On My Poetics

Typically the way I write is
based on a sudden awareness
of a situation I want to
bring to light for others. I
typically will hear something
that simply outrages me: the
situation in the Niger River
Delta, gay rights struggles,
really, any injustice. I
write in free verse most

often because it is where I
feel comfortable, but also
where I feel I can give the
most merit to the things I
have written.

I often start with a topic
and develop a poem around it,
usually it just comes as I
write, though on occasion a
particular line will stick
out ("Even More Homeless" or
"Never Seen The Night" for
example) and I will try as
hard as I can to develop
something meaningful around
it.

Sometimes I am inspired by
things I read to create some
form of homage (as in the
case of the beautifully
dilapidated visuals in Allen
Ginsberg's Sunflower Sutra or
the general tone of Amiri
Baraka's writing.) Once I
feel the inclination to write
something, I tend to look at
what it is I like about a
piece or author and attempt
to bring about that in
something I write. The most
successful example of that in
my writing, I feel, is In
Response To: Sunflower Sutra,
and it is why I decided to
keep that name.

I intend to inform people
with my writing. I consider
myself an activist, but I
know that an important step
in bringing about change is
making people aware, and as
such, I feel my poetry is a
mechanism by which I can lead
others to bring about change,
instead of trying to change
the world alone.

My entrance into the realm of
writing poetry came about
most prominently in my first
year of college, when it was
a venting tool to express my
frustration with my early
years. Over time I became
very opinionated about
various forms of injustice in
the world and realized just
how useful my writing could
be as a tool to spread
awareness.

My style has definitely
matured over the years, I
went from poetry of general
angst to poetry primarily
centered around
sociopolitical criticism. I
have other styles of writing
(such as the first section,
in which I took a few stabs
at writing visual poetry to
varying levels of success,)
but I favor sociopolitical
commentary because I tend to
feel like it has a chance to
persuade someone to do
something, as opposed to
being more aesthetic.

This particular collection
works doubly with the title
Time Capsule, because it
includes poetry spanning my
entire time at the
university, and also it works
as a collection that, perhaps
in a few years, maybe
decades, I can look back on
these writings and see how
life is (hopefully)
different, *for everyone*.

Visual Poems

I open this series with a
series of poetic images, the
first of which is a visual of
the world after we are gone.
The poems that follow it are
a three part "poetic comedy"
which will display a trip
from the place most disrupted
by our hands to a place which
has the least disruption. The
last place is not absent of
our interaction, but we work
mostly in symbiosis with it.
The visuals should display a
place which is to be lamented
for how it has been treated
and as we leave the trilogy,
the visuals shift to a place
which is fairly close to a
peaceful interaction with the
environs that surround us.

The "poetic comedy" aspect
comes from Dante's Divine
Comedy; the first poem of the
three (Potentially also
titled Land of the Forgotten)
is supposed to parallel Hell,
and makes a few references to
Dante's travels within; the
second is supposed to refer
to Purgatory (hence the
judgment theme at the
beginning); and the third is
supposed to refer to Paradise
(though I took liberty in
saying that it is not a
perfect place, as I am of the
opinion nothing can be truly
perfect.)

The Abandoned

Crumbling concrete walls
    covered in cracks
    and murals from
    graffiti artists
    seek practice
Tags, rags, and shopping
    bags, abandoned
    empty Krylon cans
Tables and fixtures in
    disrepair, nature
    taking back man's
    attempt to control
    her.
A bird's nest with three
    hungry chicks
    crying for
    breakfast.
The only light in this three
    story edifice is
    natural light and
    burned out hanging
    lamps swinging in
    place by a gnawed
    power cord.
Broken glass and rubble span
    the molding
    thatched and frayed
    nylon office
    carpet, damp from
    the rain leaking
    through the
    fragmented window.
A dank, musty odor wafts
    through, the smell
    of runoff and
    compost.
A fax machine in three pieces
    with the glass
    broken out roots
    itself into a
    powerless socket in
    the wall.
Somehow still beautiful, even
    comforting to the
    right eyes.
Something elegant about
    Nature's readoption
    of the stone, sand
    and metal that was
    so carelessly left
    to rot by those

that thought they
            owned it.
The outside walls covered in
            vines which
            strangle the statue
            on what was once a
            lawn.
Wind and sun have turned the
            sign into a faded
            and forgotten image
            of the place this
            used to be.
Scraps of leftover material
            which cost too much
            to reclaim and more
            were scavenged by
            buzzards and roots
            and vines, a spool
            of cable stands
            tall and rusted
            against what was a
            garage wall.
The large lifting door half
            opened and covered
            in green and black
            spray, windows
            broken out, a
            raccoon lazing
            about in a leftover
            cabinet, rusted,
            with cracking
            bubbled paint, bits
            of fast food
            rappers and old
            cups of soda make a
            bedding for the
            creature in the
            part way opened
            apartment.
Wildflowers overtake the
            crumbling planters
            and the occasional
            tree shades the
            land.

In Response To: Sunflower Sutra

Manufactured corpses
            scattered disrepair
    shattered
            alone
    sullen
        decaying
With tree root wires,
        rebar
            pipes
    trunk of oil drums
            leaves of scrap paper
            and foil
Leaking batteries, a head of a
            doll, a broken glass
            I raise
Here's to you, the fallen,
            forgotten
To you, returning to the soil
            from whence you came
I raise this shattered glass to
            your shattered
            window, long dead
            train car
No sign of natural life is seen,
save the uprooted, rotting husk
            of a sunflower
The lone soldier of the natural
            living,
destroyed by that which could
            kill the nonliving
Seatless chairs, broken
            wheelbarrows,
busted cars crying shattered
            glass tears from
            their once glowing
            eyes
The colors once vivid fade to
            gray and rust and
            black.

Farther from the center of Dis,
            a Stygian flow of
            motor oil and battery
            acid,
Yet still so far less harsh, as
            grass reclaims the
            loosely-defined soil,
growing where it can (and maybe
            shouldn't.)
A scrapped, upturned hood of a
            truck turned
            flowerpot as it fades
            to red sand

Cavity filled teeth of a
        dilapidated, decaying
        babygrand lie in ones
        and twos on the
        ground
Memories of the dead past,
old fallout shelter signs shot
        to pieces,
fractured glass soda bottles,
floorset wooden cathode ray
        screens sans glass
        rot, a home to
        termites
Old unloved garden tools wish
        for their youth,
when they were something.
Foundations they dug, yards they
        beautified,
now a redbrown neckless head,
        nothing more
Plenty of things don't know what
        they are anymore,
compost and shredded scrap,
dying undignified in heaps,
mass graves uncovered.

Outward the upper tiers of Hell.
Brave hungry birds risk
        poisoning and
rats hide in old soup cans
        breeding rats and
        rats
Roaches explore the wasteland,
rotting food and old stained
        fliers,
single gloves, shoes, and socks,
dried tissues and antifreeze
        bottles.

To the vestibule, a wasp nest
        built on an old piece
        of plywood
A Fox sniffs for scraps,
bringing mechanically separated
        chicken to its kits,
leaving the plastic doll with
        sauce-stained dress
        behind,
only interesting to humans,
or for teething cubs to find on
        their own.

The Land of Judgment

Outward from the wasteland
to the social realm
Where there are many "toos"
His hair is too long
Her dress is too short
Her hair is too curly
In some place, his skin is
        too dark
Too different
Too conformist
Too loud
Too quiet
Too smart
Too dumb
Too mean
Too *nice*
Too cool
Too many piercings
and a tattoo, too.
Everyone has to break their
        back to get ahead
Or lie
Or steal
Or cheat
Or threaten
Or hurt
Or lie
Or *lie*
It's all fair.
The "fair" lie in a
        disadvantage.
Those who would do things the
        "right" way get
        left behind
The lazy and selfish
        venerated
But there are
The hard working
The kind
The "fair"
Those who listen
Those who want to help
Apathy fought with passion
A way to redeem oneself
To escape and be purged.

Past The Gates

Outside the walls
It's dangerous
There are many threats
and few guarantees.
No batteries
No medicine
It's cold
It's hot
No mass communication
Not much love.
But.
Not much hate.
A spectrum of colors with no
paints or synthetic dyes.
Music without music
A menagerie left and right
Large and small
A wide choice of scenery
A little slice of heaven
Some can stay forever
Many can't
Most don't want to.
There is evidence of the
inside,
a shred here,
a scrap there,
but for the most part, purged
or integrated, the land with
the leftovers
Trunks consume bicycles
Current events turn to soil
Artificial mountains of
abandoned shelters covered in
natural moss and vines
Organic
It heals without aid
Outside the walls.

Excerpts from

See Then Now

A project I've been working on after hearing a reading and having a conversation with the wonderful Jamaica Kincaid, *See Then Now* is a collection of poems which criticizes the present world by looking at the past. The first part (some of which is shown here) focuses on how some things have not changed as much as we would wish they had ("See then now,") the second on things that have changed for the worse ("I want to see then, now,") and the final on things I hope the future keeps from our time ("I hope they see, then, now.") I was inspired to write it after mishearing the title of her book *See Now Then* and I was filled with ideas and began writing.

See Then Now – Violence

Killing in the name of

religion

race

gender

sexuality

politics

culture

geography

...

Maybe it'd be easier to list
 what isn't seen
 as worth killing
 for:

That said, it's still much of
 the same.

However many hundred,
 thousand, million
 years

We've been "sophisticated" we
 still fight

Not just kill
Abuse
Mame
Wound
Attack
Hurt

Not just physically
mentally
socially
emotionally
economically

Not just then

Now as well

So see then now

See how we've changed

See the wars

 the genocides

 the fights

 the arguments

 the blood, sweat, and
 tears

Not going to construction

But destruction.

See Then Now –

Gender, Sex, and Sexuality

Television screens spouting
      newsclips still
      play
Statements by leaders or
      those who want to
      be
Claiming some blight on
      humankind
Caused by those who
      apparently "made up
      their mind" to like
Those of their own sex
And
"Women" who work as hard as
      "men" are paid less
      in 2012
And
People ogle strangely at
      those who dress how
      they choose, how
      they feel
If how they choose doesn't
      meet up with
      society's
      predisposed
      expectations
Of how they should, a "man"
      in a dress, a
      "woman" dressed as
      a "man"
Decades after the Stonewall
      Riots
Does "woman" or a "man" have
      any <u>real</u> individual
      value? Or is it a
      burqua
Thrust on our shoulders to
      limit our vision of
      ourselves
and others?

See then now

We haven't changed in
      message,
Only in subtlety.

Where is the hit single where
      a "man" confesses
      "his" love to
      another "man?"
Or "woman" likewise?
"Women" are still shoppers or
      nags or whores or
      hags
"Men" are still the
      breadwinners or
      slackers or studs
      or professionals
"Women" still nurses
"Men" still doctors.

Some insist that men should
      cloak emotion
Or women should cook or clean
      but *certainly* not
      manage or lead.

Some insist that
      heterosexuality is
      the only "natural"
      sexuality which is
      both false and
      irrelevant to any
      value judgment they
      would splice
      thereto.

Some still talk of gayness or
      gender
      nonconformity as a
      disease, mental or
      <u>even contagious</u>,
      even contagious
      through a
      television or
      computer screen.

And there's a hostile,
      caustic recoil

Some insist a "man" can't be
      raped
Or that "women" don't abuse
Or that a "woman" who acts
      "girly" is wrong

for not being
something "she" may
not comfortably be.

And there's hostile, toxic
infighting

Those who would promote gay
rights
Exclude bisexuals
Those who might promote gay
and bisexual rights
Exclude trans* people
They are seen as
"complicating" the
issue

As if it were easy.

See Then Now –
Nationalism

The disaster arguably still
ongoing that was
once called The
Great War was
Sparked by evergrowing
national pride
building to toxic
rivalry.
The archduke likely never
expected he'd be
world-famous as
Little more than the
catalyst, not by
intent, mind you,
of a decades-long
disaster.
Yet when I see a flag flying
I smile and
appreciate the

rewards of being
American,
We are not number one, I
don't believe that
as many do:
There are those who would see
it a <u>crime</u> to burn
that banner in
protest
When nothing is more American
<u>than</u> protesting the
establishment;
it's our history.
People killing Iranian women
with notes saying
"go back to your
country."
Well, come to my world. A
world of *our* world:
I couldn't care
less your homeland,
You're from here to whatever
degree hereness
unites, not
divides.

But see then now?
A soccer game can cause a
riot
A "foreigner" is seen as a
threat to the home,
not an opportunity
for knowledge or
friendship.
A flag is a symbol whose sole
purpose seems to be
division
A world that depends on
globalism treats it
like a necessary
evil
When it has such good
intentions...

What is better than us?
However big that us
may be?
Water is only a barrier if
you see water as a
barrier,
Mountains only walls
If you want to keep something
out.

See Then Now – Post/Colonialism

I see very little difference
        in meaning often,
        'twixt
        postcolonialism and
        its predecessor

Nigeria is still an
        extraction-based
        economy where the
        public is
        subjugated by the
        oppressive ruler,

Kenya the same.

Nary any recently "liberated"
        land shows much
        change in
        conditions, in fact
        it can be, in some
        ways

Destructive if there is no
        assistance from
        those nonresident.

Extraction without limits for
        "the better of the
        nation" does little
        for the masses and
        less for the
        individual.

So see then now, occupation
        from afar,

*miserydiseasestarvationviole
        nce*

And when the masses or the
        individuals have
        had enough, they're
        the bad ones:

For disrupting the
        established order
        of things

Shut up and take your place

Below the radar and feet of
        your masters.

Gas flares and indentured
        servitude

The king is not from afar but
        right in your very
        home

And he is far more

Ruthless

Than the former occupation

Ever was.

See Then Now –

Apathy

Way back when, some lands
        were isolationist,
        and the individuals
        likely didn't care
        about those far
        away

What happened in Norway
        probably wouldn't
        be in the
        conversation for
        someone in the USA,

They may not even know where
        Norway is.

So...

See then now

When in the USA have you
        heard about foreign
        politics?

On the news?

It's not like that
        everywhere.

I'm guilty as I write this,
        my lens is narrow,
        as well, but I'm
        aware of it.

We are a world; we are a
        global system.

There is no them unless you
        make one

So why don't we care about
        us?

We only care about the "me"s
        or, at most, a very
        local "us."

People are dying

The world is, in many ways,
        falling apart.

But we shrug and putt around
        in our SUVs

In our off-shored sweat shop
        tees

And think "well it's someone
        else's problem."

"They're so far away"

"It's their fault for not
        doing something
        about it."

Meanwhile we drive past
        homeless at home

who will "probably spend the
        money on booze"

Like you can blame them,

And do.

We drive past homeless at
        home

who "probably aren't even
        looking for a job,
        expecting *us* to
        take care of *them*."

And we never stop

To ask

If that's true

Simply

Because

We

Don't

Care.

See Then Now –
Exploitation

There was a time not so long ago
where the workers had
no say in the
conditions in which
they worked.

Someone may have "Sold" their
"soul to the company
store" or been stuck
in work situations
with dangerous white
phosphorous.

And there was little they could
do.

There was a time when good
medical care was for
the wealthy and home
remedies were for the
rest of us.

Even now, though, to some
bosses, the customer
is always right

Even when they are wrong.

Even now, though, there are wage
struggles while top
level execs sit on a
chair made of money
on a floor made of
money in a house made
of money

Even now if you get ill you may
have to travel miles
out of your way

Because the local hospital

Is out of network for your
insurance

See then now.

Little has changed

Life-sustaining pills cost
unfathomable prices

Women still make less than men

Corporations are people, amoral
people with wealthy,
privileged heads
making decisions for
the body and
environment

Extraction of chemicals
underground poison
water, land, plant,
and animal

Corporations fund shoddy
governments in poor
countries to keep
quiet anyone who
decides "hey, I don't
like suffering."

Everyone is of the "me first"
mindset.

Everyone wants to "get" the
other guy.

No one thinks about the other
guy's situation as
long as they can get
ahead.

So sit down and take a look
around

Because

Life

Is

Not

Easy

For

Anyone.

See Then Now - One True Religionism

The Inquisition
The Crusades
Countless genocides west and east
Killing
Hating
Dividing
Greed
Torture
In the name of
The one true religion

Whichever it may be.

But that's all in the past...
Or not

See then now

Picketers saying who god hates
What you can or can't do

Whether you believe or not

And they'll let you know just
what's in store
For you
According to them
Those humans
Those fallible humans
Know exactly
What an omnipotent god
An omniscient god
Often a benevolent god
Hates.

Disbelief in their gods
Gives them the right
In their heads
To harass you
To picket you
To spit at your feet
For being different

Faith interferes and inflicts
itself
On science
Placing road blocks on proper
education for
Your children
Your doctors

On a subject we can't truly know
If there even is a god
What could mere humans ever know
About her or his (if such terms
even mean anything)
Will?

Excerpts from Life Is Beautiful

Picking The Brain of the Insane

Life Is Beautiful: Picking The Brain of the Insane is my earliest, and longest running project at this point. It intends to be a larger book than the others, and is a collection of sociopolitical, philosophical, and various other topics of poetry, essays, and prose which intends to span a broad range of ideas, genera, and topics while still staying within my personality and overall style.

Embers

The leaves fall like embers
and I am seared.
Gas-choked rivers glow from
everburning flames.
The air of sulfur and
hydrocarbon
cocktail
Lead in the food, lead in the
water
All is gray and black and
fiery oranges and
yellows, and reds
of blood and flame
alike.
Pacifists pushing for change
for rights
for medicine
for *anything*
Sawed to pieces by automatic
weapons
Or strung over a bar by a
rope

Native creatures and plants
rotting in piles of
soiled compost and
char and settled
smoke.
Where plants till *can grow*
foreign noxious
plants thrive and
animals infest.
A stench of death and smoke
and gas and pain
and gas and blood
and gas as it
chokes.
The leaves fall like embers
and I am seared.
Another day another dozen
dead for a dollar.
Another night, a child with a
fever that could be
cured if the
parents had the
money.
The cover-ups as big names
with big bright
logos fund

government
oppression and
Assure their shareholders
that consumers
won't know a thing
Assure the consumers that
things are
humane
murders
humane
poisoning
humane
abuse
humane
malnutrition
humane
forced poverty
humane
discrimination
humane
back room deals
Nothing to see here.
The spines of the trees crack
and the soldier
woods fall.

The troops roll in as the
ground shifts
beneath their feet.
They make off with their
spoils and leave a
sore and empty
landscape.
The skies weep at the
bloodshed,
watershed for the
wood shed in the
back yard of the
wealthy couple six
thousand miles
away.
The people stood their ground
but voices are only
heard if ears are
listening.
So as the skies cry for
fallen man, woman,
child, beast, and
greens
The ground swells and the
land slides,
burying a village,
the same one that

fought to save the
thicket for fear of
just this.
Twenty-five dead, hundreds
homeless
And the soldiers march on
Another day, another dozen
dead for a dollar.
Men, women, children, toiling
in inhumane
conditions
For black rocks whose
sediment will be
their death within
the decade
In this land of no power,
electrical or
social
For rocks of gold, silver,
whatever else color
for gems and metals
It doesn't matter to them,
it'll never be
theirs
Those gorgeous rocks will
make their home

On the fingers of the wealthy

across seas or vast

expanses of land

From their home, from their

pain, from their

desperation

Missing limbs from cave-ins

and faces obscured

by a layer of dust

Mining under duress of

starvation, no

breaks for putrid

water, restless

sleep, rotten food,

or the unsanitary

bathroom

A child falls to his knees,

overworked, and is

left to die, crying

for his mother,

miles away.

The bodies fall like ashes

and I am scarred.

Never Seen The Night

The child of only nine
Sits in a small pond, not
    clear, but coated
    in a film of all
    colors, tinged with
    a dark brown.
It is the morning hours,
    perhaps just prior
    to the crack of
    dawn.
She doesn't know the meaning
    of such words.
Neither because of education
    or experience.

She lives in the Niger Delta
Once a lush land, green with
    flora, home to
    plenty of
    creatures.
That is ancient history of
    which she knows
    none
Her family "lives" on a
    couple hundred
    dollars a year.
She likely is infected with
    toxins they don't
    know about
Her air is a smog, thick and
    burning with
    petrochemical
    releases.

The land's strangest feature,
    however, is it is a
    land of never-
    night.
In her nine years of
    existence, she has
    never once known
    what night is.
Towering mini-sun spires of
    blazing hot fire
    jut from the ground
    belching thousands
    of degrees.
An eternal sunlight, night,
    day, everyday.
Unlike the Arctic with six
    months of day and

six of night, this
                    land
forgotten
or
ignored
by the oil-hungry lands
                    abroad
is always in a perpetual
                    daylight.

She's nine years old and has
                    yet to see night
Because night doesn't exist
Night is simply another one
                    of the rights
She doesn't receive
where she lives.

A Kid, Four to Seven

I don't know where I am

I am scared

There are more like me, here

What did I do?

Mom, where are you?

    They beat those who don't obey,

    Obeying is beating those who don't obey.

    They taught us how to shoot a gun

    By having us practice on others

    I guess I'm the lucky one.

      I first killed when I was five.

      She, six, screamed for her life.

      As I took my dull knife

      And ran it across her throat

      I didn't feel bad about it.

    Here I lie,

    In a ditch

    Seven years old

    Six bullets in my back

    Dead.

4

5

6

7

Fair Trade

I'm starving, my last meal
was last Saturday.
I'm freezing, all I have is
half a meter of
cloth for a
blanket.
I'm eight years old.
I have seven teeth, three
black, one cracked.
I am almost legally blind,
that's why I only
have nine fingers.
Ten cents an hour, I work to
help feed my
family, my mother
has
AIDS, my father died of an
impacted wisdom
tooth.
My little brother, four, has
Down Syndrome.
My older sister is missing a
leg from an
accident that
seasons your cup of
coffee.

And that shirt you're
wearing? Under the
black dye, is the
blood from my now
missing finger.

Warzone

Tons of machinery making paths
where they choose
Or where they're told
Starving children left out in the
cold
Fires consuming homes of the
innocent.
Over totally unrelated provoking
incidents
Gunfire taking down men, women,
children,
indiscriminately.
Starvation, intimidation,
"salvation," poor
sanitation
Isolation, conflagration,
incarceration, death.
Good, honest people, trying to
live life,
Under constant fear of whether or
not they will get to see
their homes again
Their husbands, wives, children
again.
Deemed infidels, marked for death,
on the basis of a cult
demanding respect
Threats made in the names of gods.
No true foundation for their
discrimination.

Locations destroyed, waste filling
the streets.
While those on their 'mission'
just pass it by,
Any chance of assistance
completely denied
Ignorance, arrogance, militants,
dissonance,
"Reverence," consequence,
vagrants, and fear.
Yet those in charge don't shed a
tear,
Calls for help, yet no one hears
Until the day they disappear.
Dehumanization of those different
from self.
Placing values on a dusty shelf.
Riches brought to rubble, science
blamed for trouble.
Nobody is really safe anymore
If this is city life, I'd hate to
go to war.

Pre-Occupied

The youth are our future
    youth are our future
The lazy youth
I fear for the future
Need work experience
Need work experience, for your
first job
Just get a job
Just get a job
Now hiring
    Just not you.

Those occupiers
Those lazy slobs, wanting free
money
    Says the last Social
Security generation.
Get a job
    Lazy slob
    lazy, wanting free money
Just get a job.
In my day, we weren't afraid to
    roll up our sleeves or flip
burgers.
Get a degree so you don't have
to flip burgers.
Burger flippers failed the game
of life
PhDs flipping burgers
because s/he needs a job
To pay for loans
    for the PhD
Yes, I've graduated.
No, they're not hiring
Yes, I've applied.
Yes, I'm trying.

That lazy youth
Just get a job, stop asking for
handouts.

I did my time, and what's the
prize?
Nothing but a piece of card
stock in a frame, and ten years
searching
Yes, I'm trying.
Since when is it lazy to feel
let down, for not getting a job

in the field of the degree? The
degree that took up a large
fraction of my life?
Yes I'm trying.
No they're not hiring.

The youth are our future.

To hell with the youth.

Even More Homeless

He's only nine.

He lives in a middle class

house.

But short of that, he's

alone.

He has parents, yes

A mother and a father who

Don't really care

To them he's been nothing but

A nine year burden they

didn't want

But had never gotten rid of.

Given the bare necessities

for life

He doesn't tell the kids at

school

who pick on him for his hair

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His out-of-fashion clothes
His height
His weight

After the walk home he says a feeble
"hi mom, hi dad"
As he creeps his way up the stairs
Trying not to distract them from
More important things.
The TV channel changes.
His door closes.

He sits in his barren room at night
A bed (of sorts) and a table loosely
furnish the white box with cracked window.

He may have a house
But he's even more homeless than
The street citizens
The ones who have a community

Friends, even family
Just no permanent residence.

He, nine,
He knows what it really means
to be homeless.
He goes to the same place
every night
But never feels like he is where
He should be.
Somewhere out there
There must be
A parent or two
Looking for a child
While he sits here
Looking
For a home.

Six Word Story:

Poverty

Kids play in an empty apartment.

To Life, Liberty and the Pursuit of Happiness

Hello, my number is 7996,
I'm 5'5", weigh 95 lbs.
And I'm selling my soul
to sell my body
to sell your goods on prime
time commercials.
Who needs self esteem
in light of the American
Dream?
The dream to be whatever you
want to be
As long as the price is
right.

Hello, my number is 7996,
I'm infected in mind,
anorexic,
So I can look good enough
for the social standard
You can see my heart through
my
ribcage, and the shape of my
skull through my mascara and
rouge face
All this for just a taste
Of acceptance.

Hello, my bed number is 7996
As I sit here attached to
machines,
A victim of socially self-
enforced self-destruction
I lie here in this hospital
room
As a blanket is pulled across
my face
I may be gone
but at least I died Pretty,
Right?

Words Like Bombs

Words, like bombs
Can kill
Have collateral damage
Hurt
Breed fear
Control.

Don't think so?

Tell that to the innocent one in
court, deemed guilty of a crime he
didn't commit. When the court
concludes the fit punishment is
"death" for being in the wrong
place at the wrong time.

Tell that to the countless groups
who fought and still do for
equality in the eyes de jure and
de facto while those of the
Bystander Effect keep walking, and
those who would oppress
Keep talking.

Tell that to the victims of bill
collectors. They were committed to
paying and on time, then the
economy happened. Now they stare
blankly out the window, then to

their two year old, then back, to
the pantry, empty, the street, the
phone
It rings.

Words, like bombs
Can destroy
In an instant

And there's no turning back.
The victims may recover
May not, but once the detonator is
pressed
There's only moving forward.

Words, like bombs
Can change everything
In an instant

Once it's done, it's done, and all
that's left is
The fallout
Picking up the pieces
The consequences experienced
By the survivors

Words, like bombs
with shrapnel, sharp, stinging,
piercing
possibly permanently lodged within
can bring immeasurable pain.

Words
Like
Bombs
Can destroy

Sticks and stones:
It's a lie.
Words
Like
Bombs
Are weapons.

Ten People In Ten Sentences

The guy on the corner finds a
    crisis in getting a
    $215 ticket for
    speeding.
A girl halfway around the
    world is
    celebrating being
    able to eat dinner
    tonight.
Some girl in a brand new SUV
    with a rhinestone

steering wheel
cover is freaking
out over not
getting to go to a
movie with her
friend she sees
every day.
A woman, right now, is
thrilled she has a
new skateboard on
which to pull her
legless body
around.
Some three year old is
screaming at his
mom in a grocery
store over coco
crisps.
Some three year old is
screaming for his
mom dying of small
pox.
A seven year old is not
talking to her
parents because she
had her cell phone
taken away.

A seven year old is feeding
her family because
she can't talk to
her dead parents
anymore.
A mother abuses her baby she
irresponsibly had,
but didn't want.
A gay man would do anything
for a child he
can't legally have.

The Corner of Main and Ash

The second block of the main
    street of downtown,
In front of the one-word-named-
    store that sells
Strange clothes, and stranger
    gadgets, run by a guy
    with
No less than three piercings,
    with spiked hair,
    dyed green
On the bench by the planter next
    to the newspaper
    machine
Sits a guy on the guitar, trying
    to eke out a couple
More dollars to pay for his
    girlfriend's ring
He wants to propose on her
    birthday next month
He sings, pours his heart into
    the words as his
    voice rings
Guitar case open, filled with
    change, and a twenty
Clipped to the top in triumph of
    some kind stranger's

Generous gift to a guy in his
    shoes from not ten
    years previous
Farther down the street, a man
    in rags with a sign
Saying "Give me money" or
    something to that
    effect
Unlike many in his situation, he
    didn't fall on tough
    times,
He's fine, he just never tried
    and decides to
Rely on the hearts and kindness
    of hard-working
Fools who think he's unable to
    work for his food
He lives off of free, a strong
    willed greed, not
    caring
If he ever lives in a mansion,
    so long as he never
    has to work for his
    green
In the alley nearby is some poor
    guy with a spell so
    bad he can't get
    hired,

For even the simplest of jobs
    because he can't
    control
His actions, he stares at night
    and shivers from
    chills,
How he'd love to have the
    simplest skills, he'd
    get a job
If he could, but everything so
    far is no good,
He pains from the cruelty of the
    previously mentioned
A miser, lazy, exploiting
    attention, making his
    life
Harder since he can't do
    anything but this guy
    makes
Cash by shyster-like begging

Gambling His Life Away

I'm Gus,
Yesterday I brought my teeth
    into the neck of
    another, like me
She didn't have a chance, her
    body was worn out
    from over breeding,
    her teeth pulled
    out
I did it out of mercy as she
    whined a painful
    thank you release
Just two years ago life was
    good, my kid, I
    think his name was
    Jake,
Let me out for an afternoon
    run,
Next thing I know I'm in this
    pit, just trying to
    survive,
To pad the pockets of some
    person who doesn't
    care about me,
Doesn't feed me, doesn't
    value me,

Doesn't value life,
Tomorrow I'll be tossed in
        the garbage, like
        she was yesterday,
With her, unborn litter they
        didn't realize she
        had.
I miss you Jake.

Where They Go To Die

"Say bye bye to grandma"
The last words I heard from
my daughter
As she left me in this place
Forgotten by God
I haven't seen my family in
four years
That wouldn't be a problem if
that were all
But the nurse
If you can call him that
He finds some sick
entertainment in
Hitting me, unable to walk

Of my own accord, then labels
it a fall and escapes

The last I saw of my great
grandchildren was yesterday
They visit often, but never
me, alive, again
For last night, a nurse, mad
at her husband,
Took our her rage on my frail
frame
Smothered me with a pillow,
if she wasn't going
to see her kids again, she
figured, I shouldn't either.

We, alone, are where we all
end up,
Back in the Earth, before our
time,
We went willingly to the
homes,
Not wanting to burden our
families,
But they will never know,
what truly happened.

Who Can Parent A Child

Murderers

Molesters

Rapists

The clinically insane

Drug addicts

Abusers

Violent maniacs

Irresponsible parents who
leave the knives out

Homeless people who don't
want to work
who claim the kids just for
the perks

A mother who has 15 other
biological kids, only three
from the same father
who wants help paying for
them

Even those willing to
brainwash

... You know, as long as
they're not gay.

Condemned to Death

She was told

She was bad

She was broken

She was an abomination

She wasn't qualified to be a
parent

She was confused

She deserved death

She took it

She killed herself

Because she felt bad

Because she felt broken

Because she felt like an
abomination

Because she felt unqualified
to be a parent

Because she felt confused

Because she was gay

Academic Misconduct

Academic stronghold with a
sports mascot face
With a sports budget
With a sports section in the
newspaper
Where athletes are first class
and ahead of scholars and
aesthetes
Where people come to better
include athletes so they don't
feel alienated.

While...

There is education, yes, but
In some departments
Second to research, while
teaching assistants are the
Sole educators and graders
Students there to learn are
fourth class
Below Alumni (who donate or
succeed in the university's
honor, of course)
Sports fans
And the aforementioned athletes
But the athletes are alienated.
Not we, here to learn, and
heaven forbid you say you don't
follow sports
Or you may as well hide your
face

Disgrace

This campus with white walls and
red rooves
and students and students and
students and students and
students and some athletes, too
-- who are <u>students</u>.
Divide the time and money and
students pay scores above sports
Enroll later, no financial
support
Guaranteed.

Where:

Debate teams win national awards
on the back page of the paper
because our
Basketball team
Lost a game, and that's news.
Academia at odds with its
institution
But few care
And fewer speak out
Because challenge the system and
you're a heretic
Who goes to school to learn?

I DO DAMNIT.

So give me a sign that I mean
something to the place
That took
Four years and
Forty thousand dollars
And gave me a piece of card
stock with a seal.
Maybe.

If that card stock is not too
much to ask, that is.

How To Fix Things

<u>Don't pray</u> for me

<u>Don't pray</u> for change

<u>Don't pray</u> for peace

<u>Don't pray</u> for truth

Look for truth

Strive for peace

Work for change

Think for *yourself*

Letters Between Fools
or
(Words.)

Jon Prapuolenis

Dear Reginald,

    I do not know who you are. It is rather a perplexing situation I find myself in. I feel the unshakable compulsion to write to you. I wonder if you are aware of me. We have never formally been introduced, or at least I do not believe we have. I watched the flowers outside my window today. Not all day, but a fair portion of it. There is more to the story, but I fear I have become far to familiar already.

Cautiously,
Fredrick Von :

*

Dear Mr. Von Colon,

    Your letter caught me by surprise. However, I do find myself intrigued. Do not fear yourself too familiar or forward as I am inundated with the bizarre and backwards. Your short letter was a nice break from the monotony.

    You have a window? Or, what excites me more, you have seen a flower? In most botanical pursuits I find myself poorly rounded. I have primarily dealt with small hedges and the odd fichus (a small tree technically, if I am correct in my beliefs), though I must admit I have seen relatively few flowers. Should this sadden me? Perhaps. You know the expression, I presume, "Light a man on fire; he will likely never rub the petals of a lilac across his earlobes." It is merely an old wives tale as far as I can figure. But this is unimportant. Please, tell me more about the flower outside your window good sir!

Intrigued,
Reginold

**

Dear Reginald,

    It warms my heart to know you do not think me a hybridization between a bearcat, a large pink polar bear, and a peacock with a severe case of mange. Or perhaps I read too far between the lines? In any case, it seems fitting that I should inform you about the passing of my flowers.

    As I had previously told you, they sat just outside my window. What I neglected to mention, as I felt it imprudent to bring up at the time, was the fact that my flowers sprouted from the back of a turtle. The turtle is real, however, the flowers are fake. He is small, gray, and severely arthritic. We all call him Duck though I once saw him respond to Goose. He originally found the flowers in a heap at the foot of a large lanky tree. They were real then, though that does not much matter in the grand scheme of things. If there is one thing I can say about Mr. Duck esq. (his proper title) was that he absolutely abhorred Polka.

    On a sunny day last Wednesday Duck found himself in the middle of my gravel garden. He was a creature of leisure, I'm sure you would agree. Across the garden there was, and still is, a small road. Most days this road went unused, but last Wednesday this was not the case. A wild Pianist riding a stolen xylophone rolled rapidly by. As he bumped along he sung what I can only assume sounded like Polka to Duck. Absolutely scandalized by this, Mr. Duck, rest his bespectacled soul, burst into flame. The Fire Marshall was unable to put him out for hours, full bladder and all.

    Do you think this reflects poorly on my future prospects? I have been reading about the Zodiac and Astrology recently and as best

as I can understand these events seem to represent ill omens.

Pessimistically,
Fredrick Von :

<center>***</center>

Dear Mr. Von Colon,

I find the news of Mr. Duck's esq. demise most distressing. Planter, Pioneer, and Polka-hater; he will no doubt be sorely missed. I am not one for consoling words on most occasions. Generally it seems more heart-felt if I simply attempt to communicate my condolences through a series of emotional sounds. Attached to this letter is an 8-track which contains some utterances I hope you will find comforting during these trying times. Track number 32 "Frrrngghfgteeephaaago" is my personal favorite.

If this gesture does not lick kindly your bleeding heart, I submit the following parable: (not your name)

There once was a small fish. He feared the large ocean, but not for the reasons one would assume a tiny tasty tidbit of a snack might fear the sea. He could hardly leave his swanky condominium near the wayward sandbar for fear of immolation. This fish, curiously named Duck as well, was not afraid of drowning, impellation, mastication, or even steam frying with a sprig of parsley. Only the idea of being engulfed in flames was dreadful to Duck. After many nights of pitifully sobbing into the breast of an urchin Duck devised a plan. He fired a small nuclear device into a passing oil tanker in a misplaced act of sexual frustration. The sea burned for days. Steve Buscemi shed a single golden tear. After that Duck rose to prominence in the wide ocean, becoming the head of a cult.

Thus ends the tale. Do you not see? The fish was a metaphor for a slightly larger fish. The boat? A plane! And Steve Buscemi as a slightly hairier Steve Buscemi. I trust you will take this all into consideration come election time.

Proudly,
Reginold

<center>****</center>

Dear Reginald,

I am put back at ease. You have my deepest gratitude, truly you do. I would like to show you some of my poetry. I write when I feel particularly ill at ease with the geo-political climate. Also when I am a bit dyspeptic. Below I have scribed one dedicated to you. I hope it is to your liking. Forgive me for the rhyme scheme; it is still a bit of a work in progress.

<center>

<u>Emotions felt whilst Sneezing</u>
Bright moonlight in my eyes at half past
noon,
I eat a sandwich which crunches to much
atop this dune.

Finding chips is just as nice.
Dice.
(this is where I free style)
Broken promises, heartfelt lies.
Cheese a la mode, Woolf in my pants.
Who you are
Going
T
O
O
Call?
Damn Straight. Streams.
Marshmellows are edible,
Acorns less so.
My dreams scream
bad pillow talk.
Are you a robot?

</center>

Do you think I will ever make it as a ballerina?

Uncertain,
Fredrick Von :

<center>*****</center>

Dear Mr. Von Colon,

Your poetry has stirred within me a deep forgotten feeling. However, I fear it is still forgotten, as I cannot put my finger on what it is. Perhaps my appendix? Or the church mouse I consumed may not have expired quite yet. I will have to ponder this mystery as I contemplate your verses.

Attached to this letter I found a small blinking disc. Your previous letters were not so sporadically luminous so I wonder why this one was. As I read the poem I tapped my big toe to the beat of the light. I could not tell for certain if the disc was meant to constrain my reading or brighten the page. It seems presumptuous to have attached such a thing to a work so pure. Certainly this is out of character for you Mr. Von Colon.

Disgruntled,
Reginold

******

Dear Reginald,
    What disc? The round and the flat are two elements that I strive to keep separate in my life. Either something is round or it is flat. Those cocky discs think they can have it all. I shall not even begin on what I think of blinking.
    So needless to say I did not include the disc. In fact I am at a loss for how it came to be attached to the letter. Perhaps you should dispose of the disc. I have a bad feeling about it.

Concerned,
Fredrick Von :

****

Dear Mr. Von :,
    Your name is confusing to write. In other news Reginold has expired. Very much like milk left out in the sun; he has been shot in a tragic Skeeball accident. I am inspector Artfelt Jaundice and I have some questions to ask you.
    1. Where were you?
    2. How aren't you?
    3. If when how now brown cow chica bow wow.
    4. Why!
    5. You claim to hate discs but your spine is full of them?
    6. When did you burst from Reginold chest causing it (his chest) to suffer a severe decrease in blood retention?
    7. Who gave you the disc.

Please address your confession to Detective Limey at the police station. Technically Detective Limey is just my nick name, I love limes, but that's what it says on my mailbox. I love citrus so damn much, you have no idea.

Officially,
Art

****

Dear Limey,
    No.

Regrettably,
Fredrick Von :

Chapter One: Friday
Jon Prapuolenis

5:54 a.m. I wake up already late. I tell myself it won't matter, that my dreams were probably a better use of the 9 minutes than getting up. I'm probably about half right. In the grand scheme of things, the 9 extra minutes of dreaming, untold eons on the grassy plain I imagined myself skipping across moments before, probably was the more fulfilling option. However, pragmatically, it was a stupid decision.

By waiting those 9 minutes my entire day was likely thrown off. No one would say what I did was pressing or important, it just took a very predictable amount of time. Once I woke up I had exactly 45 minutes to be out the door. That was unchanging. What I did with the time between leaving my warm covers and sitting down in my crappy car was unimportant.

Most days I spent 5 minutes staring at the ceiling while imagining how cold my dirty linoleum floor would be. After putting my feet down on the unimaginably frigid floor, 17 steps and 3 minutes are spent walking to the bathroom and waiting for the shower to warm up. Once under the warm drool that my decrepit showerhead provides, I have twelve minutes to clean up. I only really need 2, so the remaining 10 minutes are primarily utilized slowly rotating while contemplating when I last cleaned my bath towel. Those 10 minutes are indispensable; they infuse my morning with a profound sense of calm. From there I have 5 minutes to dress and 20 to eat. What I wear is decided for me, uniform shirt, pants without holes, and closed-toe shoes. What I eat is inconsequential as long as it gets me out the door by 6:30.

Some days I would sleep until 6:25, getting up in a whirl of panic and bits of clothing as I hurried to the car. Some days, having showered the night before, I would spend thirty minutes preparing a full and hearty breakfast. It really didn't matter as long as I was out by 6:30.

Today I left at 6:39. Being late can lead to a whole list of complications. For surgeons, missing the window for an organ transplant can lead to increases in insurance rates. For a pilot, lowering the landing gear too late can lead to a sharp increase of burning debris on the runway. For me, being late means missing Jake outside the back door having a smoke. It's not that Jake and I were close at all, or that I really loved the smell of Newport's, but while he was outside he propped the door open and I could easily slip inside. After 6:53 he would return to slicing produce and I would have to pound on the door until someone let me in. Inevitably it would be Sam. I fucking hate Sam. I have no idea why exactly. I try to keep it to myself, but my loathing of that man is one of the few things I was sure of in this world.

At 6:57 Sam stood staring at me as I clocked in.

"Not too bad outside, huh?" I asked Sam, trying not to notice that he was staring at the small smudge on my nametag.

"Your tag is dirty," Sam stated.

"Yeah, I got some chocolate ice cream on it yesterday. There was a big rush, some event downstairs or something. I must have made 20 milkshakes back to back. Of course these people never want to wait so I was throwing them together as fast as possible. Chocolate, Strawberry, Vanilla, all flying around, 3 blending at a time. I'm surprised I don't have any behind my ears." Sam stared at me quietly for half a moment past it being awkward.

"Cool story bro." And with that he walked away to sweep the ceiling or whatever it was that he did around here. Through my entire story Sam had done nothing but stare blankly at my right eyebrow. He didn't smile, he didn't frown, nor did he have the decency to look bored. In all my time working at the Café I don't think I ever saw his face arranged in anything other than an impassive stare. Managing to land so perfectly neutral would have been impressive if it didn't aggravate me so much. I tried fruitlessly to figure out why as I began the morning prep work.

Pushing the chain barricade open, I looked out across the food court to see who had already gotten their signs illuminated. As usual, Betty's was up. Their gate was open and, by the smell, it seemed Catherine had already made the first pot of coffee. I flipped on the Café sign and headed over to Betty's.

The proprietor, who was also the manager, the only employee, and my good friend, looked up from one of the steaming machines surrounding her and waved.

"Hey there, pretty nice out today, huh?" She said.

"I know right? If it stays like this I might not mind driving up here so much."

Catherine nodded sagely and began making my drink of choice. She was a small woman, more than halfway through her 50's. It was impressive just how nimbly she got everything in the small shop whirring, grinding, and shooting steam all at once. A twist of the espresso filter here, a few buttons pressed there, and with an alarming blast of steam my drink was done.

Back when I used to work in the coffee shop with her, I caught more than my share of steam jets to the stomach. Catherine seemed able to control half of the machines by thought alone, like some coffee-based wizard. On the other hand, my greatest achievement while there was the day I managed to reassemble the espresso machine I may have caused to spontaneously and energetically disassemble.

Catherine places my drink on the counter.

"How much do I owe you?"

"Probably a lot, but nothing for the drink."

"Five finger discount?"

"Nope, ex-employee. Plus, it took all 10 to make that incredibly manly drink."

"Hey, don't make fun of my Frappa-Cappuccino Deluxe with whip cream and sprinkles." My second greatest achievement while working at Betty's was inventing the Frappa-Cappuccino Deluxe, or Frappa-Cappa Del for short. I don't have to explain myself to anyone, that thing is delcious.

"That thing is alarming."

"I know, it's great. You really should put it on the menu."

"I think I have an ethical responsibility not to. It's essentially diabetes in a cup."

"You're between a McDonalds and a Panda Express, you have an ethical smokescreen when it comes to nutrition."

"Uh huh." She smiled and I took a sip of my drink. It was magical, as always. I glanced at the clock.

"Well, I better get back to work."

"How's it going over there? Brandon hasn't told me how you've been doing on the mixer." Brandon, her friend and my boss, was essentially a 5 star chef working in a prison cafeteria. His food was something like a super model dressed in assorted cans of wasp poison; it seemed dangerous, but when you got to the bare essentials, it was spectacular. Or something like that. Anyway, Catherine

and Brandon went way further back than I really wanted to know. When it became apparent that, for the safety of the mall in general, I should not be making coffee, she got me a job at the Café.

"You know, things are okay over at the Café. I'm much better at shakes than with the espresso machine."

"Uh huh, the what?"

"The shakes?"

"Nope, the place you are currently employed not to destroy things."

"The Café?"

"I'm pretty sure that's not its official name."

"Well, you know, it's part of the name."

"They don't call Burger King just burger last time I checked."

"They really should, it could probably make for a fun set of commercials."

"What do you say when someone comes up to your register?"

"Hello."

"And?"

"People here are pretty rude, they generally just declare they want a milkshake or some Lemon Pepper Cod." Catherine half suppressed a smile.

"Are you going to say it or am I going to have to get Brandon to make you?" I rolled my eyes but acquiesced.

"Hello Madam-"

"Nice touch."

"Welcome to the Ice Lolly and Juicy-O Café, what can I get for you today?"

"Was that so bad?"

"Worse."

"It's not the worst name I've ever heard for a place."

"No, it's like two of the worst combined into one."

"Well, you guys do sell ice cream and orange juice." Laughed Catherine.

"I would have been fine with Ice Orange Café, but why did the fruit have to be abbreviated so abruptly? And where did the Lolly even come from?"

Catherine just shook her head.

"Lolly. I'm going to be thinking of that word all day," I mumbled.

7:15 found me back on task. Every morning I prepared the line for the servers. Utensils set out, grill drip pan filled, lemons cut, ranch divided into portion cups, bread unwrapped, and whatever else needed to be done. My favorite, and most time consuming task, was filling the ranch portion cups. It didn't matter what the entrée of the day was, we went through a stupid amount of ranch.

I stared at 100 tiny plastic cups, empty and expecting. The squeeze bottle that I filled with ranch could get between 30 to 33 filled before it needed to be refilled. Each jug could fill the bottle about 4 1/2 times before it was emptied. I don't know how many jugs it took to kill the big barrel in the freezer. I have to say, I'm perversely curious at this point. It has filled 42 jugs since I started counting and we're still on the same barrel.

It is a strangely calming experience filling the cups. Squirt, move, squirt, move. Methodical, robotic, extrudelicious. It took until about 8:00a.m. on an average day to get all the cups filled, lidded, and put in the cooler under the counter. During that time I could let my mind wander. Today, like most Fridays, I could see the rest of my day unfold in front of me. The rest of my prep work, the odd early customer, the lunch rush on the register, the odd shake, my lunch break, sweeping and mopping behind the counter, the odd customer, clock out, maybe dinner, friends, drinks, games, an average Friday.

It was all fairly predictable, on and on, again and again. It would be a more

comforting idea if it didn't make me so uneasy.

As I stopped on cup number 95 to refill the bottle, I caught sight of Lawrence Price. Maybe this wouldn't be another Friday after all. It was a Mr. Price day, those were unpredictable.

Every other element of the jobs I've had, hell my life, always seemed to rest inside a set of predictable averages. 4 minutes to shave, 14 seconds to tie my shoes, 7 weeks for a relationship to fall through, 27 hours to beat an average console game on easy, 17 minutes to eat lunch, 13 to deposit it later (this being a ratio I'm secretly quite proud of). But Mr. Price never falls within the bell curve of my expectations.

Mr. Price replaced the old janitor when the he quit or died a year ago. That day, there had been a lull in the lunch rush and I looked across the many occupied tables to see the upper most peak of Price's untamable white hair seemingly rise from the floor as the escalator carried him up into the food court. His hair would have been strange enough on it's own, something like cotton candy and adding a good 6 inches to his already impressive height. It would have looked at home on an 80-year-old mad scientist. However, it clashed severely with a soft face that couldn't be older than thirty-three. His eyes were slightly to dim and slightly too slow too move from his watch to the floor as he came to the top of the escalator. He then proceeded to make his way straight to the nearest trashcan and began to remove the bag.

This surprised me. I had never before seen a man in a suit collect mall trash bags. But there he was, still in finery, when later that day he returned to sweep and mop. Still in his cream colored suit with a matching vest. Beyond the suit nothing was consistent. Sometimes I'd find him mopping right outside the Café first thing in the morning for days in a row, and the next week I'd only see him pull out a mop as I was leaving for the day. There seemed to be no order in which he cleaned the food court. Trash first, then sweeping then mopping, or backwards, or no sweeping. Front to back, back to front, zig-zaging from corner to corner. Starting from the middle and working out. It was unclear what his routine was, if he even had one. At least not one I saw. Some days or weeks, I wouldn't see Mr. Price at all, though everything always seemed to get clean.

Before today it had been nearly a month since I had seen him and his fancy suits. He approached the trashcan in a lime green pinstriped suit and began to remove the bag when he stopped suddenly and pulled out a cell phone. He listened for a few moments before he dropped the bag back into the can. He seemed to be listening intently, brow furrowed.

"Excuse me!?" A small woman in an outrageously pink sweater with a noxious look on her face half yelled, half stated, a foot in front of me. I jumped to attention.

"Hello, welcome to-"

"Is your Almond Cod Medley vegetarian?

"Huh?"

"Is there any meat in it?" She asked impatiently.

"Well it's got carrots, beets, fish-"

"Oh. Well. Never mind."

"Huh?" She didn't seem to hear as she bustled aggressively towards the pretzel stand. I glanced back towards the trash, but Price was gone. He was nowhere to be seen. I resigned myself to another average Friday.

The rest of the day went by slowly and uneventfully. By 4:00 I was more than ready for my shift to end. I had already

swept the back, washed the counter, and in general gotten nearly everything ready to close. The last thing on my checklist for the day was collecting plastic trays from the top of trashcans to be cleaned for tomorrow. As I grabbed two of the trays, a small black moleskin notebook fell out from between them. I picked it up and examined it. It was fairly rough looking, about 4 inches tall by 2 1/2 wide. I was intrigued by what it was doing there. I flipped its front-page open. It read: Property of Lawrence Price.

Madagascar?
Jon Prapuolenis

We four had been playing games for years. Tonight they all agreed the game would be Risk. A game of dice, and some strategy, it provides ample opportunity to talk and drink. Naturally, it had become our go-to favorite whenever no new game could be found. By 9 p.m. everyone had arrived. We poured our drinks and selected our army colors. Charlie, Sarah, Steve, and I were ready to do what we had done many nights before; take over the world.

The game sat on a particleboard slab which might have been a ping-pong table in a past life. The run-down piece of furniture had been stripped of all paint or finish and came complete with more than its fair share of splinters. The corner where I preferred to seat myself looked like it had been masticated by a truckasaurus. I rescued it from a local curb to serve on nights like these. It sat in a place of honor at the center of my tiny apartment.

Charlie sat down next to me, his curly hair wild as ever. Steven plopped down across from Charlie, with his collar popped and an overfull glass of vodka. Sarah slid into her seat across from me, smoothing her sheet of blonde hair.

"Gentlemen," I started.

"And Lady," chimed in Steve, grinning at Sarah.

"Yes, and Lady, the name of the game tonight is Risk. Before we start, does anyone need a refresher on the rules?"

"Is it still legal to win? Because that will be my primary strategy," said Charlie.

"I would hope so. If I don't win how would the game ever end?" Sarah winked at Charlie.

"Any real questions then, or are we all set to draw for initial placements?"

"This is the game where you roll dice, and acquire territories, right?" Asked Steve.

"Yep, though in your case it will be roll dice, hand over territories to me, and cry deeply," said Charlie. Steve smiled aggressively in response.

"Well if there are no actual questions, let's get started." I handed out the cards.

In no time at all Charlie reigned over most of South America, plus a small force stranded in Madagascar. Steve controlled North America and Africa. Sarah became the warrior queen of Australia with holdings in Asia. Meanwhile, I fully fortified my presence in Japan. I also kept a good swath of Europe under my thumb.

Then the game was afoot. Charlie was the first to move. He took his time planning the attack.

"You see, I chose the blue army because they will crash across the board like a raging river," mused Charlie.

"Or they'll just sit there and evaporate like a slightly militant puddle," said Sarah.

"Or that, but probably not. I've become one with my troops, and I've passed to them my intense love of Tapas. They will never leave South America whilst my stomach growls for Justice."

"Aren't Tapas from Spain?" said Steve.

"Shh, you're revealing my grand plan. I now have no choice but to destroy you before you can discover the full extent of my devious machinations." Charlie failed to wipe Steve off the board. He managed to take a part of North Africa via his foothold in South America. However, it was at the cost of most of Charlie's main force.

"Well that wasn't really destroying me, but you may have broken statistics. That was at least ten ones in a row," said Steve.

"Whatever, your turn," scoffed Charlie. Steven made his moves with much less exposition than Charlie. He settled for pushing Charlie out of North Africa and taking half of South America. He failed to decimate the small force abandoned in Madagascar.

"Where are your statistics now, sir!?" gloated Charlie.

"That was incredibly unlikely," mumbled Steve.

"What you know about Madagascar!? Step back, they mean business."

"You probably won't have anything other than that soon," said Steve.

"It's all about Madagascar in the end man, you just watch me."

"Well if you're both quite finished I think I'll take my turn," said Sarah.

Her march was a merciless one. After quickly connecting her holdings between Australia and Asia she expanded aggressively thorough the Middle East into Eastern Europe, knocking on the door of Northern Africa.

"That's a tough break Phil," said Charlie, "It's a fact - Sarah has the demon luck."

"That was a lot of sixes, damn," said Steven.

"Hrm, I might need to rethink my strategy." I said. I took a few moments at the start of my turn to survey the battlefield and recalibrate the plan. While none of the games we played were particularly competitive, I pride myself on an ability to win more than one quarter of the time. It wasn't a huge deviation from the norm, and if I hadn't mapped out the groups win-loss ratio in my black notebooks labeled "studies" there is a chance I might not have known I am exactly 23% over the group average. The puzzle pieces falling into place in my mind now, I mobilized. I pushed my army up through Alaska into North America. I finished my turn by fortifying my southern flank against Sarah's main force.

She had a nasty habit of being unpredictable.

"That should do for now, I think," I mumbled into my vodka.

Sarah smiled at me as she took a sip of her drink.

The following rounds were as kind to Charlie as the first.

"I don't think your troops will be dining on Tapas this game, dear," said Sarah.

"I am not a woodland creature made of delicious venison, and furthermore, my Madagascar strategy will pay off in the end, baby."

"I'm sure it will. Won't it?" Sarah giggled.

Charlie had all but given up any shot at legitimately winning the game, but there was no way he was going to give up. At the very least he refused to be defeated by Steve. Charlie noticed the way he glanced at Sarah tonight. Charlie and Sarah weren't dating anymore, they hadn't for some time, but that didn't stop Steve's little remarks from annoying him.

"Fuck it, I'm coming for you guys. My brave Madagascar Legionnaires! I shall rescue you! We shall eat Tapas as a family again!" Charlie split his meager holdings in Argentina and attempted to break out into Africa. "There must be a better way to roll these dice. I've perfected the art of rolling ones at the very least. Sarah, you never did teach me the secret of sixes," said Charlie, rolling a handful of ones.

"It's a closely guarded secret. I'd have to paint your nails and kill you if I told you."

"Sounds kinky. I might be up for the first part if that's what you're into," said Steve with far too little sarcasm in Charlie's opinion, judging by the way his eyes narrowed. Charlie's next roll went rogue and landed in Steve's gin and tonic.

"Watch it man!" Said Steve, jumping up, "These are new pants."

"My bad, clearly the dice were thirsty."

"I think they need a different drink. Snake eyes on the bottom of the glass," said Sarah.

"And thus ends my glorious charge." Charlie excused himself to clean off the dice and get Steve a new drink. He and Steven used to be much closer friends, then Sarah broke up with Charlie. Steve's transparent pursuit of Sarah strained the friendship to the breaking point several times. For the most part they managed to stay fairly civil. Except in Madagascar.

I looked up and caught Sarah smiling at me. I looked down at the gameboard.

"Get back in here dude, I'm going to crush your hopes and dreams," Steve yelled to the kitchen.

"And you're welcome for the gin," said Charlie, setting a fresh glass on the table for Steve.

"It's my gin," I said. Not that I minded, but I felt like it would be to awkward to not point the fact out.

"Very much not the point," said Charlie.

"Are you ready to lose Madagascar ol' chum?"

"Come at me bro."

Twelve times Steve sent his forces against the small dot of blue holding the island and twelve times Charlie came out ahead.

"God dammit! I don't even have words."

"I do! What you know 'bout Madagascar?! Uhhhh! Yes. This is how it happens guys."

Sarah just shook her head in disbelief. The rolls were pretty unbelievable, but what really got to her was Charlie and Steve's petty fighting. I could tell by the way she looked at them. She and Charlie had only dated for three months before it became clear to her the two of them were

not mean to be. She was aware Charlie and Steve had an agreement that Steve would back off before they had started dating. They called it the bro-code or something similar. Once they broke up it became increasingly apparent that there was no way she could have Steve without also alienating Charlie. So in an effort to keep the peace she endeavored to stay friends with both of them. It worked for the most part. They had these game nights primarily because she suggested them; Sarah loved games, Charlie and Steve loved Sarah. I could tell she wasn't exactly sure why I liked game night so much. I just liked having people around, the small apartment seemed a bit bigger with all those loud drunks in it.

Sarah had built up for a while and was now ready to sweep southward. In one turn she took most of Africa, South America, and even bits of North America. She even expanded a bit north into Asia to take Ural.

"Who takes Ural?" Said Steve.

"No one takes Ural," laughed Charlie.

"It's not very good, tactically," I agreed.

"Whatever," smiled Sarah.

I had a few cards in my hand and decided now was the moment. Cashing all the cards in at the start of my turn, I received ludicrous amount of reinforcements. I had calculated Steven and Charlie were far too scattered and under-enforced to put up much of a fight. More importantly, I observed that Sarah had far over extended her troops. Exploding across the map, I took North America, wiping the last bits of Steve's forces from the map. With the reinforcements from Steve's defeat, it was easy to quickly take Asia, Australia, Europe, and South America then back the remnants of Sarah's forces up against Madagascar. The only move Charlie had

was to attack through Sarah's last troops, something I knew he wouldn't want to do. I smiled quietly, knowing the game was mine. The voices in my head quieted for the trumpets heralding my imminent victory.

"Well, I think that pretty much settles it. Would you like to surrender together my dear?"

"I think I'll wait until my turn before I hand it in."

Charlie passed his turn. Sarah attacked Madagascar. Against her avalanche of sixes Charlie never stood a chance.

"What do *you* know about Madagascar?" mocked Sarah.

Charlie shrugged and finished his drink. With the reinforcements she took from Charlie Sarah was able to take Africa and hold it for a few rounds before I inevitably won. As I cleared the game board Steve and Charlie walked to the kitchen to get more booze. Charlie patted Steve on the back as they went.

My attention diverted as I felt soft skin brush my hand. I looked up. Sarah's eyes were locked on mine, a smile on her face.

Chapter 3 or 4 or something: Schedules
Jon Prapuolenis

Another day had come and gone, still no sign of Price. I had asked around to see to whom he reported, but no one seemed to know. Apparently his boss had quit years ago, but Lawrence just kept coming to work. There had never been any problems and things got done, so no one ever bothered to look into the situation. As best as I could tell no one had ever known him to miss a day.

At home I stared at the notebook lying on my table. I had respected Price's privacy up to this point, but my urge to snoop had never been so great in my life. After I had determined the ownership of the thing, it had been left undisturbed in my small kitchen. There it remained, perfectly in the center of the small crappy table where I took most of my meals. The sun was setting fast and before I knew it I was sitting in the dark, losing the small black book in the fading light.

I stood up and turned on the bulb over the table. The light hung just a bit too low overhead, drowning the surface and chairs in a puddle of luminescence. As I leaned against the refrigerator in the deepening shadow, I thought the notebook looked a bit mysterious, almost sacred. The reflective black-leather cover winked at me in my corner. Grabbing a beer, I sat down as though the book was a blind date I had intended to stand up. I reached forward and pulled the book in front of me. I took a sip and contemplated.

I am cautious about violating others' privacy. I had a bad experience once, so suffice to say I stay on the safe side of situations such as these. It's amazing what someone can figure out about a person from just noticing the things they do right in front of you. So I figured that, in most circumstances, any prying into personal lives was just asking for trouble. But still, the notebook called to me. It became easier to rationalize. What if Lawrence was hurt? What if he had quit and didn't remember where he had left the notebook? What if he knew I had his book and was waiting to ambush me one dark night? What if there was a reward? Most of all, what if this little book held the key to answering the question that was Lawrence Price?

Finally I decided to read it. If he was hurt, I had an obligation to make sure there was nothing wrong. After all, what if he had written "Gone to meet my mortal foe, be back home by eight, mop in front of café next morning by seven sharp." I opened the notebook to the page marked by its attached thread. Much to my disappointment I was greeted by a calendar of last week. It was meticulous in every detail. I took another sip and tried to make out his handwriting.

***

Monday:
Wake: 5:00am
Birds sing outside: 5:03am 82% (√)
Shower: 5:00-5:30am
Squirrel on fence: 5:52am 27% (x)
Leave for work: 6:00am
Arrive at work: 6:17am 58% (√) 6:28am ( )
...

***

It seemed to show every single action that he performed on the days in question, down to the most seemingly random. I couldn't figure out why he had written in percentages of some things. Maybe he wrote down what he thought the odds of that thing happening were. Perhaps he was testing a hypothesis, or maybe chronicling his observations for some big secret project. I looked over the book again. There seemed to be no

unifying idea between all of the inconsequential entries.

I flipped back earlier in the book and found more of the same. In tiny handwriting, he had packed in every single thing that had happened on every day chronicled in the book. Spills and their locations, events and their impact on his duties, even instances of lingering eye contact and the possible meanings. Next to each entry that could have had multiple outcomes he would list the two or three and put percentages. Next to one would be a check and the others would have an 'x' next to them, though always in a different color ink than everything else.

It was fascinating to see the weeks before through Price's eyes. I looked farther back in the book for my birthday, a few months before. My boss had set up a small party after work. There had been a cake, candles and some type of anchovy creation that was surprisingly good. Sure enough, there was mention of it in Price's notes. He had devised that there was a 24% chance that I would drop my cake and a 93% chance that I would look up at him as he mopped. He had also written in, in the same color ink as the checks and x's , "strange rough feeling."

Flipping through the book I found a few more notes written in with the same color ink. Mostly it was the same sentence here and there, sometimes contracted to "S.R.F." On occasions where he had listed two possible outcomes but both were "x," he would write "Perhaps too bold." I flipped past the bookmark and noticed the notes stopped. Curiously enough though, nothing else did. With the same level of specificity, the notebook chronicled the remainder of the year. The only thing missing were the checks or x's and the odd note.

I sat back, confused. How? Did he have some sort of insight into what each day

would hold? I looked at the week to come. Evidently he had assumed he would be coming to work, as the notebook listed his activities and observations as if he expected to do them. He had mentioned the incident on Monday. Did Price know Sam? Had Sam told him what he planned to do? Two more notes from that week caught my eye. It said on Thursday I would stop by Price's apartment. On Friday, it declared, I would quit my job.

I stood up and got another beer.

Musings in a Cold Store on a Warm Night
Jon Prapuolenis

The summer air was thick and humid. It vibrated with the drone of the many cicadas. I like it this way, sort of like I'm wrapped in a tingling blanket. I currently felt more like I had my head under the blanket. We walked towards the automatic doors, blinking from the bright lights of the grocery store.

It was late, so they had blocked the typical entrance with shopping carts. As I entered the exit I grabbed a shopping cart. The A/C was up so high the entire place fell just short of frosty. In shorts, sandals, and a light shirt, I suppressed a shiver. The cart now the typical weight, we started forward.

It was nearly two in the morning, but I didn't need to be up until late tomorrow, well today technically. I would have rather been back at my apartment, but we were out of toilet paper and bagels. Essentials - so this couldn't wait till tomorrow. I had a large amount of reading to do and what I calculated to be an even larger dump to take, so it was just me, the restocking employees, and my Bear walking the empty aisle of the cold store this warm summer night.

No one really paid attention to us as I pushed the squeaking cart up and down between the imposing shelves. In the deserted store they caused everything to echo eerily. My loose sandals smacked the ground and reverberated upwards as a bad 80's power ballad drifted down. Cecil would say that's redundant, a bad 80's song, as if there were any good ones to begin with. He could be quite judgmental for an 800 pound pink Polar Bear.

We cut through the pet food section on our search for the toilet paper. Beniful, Fancy Feast, and Beggin' Bacon Flavored Dog Snacks slowly scrolled by.

"Hey Cecil, want some Purina Bear Chow?"

"How very droll, as if," scoffed Cecil. Not laughed, chortled, snickered, or giggled; scoffed. That's just how Cecil was, or at least as long as I've known him. He's the kind of guy who made a point of eating every meal with silverware, pairing the appropriate wine with his dinner, religiously avoiding contractions, and in general looking down on people. A feat that isn't too difficult when one is over seven feet tall, but that's beside the point. He got on my nerves sometimes, but I guess if you hang out with someone long enough you start to see past some of their minor flaws. Or at least you end up having to.

We arrived at the primary goal of the trip, a towering display of TP. Without thinking, I grabbed the softest looking stuff within arms reach.

"You cannot be thinking of purchasing that."

"What?"

"I have told you this before, I find that brand deeply offensive. I would no more wipe my hindquarters with those vulgar sheets than imbibe that dreadful Coca-Cola beverage."

"Oh, I forgot you hate it when they use Bears to advertise."

"They are not Bears so much as crude caricatures of my people. It is insensitive and intolerable to anyone with any sensibilities.

"All right, all right, I'll get a different kind. Budge over, would you?"

Cecil was seated in the center of the cart, hunched forward a bit, like a pretentious teddy bear. A comparison I kept to myself, as he absolutely hated Theodore Roosevelt. He yelled "Bloody Progressive!" anytime his name came up.

There wasn't really enough room in the cart so Cecil agreed to hold the paper in his lap.

When it came right down to it, Cecil's airs of grandeur were put aside when it came time to solve a problem. I don't know if other people can see that about him. Most people try their best to ignore the sometimes-condescending things he says, but they go a bit too far. No one really takes the time to get to know him, get past his quirks and see the value in Cecil, The Economist reading, Sommelier Certified, and just all around interesting Bear. By just pretending he doesn't exist people can miss out.

With our TP and Bagels we make our way back to the front of the now quiet store. The stereo high above the shelves sputtered out while we were debating if more cream cheese was needed, so now our cart squeaked into the lonely silence.

The Cashier watched us blankly as we made our way over the long stretch of shimmering cement floor to the register.

"Find everything you need?"

"Yeah. Bit cold in here isn't it?" Unamused, he rang up my items. I reached for my pocket and realized I had left my wallet at home. "Aw crap, I think I left my money at the apartment."

"Allow me." Cecil swiped his card before I could stammer my awkward plea. "Just toast me one of those bagels when we get back home."

"Thanks, I owe you."

It's probably not surprising, but when there's a problem it's nice to have a pink Polar Bear named Cecil around. We walked out into the warm night smiling.

Chapter 9: Smooth orbs, clean slates, and rough beginnings
Jon Prapuolenis

We sat across from each other. Lawrence looked off into the corner of the room. It was nicer than I had imagined, the room that is. Tastefully decorated with matching chairs and drapes. A sort of brown pin-stripe. His chair looked like mine felt, smooth leather that seemed to lack an edge.

"So," he said, straightening his suit compulsively, "Today is really today then?"

"As best as I can tell." I had so many questions. Where had he been all of this time. Why was he back here after having fled, or at least appeared to. Who were those men with knives? Where did he get these chairs? They were preposterously comfortable.

"What... are you?"

"So that's how you would like to lead off then?" Lawrence smiled slightly in recognition.

"I don't mean to be rude, but it seems as good a place as any to start."

"I am just a man, in the end that's probably why recent events have unfolded the way they have."

"The notebook-"

"Do you have it? I would guess you would have had to in order to find this place."

I pulled out the small black book and handed it to him. He flipped it open to the worked page. A look of recognition crossed his taught features.

"How many days from the last entry?"

"You stopped annotating half way through last Friday, so about seven days."

He studied the next week very carefully. With a knowing smile he snapped the book shut.

"This is all quite unusual, it seems I've missed a number of things."

"You've been gone for a week."

"Well yes, but things have occurred that I've never seen before. It's been quite a while since that happened."

I stared blankly at Lawrence. He smiled maddeningly back.

"Are you some sort of soothsayer? Or Prophet? Are you from the future or something?"

"Not really, no, and technically no."

"What?"

"Well, you've read my notebook, I assume that it's pretty self-evident." He stopped and rubbed the arm of the chair, contemplating. "Though I guess I've really never shown it to anyone before..." He suddenly stood up looking absolutely scandalized. "Is it possible that you are not aware of my condition?"

"Very possible, in fact, likely."

"I've been incredibly incomprehensible then. My sincerest apologies." With that he fell back into his chair, utterly crestfallen. Silence swallowed the room for what seemed like a very long time. I finally inquired about Lawrence's condition.

"I don't think there is an official term for it, but I like to call it being Temporally Imbalanced."

"Unblanced? Are you crazy or something?"

"Crazier by the day, but that's more of a side-effect than the root of the problem."

"So what does being temporally unbalanced do to a person?"

"Well, in my case, it means that every time I go to sleep I have a chance of waking up in either the past or the present."

"Huh."

"It's quite inconvenient. As I've gotten older I'm lucky if I can live two days that are actually 'today' in a row."

"So you have seen the future?"

"Probably, large bits of it actually."

"And the past? You've seen ancient civilizations with your own eyes?"

"All the way back to 1986."

"That's not very ancient."

"Admittedly, no, but I'm pretty well versed with everything that has happened between then and now."

I rubbed the arm of my chair. It was ridiculously smooth.

"What's the 30th century like?

"No idea."

"But I thought you had seen a lot of it."

"I've seen tomorrow until April 1, 2042."

"That seems like an odd place to stop."

"That's the day I will die."

"What?"

"I only see days between the time I was born and the day I got shot in a pet store." Lawrence must have read the quizzical look on my face because he continued, "A bizarre hunting accident I think."

I blinked, trying to clear the confusion out of my eyes. I tried to take in the implications of what Lawrence was saying. I failed miserably.

"Why wouldn't you avoid going to a pet store in the future?"

"Well there are a couple of reasons actually."

"Such as?"

"Well for one, I love hamsters. The work they do with wheels, just brilliant."

I didn't know how to respond to that.

"I guess another is that I'm not one-hundred percent sure I'll be shot."

"But you-"

"The times I lived through April 1, 2042 were always a bit rough." Lawrence

looked at me as though somehow that answered my question.

"I've confused you again, haven't I?" I nodded. "What parts did I lose you on?"

"Times?"

"Well I can live the same day, past or future, multiple times. It's almost always annoying. I once spent nearly a year sick with the flu during a heat wave during which the air-conditioning went out right as my fever peaked. It was terrible."

"So if you live a bad day multiple times, why don't you change it?"

"Sometimes I do. If the day feels particularly rough I go out of my way to have fun with it, as nothing I do will connect with anything."

"Rough?"

Not every day I live really did or really will happen. If I concentrate I can mostly tell how true the events I am experiencing are. On a day in the future that doesn't occur, like when a massive pandemic kills off most of the population, I feel a rough sensation moving against the front of the orb of my mind. On a day that will likely occur I feel a smooth sensation on the front of my mind. The stronger the feeling, the more likely the day will occur."

"Huh."

"Yeah."

We both sat in silence for a moment. It was a lot to take in. Though I have to admit the idea of varying degrees of false past and present was an interesting concept.

"That sounds very complicated to keep track of."

"That is why I keep such a detailed notebook. It allows me to both keep myself on track in the present as well as better judge the degrees of truth to odd temporal days."

"It must have really sucked to lose it then."

"You have no idea. It was more than twenty years of false days between last Friday and Saturday. I was quite lost. There aren't many days in my life I haven't lived through at least once, and very few events I haven't seen come to pass in the continuum. So to lose something so vital, and unexpectedly, was quite a shock." He rubbed the arm of his chair and smiled. "It has made me realize something important... but that brings me to my proposal to you. I need someone who would help remind me of things like what day it is and what color the sky is. I was hoping that person could be you."

That was unexpected. I didn't know what to say."

"If you're worried about compensation I have personal funds enough to provide a decent salary. I held my job mopping was mostly because I found it calming. I had a good number of smooth days studying the stock market."

I though about the idea of being a quasi-Time Travelers personal assistant, it would certainly break up the monotony of my structured routine.

"It could be interesting..."

"So is that a yes?"

I thought about Lawrence's prediction for tomorrow.

"I think the answer is already in your notebook."

Eye c a b
Jon Prapuolenis

There are a million little differences between you and I, and likely even more similarities, though these might be subtler. I, for instance, enjoy and endeavor to keep a large percentage of my blood inside my body at all times. I am told this is a trait most people have in common when it comes right down to it. But for all the billions of intricate character features, foibles, and faux-paux that make up an individual, there seem to only be two types of people in the world.

There are people who notice a bee in the room and those who do not. It seems a dubious statement. A sweeping generality that leaves little room for context and specific details, I know. Generally, I shy away from absolutes of any flavor in categorizing things, let alone people. However, in every interaction I can recall there has been a distinct split between those aware of the bee, the wasp, or the yellow jacket and those who are oblivious.

But all this is far too abstract. Allow me to delve into a situation a bit more specific. Picture a tile floor, four non-descript walls bathed in florescent light. A ceiling that looks like squares of granola-flavored cardboard, or perhaps cardboard-flavored granola. A ceiling criss-crossed by a grid of tin and a number of listless crevices from which the flat soulless florescent bulbs infused the room with its flavorless illumination. It is a room that must have been designed by a very boring person on a gray dreary day.

The room could have been one of many from my school days, sprinkled with cheap plastic desks half-heartedly pretending to be wood. It could have been any room, but it wasn't, I'm almost sure of it. As time passes it will doubtlessly blend with all of the others.

On this day I found myself in one of those unfortunate desks and let the bland lecture flow over me in a inoffensive wave, not unlike the lights glaring down. I still remember the subject of the class, linguistics. It was something that stuck in my mind because I still can't come up with a word to describe it.

It was interesting but tedious. Dry but personable. A waste of time but I found myself utilizing its trivia long after the desks were ablaze. With all its talk of phonemes, glottal stops, sociology, and neuroscience, it was odd that the class could not provide me with a way to translate my thoughts on it into more concise verbal ques.

Anyway, sitting in that class, one warm spring day, I looked up. The air conditioning was wither broken or mercilessly denied to the building. It was so hot that the projector affixed to the ceiling was threatening to melt. At least it said as much in its multilingual warning message that appeared over some slides of phonemes. Bouncing lazily across the ceiling was a large wasp. The stinger hung under it like a hypodermic needle. I could feel it looking at my eyeballs.

No one else seemed to notice a thing. A roomful of sweaty perturbed 20 some things staring at a blank screen. I was alone.

For the next few minutes I alternated glancing at the wasp and pretending to notice the slide. It stayed on the other side of the room, bouncing dumbly off the ceiling. The muffled tap of its thorax against the ceiling was deafening. But still, only I seemed to notice.

When I was a child I sometimes would be sent to stay with my grandmother. She was quite old and not very personable, but tried her best to pretend to be. Her apartment was small and hot, with furniture older than my parents sitting in dust older than I was at the time. I remember sitting on the cement-like couch and staring at the wall. Of all the walls in the house it was the second most interesting. I managed to conclude this after the second visit. This wall had a long series of shallow wooden shelves running all along it. They were made from a wood that always made me think of the place that my grandmother talked about in her sleep. The shelves smelled musty with age.

Atop these wooden planks were a variety of small items going nearly to the ceiling. A tiny clay bird sat near the window. A tarnished gold lighter shined mutely on the shelf nearest the floor. During the hot

summer days I would sit and stare at the items over the course of hours. This did not fill me with any particular joy, but after my experience with the screen door on the other wall it was enough.

One day, early on in my visits to the apartment, I stood in front of the screen. Looking out the sun filtered in. There was no breeze. One day I might remember the thoughts I had then. I stood with my face pressed against the screen. I heard the buzzing but I don't think I cared. I blinked.

In the classroom the wasp continued to bounce along the ceiling. I had no real reason to follow its movement too meticulously, it's not like I was allergic, but I watched it nonetheless. It disappeared inside one of the lights. In the second row, five seats in front of me I saw someone look up. He wore a pretentious hat and suspenders. He looked back down.

Why do Weebles wobble at all if they don't plan on falling down? Who likes short shorts? If I lost my mind where would I begin to look for it? All these questions fill me up like some sort of frothy porridge. It sloshes around my mouth and down into my belly. If I sit still enough I can feel it slowly creep down my leg and roll around in my shoes. They are sticky questions. Questions that don't need to be answered and I question why I questioned them at all in the first place. But such is life.

Down the wasp spirals, in a languid circle, moving almost purposefully towards a girl with spaghetti-strapped shirt. Or are they called blouses? I would have asked the wasp after the fact but I don't believe we would have seen eye to eye. Her shoulders seemed to glisten in the uninteresting light. Maybe she was a goddess. Maybe she was anointed with oil. Maybe she needed to shower. The wasp moved towards this fleshy light.

It is curious, how the climax, the end of a thing, no matter how obvious or uninteresting, draws a person like a moth on a mission. You could be almost certain that you know what will happen. How it will be a waste. How it will bore you. But still, if you take a person and throw them in a chair pointed at a screen or a page with something about to happen on it they will be inclined to see it through to the end. All just to see if it went the way they expected. They are annoyed if they guessed right, more so if the end veers away from all expected outcomes. That is why I generally stick to throwing chairs instead of throwing people into them. The ergonomics never match with specifications. If enough thought is applied it will all fall into place nicely.

Anyway, the girl died. She was apparently very allergic to wasp stings and could not get epinephrine in time. It was all very sad. The sting pierced her right shoulder. She rolled on the floor, expanding and red. The fuse was set and lit, she exploded. Flames lapped like small dogs all around me as everyone screamed or sang Ke$ha songs. That is what I remember, but I am often wrong. Or at least that's what people tell me. I'm wrong. Also they say that I am a yellow taxi. But that doesn't make any sense. Does it?