

# Excellence in Upper-Level Writing

The Gayle Morris Sweetland Center for Writing

## Excellence in Upper-Level Writing

2010/2011 & 2011/2012

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#### Introduction

In 1978 the University of Michigan launched the Upper Level Writing Requirement (ULWR), establishing a model that has been emulated at many colleges and universities under the banner of writing across the curriculum or writing in the disciplines. The original LSA charge to Sweetland (then the English Composition Board) was to create courses to be taken in the student's area of concentration after the sophomore year.

Year by year and semester by semester instructors across the College have implemented this charge, insuring that writing is part of the academic experience of our undergraduates. Between 1978 and the present, thousands of ULWR courses have been offered by departments in all three divisions of the College.

Each course with the ULWR designation is approved by Sweetland. The criteria for approval include a substantial amount of writing (usually about 30 pages of polished writing), revision of at least 50% of the writing, feedback provided to student writers, and sequencing of assignments so that capacities developed in one piece of writing can be transferred to another. Teaching an effective ULWR course is not easy. It requires a willingness to develop challenging assignments, to spend hours talking through project ideas with students, to invest significant amounts of time responding to

drafts and making suggestions for revisions, to develop rubrics or criteria for grading, and to devote days to grading final versions. The instructors whose students are represented in this collection have done all this and more. They have watched carefully for excellence, and they have challenged students to move beyond what they thought they could accomplish in writing. They deserve our appreciation and admiration.

Most ULWR courses ask a lot of students, requiring them to simultaneously learn advanced material in a given discipline and to develop their capacities as writers. As one student put it, "besides just explicitly working on writing, you get this whole vocabulary of terms and techniques that are used in research in this field." Many students find that ULWR courses push them to think more deeply and write more extensively than they have ever done. They cannot bang out a first-draft-last-draft the night before the paper is due; they have to return again and again to develop ideas and flesh out arguments. The selections included here show the writing students can produce when the bar is set high.

The judges faced a challenging task; there were many outstanding pieces of writing in the nominations they received, and they—we, because I was one of them—struggled to balance disciplinary and genre differences while always keeping quality at the center. As participants in the Sweetland Seminar we were accustomed to talking about the ways writing is both similar and different across various fields, but we still faced difficult choices. I am deeply grateful to Lynn Anderson, Daniel Birchok, Katie Brion, Sueann Caulfield, Brian Dowdle, Cameron Gibelyou, Zak Lancaster, Shelley Manis, Andrea McDonnell, and David Medeiros (judges for 2010-2011) and Sara Aciego, Erin Baribeau, Amy Carroll, Philip Cheng, Sarah Conrad Gothie, Trevor Kilgore, Barbara Koremenos, Lila Naydan, Benjamin Paloff, Jessica Robbins, and Bonnie Washick (judges for 2011-2012).

I hope you will enjoy this inaugural collection of prize-winning writing produced in ULWR courses, relishing the prose represented here, and offering selections as models to the next generation of ULWR student writers.

Anne Ruggles Gere, Director, Sweetland Center for Writing

### Sciences winners 2011/2012

Nell Gable: "Coyote-Wolves: Michigan's Beasts of Burden" nominated by Emilia Askari, Environ 320

Naomi Lewandowski: "Human impacts on ecosystems: comparing the removal of the gray wolf (*Canis lupus*) to the introduction of invasive water hyacinths (*Eichhornia crassipes*)" nominated by Selena Smith, Earth 431

#### 2010/2011

Anna Cacciaglia: "An Odd Kind of Sympathy" nominated by Sara Talpos, English 325

Aimee Vester: "Charcot-Marie Tooth Disease" nominated by Laura Olsen, MCDB 397

## Social Sciences winners 2011/2012

Christian Keil: "Newcomb's Problem and Expected Utility" nominated by Frank Thompson, Econ/Phil 408

Seth Soderborg: "The Effects of Conditional Cash Transfer Payments on Voter Support for the *Partido dos Trabalhadores*" nominated by Rob Salmond, PolSci 381

#### 2010/2011

Anton Camaj, Eileen Divringi, Jake Gatof, Nicole Johnson, Ji Won Moon, and Azure Nowara, "Oh SNAP! The Real Cost of Cuts to the Supplemental Nutrition Assistance Program" nominated by Mika Lavaque-Manty, POLSCI 381

Jennifer Sun: "English Proficiency and Spousal Support are Associated with Higher Self-rated Health in a National Sample of Asian American Immigrants" nominated by Perry Silverschanz, PSYCH 391

## Humanities winners 2011/2012

Aaron Bekemeyer: "Bringing the Revolution Home or Fulfilling the Law?" nominated by John Carson, Hist 399

Ryan Pavel: "The Gun" nominated by Alex Ralph, English 325

#### 2010/2011

Carly Friedman: "Miss Ann Philips: Via Air Mail" nominated by Aric Knuth, ENG 325

Deanna Willis: "A Break from Conventionality" nominated by Matt Kelley, SWC 300

## Nominees list 2011/2012

Student	Course	Instructor
Aaron Bekemeyer	Hist 399	John Carson
Ariel Bronson	Comm 361	Julia Lange
Kathleen Carbone	English 325	Beth Davila
Cory Ferrer	English 325	Cody Walker
Felicia Flowers	English 325	Sara Talpos
Nell Gable	Environ 320	Emilia Askari
Stephanie Garbarino	English 325	Dana Nichols
James Hammond	Hist 399	John Carson
Michelle Harlow	PolSci 326	Molly Reynolds
Amelia Hoover	PolSci 402	Mika Lavaque-Manty & Joshua Shipper
Ashley Postler	PolSci 402	Mika Lavaque-Manty & Joshua Shipper
Christian Keil	Econ/Phil 408	Frank Thompson
Francesca Kimmelman	Ling 315	Acrisio Pires
Genevieve King	AAPTIS 331	Ethan Menchinger
Andrew Larson	Ling 315	Acrisio Pires
Naomi Lewandowski	Earth 431	Selena Smith
Shai Madjar	Phil 402	Eric Swanson
Leslie Matern	HistArt 344	Elizabeth Sears
Austin McHenry	English 325	Elizabeth Hutton
Molly McNary	PolSci 326	Molly Reynolds
Aaron Metviner	Writing 410	Danielle Lavaque-Manty
Taylor Stanton	Writing 410	Danielle Lavaque-Manty
Brian Tseng	Writing 410	Danielle Lavaque-Manty
Karen Ye	Writing 410	Danielle Lavaque-Manty
Drake Misek	Writing 300	Lila Naydan
Blake Obi	Environ 320	Emilia Askari

Lauren van Oss	AAPTIS 491	Kader Konuk
Ryan Pavel	English 325	Alex Ralph
Diana Ariella Rosenson	Psych 401	Mark Thompson-Kolar
Rebecca Salk	Phil 401	Louis Loeb
Annabeth Shirley	English 325	Sara Talpos
Seth Soderborg	PolSci 381	Rob Salmond
Hannah Tasker	English 325	Natalie Bakopolous
Jennifer Thomas	Comm 371	Paddy Scannell
Laura Torp	Writing 300	Lila Naydan
Jennifer Xu	SWC 300	Alex Ralph
Lindy Zhang	Ling 375	Robin Queen

#### 2010/2011

Student	Course	Instructor	
Alex Assaf	Comm 371	Derek Vaillant	
Amalia Briggs	Ling 315	Acrisio Pires	
Anna Cacciaglia	English 325	Sara Talpos	
Iris Candelaria	English 325	Natalie Bakopoulos	
Paul Dearing	SWC 400	Alan Hogg	
Carly Friedman	English 125	Aric Knuth	
Nell Gable	English 317/328	Keith Taylor	
Philomela Gan	CompLit 322	Yopie Prins	
Alison Huang	PSYCH 331	Megan Hagenauer	
Toniesha Rashee Jones	CAAS 495	Scott Ellsworth	
Christopher Katanski	SWC 400	Alan Hogg	
Alex Kremzier	PolSci 326	Molly Reynolds	
Julien Lafortune	Econ 494	Warren Whatley	
Ashley Miller	English 325	Aric Knuth	
Valerie Montes	CompLit 322	Yopie Prins	

Amy Munslow	PolSci 341	Shaun McGirr
Hiten Patel	Psych 331	Megan St Peters
Sarah Randolph	PolSci 343	Shaun McGirr
Ellen Schiff	PolSci 409	Mika Lavaque-Manty
Justin Schon	Econ 462	Anne Fitzpatrick
Ryan Shevin	SWC 300	Matt Kelley
Michael Small	Econ 462	Anne Fitzpatrick
Spencer Smith	Econ 495	Frank Stafford
Andrea Solochek	Ling 315	Acrisio Pires
Matt Stier	MCDB 397	Laura Olsen
Jennifer Sun	Psych 391	Perry Silverschanz
Lillian Vance	Econ 494	Warren Whatley
Caitlin Vander Weele	Psych 331	Megan Hagenauer
Aimee Vester	MCDB 397	Laura Olsen
Stephanie Voss	Ling 315	Acrisio Pires
Hannah Wagner	Anthro 314	Alysa Handelsman
Jenna Weinberg	Anthro 314	Alysa Handelsman
Mark Willhelm	PolSci 326	Molly Reynolds
Deanna Willis	SWC 300	Matt Kelley
Laura Winnick	English 325	Nick Harp
Susie Yi	Ling 315	Acrisio Pires

## Sweetland Prize for Excellence in Upper-Level Writing (sciences 2011/2012)

#### Coyote-Wolves: Michigan's Beasts of Burden

From Environ 320: Nell Gable (nominated by Emilia Askari)

Nell does many original interviews to collect information for this story, which also is beautifully written. I love the way she uses suspense to keep the reader hooked. She deftly describes compelling scenes – beginning with her opening paragraph and continuing throughout the story. This is a complex topic. Nell clearly and elegantly describes the issues for an average, non-scientific reader.

Emilia Askari

#### Coyote-Wolves: Michigan's Beasts of Burden

A mammalogist, an ornithologist, a poet and a dozen or so college students from the University of Michigan Biological Station, sat quietly in the middle of a grassy field at midnight, surrounded by the cool summer air and the stillness of the trees. The biologist played a recording of wolves howling over a stereo. After several seconds pause, the group heard a chorus of yips and cries in the distant forest. Sitting there in the warm night at the end of what was nick-named "the summer of the wolf," the group of wolf enthusiasts desperately wanted to believe that the sounds they heard in the trees were not dogs, not coyotes, but wolves.

But the true identity of the animals making the sounds was far more complex than the group imagined.

Back then, in the summer of 2010, the group had good reason to believe they were hearing wolves. The previous March, a Cheboygan County farmer reported sightings of large wolf-like creatures in his gravel pit not far from the University of Michigan Biological Station. The Michigan Department of Natural Resources was skeptical—until they received an image of the creature captured using a hidden camera trap. The photo showed a gangly female wolf that appeared to be pregnant.

The news was groundbreaking. There had not been a breeding pair of wolves in the Lower Peninsula since their complete eradication in 1910. After 100 years of absence, the wolves had returned with the potential to dramatically influence the ecosystem and human population of Michigan's northern Lower Peninsula. The Endangered Species Act has federally protected wolves since 1973. In the Upper Peninsula and other parts of the United States, wolves were thriving and it appeared that they had finally made a comeback in the Lower Peninsula as well.

Wolves and humans have historically had a very complicated and often volatile relationship. Humans tended to fear and sometimes hate wolves, with whom they have always competed for territory, meat and dominance over the land. The first Michigan pioneers vied against the beasts daily. An annotated species map compiled in the early 20th century by N.A. Wood reports sightings of "monster wolves" in all parts of Michigan. According to one Washtenaw County settler, "Wolves are numerous and destructive. Wolves can be seen in all directions." As a result of the fear caused by the settler's daily struggle with the animals, towns in Michigan and many other parts of the country placed a bounty on wolves. Encouraged to seek revenge on their canid enemies, settlers were rewarded with cash for killing wolves. Michigan pioneers were so effective in the extermination that by 1910, the Lower Peninsula of Michigan was completely bereft of wolves. However, wolves are a resilient species.

After the DNR confirmed in March 2010 that the farmer's gravel pit was home to a pair of wolves, the agency began working with wolf specialist Don Lonsway. An expert wolf trapper from the Upper Peninsula who works for the United States Department of Agriculture, Lonsway suspected that the wolves had crossed over the Mackinac Straits and created a den in the area surrounding the University of Michigan Biological Station in Pellston.

He began attempts to trap and radio collar the wolves for future research and genetic testing. Then came the next development in the story. In mid July—as about 250 students, professors, researchers and their families sat down to eat dinner in the bustling Bio Station dining hall—field mammalogy professor Phil Myers stood to make an announcement. He reported that Lonsway had trapped one of three wolf pups now living in the Lower Peninsula. Myers explained that after finding the unharmed pup in one of his carefully concealed foot-traps, the wolf specialist took blood samples and measurements before setting the pup free with a radio collar to track its movements.

The existence of pups proved that the pack had bred in the Lower Peninsula, which meant that there was potential for a growing wolf population. After hearing the news, the dining hall erupted in applause. For the community of people who were devoting their summer and for many, their lives, to righting the wrongs committed against the land, "it felt like a win," says poet and English professor at the University of Michigan, Keith Taylor. "The fact that they came back on their own was an indication of environmental health and cultural shift because 10,000 people weren't out there trying to blow away wolves this time," said the poet.

The Bio Station community buzzed with the news of wolves in the surrounding area throughout the long, hot summer. After hearing the news for the first time, Taylor recalls: "I went back to my cabin, looked out over the lake into the woods and said 'Whoa, there are wolves out there!' And that made the whole place feel different." The small scientific community felt invigorated by the news, he thought, because, "There we are, living in a state that can seem hyper civilized, hyper congested and suddenly we were living in the presence of the ultimate symbol of wilderness."

Not everyone, however, welcomed the presence of wolves in the Lower Peninsula. On January 19th, 2011, the DNR found the collar of one of the trapped wolf pups beside Rigsville road. Though the body was nowhere to be found, the DNR suspected poaching and offered a cash reward for any information on the killing. Since wolves are still listed as an endangered species in Michigan, the punishment for killing a wolf is up to 90 days in jail and thousands of dollars in fines. According to Chris Hoving, an adaptation specialist for the DNR, hunters should know exactly what they are shooting at before they pull the trigger. The DNR was prepared to aggressively pursue the poacher until the agency's scientists received a surprising piece of information that caused them to back off of the investigation and reevaluate everything.

After months of testing and re-testing, the DNA results from the collared pup caught by Lonsway revealed that the wolves who inspired the 2010 "summer of the wolf" weren't wolves after all. The genetic testing indicated that the animals were a sort of hybrid—not wolves, but not pure coyotes

either. Jennifer Kleitch, a wildlife biologist for the Michigan DNR explained that the creature's mitochondrial DNA—genetic information that comes from the mother—was mixed with eastern wolf. The autosomal DNA—genetic information from both the father and the mother—was coyote. Kleitch clarified that this likely meant the mother of the pups was part wolf and part coyote—although how much of each species' DNA she had is still unclear. The DNR concluded that several generations back, a female eastern wolf likely mated with a coyote. The offspring of this pair continued mating with coyotes and eventually came to produce the pack discovered in Cheboygan County in 2010.

"I was shocked," Kleitch says, when the genetic test results came in. "It is really confusing because one of the collared animals weighed around 60 pounds, which is huge for a coyote." At that point, the DNR was essentially dealing with animals that were physically wolf-like, but genetically coyote, and therefore, no longer officially protected by the Endangered Species Act nor governed by Michigan's wolf management plan. The plan, created in 2008 by the DNR, ensures that wolves can spread into the Lower Peninsula unmolested.

The Endangered Species Act and the wolf management plan provide a protocol for dealing with wolves but not hybrids. "We know that hybrids and look-alikes exist," says Hoving, "but there is no policy at the federal level to deal with them specifically." Because there is no precedent for dealing with creatures that Hoving refers to as "coyotes with wolf genes," it will be up to the DNR to manage issues created by these animals on a case by case basis.

The Michigan officials are not alone in this confusing struggle to identify and manage enigmatic canines. According to a 2010 report on the Eastern Coyotes of New York State, written by Roland Kays of the New York State Museum, "Coyotes, dogs and wolves are all close evolutionary cousins, all part of the genus Canis, and all biologically able to cross-breed and foster fertile offspring." In a 2011 study published in a journal called Genome

Research, advanced genetic testing techniques allowed a team of 19 researchers to trace and link the origins of 4 of the non-dog canid species present in the U.S: Gray Wolves (*Canis lupus*), Red Wolves (*Canis rufus*), Great Lakes Wolves (*Canis lycaon*), and coyotes (*Canis latrans*).

The groundbreaking research showed there to be an abundance of mixing between and within the coyote and wolf species. For example, the Eastern Coyote or "coy-wolf," as it is often called, of New York State, originated from coyotes travelling southwest from Ontario, through the Great Lakes Region, where they bred with Great Lakes Wolves before fully colonizing New York State. According to studies done by Kays and his fellow researchers, the Eastern "coy-wolves" have much larger skulls than western coyotes, allowing them to hunt large prey like deer, but are physically smaller than wolves and better able to avoid humans, making them well-suited for life among people. Now, New York State deals with the complex effects of the presence of canids that are not wolves, nor coyotes, but a mixture of both. Many scientists involved in the research see it as grounds for a reevaluation of the current endangered species guidelines, which may no longer be relevant or useful.

For Chad Sherman, a resident of Wolverine, Michigan—a rural town of about 350 people—the genetic details of the animals matter little. Wolf or coyote, "We don't want 'em," says the cattle breeder and avid hunter. Sherman often meets with friends at the Marathon gas station just off of Interstate 75 for coffee and conversation. "Everyone I know wants them gone," he says. He feels that the presence of wolves in northern Michigan will threaten his livelihood and that of many of others who work with livestock. "There are plenty of predators here already," says Sherman, who believes residents have a right to shoot the wolves if they become a nuisance.

Sherman could have good reason to worry. In the Upper Peninsula, where the wolf population is thriving, the number of cattle killed by wolves skyrocketed in 2010 with 6% of farms experiencing an attack, according to

the 2011 Michigan Wolf Depredation Report. Wolf depredation—the term used to describe wolf-caused killings—can cost livestock owners thousands of dollars, which the state must then repay in the form of indemnification. "I just don't see what good wolves can be; the state can't make any money off them—all they can do is be detrimental to livestock, deer populations and residents," says Sherman, who insists that the DNR planted the wolves in northern Michigan—a claim the DNR denies. Sherman's complaints prove just how controversial the existence of wolves in Michigan could soon be.

Hoving, the DNR adaptation specialist, understands people like Sherman's concern and believes that the situation would be simplified if the hybrids were included as part of the total number of wolves in Michigan, and the entire population was removed from the Endangered Species List. He feels—and the Michigan DNR officially agree—that since the population of wolves in Michigan far exceeds the number required for de-listing, wolves no longer require federal protection. "Management of an endangered species is costly and time consuming and we need to shift funds toward managing other endangered species," he argues. Despite the fact that federal de-listing of wolves would lessen the punishment for their killing, and probably increase the frequency of it, Hoving says that he's not worried about ruining wolf restoration progress. "We wouldn't damage the health of the wolf population," he reasons, "The wolves would learn quickly to avoid people."

For now, the DNR will manage issues caused by the mixed-blood canids based on the appearance of the animals, for lack of concrete genetic information. "It's difficult to know for sure what you're dealing with until you do the genetics," says Kleitch. Hoving explains that if a resident were to kill an animal that had the physical characteristics of a wolf, he or she would be prosecuted for killing an animal of an endangered species. "If the hunter can't tell, it's best to err on the side of caution," he said.

As for what remains of the original pack, first discovered in 2010, they seem to be settling into their new Lower Peninsula home. One of the

radio-collared females still inhabits the forest near the biological station, according to Kleitch, and she may have given birth to pups, based on camera trap images and paw prints found. Still, with many people against them—including the still unidentified person responsible for poaching the collared pup in 2011—the wolves' future in northern Michigan is uncertain.

But for the eclectic group of people who sat in the field that warm summer night, hoping to hear wolves, the "summer of the wolf," remains one of the most exciting summers of their lives. Among them was Josh Winters, a University of Michigan student who said that regardless of recent findings, "For me, I guess I will always see it as a wolf." Despite the complexity of the controversial situation in northern Michigan, one thing is certain: *something* was in the woods that night and its story continues to unfold.

# Human Impacts on Ecosystems: Comparing the Removal of the Gray Wolf (*Canis lupus*) to the Introduction of Invasive Water Hyacinths (*Eichhornia Crassipes*)

From Earth 431: Naomi Lewandowski (nominated by Selena Smith)

Naomi's paper was well researched, had great organization and demonstrated a high level of knowledge about the topic. She was able to use an engaging writing style that was still technically strong for a scientific paper. In addition to a well thought-out paper, she went above and beyond her other classmates to incorporate multiple aspects of the environment, both biotic and abiotic, into her discussion of the effects of keystone and invasive species to give the reader a broad understanding of issues surrounding these species. She also discussed both socioeconomic and ecological impacts. Naomi paid close attention to comments made on previous drafts of the paper, showing that she cared about improving her writing.

Selena Smith

## Human Impacts on Ecosystems: Comparing the Removal of the Gray Wolf (*Canis lupus*) to the Introduction of Invasive Water Hyacinths (*Eichhornia crassipes*)

#### **Abstract**

Ecosystems all over the world are delicately balanced and can be easily disrupted, especially by human involvement. I will discuss two cases of human involvement that have negative impacts on ecosystems and involve two separate species. The first is the removal of the gray wolf (*Canis lupus*) from western national parks, and the second is the introduction of the water hyacinth (Eichhornia crassipes) into ecosystems worldwide. The gray wolf was extirpated from many areas of the American West in the early 1900s. This triggered trophic cascades affecting both riparian plant growth and, in turn, stream morphology. Wolf reintroduction in the 1990s has reversed some of these effects, showing the importance of this apex predator. The water hyacinth was introduced into over 50 countries for use as an ornamental plant. Its propensity to reproduce asexually adds to its effectiveness as an aquatic invasive species. Introduction of the plant has not only shifted water chemistry and invertebrate communities, but has impacted the human use of waterways. Attempts made to remove the invasive species are often unsuccessful. There is no easy way to say which human impact has a more negative affect overall, but it seems that the absence of wolves has a larger ecological impact while the introduction of the water hyacinth has a higher impact on socioeconomics.

#### Introduction

Both the wolf and water hyacinth systems are important for understanding how seemingly simple changes made in stable ecosystems can have far-reaching effects. The eradication of gray wolves (*Canis lupus*) in the western United States has a long history beginning at the turn of the 20<sup>th</sup>

century. Predator control programs were implemented in the West in an attempt to protect valuable livestock herds. Records of pelts turned in for bounty money gives the best estimation of the wolves decline and collapse; the peak of bounty payments spanned 1903-1909 at just over 4000 pelts in the peak year, and then declined until 1927 after which no payments were made (Riley et al. 2004; Ratti et al. 2004). Wolf populations have remained small but efforts have been made in recent decades to reintroduce wolves in an attempt to restore ecological areas to their historical compositions (Riley et al. 2004). The concern over past eradication and reintroduction of wolves is, in part, because of the far-reaching effects of their absence. Wolves act as an apex predator; they are at the top of the food chain and are inextricably linked to all levels below them. The removal of an apex predator can trigger a trophic cascade, or a 'top-down' effect, so that each trophic level below the wolf is impacted, often negatively, in some way (Beschta & Ripple 2008). The effects of wolf eradication and the effort made to reintroduce the predator gives a good insight into the potential of human impact on the ecosystem.

Wolf removal had far-reaching effects; however the introduction of a species can also have wide spread effects on an environment. *Eichhornia crassipes*, the water hyacinth, originally native to South America, is now a prevalent aquatic invasive species in over 50 tropical and subtropical countries worldwide (Villamagna & Murphy 2009). It is completely free-floating and forms dense, interlocking mats in bodies of fresh water (Villamagna & Murphy 2009). The water hyacinth was most likely introduced as an ornamental plant, which then spread outside of garden ponds. Attempts have been made to eliminate or reduce populations of *E. crassipes* by chemical, mechanical, and biological control, but these have been largely unsuccessful (Villamagna & Murphy 2009; Toft *et al.* 2003). *E. crassipes* does not have the same top-down effect in its new environment as the gray wolf, but does affect the surrounding biota and bodies of water in several ways including greater nutrient uptake, decreased dissolved oxygen content, and reduced primary production

(Villamagna & Murphy 2009).

The gray wolf and water hyacinth are two examples of ways in which humans have inadvertently impacted the environment by the removal or introduction of a species. These changes can have both direct and indirect effects on multiple aspects of the surrounding environment from which it becomes clear that even seemingly simple changes to the biota can have far-reaching and long lasting effects.

#### **Cascading Effects of Wolf Eradication**

Trophic cascades triggered from the removal of wolves from a region or ecosystem can have major effects on both the biota and the environment. I will first focus on the biological ramifications of the cascade on both plants and animals.

#### **Biotic Effects of Removal**

Beschta and Ripple 's (2008) study in the Olympic Peninsula National Park is a prime example of the type of top-down changes caused by wolf removal. The study shows that after functional wolf eradication in 1910, populations of ungulates, especially Roosevelt elk (*Cervus canadensis*), grew in size and altered their foraging patterns. This growth and alteration led to increased grazing on riparian flora, the plants which dominate land-stream interfaces, and restructuring of riparian plant communities. In particular, stands of black cottonwood (*Populus trichocarpa*) were greatly affected by high browsing. Plots inside the park averaged around 8000 seedlings while plots outside averaged around 33,000 seedlings per hectare. Within some areas of the park, not only were stands difficult to locate, but they primarily contained trees over 90 years old, showing that there had been very little new growth. Cottonwoods are still producing high numbers of seeds but elk browsing and abiotic factors, such as erosion of sediments and channel widening (Beschta & Ripple 2008), prevent their recruitment. The successional pattern has

therefore shifted away from cottonwoods toward red alder and sitka spruce. Early expeditions described areas of river in the Olympic Peninsula National Park as very overgrown and difficult to navigate, but today overgrazing by Roosevelt elk has prevented riparian seedling recruitment and changed the river ecosystem of the park significantly (Beschta & Ripple 2008). It is clear from these observations that wolf removal indirectly, and negatively, impacts plant communities.

In a study by Johnston *et al.* (2007), a third biotic level was affected when overgrazing by ungulates led to a decrease in willow (*Salix* sp.) stands and forced beaver populations from the area because of the diminished supply of their major food source. Beavers in Yellowstone National Park had an established mutualism with willows; the trees provided food and dam structure while the beaver dams provided an elevated water level essential for uninhibited willow growth (Johnson *et al.* 2007). Wolf removal shifted this mutualism and allowed increased indirect, or scramble, competition between elk and beaver. Trophic cascades can affect varying numbers of biotic levels but the cascade effect, in general, is a serious consequence of human-induced changes to an environment.

Other animal communities can also be affected by elk overgrazing and decreased riparian recruitment. Decreased cottonwood and other seed-ling tree recruitment can lead to a wider riverbank. This widening leads to decreased water contact with fallen trees and lessens the occurrence of large logs that are dragged into rivers in the Olympic area by flooding or other events and subsequently submerged on the river bottom. Therefore, habitat and shelter for fishes migrating upstream from the ocean becomes nonexistent (Beschta & Ripple 2008). A widened riverbank can also decrease contact and fracture the link between the river and the riparian forest itself. This may disrupt inputs of larval invertebrates by interrupting their lifecycles (eg. insects with aqatic larval forms and terrestrial adult forms) and therefore cause changes in the feeding habits of consumers such as fish, birds and bats

(Beschta & Ripple 2008). These types of changes are less readily observed but are still a cause of concern for the cascading effects of apex predator removal.

#### Abiotic Effects of Removal

The second major effect of a trophic cascade triggered by the eradication of the gray wolf (*Canis lupus*) is the multi-dimensional change occurring in the landscape and surrounding physical environment caused by the removal of the apex predator. In the Beschta and Ripple (2008) study, after wolf removal led to over-browsed riparian zones, the dynamics of rivers within the Olympic Peninsula National park began to change. In general, riparian plants provide root structure which anchors and prevents erosion of river channels. In the absence of these roots and with increased sediment load, the channel widens, migrates more often, as well as increases braiding—an increase in indirect channel pathways and instability. The channel widening and bank erosion in turn creates a feedback in which there is less optimal habitat for riparian plants, like cottonwoods, to root. Beschta and Ripple 's (2008) study outlines the multi-dimensional impacts of wolf removal and calls attention to large-scale physical changes that can occur in the presence of trophic disruption.

Physical landscape changes also took place in the Johnston *et al.* (2007) study in which competitive exclusion of the beaver (*Castor canadensis*) population led to lower water levels. Beavers were pushed out by elk over-grazing and the subsequent decrease in willow densities. These beavers abandoned their dams which degraded over time, releasing blocked water and lowering water levels of areas up-stream from the structures. The drop in stream level left willows far above the water line and produced the previously discussed stress. Similarly to the Beschta & Ripple (2008) study, streams were also widened by the absence of anchoring roots.

#### **Wolf Reintroduction**

The effects of the trophic cascade were recognized in Yellowstone National Park and in the winters of 1995 and 1996, 31 gray wolves (*Canis lupus*) were reintroduced into the park (Beschta & Ripple 2009). Within a few years, some areas of the riparian zone showed a clear decrease in ungulate grazing and an increase in willow and cottonwood recruitment (number of new seedlings) as well as height. Recovery has been patchy most likely due to the hunting patterns of wolves and the responding shifting foraging patterns of ungulates. However, there are some consequences to be expected from any large change in an ecosystem, even if it is being returned to an ancestral state. The reintroduction within a national park has led to a non-historical prey response to the wolves; elk have learned to congregate near human habitation as a defense mechanism to wolf attack (Beschta & Ripple 2009). Despite some drawbacks, wolf reintroduction has taken a major step in restoring an important, historical landscape to its ancestral state.

In some cases, reintroduction is preferable to the alternative, which would be controlling the lower trophic level. In this case, wolf reintroduction is preferable to human reduction of elk populations. In the study by Johnston et al. (2007) described above, a new sort of mutualism emerged where willow growth was actually aided by elk browsing in Yellowstone National Park. Lowered water levels from the absence of beavers placed stress on growing willows; this stress could be alleviated by grazing because the subsequent reduction of branch junctions increased conductivity and water uptake. While it may seem like a viable alternative, this system still deviated wildly from historical conditions in which wolves kept elk populations in check and willow trees were not over-grazed. Reduction of ungulate populations would only continue to reduce the recruitment of willows in water stressed areas where grazing is helpful to the plant (Johnston et al. 2007). The feedback loop of willow growth and elk grazing could only be broken by the return of wolves to Yellowstone National Park.

Though wolf reintroduction has been positive in returning the balance to ecosystems of the west, some doubt that gray wolf ecology can return to its ancestral state. Work by Riley *et al.* (2004) suggests that wolves mainly inhabit mountainous regions and areas in and around national parks instead of occupying their native, more prairie-bound range. The absence of wolves triggered far reaching effects that can be felt even today; with better understanding of the complexity of these ecosystems we are finally able to correct some of the past harm done and hopefully prevent a similar occurrence in the future.

#### The Introduction of Invasive Water Hyacinths

Invasive *Eichhornia crassipes* can also have large and long-lasting effects on ecosystems into which it is introduced. These changes are not as well documented or observable as the impacts of gray wolf removal partially because instances are so wide-spread, remote, and often occur in non-English speaking countries (Villamagna & Murphy 2009). Despite this fact, their introduction as a human-induced change still poses a negative threat to many freshwater ecosystems and to human use of the waterways.

#### Success as an Invader

Water hyacinths rank highly as a harmful invasive species owing much to their reproductive nature. The hyacinth *Eichhornia crassipes* can reproduce both sexually and asexually, though genetic work by Ren and Zhang (2007) suggests that asexual cloning is the primary mode of reproduction because single clonal genotypes are very widespread. This clonal growth by use of stolons, which root out and sprout an entirely new but connected plant, contributes to the invasive success of *E. crassipes*. Evidence comes from the number of clones present in an area with the least number in original founder locations and growing numbers further away. Multiple colonizations by clones have taken place in Ren and Zhang's (2007) study area in China,

which has exacerbated the invasiveness.

#### Major Effects of Invasion

Hyacinth invasions around the world have many effects on the surrounding ecosystem. However, unlike wolf eradication, these consequences are not neatly divided between abiotic and biotic effects on the environment. Eichhornia crassipes can greatly alter water quality in several ways including greatly decreasing dissolved oxygen content. This is a result of the leaf cover of hyacinths which prevent surface mixing, as well as shading primary producers (phytoplankton and native plants) subsequently preventing them from photosynthesizing and adding oxygen to the water (Villamagna & Murphy 2009). E. crassipes can also alter water nutrient levels because the plant has the ability to uptake and store greater levels of nutrients, like nitrogen and phosphorus, than it actually requires for future use in the event of nutrient shortages. The capability for nutrient uptake makes water hyacinths popular as waste water scrubbers, but can create imbalances in the nutrient levels of a normal freshwater ecosystem (Moran 2006). Villamagna and Murphy's (2009) study investigates impacts on several aspects of the invaded ecosystem. Large hyacinth mats can negatively impact primary producers by out-competing them for space and sunlight. Decreases in production caused by competition are not always immediately seen because hyacinths may trap detritus that acts as an alternate food source for these producers. Both zooplankton and fish community structures act in highly variable ways dependent on preexisting populations, chemical conditions, predator presence, and season. Macroinvertebrates also show varying responses but it is largely thought that the novel habitat and shelter structure provided by the leaves and roots are beneficial to insect larvae, snails, and other larger invertebrates (Villamagna & Murphy 2009). Though research has not fully explored potential negative impacts on invaded ecosystems, continued research on E. crassipes is important in preventing potential harm to fresh water systems.

Insight on this invasive species can also be gained through comparison with bodies of water dominated by Eichhornia crassipes and those dominated by a possible equivalent, the native pennywort (*Hydrocotyle umbellata*). Toft et al. (2003) completed a study comparing the two plants and the differences in ecosystem effects by the replacement of the pennywort. The plants were found to be functional non-equivalents for several reasons. Different insect communities occupy the two species due to differences in plant structure; hyacinths have a more complex root mass and surface structure favored by a different set of insects. Differing invertebrate fauna leads to variation in fish diets between plants species. Native amphipods are the preferred diet of fish in the study area and are found most abundantly within the native pennywort structure. Invasive amphipods prefer the invasive hyacinth but make up little to no portion of fish diet. The invader may be consumed less because of greater ease in hiding in the larger root structure, or because of the lower level of caloric return provided by the smaller invertebrate. Toft et al. (2003) gives a valuable perspective on the potential harm of an invasive species by studying an equivalent species; this is especially useful in cases such as this where it is not possible to study the ecosystem in question both before and after an invasion.

#### **Control Efforts**

The ability of *Eichhornia crassipes* to spread quickly works to prevent complete eradication; even a single remaining plant can sprout an entire new mat. The coupling of the invasive plant and amphipod described above shows that removal of the water hyacinth could also affect other factors that would help to return the system to its ancestral state as a whole (Toft *et al.* 2003). A study completed in ecosystems in Texas researched the use of biological controls in the form of weevils to damage and remove mats of *E. crassipes* (Moran 2006). Weevils did inflict damage in the form of leaf herbivory and scarring, as well as indirectly cause a nutrient loss in the hyacinths. However, the wee-

vils were not overly effective in removing water hyacinth colonies and were unable to maintain populations large enough to do damage in areas where hyacinth mats were disturbed (such as high energy streams) (Moran 2006). This is just one attempted solution to hyacinth removal but there have been few truly effective and ecologically friendly eradication efforts largely due to a variety of interfering variables. Other solutions include mechanical removal which is cheapest but the decomposing left-over biomass can alter nutrient levels in the water. Chemical and biological reduction efforts are more expensive and can negatively impact non-target species (Villamagna & Murphy 2009). While there has been partial success, it seems that more research is necessary to fully control and reduce populations of water hyacinth.

#### Comparison of Effects of Wolf Removal vs. Water Hyacinth Introduction

There is no simple way to determine if one system or the other has a 'worse' effect. The dynamics of both trophic cascades and species invasions can cause serious and far-reaching effects on the surrounding ecosystem. We can look at the comparison from a few different perspectives to answer the question in different terms.

#### Socio-economic Impact

Both the introduction and the removal of a species can have repercussions on humans, but this impact is easier to conclusively measure in the case of water hyacinths. Ecosystem services, such as biotourism, can be negatively impacted by the absence of large, apex predators. Predator absence could result in lowered biodiversity and possible decreased public interest in an ecosystem (Ray et al. 2005). However, these negative effects are often overlooked because of their lower impact on humans. If wolf absence directly impacted human economic gain, it most likely would not have taken over 60 years for wolves to be reintroduced into some areas. Water hyacinth, contrastingly, causes problems in water navigation, impacts fisheries, and can interfere

with the running of hydroelectric power plants (Villamagna and Murphey 2009).

#### **Ecosystem Impact**

Both species changes can cause wide and varying impacts on their surrounding ecosystem; however wolf removal appears more serious in this case because of the delicately balanced system and cascading system of trophic levels. Wolf removal was shown to have impacted the biota and landscape of both the Yellowstone and Olympic Peninsula national parks in large and lasting ways. The effects of their removal are still present in the parks today, even after the beginnings of wolf reintroductions. Water hyacinths on the other hand, show inconclusive long lasting effects on their ecosystem as well as probable ease of return to the natural state after plant removal.

#### Conclusion

The human presence on the planet has caused large and often irreversible changes to a number of ecosystems. Species extirpation and spreading of alien species are only two of the ways in which our actions can impact the earth for years to come. The two cases presented here are just two ways in which a seemingly simple change can have effects on both the biota of a system and on the physical aspects of an environment. Wolf extirpation triggered trophic cascades affecting riparian plant growth and river channel morphology while introduced water hyacinths changed surrounding water chemistry and invertebrate communities. These types of changes should be cause for concern and further research as well as act as a warning to prevent the types of future human-induced changes that could have equally negative and far-reaching effects.

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### Sweetland Prize for Excellence in Upper-Level Writing (sciences 2010/2011)

### An Odd Kind of Sympathy

From English 325: Anna Cacciaglia (nominated by Sara Talpos)

Anna's essay lives up to Stephen Pinker's assertion that "the best science writing delights by instructing." I admire the depth and breadth of Anna's scientific knowledge; what excites me even more is her beautiful language, making such knowledge accessible—and compelling—to a general reader. This essay's structure is unique, juxtaposing personal narrative with paragraphs drawn from secondhand sources. The juxtaposition invites readers to consider the connections between Anna's own studies and the work of others. I am grateful for this essay's celebratory argument, for the author's ability to see the connections between living (and nonliving) things: "The veins through the leaves in an oak echoed the faint blue channel across my wrists, which mirrored photographs of a river taken from an airplane, which spread like the roots of a tree."

Sara Talpos

### An Odd Kind of Sympathy

I picked flowers as a child, but not for their beauty. I would find as many different types as I could and gather one of each, the largest blooms. I would walk them back to the porch, where I would sweep clean a solitary brick, as though sterilizing an operating table. Then, one by one, I would pick the plants apart, peeling away the layers one at a time, piercing and prying secreted cores with tiny fingernails and scooping the seeds into my palm. I set out each cadaver neatly surrounded by its parts and moved methodically to the next. They were so complicated once you started paying attention.

No one knows quite how, but cells use time. Circadian rhythms, the biological programming that influences sleep cycles, are caused mostly by large groups of cells doing the same thing simultaneously. Scientists believe that every cell in an organism has some way of sensing when natural light is present and knowing when it's getting dark. And so, at the same time every day, the cells of every living thing in any given time zone do the same thing in unison. They've been doing it for thousands of years (Evans). Unity among seemingly independent beings is something of a recurring theme in science, though there is frequently no plausible explanation. Such inexplicable interaction can be observed in almost every science, on nearly every scale. It is called synchronicity.

In school, I was drawn to biology, where I found fellow dissectors of flowers, other kids who poked dead birds with sticks and cultivated mold in their sandwich bags. We were all curious; we felt our observations were somehow worthwhile. With each passing year, the topics in biology got finer and more detailed. The first year, teachers might explain that plants make their own food. The next they might call it photosynthesis. By high school we were naming the parts of the cell necessary for the process, and halfway through college we could recite the chemical equation itself, down to the last photon and enzyme. My fellow students and I ate it up, hungered for the next step, the next layer to peel away, but soon biology became too big

to support itself. It fractured into disciplines and we were forced to pick a specialty. Even within a chosen field, though, the certainty was gone, the confidence. We had moved into the realm of research and speculation.

In one species of firefly found in Southeast Asia, individuals are known to flash their bulbs together, such that half the group is lit while the other half is off, arranging themselves spatially so that the night sky begins to look like a shifting checkerboard. Though it is believed that they do it for the purposes of reproduction, no one knows what determines their cadence, to what pulse they set their performance. No one even knows whether a firefly's reflection of his neighbor's pattern is on purpose (Strogatz). Synchronicity has been called "meaningful coincidences," and has been broadly used as a label for things that feel significant, but cannot be explained any reasonable mechanism (Nadis). It's not choreography; it's more akin to magnetism or impulse, instinct, but occasionally in things that can't have instincts at all, like atoms or planets.

I started working in a genetics research lab freshman year, excited to make my own discoveries. But, as it turns out, nature has no interest in helping you understand her structure. It is a fight for every hint, every scrap of data that might allow us a glimpse of invisible workings. In years of work on a single gene, hundreds of data sets, and thousands of dollars, I would be hard pressed to tell you anything we really learned and even more incapable of telling you what it meant in the larger scope of biology. I worked under a Ph.D. who had dedicated ten years of his life to that single gene. To him, I'm sure his project felt important, even crucial. Indeed, I've found that to be true of every researcher I have met since. Everyone has their pet protein, their favorite enzyme, a single step in an intriguing process. Many seem to have lost perspective. Though it seems contrary, it is the most specific details in biology that are the most consuming, for every discovery inevitably leads to a new layer of complexity.

The mystery of synchronization is by no means tethered to the earth.

Astrophysicists observing distant galaxies have seen that the temperature of a body's

atmosphere may be related to the period of orbit of its solar system's sun. Thus, the current season of a central star may affect something as seemingly disjointed as a neighboring body's chemical emissions, though no system is known for such a communication, which takes place over hundreds of thousands of miles (Bohlender).

I know that the researchers were children once, children who collected bugs and probed mud and studied the stars. They chose the course they did for the same reason that I chose biology. It's possible they couldn't understand the root of their curiosity at the time, but I feel that the desire to understand nature goes deeper than the incessant inquiries of children. By the time they were old enough to give a name to their question, they were too constrained by formulas and chemical names and the ever present pressure to publish to pay it any mind anymore. But part of them still believes that science can answer that question.

The black-tailed godwit is a migratory seabird which mates for life but may live hundreds of kilometers away from its partner, meeting her only once a year. Despite having no contact whatsoever between flocks, the birds arrive at the annual breeding ground within an average of three days of one another. Though scientists speculate that the birds may use seasonal clues or determine migratory timing genetically, no one is really sure how they manage to behave so regularly without any method of planning (Gunnarsson).

And the question is this: Where is the thread, the theme? What is unifying us, with one another and with everything around us? It's a question that, as it turns out, is hardly specific to science. It is the question of religion and of art, of psychology and anthropology and philosophy. People have asked this question since the beginning of people. And, clearly, every person must find their own way to answer it. Throughout history many have tried, with various methods and to various ends. But we, the collectors of flowers and probers of mud, we trust only our eyes. We seek the answer in our observations and our experiments, burying ourselves in the layers of complexity that we can measure. And it is here that science becomes both the best and

the worst method for finding an answer, for it is only in the failure of science that the answer becomes clear.

There is no world so small that synchronicity cannot be found. All electrons have an innate spin. When two electrons are associated as a pair and the spin of the one of the electrons switches, the spin of the other will also switch, even if the electrons are separated by thousands of miles. It's called "hyperfine electron coupling" and, though it's studied in the fields of quantum mechanics, chemistry and physics, no one has yet discovered the mechanism that makes it possible (Brink). Thus, matter itself follows the same mysterious rhythm as the planets themselves, encompassing every level of organization in between.

Science can explain a lot. Science can tell us practical things, like why there are tides or how to treat infections or why milk goes bad. Science can explain some things that seem magical, like the northern lights or the development of an embryo. Science can save your life. And, to some extent, science can tell us how we are connected. It can tell you that your genes match a chimp's, and, to an extent, a bacterium's. It can tell you that the same matter that makes up the stars is in your bones and your blood and the air you breathe. It can show you that the same force that keeps your feet on the ground is holding the universe together. It can show you how populations communicate, how environments are built. There is enough evidence for the connections between every solitary speck, living and nonliving, in this galaxy, to help us sleep easy at night, knowing that we are never alone. And you could stop here, as a scientist, and believe that science does have the answers, and let your search be over. But science also knows enough to recognize what it cannot explain.

Steven Strogatz is a mathematician who studies examples of synchronicity in physics and nature. He calls the phenomenon an "odd kind of sympathy," a phrase that seems particularly fitting when considering the idea of sympathy not only as understanding, but also as an alliance (Nadis). Synchronicity is just one example of a way in which we are united not only in principle, but also in our

ignorance of what make the principle possible.

And there is so much we don't know. Everywhere in science there are rhythms, patterns which seem to have no place at all. Again and again we stumble upon them. Science must throw up its hands; it cannot follow where logic seems absent. When I was a child, it seemed clear, implicit even, that everything has something in common with everything else. As I picked apart nature, there was an aspect of déjà vu. Once you looked for the patterns, you could begin to see them everywhere. The veins through the leaves of an oak echoed the faint blue channel across my wrists, which mirrored photographs of a river taken from an airplane, which spread like the roots of a tree. An egg is an eye is a bubble is a moon. There is no escaping what we share with our world, both in its history and its destiny. But what really binds us is the very thing that, on the surface, seems to undermine all of our efforts to explain.

Only here, at the edges of our comfortable solutions, do we find that theme, that constant beat that links everything that has ever been. The fact that we can't explain it is the very thing that makes it relevant, for what could be more universal that not knowing? The anonymous forces, the inscrutable enigmas, they draw us together like no hypothesis or theorem has ever been able to, and probably never will. We unite in awe of a mystery, having in common not only our matter and our evolution but also this pulse, its energy, and our complete ignorance in the face of it.

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### **Charcot-Marie Tooth Disease**

From MCDB 397: Aimee Vester (nominated by Laura Olsen)

Aimee similarly does an excellent job of analyzing her target audience. She has chosen to address potential patients and their families who are affected by the disease the she works on in her research lab. Thus, it is a more difficult subject, because it is much less familiar to the general public. Her goal is to explain how the DNA samples the patients submit could be used to benefit research on the disease.

Laura Olsen

### CMT Needs You!

Placed in a translucent 1.5-mL tube, a patient's DNA sample appears rather unexciting. Without patient samples, however, our genetic studies of Charcot-Marie-Tooth disease (CMT) would be futile. In studying the patterns of inheritance of different types of CMT, the samples of family members are especially important, yet difficult to procure. This presentation aims to persuade family members of CMT patients to submit their samples for CMT research. Teaching family members more about CMT and the ongoing research can show them why their information is important, and motivate them to help in finding treatment for their affected relatives.

### **Audience Analysis**

My main audience is very broad—adults of various backgrounds, mostly in their 40's and above—with a very specific need. The audience needs information that is more focused on research than a general CMT website, but is less technical than a research article presented by experts. The audience is older because it is more likely that older family members showing no CMT symptoms are unaffected. Their age ensures that the characteristic late onset of CMT would most likely have already occurred. In order to really persuade the audience to submit their samples, the material must be presented in an engaging and concise manner, and must also be easily attained. I think that print media is easiest to use for the greatest variety of people in the audience, so I intend to use a brochure.

To be most persuasive, the brochure should meet the expectations of the audience. Not doing so would only divert attention away from the main point. The audience would probably look for research information that clearly delineates steps and methods, because the audience will perceive the source as some sort of scientist. Also, while the audience might be interested to learn about some of the bacterial and yeast studies being done, they would most expect to learn what tests are performed with their DNA samples.

Furthermore, the audience might worry about the privacy of their patient information, because this is an important concern when conducting clinical research.

### Adaptation Strategies

To make the audience feel most involved and essential to CMT research, I will use adaptation strategies that will allow me to keep as much of the science intact as possible. I think that this can best be done by using definitions and graphics. As many of us learned in our Thanksgiving assignments, explanations are nearly impossible without visuals. This is especially true when explaining procedures, and I hope that using visuals in my brochure will create a more coherent picture of what will be done with the individual's sample. Definitions will also be an effective persuasion tool because they will ensure that the audience does not feel talked down upon, and will also deal with any misperceptions that the audience might have. This is an important point that Nancy Ross Flannigan talked about—when writing about science for the general public, we should keep in mind that the public might miss some of our facts if they already have preconceived ideas about the subject. The audience might have the misconception that we work directly with their blood samples, for example, when we really work only with their DNA. Finally, I will use narration to weave a story about the individual's sample, engaging the senses so that the audience is engaged throughout the brochure.

### **Content of Brochure**

The content of this brochure should differ enough from CMT resources currently available, utilizing the expectations of the audience to be most effective. The CMT resources that have been published thus far mainly focus on describing and coping with the disease. Material intended for the general public focuses less on research, most likely because many of the disease's mechanisms are still so unclear, and because many people are

not as interested in the research. Also, the research that is discussed does not necessarily show the importance of family member data. Research publications, conversely, present methods that are often way more complicated than the general public can understand, or is willing to understand. This brochure serves as an introduction for the general public into the research world, so that they feel comfortable enough to donate their samples to research.

### Distribution of brochure

To reach the largest number, the brochure should be distributed to the audience both indirectly and directly. Indirectly, family members can be reached when they accompany their affected relatives to the doctor's office, or other events related to CMT. The brochure should be available at the office of clinicians that would typically diagnose and treat CMT patients, such as neurologists. CMT patients themselves could also be provided with this brochure, so that they can pass their family members the information at a later date. CMT organizations can also put the brochure on their websites and distribute them at their gatherings. For a more straightforward approach, researchers themselves could also mail this brochure to interested individuals or those that CMT patients have identified. Clinicians can also directly address the patient's family members when they accompany them to the clinic. In all of the above instances, though, credibility should be maintained, so that the audience trusts the research's integrity and can be persuaded; no private businesses should distribute this flyer.

# Charcot-Marie-Tooth Disease

# WHAT IS CHARCOT-MARIE-TOOTH DISEASE?

the upper extremities. Most CMT cases are not considered fatal, though the quality of living of those affected is severely impacted. Current treatment employs orthotics and pain relief affecting the peripheral nerves, and is seen in approximately one in 2500 individuals. The Onset usually begins with muscle weakening in the lower extremities, and then moves to nerves are called neuropathies. The onset of CMT typically occurs later in life, although peripheral nerves consist of motor and sensory nerves, and diseases that degenerate patients with some types of CMT experience onset in adolescence or early childhood. Pierre Marie, and Howard Henry Tooth. CMT describes a group of inherited diseases Charcot-Marie-Tooth disease (CMT) was discovered in 1886 by Jean-Martin Charcot

INHERITED PERIPHERAL

COMMON FORM OF CMT IS THE MOST

AST FACTS:

1 IN 2500 INDIVIDUALS

NEUROPATHY

### WHAT IS ALREADY KNOWN?

GENES ARE KNOWN TO

CAUSE CMT

MUTATIONS IN 39 ARE AFFECTED

because drugs are yet to be developed.

patterns of inheritance of many, but not all, types of proteins crucial to normal peripheral nerve function muscle weakening and atrophy, and also to loss of esting DNA samples from family members of CMT patients, researchers were also able to identify the in CMT there are mutations in genes that encode sensation. Using genetic techniques, researchers genes that are associated with CMT patients. By The proteins created are faulty, and this causes peripheral nerves to degenerate. This leads to have been able to identify mutations in specific

### WHAT WILL BE DONE WITH MY SAMPLE? Your sample will be treated with the utmost care and WHERE IS THE RESEARCH GOING?

be extracted from your sample, and then sent directly to the sequence of portions of your DNA and compare it to

confidentiality. Once collected by a clinician, DNA will

a researcher. In the laboratory, the researcher will find

the sequence of your affected relative's DNA

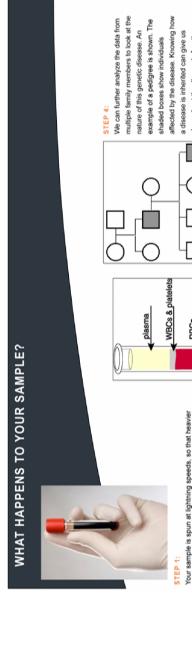
mutations in the genes, researchers can find differences Now that a number of genes have been implicated with CMT, researchers are beginning to examine the protein studies will allow researchers to better understand how products of these genes. By investigating the known these abnormal protein products cause disease, and also how peripheral nerve processes should normally nerves is a key step. The next step would then be to in the way genes' protein products function. These function. Elucidating mechanisms in the peripheral use that information to create therapies that would compensate for whatever is going wrong with the abnormal proteins.

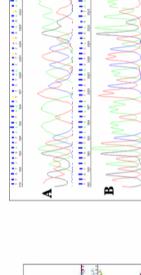
## HOW DOES MY INFORMATION HELP?

This will allow researchers to prioritize their research and compare the affected patient's DNA to that of their famil researchers can use the information to determine which traces a trait—and determine the pattern of inheritance hem is also present in every unaffected family membe Once DNA sequences are obtained, researchers can researcher build a pedigree—a sort of family tree that variations are most likely to be disease-causing. For example, if the patient has two mutations and one of that one mutation is less likely to be disease-causing members, and look for the presence or absence of certain variations within the DNA. This will help the that the patient's CMT type exhibits. Furthermore, ind disease-causing mutations more effectively.









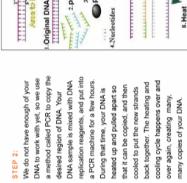
clues about the disease's function.

three parts: plasma, white blood cells, and red blood cells. From your white blood cells we get what we really want—

parts settle to the bottom. This separates your blood into

STEP 3:

Now that there is enough of the DNA we want to look at, we send your DNA to be sequencing essentially cracks your DNA code, and we use a computer program to compare your code to that of your affected relative. Each peak in the image above represents a nucleotide base—one letter in your DNA code.





### Sweetland Prize for Excellence in Upper-Level Writing (social sciences 2011/2012)

### Newcomb's Problem and Expected Utility

From Econ/Phil 408: Christian Keil (nominated by Frank Thompson)

The topic of this paper is perhaps the most challenging of those that I suggest students consider for their term paper for my ECON/PHIL 408. Very few try. (Finding a satisfactory answer to Newcomb's Problem has occupied some of the best minds in economics, philosophy, and psychology for a half century.)

Keil's concentrations are Economics and Honors Psychology. He researched the relevant literature quite thoroughly, thought and wrote about it incisively, and came to his own tentative conclusions. In addition to being brilliantly well-thought, the paper is a model of fine composition.

Frank Thompson

### Newcomb's Problem and Expected Utility

At its most fundamental level, economics is a question of allocation: given moderate scarcity, what is the best way to distribute resources? To answer that question, we must first analyze what allocations individuals prefer by developing a coherent explanation of individual preference. The development of such an explanation will be the primary focus of this paper.

One theory of preferencing is expected utility theory, first hypothesized by Daniel Bernoulli in 1738. Bernoulli advocated for an understanding of preferences that accounted for the variable utility of individual goods. In his words, "the determination of the value of an item must not be based on its price, but rather on the utility it yields," so an understanding of preference ought to be based on an individual's subjective expected utility, rather than any objective description of value.

This conclusion is intuitively appealing. Goods seem to be worth different amounts to different individuals, and some popular findings of modern economics (like the diminishing marginal utility of money) seem to support this hypothesis. More rigor and detail was given to the theory in 1947, when economists John von Neumann and Oskar Morgenstern identified the conditions necessary for expected utility to hold (namely, "ordering, continuity, and independence"; Starmer, 2000, p. 334). The analysis of von Neumann and Morgenstern served as a catalyst for further debate on the merits of expected utility theory, provoking a series of thoughtful, in-depth analyses on the subject.

In fact, the expected utility debate has such impressive breadth that I doubt a paper of this length could adequately deal with it in its entirety. For the sake of depth and completeness, then, I will turn to a specific, powerful criticism of expected utility theory — one arising from a philosophical, psychological, and economic problem known as "Newcomb's problem" — for the remainder of this analysis.

In a sense, I hope to use Newcomb's problem as a case study: an individual, hypothetical scenario that serves as a testing ground for the broader hypotheses in question. There may very well be problems with the expected utility theory that go unaddressed in this paper, but as my analysis will show that the theory survives the criticisms that arise in the world of Newcomb's problem, it may bring us ever closer to a true understanding of individual preference.

Popularized by Robert Nozick in 1969, Newcomb's problem has become one of the most divisive thought problems in modern philosophy (Kiekeben, 2000). It is formulated as follows.

You sign up for a psychology study, and are told that you have the chance to win one million dollars. Obviously excited, you run to East Hall and arrive at the room where the experiment is being held. In the room, there are two boxes: one transparent, containing \$1000, and one opaque, containing either \$0 or \$1,000,000 (Figure 1).

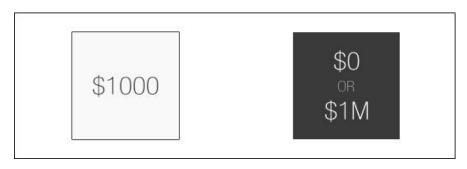


Figure 1. The boxes in Newcomb's problem.

Upon entering the study, you know these possibilities, and know that you have the following choice: either (a) take both boxes, or (b) take only the opaque box. The catch to the game is that before you enter the room, a nearly perfect predictor has predicted your choice, and will only place the \$1,000,000 in the opaque box if he thinks you will choose (b). You are con-

fident in the predictor's abilities, as he has predicted your behavior correctly in the past, has never been wrong in his predictions. Knowing all this, which box do you choose?

According to expected utility theory, you should choose (b) and take only the opaque box. The logic behind this recommendation is simple and intuitive. If you choose (a), the predictor is unlikely to place the \$1,000,000 in the opaque box, meaning that the expected value of choosing (a) is slightly over \$1000. If you choose (b), conversely, the predictor will almost surely place the \$1,000,000 in the box that you choose, nearly guaranteeing yourself \$1,000,000. As you would surely gain more utility from \$1,000,000 than you would from \$1000, expected utility theory recommends that you choose (b).

This has become known as the "one-box" solution to Newcomb's problem, in contrast to the "two-box" solutions that give arguments for choosing (a). A third option (the "no-box" solution) has made a minor impact in the literature on Newcomb's problem (Maitzen & Wilson, 2003), but the modern debate is primarily a contest between two sides: the one-boxers, who use expected utility theory as described above, and the two-boxers, who use a related, but notably different system of preference evaluation named "Causal Decision Theory" (Weirich, 2008).

In particular, the two-boxers argue the one-box solution has a particularly damning flaw: your choice cannot change what is placed in either box. Once you enter the room of the experiment, the two-boxers argue, the \$1,000,000 is either in the opaque box, or it is not – there is no third option – so why not take both boxes, and walk away with an extra \$1000?

This focus on causality is echoed in the general philosophy of Causal Decision Theory. Its general structure is similar to expected utility theory, as it uses probabilities and utilities to measure the overall good of an action, but Causal Decision Theory argues that when an individual has no causal relation to the ends of a particular action or lottery, they ought to use the recommen-

dations of the "dominance principle," rather than expected utility calculation, to determine the rational course of action (Nozick, 1969).

Simply understood, the dominance principle argues that individuals ought to prefer those actions that always provide at least as much utility as any other alternative, and occasionally provide more. More formally, an action,  $s_i$ , is weakly dominant to any other action,  $s_i$ , as long as the utility derived from  $s_i$  is greater than or equal to the utility derived from  $s_i$  for all possible strategies of one's opponents,  $S_{-i}$ , or equivalently:  $u_i(s_i, s_{-i}) \ge u_i(s_i', s_{-i})$  for all  $s_{-i} \in S_{-i}$ .

Applied to Newcomb's problem, the two-boxers use the dominance principle as evidence that (a), the two-box solution, is the correct choice. The predictor either places the money in the box or he does not, they argue, and as in either state, choosing both boxes would give more money to the participant, two-boxing is the dominant choice (Figure 2).

	State of Nature	
	One-Box Prediction	Two-Box Prediction
Taking One Box	\$1,000,000	\$0
Taking Both Boxes	\$1,001,000	\$1000

Figure 2. The payoffs to Newcomb's problem, as understood by Causal Decision Theory (Weirich, 2008). As \$1,001,000 is greater than \$1,000,000 and \$1000 is greater than \$0, this formulation of Newcomb's problem suggests that the two-box solution, (a), dominates the one-box solution, (b).

The argument made for the two-box solution, then, can be understood as dependent on two separate, independently necessary claims. First, it depends on the application of Causal Decision Theory, or more specifically, it depends on the claim that the actor in Newcomb's problem has no causal

relationship to the ends she may bring about. As Causal Decision Theory admits, if there is no such relationship, the theory does not apply (Nozick, 1969). Second, the two-box answer depends on the conclusion of the dominance principle. Even if Causal Decision Theory is appropriate generally, a denial of the dominance principle would serve as evidence to discount the two-box solution to Newcomb's Problem – without the dominance principle, Causal Decision Theory is functionally the same as expected utility theory (Nozick, 1969).

In the following analysis, I will argue that both of these claims are unfounded: that causal decision theory is inappropriate to analyze Newcomb's problem, and that the dominance principle does not support the two-box solution. By doing so, I will develop two independent reasons to support the one-box recommendation of expected utility theory; if the two-boxing solution is unjustified, the one-box solution is the only reasonable alternative.

To begin, I will focus on the application of Causal Decision Theory to Newcomb's problem. I contend that this application is inappropriate for two reasons.

First, the application is simply false: an individual's actions in the problem have an impact on her expected earnings. Causal decision theorists cite the impossibility of reverse causation to reject this possibility, arguing that the actor's decision in the room cannot affect the decision of the predictor (i.e., an action that happened in the past). Because the actor's decision between (a) and (b) can have no true, causal relationship to the predictor's decision, then, her decision has no relationship to her potential earnings (Locke, 1979).

This argument quickly gives way to complex discussions of causality and free will, but the true problem with the argument is far more basic: in order for a player to benefit from choosing both boxes, the predictor must make an incorrect prediction, which is extremely unlikely. While discussions of causality and free will are interesting, they are useless – the very conditions

of the problem make them unnecessary. We know that the predictor is almost never wrong, and that fact alone should be enough to accept the accuracy of his predictions.

This answer is likely unsatisfying. Individuals insist on knowing how certain "magical" acts, like the act of the predictor, are possible, as was seen with the modern cognitive-psychological rejection of "black box," behaviorally-based arguments in psychology (Sternberg, 2008). Luckily for those individuals, there have been attempts to explain and demystify the actions of the predictor – rather than magical, the power of nearly perfect prediction seems entirely plausible. The explanations for this power are incredibly diverse, ranging from invocations of a common cause for both the prediction and the action (Eells, 1982) to quantum-mechanical exceptions to causality (Schmidt, 1998) to an appeal to the predictor's power of psychological observation (Bach, 1987), but all conclude the same way: for whatever reason, the predictor is correct. As Price (1986) notes, the predictor must follow the "principle of total evidence" (p. 199) in order to be so accurate – simply, he has access to (and effectively takes account of) any and all information necessary to make accurate predictions.

Given the predictor's near infallibility, it would seem irrational to bet against his power, but the two-box solution demands one to do just that. The only reasonable way to escape this accusation is to emphasize the difference between the predictor's nearly perfect accuracy and true (i.e., 100%) perfection (Kavka, 1980), but this distinction is trivial. If a certain action has always been correlated with a certain result, it is better to behave as if there was a known causal relationship between the two even when a true causal relationship cannot be identified (Bar-Hillel & Margalit, 1972). For example, even though the true cause of gravity is unknown, it would be unwise for individuals to stand under heavy falling objects. Simply, the correlation seen between the predictor's predictions and your past should be enough for one to expect that the predictor will know when an individual will attempt to

exploit him.

Given this relationship between the individual's decision and her expected winnings, the application of Causal Decision Theory to Newcomb's Problem is inappropriate. Individuals can expect to be rewarded for trusting the accuracy of the predictor's judgments, so they ought to maximize their expected utility, and take only the opaque box.

The second major problem with the application of Causal Decision Theory to Newcomb's problem comes through a vein of argument that has recently gained popularity – that Newcomb's problem is a type of Prisoner's Dilemma. Normally, finding fault with one justification of a theory would not be sufficient reason to discount the theory as a whole, but in this case, the justification sheds light on a fundamental misunderstanding of Newcomb's problem that causal decision theorists tend to make.

This misunderstanding will be clarified shortly, but to begin, it is important to clarify the claim being made: that Newcomb's Problem is a Prisoner's Dilemma. This idea was first proposed by David Lewis (1979), with his formulation of a prisoner's dilemma that shared the distinctive features of Newcomb's problem (Figure 3). In this hybrid Prisoner's Dilemma, one prisoner was given a choice between defecting (with a payoff matching the two-boxing decision of Newcomb's problem) and cooperating (matching the payoff of one-boxing). To simulate the conditions imposed by the presence of the predictor, the prisoner in the dilemma is told that his accomplice had already made his decision, and that pairs of prisoners have almost always chosen the same option (either both defecting or both cooperating) in the past.

12	You Cooperate	You Defect
Cooperate	\$1,000,000	\$0
I Defect	\$1,001,000	\$1000

Figure 3. The payoffs a prisoner may receive in Lewis' (1979) Prisoner's Dilemma / Newcomb Problem hybrid.

Lewis ultimately uses this new formulation of Newcomb's problem to argue for the two-box solution, but the content of his argument is significantly less interesting than its form – in fact, the application of game theory to Newcomb's problem has inspired a number of responses, one of which is particularly notable for the present analysis. Using the game-theoretic framework, Christoph Schmidt-Petri (2005) argued that if Newcomb's problem was a one-shot game (that is, that it would only be played once), it is best to apply Causal Decision Theory and defect, but if the game was repeated forever, it would be advantageous to side with the conclusions of expected utility theory, and cooperate. This interpretation may have some intuitive appeal, but ultimately misunderstands the mechanics of Newcomb's problem – even though the "game" of Newcomb's problem is formulated as if it is only to be played once, it ought to be treated as if it was a repeated game due to the predictor's knowledge.

This short-sighted underestimation of the predictor is a fundamental flaw of the two-box solution to Newcomb's problem: although the predictor is playing this game for the first time, his knowledge of you makes it seem like his decision was made in a repeated game scenario. In a repeated game, any player would know from past experience whether or not to trust you, but predictor needs no such experience. The predictor already knows who you are

as a player, and therefore, can predict with great accuracy what decision you will make.

This seemingly paradoxical knowledge of Newcomb's predictor has been described as the "hidden circularity" or "mirror" of Newcomb's problem (Slezak, 2006), and is another fundamental reason why the application of Causal Decision Theory to the problem is inappropriate. In the same way that the knowledge gained by players in a repeated game makes attempting to maximize their expected utility the most prudent option, the knowledge of the predictor is such that any rational player ought not try to choose a "dominant" strategy.

Maximizing expected utility is the only rational choice for a player in Newcomb's game, as the application of Causal Decision Theory is inappropriate. As we have seen, two observations stand as evidence to this conclusion: that an agent's decision can affect her own probability of success, and that the nature of Newcomb's predictor is such that defecting (to use Lewis' terminology) will almost inevitably result in a lesser reward. Each of these observations warrants a rejection of Causal Decision Theory and a corresponding acceptance of expected utility theory; it is clear that expected utility theory provides a logical, coherent framework with which to analyze Newcomb's problem, ultimately showing the possibility of expected utility as an explanation of the preferences of an individual.

The second major line of argument against the two-box solution to Newcomb's problem and for the acceptance of expected utility theory comes as a critique of the dominance principle. As explained earlier, the dominance principle is a necessary element of the two-box proof – even if Causal Decision Theory might be an appropriate framework with which to analyze Newcomb's problem, it would not matter unless the dominance principle gave a warranted reason to prefer one-boxing. I will contend that it does not, for two reasons.

First, the proof that the dominance principle uses to justify two-box-

ing is based on a set of faulty counterfactuals. The primary claim of the dominance principle is that the \$1000 in the clear box is always available as an extra reward to any individual given Newcomb's problem – if an individual chose to only take the opaque box and was awarded \$1,000,000, they might see the \$1000 as a foregone prize (as seen in Figure 2). In fact, this logic is sound with most games involving risk. For example, if I was a contestant on the *Price is Right*, I would likely kick myself if I accepted the first showcase, only to find that the Jetski was actually behind the second curtain.

This "try now, evaluate later" approach, however, does not work in the world of Newcomb's Problem. Given the uniqueness of the predictor's task – attempting to predict your choice, knowing that you know his abilities – you are in no better position to evaluate your expected payoffs after playing the game than you might have been before playing it (Kavka, 1980). As we saw above, the predictor's nature is such that your decision between one-boxing and two-boxing has an impact on the payoffs you may receive, and the very possibility of this impact is enough to deny the validity of the counterfactuals two-boxers use as evidence for the dominance principle. Such comparisons are useless in a world as dynamic as that of Newcomb's problem – the very possibility that the predictor may change his action if you reason differently about yours makes such simple counterfactuals inaccurate, and therefore, the dominance principle may not give an accurate answer to Newcomb's problem.

The second, and decidedly larger, problem with the dominance principle's application to Newcomb's problem once again comes as a result of a mischaracterization. According to the picture drawn by the dominance principle (Figure 2), the state of nature is such that upon entering the room, the predictor has made one of two choices: either to place the money in the box, or to refrain from doing so. This game-theoretic understanding of the problem, however, seems to be inaccurate.

Based on work done by John Ferejohn, Steven Brams (1975) gave a

strong argument for an alternate interpretation of Newcomb's problem – in *contrast* to the game-theoretic picture drawn by Lewis, Brams argues that the problem ought to be understood as "decision-theoretic" (p. 599). The distinction between the two is subtle, but extremely influential. Rather than treating the predictor's decision as set once one enters the room, the decision-theoretic approach argues that the true "state of nature" lies in the predictor's accuracy. When you enter the room, Brams argues, the predictor's choice is either correct or incorrect, and this understanding clearly defeats the traditional conclusion of the dominance principle, as neither choice (one- or two-boxing) dominates the other (Figure 4). The only hope for the application of the dominance principle to escape this claim is to criticize Brams' reformulation, but as we will see, this new conceptualization is justified.

	State of Nature	
_	Predictor Correct	Predictor Incorrect
Taking One Box	\$1,000,000	\$0
Taking Both Boxes	\$1000	\$1,001,000

Figure 4. The (newly realized) payoffs of Newcomb's game (Brams, 1975). As this illustration makes clear, neither decision dominates the other (\$1,000,000 is bigger than \$1000, but \$0 is less than \$1,001,000) rendering the dominance principle useless.

One potential justification of Bram's reformulation is the claim discussed extensively above – that there is a strong relationship between an individual's actions and her potential payoff (Slezak, 2006) – but a far simpler observation is sufficient justification by itself: that the predictor's accuracy is independent of an individual's choice (Cargile, 1975). It seems reasonable, and surely more simple, to assume that this is the case. Indeed, the accuracy

of the predictor is significantly easier to conceptualize as a "state of nature" in Newcomb's problem that is the predictor's actual decision – while the probability that the predictor is correct is specified a priori by the problem itself, his prediction is undeniably dependent in some way on your decision. As Maya Bar-Hillel and Avishai Margalit (1972) explain, "You cannot outwit the [predictor] except by knowing what he predicted, but you cannot know, or meaningfully guess, at what he predicted before actually making your final choice" (p. 302). The independence of the predictor's accuracy thus serves as strong evidence for Bram's reformulation, and (as shown in Figure 4) means that the dominance principle is inapplicable to Newcomb's problem.

In the end, it is clear that expected utility theory's one-box solution to Newcomb's problem is superior to the two-box solution rendered by Causal Decision Theory. As we found, there are two fundamental problems with the two-box solution. First, Causal Decision Theory was determined to be inappropriate for Newcomb's problem, as a player's payoff very clearly depends on their actions. The predictor's power ought not be underestimated – he is nearly perfect, and therefore knows what to expect – but Causal Decision Theory does just that. An individual's actions affect her potential winnings, so Causal Decision Theory cannot apply to Newcomb's Problem. Second, the dominance principle – the way in which Causal Decision Theory determines preferences – is based on faulty justifications and mischaracterizes the state of nature in Newcomb's problem.

Both of these conclusions show that the only coherent, justifiable answer to Newcomb's problem is the one-box solution mandated by expected utility theory, and show that expected utility theory remains a viable explanation of individual preferences. Whether expected utility theory can withstand other attacks on its credibility – in other words, whether the results of this analysis are generalizable – is a question for further research, but given this analysis, one fact should remain clear: expected utility theory gives a coherent, rational explanation of the optimal solution to Newcomb's problem, and

accordingly, ought to remain a candidate for the explanation of individual preferences.

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### The Effects of Conditional Cash Transfer Payments on Voter Support for the *Partido* dos Trabalhadores

From PolSci 381: Seth Soderborg (nominated by Rob Salmond)

Seth wrote an outstanding paper that an advanced graduate student would be proud of. The assignment had a number of distinct requirements, which can often lead to disjointed written work. Seth's paper, by contrast, combined those elements into a coherent, clean narrative structure that was highly professional. Seth also took on a very ambitious research question: do cash transfers to poor families in Brazil (conditional on their compliance with education and other policies) influence these voters to prefer the incumbent party? With such an ambitious question there are even more possible pitfalls for inexperienced researchers than usual, but in my judgment Seth's work not only avoided the obvious pitfalls, but proposed a research project that is at once innovative, feasible, and valuable. It is the best undergraduate research proposal I have read at UM.

Rob Salmond

### The Effects of Conditional Cash Transfer Payments on Voter Support for the *Partido dos Trabalhadores*

### Introduction

In 2003, Brazil began one of the most ambitious poverty-reduction efforts ever attempted. A program called Bolsa Familia, or "family allowance," began paying cash to over 12 million poor families whose children attended school and received preventative medical care. Bolsa Família is now the most successful example of a new welfare program paradigm, the conditional cash transfer (CCT), which attempts to create incentives for potential recipients to engage in activities that help break the intergenerational cycle of poverty. Bolsa Família is credited with raising school attendance rates, improving child nutrition, lowering the number of children in the workforce, and lifting millions of people out of extreme poverty (Lindert, Hobbs, and Briere 2007; Castineira, Nunes, and Rungo 2009). Of the world's ten largest economies, only in Brazil has the Gini coefficient of income inequality declined since 2000. Lindert et al. credit that decline to the impact of the Bolsa. Brazil's success in implementing the world's largest CCT program has inspired governments from Tanzania to New York City to experiment with similar programs. Bolsa Familia is too large to have no effect on politics. Half of Brazil's population either receives payments or knows someone who does. Opponents of former president Luis Lula Inacio da Silva, the man who created the program, claim that *Bolsa* is a massive vote-buying scheme. Over the past decade, the Workers' Party (PT), which Lula founded, has become Brazil's largest and most effective political party. The PT candidate whom Lula endorsed in the 2010 election won with over 55% of the vote; forty percent of Brazilians who identify themselves with a political party now claim PT affiliation. Bolsa has been the PT's largest project in that time. Even a 2005 scandal that revealed systematic corruption among the PT's leaders could not derail Lula's reelection bid. Bohn (2011) argues that the Bolsa Família transformed the PT from

a party of urban skilled workers and educated Leftists concentrated in Brazil's Southeast to a national coalition of poor voters.

Do welfare programs buy votes? A standard assumption in political science holds that the most important thing guiding a voter's decisions in the voting booth is whether he or she is richer on this Election Day than he or she was at the time of the last election. Among the many conjectures that can be derived from this way of imagining the relationship between politicians and voters are some that concern welfare programs. If voters' material wellbeing is an important part of their political decision calculus, then voters who receive money from welfare programs are likely to prefer the candidate whom they think is most likely to preserve the program or increase benefits. Voters who believe that they might be eligible for welfare benefits in the future are also likely to prefer the candidate they think is most likely to provide them with benefits. The degree of support an individual voter will extend to a politician he or she prefers is likely to depend on how important welfare income is to his or her standard of living. Poor people who depend on welfare to meet basic survival requirements care more deeply about benefits than would a wealthier person for whom benefits might mean an extra meal out each month. In a situation where many people depend on welfare benefits, politician and parties could build political dynasties by creating a welfare scheme upon which many people depend. Whenever a government claims to be attempting to reduce poverty by implementing a welfare scheme, there exists the possibility that the government, rather than making a good-faith effort to alleviate poverty, is attempting to create a group of voters who feel indebted to the government. This, critics claim, is exactly what the PT has attempted to do. Sewall (2008) suggests that, while the PT did hope to improve its position among poor voters, the Ministry of Social Development created to run the program is relatively free from political interference. The Bolsa can therefore be thought of as independent from the PT.

A number of studies have found that support for Lula diverged

from PT support in the 2006 election (Soares and Terron 2008; Hunter and Power 2007; Zucco 2008). These studies uniformly express surprise at the PT's seeming inability to reap electoral gains from the *Bolsa Família*. In early 2010, when approval for the Lula government exceeded 80 percent while the PT held only 83 of 513 seats in the Chamber of Deputies, it seemed that the electoral benefits of the *Bolsa Família* had only accrued to the president (Terron and Soares 2010). The PT's record-breaking win in the 2010 elections suggests that the *Bolsa* might actually be benefitting the PT, and that some other factor may have damaged its vote share in 2006. The 2005 vote-buying scandal, in which President Lula was never implicated, provides a reason for both the PT's declining seat share that year and the divergence between PT and Lula support bases.

Most previous studies of the *Bolsa*'s political effects focus on the presidential race. To understand the program's effects on the PT, which so far are unclear in the literature, I intend to test whether the program has influenced the result of state-level races for seats in the federal Chamber of Deputies. I suspect that the *Bolsa Família* plays an important role in federal deputy elections. Noise, social processes, the heterogeneity of the electorate, and endogenous variables might make it difficult to see how the *Bolsa* affects the PT at the national level. A few studies have used municipal-level data to explore voting behavior in the presidential race. None have used it to analyze federal deputy races. Because much of the existing literature relies on aggregate data, nearly every paper suffers from the ecological inference problem. Panel-survey data from the Latin American Public Opinion Survey may make it possible to overcome this problem.

Existing studies assume that the *Bolsa* induces voters to prefer the Workers' Party. I do not dispute this assumption. The empirical claims that follow from this assumption are testable, and I intend to test them. Cash transfer programs' political effects are not well-understood, but as more countries adopt them, it becomes increasingly important that governments and

development agencies understand how large transfers shape politics. Brazil provides the opportunity to study a well-run, apparently non-corrupt transfer program under proportional representation. Brazil's institutional package is not so different from that of other developing nations. Understanding the *Bolsa* will do a great deal to help countries interested in conditional cash transfers understand how such a system will affect their politics.

#### Literature Review

As one of the largest CCT programs in the world, *Bolsa Família* has been subject to intense scrutiny. Dozens of articles from the World Bank, Brazil's Ministry of Social Development, and development journals have examined the effects of *Bolsa Família*. They consistently find that the program has reduced poverty, improved educational outcomes for poor children, and helped reduce income inequality. (Lindert, Hobbs, and Briere 2007; Hall 2006; Soares, Ribas, and Osorio 2010; Castineira, Nunes, and Rungo 2009; Kerstenetsky 2009).

#### Brazilian Political Institutions and the Personal Vote

Bolsa Família's success has surprised many who study the country. A highly effective, apparently uncorrupt program that reaches 96% of the people intended to reach it would be a success in any country. In Brazil, it seems unthinkable. A lively scholarship on Brazilian political institutions tends to describe Brazil's system of government as dysfunctional. Armijo, Faucher, and Dembinska (2006) declare that "numerous scholars judge Brazil's political institutions to be almost paradigmatically poorly designed," before calling the country's success in reform since democratization "a puzzle" (759). Their criticisms draw on Linz's (1994) claim that the combination of PR with presidentialism leads to political instability. Kunicova and Ackerman (2005) argue that the same combination also leads to greater corruption. Mainwaring et al (1995; 1999) describe a "feckless" Brazilian political atmosphere characterized

by frequent party-switching, low party discipline, ideological fragmentation, and proliferating political parties. The Brazilian popular press often denounces systematic bribery at all levels of government (*Folha de S. Paulo* 6/6/2005).

Institutional studies of the incentives legislators face suggest that the Brazilian political system does not allow for effective governance. Ames argues that federal deputies spend most of their time pursuing pork-barrel resources to distribute to their backers, and blames the open-list proportional representation electoral system for undermining party discipline (1995a; 1995b; 2001). Deputies with local, concentrated constituencies must cultivate ties with municipal leaders and deliver pork, which often leads them to take positions quite different from that of the party. Candidates at the top of party lists can, ironically, afford to dissent from the party. Ames consistently concludes that the electoral system makes it both possible and necessary for deputies to defect from their party's positions. It is therefore possible that some PT deputies defected from the *Bolsa* vote, while members of opposition parties from dense, urban areas may have voted for the program.

Shugart and Carey's seminal study on "Incentives to Cultivate a Personal Vote" (1995) finds that Brazil's open-list PR system, in which voters cast their votes for either a party or an individual legislator (whose name or number they must enter manually), makes personal reputation extremely important in Brazilian elections. The authors predict that greater district magnitude under open-list PR will increase pork-barreling and constituency service activities on the part of deputies seeking reelection. Thus, the 70 federal deputies from Sao Paulo are more likely to worry about access to pork-barrel resources, provision of prominent public goods, and constituency service than the three deputies from tiny Amapá. Persson and Tabellini delve into a similar question with their papers on the role of political institutions in shaping economic policy (1999; 2000). They find that presidential systems spend less, and predict that majoritarian institutions will decrease provision of public goods. The corollary that more proportional systems

produce greater spending and increase provision of public goods is explored by Edwards and Thames (2007). They attempt to determine whether differences in spending and public goods provision are the result of institutional majoritarian-ness or incentives for cultivating a personal vote. Brazil, with its majoritarian presidency and PR electoral system, does not fit easily into the majoritarian-proportional schema used by these comparative political scientists and economists. It does, however, fall towards the personalist end of the personal vote spectrum. Edwards and Thames find that "in systems with significant incentives for personal votes, increases in district magnitude actually decrease both total and public good spending," a result they say, deputies' increasing need to provide targeted pork-barrel resources to the slices of the district electorate that keep them in office (2). This result is consistent with Ames' (1995b) finding that only deputies with concentrated urban support bases consistently support welfare. For such deputies, welfare is the good that keeps them in power. For deputies with statewide support, it is more important to provide pork to the powerful lobbies that provide the money to run a statewide campaign. Anderson (2011) notes that, when compared to democracies around the world, the sum of money required to successfully win a seat in the Brazilian Chamber of Deputies is second only to the amount necessary to win a seat in the US House of Representatives.

Chang and Golden extend personal vote analysis to clientelistic behavior, which they describe as an "illegal search for the personal vote" (2006). Using Italy's pre-1994 open-list PR system as an example, they find that greater district magnitude encourages corruption under open-list PR, such that once the number of seats available in a district exceeds fifteen, corruption is even greater than under closed-list PR. While corruption is not the object of study here, clientelism may be a useful way to think about the relationship between *Bolsa* beneficiaries and their federal deputies. Deputies from large states may be more invested in associating themselves with federal government programs like *Bolsa Família*. Deputies' votes determine which

demographic groups are eligible to receive *Bolsa* benefits and how much beneficiaries will receive. Although they cannot control *Bolsa* resources in the punishment and reward method of clientelism, they can choose to run campaigns based on their support for the *Bolsa*, or not.

Hicken and Simmons (2008) examine the policy consequences of personal vote incentives. Their study of education spending, a common variable in this literature, finds that party and personal vote systems spend similar amounts on education. Importantly, however, education spending produced little improvements in literacy where the electoral encouraged cultivation of a personal vote. If one assumes that Hicken and Simmons' finding holds for other types of spending targeted at the poor, it would be reasonable to conclude that the Bolsa Família's well-documented success is the result of the extent to which it bypasses Brazil's elected officials. This is the opinion of Fenwick (2009), who writes that the Bolsa's success is due in large part to the federal government's success in keeping the program from coming under the sway of state governors. She also believes that the federal government's increasing power to constrain subnational budgets has limited state officials' ability to deliver pork. With opportunities for state and municipal spending diminished, more personal benefits from government action are coming from federal programs. Though she does not address the question of voter support, Fenwick's findings indicate that officials outside of the federal government have been unable to claim credit for delivering Bolsa—even if they are affiliated with the state branch of the Workers' Party.

Fenwick's mistrust of subnational officials echoes the argument that Brazil's government has been compromised by excessively strong federalism. State budgets have traditionally been massive, and state officials have access to millions of dollars' worth of pork. Samuels (2003) finds that federal deputies often pursue careers at the state level, sometimes taking leaves of absence from their federal seats to occupy a position in a state ministry. Samuels argues that this phenomenon is a result of the president's increasing willingness

to use line-item veto power on budget proposals. Since 1996, when President Fernando Henrique Cardoso vetoed every pork-barrel amendment to the national budget, state ministries have been more effective pork-barrel resources than seats in the National Congress. This power, along with the president's ability to simply defund initiatives he or she dislikes, has also become a powerful tool to discipline the legislature. State ministries, however, are no longer the political boondoggle they once were. After the state of Minas Gerais defaulted on \$15 billion of foreign debt, the same president Cardoso managed to bring state budgets under federal control. Still, Samuels' finding that prospects are better in state government continues to hold.

The literature on "broken" institutions treats incentives to secure pork as synonymous with the successful cultivation of personal political fiefs, and argues that these incentives allow (or force) legislators to break with their party. At the same time, these papers describe pork-dependence as a major constraint on legislator behavior. Thus, they paint a picture of a Brazilian deputy who is simultaneously dependent on pork (which they cannot get without party help) and independent of his or her party. This is a paradoxical claim. Cox (2006) helpfully points out that the process of granting deputies distributive benefits as an incentive to vote for a bill is quite different from targeting benefits to constituents to influence electoral outcomes. Newer scholarship from Cheibub, Figueiredo, and Limongi (2000; 2002) addresses this distinction in the Brazilian context, finding that party leaders have, over time, gained near-complete control of the legislative process by controlling when bills can be considered under urgency rules. They have begun using that power to enforce tighter party discipline. Cheibub et al.'s analysis of rollcall votes suggests that Brazilian parties are now highly-disciplined.

Hagopian (2009) analyzes the unexpected rise of disciplined, programmatic parties in Brazil, and finds that politicians are now willing to run programmatic campaigns, delegate authority to party leaders, and no longer switch parties. Samuels (2006) finds that party identification has risen from

32.5% in 1995 to 42.6% in 2002, a level similar to that found in many countries with established democratic governments. He cautions, though, that much of that increase is due to rising support for the Workers' Party (PT). Hagopian completes the picture with her finding that Rice Index scores of party discipline in Brazil's National Congress rose from 62 to 80 between 1986 to 1999, with especially dramatic increases in the cohesiveness of the Social Democrats, currently Brazil's main opposition party. She describes these changes as part of a broader shift away from delivering patronage goods to pursuing ideological programs. In her opinion, the shift means that party scholarship must focus less on the incentives (usually perverse) created by the electoral system, and work to better understand the incentives now pushing politicians towards party loyalty and programmatic appeals. In a wistfullytitled article, "They don't make political machines like they used to," Borges describes the Workers' Party broke the back of the long-established Liberal Front Party (PFL, now "Democrats") machine in the state of Bahia (2010). The shift, which he believes was closely related to Bolsa Família, meant that "traditional" conceptions of Brazilian politics as "clientelistic" and "anti-Republican" no longer fit the current reality (186). The decline of the PFL is a sign that state office is no longer the most secure place in Brazilian politics. Since the pioneering work of Ames in the 1990s, Brazil has improved from a place of chaotic, patronage-oriented parties to one with institutionalized, disciplined national parties able to control their state-level subsidiaries. As parties have become more subject to central control, so too have the institutions of the executive. An effective, politically independent Bolsa program is possible only in a context that no longer rewards parties for purely clientelistic strategies.

#### Theories of Redistributive Politics

Traditional studies of government expenditures as tools targeted towards electoral gain have focused on public works spending. A Chilean

school-building and hospital-improvement program called FONCODES, in place from 1991 to 1995, provides a classic example of welfare spending for political gain. Schady (2000) finds that FONCODES expenditures increased dramatically in the months before national elections, and were targeted at poor provinces where smaller expenditures could produce larger improvements in material conditions. This pattern follows the predictions made by theorists of political business cycles.

Ames (1987) and Remmer (1993) apply political business cycle theories to Brazil, with contradictory results. Ames finds that Brazilian governments of the mid-20th century successfully improved the economy by increasing expenditures in the run-up to elections, while Remmer concludes that more recent attempts at manipulation have had mixed economic results. The primary focus of their research is the economic consequences of politically motivated intervention. They take for granted that positive economic performance will improve electoral outcomes for the incumbent party. Political business cycle theory argues that politicians will increase spending to stimulate the economy prior to an election. The same logic suggests that they might also increase redistributive spending to put money in the hands of specific supporters. It is no surprise, then, that the PT expanded *Bolsa* eligibility in 2006, six months prior to a national election.

While governments' tendency to expand benefits prior to an election is well established, it is less clear how governments distribute that spending to maximize their electoral payoff. Cox and McCubbins (1986) argued that incumbent governments invested in their own supporters. By this logic, the 2006 *Bolsa* expansion was meant to benefit a group of people whom the PT believed to be its supporters. Dixit and Londregan's later model argues that governments have greater incentives to target swing voters, that is, voters who are likely to be swayed by increases in their personal material welfare (1996). If this is correct, the 2006 expansion should be seen as an attempt to expand the PT's appeal among certain poor groups. Attempts to test these competing

theories have produced conflicting results. Dahlberg and Johannson (2002) find that incumbent Socialist governments in Sweden are far more likely to increase spending in communities with large numbers of swing voters. Case (2001) finds that grants from the Albanian national government tended to go to cities where a higher percentage of residents were members of the incumbent Democratic Party.

One of the most vexing problems facing politicians attempting to buy votes in democratic systems is the secret ballot. It is nearly impossible for parties to know whether the people to whom they delivered benefits cast their votes for the incumbent or the challenger. Hicken (2008) provides an extreme example of the Philippine solution to this problem: free hospitals which one can only enter with a party identification card signed by the local congressman. Many democracies, however, do not operate like this. Stokes (2005) argues that parties have subtle ways of creating enforcement mechanisms. She describes in detail how Argentinean political parties relied on people integrated into the social lives of potential supporters to cause them to fear that their private political comments might not remain secret. She also presents evidence of a flaw in the political business cycle model, noting that voters are unlikely to be swayed by improvements in material conditions or government services if they suspect that those benefits will not be maintained. For Brazilian deputies to benefit from the Bolsa or a Bolsa expansion, voters must believe that the payments will not be reduced after the election is over.

As Zucco (2011) notes, the literature on clientelism does not always agree with analyses of programmatic redistribution. Nichter (2008) attempts to solve the secret ballot problem by arguing that parties target benefits to increase turnout rather than change voters' minds. Nichter's model has the advantage of relying on an accountability mechanism that is easy to monitor. He claims that Stokes' data actually reflect turnout-buying rather than votebuying. In Brazil, where voting is mandatory and turnout averages around 85 percent, Nichter's model is unlikely to produce significant results.

#### **Effects on Voting**

Regardless of whom they target, CCTs seem likely to produce benefits for incumbents. The exact value of the benefits is clear to the recipients, who know exactly where the money came from. In an early study of the political a CCT's political effects, Manacorda, Miguel, and Vigorito (2009) find that beneficiaries of the PANES program in Uruguay are 25 to 33 percentage points more likely to support the incumbent Frente Amplio government than the previous government, which was not in power when PANES began. Because there is a large gap in political support between people near the income threshold and received the benefits, and those who were also near the threshold but did not, it is likely that PANES, rather than an incumbency effect, accounts for the Frente Amplio's increased support among the poor. Like Bolsa Família, PANES was an attempt to reach most poverty-stricken people, rather than a purely political tool. Unlike Bolsa, PANES was a temporary measure in place from 2005 to 2007 meant to counteract an economic downturn. PANES recipients continued to support the government after the program ended, by about 20 percentage points more than the national average. Using survey data, Manuel et al. conclude that those nearest the center of the political spectrum were the most responsive to government transfers. Support, they believe, for Dixit and Londregan's swing-voter model. If this is correct, the group of people who began receiving Bolsa benefits in 2006 is likely to not have consistently supported the PT in the past.

Sewall (2008) notes that Mexico's CCT program, Oportunidades (formerly Progresa), which reaches five million families, seems to have been used quite successfully for political gain. Beneficiaries were 11 percent more likely to vote for Felipe Calderon, the chosen successor to President Vicente Fox, who had established the program. These poor voters may have been decisive in the 2006 national election, which was decided by fewer than 250,000 votes.

A large public opinion study found that most Brazilians support

Bolsa Família, though people who knew beneficiaries were far more likely to express strong support than those who did not (De Castro et al 2008). The study concludes that public support for the program has persisted despite well-publicized flaws in its execution. It seems likely to continue in the future. Bolsa is clearly connected in many voters' minds to former president Lula. Numerous studies have shown a strong link between support for the PT-affiliated president and his most prominent public project. Lício, Rennó, and de Castro (2009) used survey data from Americas Barometer to find that receiving Bolsa benefits strongly correlates with Workers' Party self-identification, positive opinions of the Lula government, and a diminished sense that political corruption is a major problem in Brazil. This last finding suggests that receiving money may, in voters mind, compensate for governmental missteps—since 2005 the PT has been plagued with vote-buying and influence-peddling scandals.

A more general exploration of voter preferences vis-à-vis overall spending finds that voters tend to support incumbent municipal officials whose governments spend more, strong evidence for the power of both public and targeted goods spending to improve incumbents' electoral chances (Arvate, Mendes, and Rocha 2010). Hunter and Power (2007) find that voters with lower scores on indicators of economic security were critical in Lula's reelection in 2006. They attribute his victory to the Bolsa Família and a series of minimum wage increases. Unlike Lício, Rennó, and de Castro (2009), Hunter and Power find evidence that the corruption scandals of 2005 and 2006 hurt the Workers' Party but did not harm the president. They suggest that this is evidence for an increasing divergence between Lula voters and PT voters. According to them, "the PT benefited far less than the president himself from government investment in social policy." Terron and Soares further explore the idea of "distancing" between the support bases for the Workers' Party and the president (2008; 2010). Noting that the PT took 18.4 percent of the national vote in 2002 but only 15 percent in 2006, they find that the

intracity correlation of Lula and PT votes was much lower in 2006 than it had been in 2005. At both the state and municipal level, the correlation of votes for Lula and votes for the PT had fallen so much that, by 2006, there was no longer a statistically significant correlation between Lula and PT vote share in a city. Terron and Soares go even further in attempting to establish that a physical distancing has taken place between the geographical regions that supported Lula in the past and support him more recently. Using a technique based on Moran's Global Statistic, which measures the spatial correlation of two variables that vary within discretely divided, adjacent regions, they find a statistically significant decline in the physical closeness of areas that strongly supported Lula to areas that strongly supported the PT. While Lula dominated Brazil's Northeast, the PT did moderately well there but won most of its seats in the southern interior of the country. Terron and Soares' results provide strong support for Zucco's (2008) claim that Lula won in 2006 because of his increased popularity in the impoverished Northeast. Given that, in 2002, Lula won only a handful of Northeastern municipalities while dominating in the densely-inhabited, industrial South, Zucco is likely correct when he attributes the formation of a Northeastern base to Bolsa money. He does admit, however, that the less-developed regions of Brazil tend to support incumbents. Zucco argues that this incumbency effect occurs because impoverished municipalities depend on the federal government for financial support, as well as the fact that, for some time, most social welfare programs have been administered by the federal government. Not surprisingly, there is broad support for the claim that the *Bolsa* Família played an important role in Lula's reelection. Marques (2009) claims that Bolsa Família accounted for 45 percent of the Lula votes in the 2006 election. Zucco (2010) finds that *Bolsa* recipients were twice as likely as non-recipients to vote for Lula in 2006. Shikida et al (2009) are among the few who disagree. Their argument, based on a calculation that found real wage increased among the poor even after controlling for *Bolsa* income, is best summarized in the title of their article:

"It's the economy, companheiro!"

#### Conclusion

The Bolsa Família's dramatic success suggests that it is possible for an uncorrupt institution to exist within Brazil's flawed governmental framework. The fact that such a program exists more or less free from political influence indicates that Brazilian democratic politics is no longer as fractious or decentralized as it was in the 1990s. Because the Bolsa covers nearly everyone who is eligible, its effects on voting behavior should be studied as the effects of a program meant to alleviate poverty, rather than to produce electoral gain. As in Mexico, Bolsa seems to have helped the president who implemented it. Unlike Uruguay, the CCT program does not appear to have strengthened the party at the national level. But this surprising fact does not tell the whole story. Support for the PT increased dramatically in some regions, and declined precipitously in others. A 2005 corruption scandal tarnished the party's reputation and sent some of its leaders to jail. If voters care about both corruption and their material well-being, long-serving PT deputies from the wealthier South are likely to have lost their seats because of the scandal, while PT candidates in the poor Northeast were able to build on the party's role in alleviating poverty to win for the first time. This is consistent with the results of the 2006 elections and, I believe, with the PT's record-breaking win in 2010, five years after cleaning house. The personal vote literature provides a strong reason to believe that candidates could rise and fall on their association with the Bolsa and the 2005 Mensalão corruption scandal, while the Lula literature indicates that even voters who do not receive benefits often like the Bolsa. Existing studies focus mostly on presidential races, and do not cover

the PT's resurgence in 2010. My research will uncover whether the PT has, over the long term, received electoral benefits from the *Bolsa* Família.

#### Theory

If we assume that voters evaluate candidates based on their perception of how a vote for that candidate might improve their material wellbeing, it becomes clear that the impact of the kinds of projects politicians produce is difficult to estimate at the aggregate level. Roads and dams benefit some people greatly but produce little for others. When a candidate promises that he or she will build a new dam, construction workers and people in agriculture might choose to support that candidate in the hopes of getting a job or seeing improved access to irrigation water. Many other voters might have little to lose or gain from the project, and so remain indifferent to the candidate. If the dam is built, the incumbent responsible will likely receive the vote of those who benefitted. Assuming that voters support prospectively or retrospectively, much of what politicians do seems unlikely to reliably affect voter behavior. Further complicating the relationship between government projects and support for politicians in Brazil is its proportional representation electoral system. An individual candidate may have a hard time associating him or herself with a specific project. Party labels help solve this problem—a party can claim that it was instrumental in securing the public good. Because so many political parties contest elections in Brazil, even party labels may convey little information about policy preferences and legislative achievements (Downs 1957; Riker and Ordeshook 1968; Aldrich 1995).1

The *Bolsa Família* is quite different from traditional public goods. Its benefits go directly from the federal Ministry of Social Development to

<sup>1</sup> Downs and Riker and Ordeshook claim that the utility an individual voter could gain from a government policy was rendered negligible in the expected utility calculation by the tiny probability of being the decisive voter. In Brazil, voting is mandatory; non-appearance at the polls is a misdemeanor offense punishable with a fine. The act of voting therefore has high utility independent of the expected utility of government policy. Interestingly, voting is voluntary for illiterates. Turnout is consistently near 80 percent (Datafolha).

eligible recipients. Money from the program is a tangible benefit with an obvious source; each recipient knows exactly how much utility he or she has gained from the program. In an environment with strong incentives to cultivate a personal vote, it is highly likely that candidates associate themselves with the *Bolsa* in hopes of receiving recipients' votes. Parties, too, are likely to want to make *Bolsa* Família appear to have been their project. Once the material improvements in the lives of recipients became clear, candidates also had incentives to promise that the program would be expanded. Incumbents who supported the program when it was created could most credibly claim that the program be expanded. Candidates from the PT, and perhaps from parties in the PT's ruling coalition, could also claim quite credibly that they would expand the program. For voters in income brackets close to the *Bolsa* eligibility cutoff, the promise of a *Bolsa* expansion is one whose benefits would be clear and meaningful.

The *Bolsa* and the possibility of a *Bolsa* expansion played important roles in political campaigns after 2003. Lula managed to expand the *Bolsa* in the months leading to the 2006 election. In 2010, both Dilma Rousseff of the PT and her Social Democratic Party (PSDB) opponent, José Serra, promised to expand the program further. While no one has recently campaigned against the program, given Brazil's history of fiscal instability, voters are likely to understand that a crisis could force the government to curtail or even end the program. Potential and current *Bolsa* recipients want to ensure that the program remains a high priority even in a crisis. Thus, when given a choice between a PT candidate and a PSDB candidate who both claim to support the *Bolsa*, they are likely to give more credence to the PT candidate, whose party has consistently supported the program, than to the PSDB candidate, whose party spent years criticizing the *Bolsa* Família as an example of government excess.

Brazilian voters can be modeled as recognizing two types of candidates: those who are likely to expand the *Bolsa* Família and those who are

likely to maintain it unchanged. A third type, those who are likely to curtail it in a period of strained government finances, is irrelevant for the period studied because government finances have not been strained and seem unlikely to be so in the future. Because most voters are unlikely to take the time to check incumbent candidates' voting records or learn about challengers' public statements on the *Bolsa*, they will use party affiliation as an indicator of a politicians' *Bolsa* policy. I assume that PT affiliation is the strongest indicator of being pro-expansion. Affiliation with the allied Democrats (DEM) and Brazilian Democratic Movement Party (PMDB) may also indicate to voters a candidate's preference for *Bolsa* expansion.

Poor people who receive *Bolsa* benefits and people with incomes near the eligibility cutoff will vote for candidates who seem more likely to provide them with benefits or protect the benefits in place. Wealthier voters will be indifferent or even hostile towards candidates with pro-expansion affiliations. A number of empirically-testable effects follow from these assumptions.

#### Hypothesis 1

In municipalities where a greater percentage of the population receives *Bolsa* benefits, the PT will win a larger share of the vote.

It took several years for the *Bolsa* to reach everyone who was eligible for benefits. In some areas, logistical problems meant that people in many impoverished communities only began receiving benefits several years after the creation of the *Bolsa* in 2003. Other cities were simply lower on the Ministry of Social Development's list. If the *Bolsa* has the hypothesized effects, there will be observable differences in PT vote between similar communities if some are receiving benefits and some are not.

#### Hypothesis 2

During the initial rollout of the *Bolsa*, PT support will be greater in municipalities where *Bolsa* disbursements have begun than in equally-poor municipalities that have not begun receiving *Bolsa* payments.

The percentage of a municipal population that receives *Bolsa* payments may not always be the best indicator of how the *Bolsa* is affecting communities. Within the group of people eligible for *Bolsa* benefits, the poorest receive more money than do people nearer to the threshold. Larger families also receive larger payments. In areas where the poor are extremely poor, the share of the population that receives money may not indicate the true impact of the program. Two additional variables can shed light on how important *Bolsa* money is within a community. Both of them are likely to correlate positively with PT vote share.

#### Hypothesis 3.1

PT vote share will be higher in areas where transfers from the *Bolsa* fund to the municipal government make up a greater share of municipal GDP.

#### Hypothesis 3.2

PT vote share will be positively correlated with the per capita *Bolsa* payment to a municipality

Rules changes have at times greatly increased the number of people eligible for *Bolsa* benefits. Opinion poll data should show an increase in support for the PT around the time of the expansion. Because expansion is likely to be a highly publicized topic, voter approval (or disapproval) of the plan may

register in the polls even before the change takes place. Poorer voters who might benefit from expansion are the most likely to support it, thus in poorer regions more people are likely to approve of an expansion than disapprove.

#### Hypothesis 4

Support for the PT will increase shortly before and after *Bolsa* expansions. Poorer states will see the largest increases.

At the heart of the claim that the *Bolsa* builds support for PT candidates is a statement about individual action: receiving *Bolsa* benefits induces individual voters to switch their support from a given party to the Workers' Party. Correlations between demographic groups and election results or opinion data do not suffice to prove that people are engaging in this behavior, though they indicate that such behavior might be taking place. If voters are changing their votes because of *Bolsa* Família, it will be possible to observe differences in behavior between those individuals with incomes near the income cutoff for Bolsa eligibility who receive money and those do not receive money. The Ministry of Social Development (MDS) maintains a complete database of people enrolled in the *Bolsa* Família program. The registry also includes poor people who fall below a certain income threshold but make too much money to qualify for *Bolsa* benefits. This makes it possible to compare communities with similar incidences of poverty but differing levels of extreme poverty. If voting patterns in municipalities where a high percentage of people are registered with the MDS but a low percentage of the population receives Bolsa money differ from voting patterns in municipalities where most registrants are Bolsa recipients, it would be easier to claim that the Bolsa affects voter behavior.

#### Hypothesis 5

PT vote share will be greater in municipalities where most MDS registrants receive *Bolsa* money than in communities where few MDS registrants are *Bolsa* beneficiaries.

This claim would be especially well-supported if voting patterns in municipalities with similar incidences of both extreme poverty and simple poverty that were not receiving *Bolsa* money differed from voting patterns from municipalities that did receive the money. Such an analysis may be possible through matching techniques. One of the biggest challenges facing an analysis of a welfare program's role in voting behavior is the fact that poverty, which determines ones eligibility for welfare, is known to influence political preferences. By separating (in a rough way) poverty from the welfare program, analyses based on the ratio of MDS registrants to *Bolsa* recipients reduce the power of poverty as a confounding variable.

Understanding the role of the *Bolsa* in shaping individual behavior requires survey data. Two large surveys of Brazilian voters include questions about the *Bolsa*, and both find that knowing or being in a beneficiary family makes one more likely to support the government (Zucco 2010). Unfortunately, these surveys do not ask about previous political preference, and do not track individuals over time. Most of the evidence for the *Bolsa*'s role must be inferred. Matching techniques, discontinuity analysis tracking the progress from town to town of the 2006 *Bolsa* expansion, and existing survey responses will have to make up for the lack of information on individual voters over time.

A number of factors unrelated to the *Bolsa* Família also play an important role in PT vote share. Economic performance is extremely important to the fortunes of an incumbent. Brazil's GDP has grown steadily over the past few years—this has probably played an important role in support for the

party. The Brazilian census includes data on municipal GDP growth, making possible the inclusion of GDP growth as a control. Complicating the use of this variable, municipal GDP as calculated by the census includes *Bolsa* payments. While it is not difficult to adjust municipal GDP to exclude *Bolsa* payments, the size of those payments relative to a municipal economy can sometimes be so large that the *Bolsa* acts as a general stimulus package within the community. Each variable related to municipal GDP will have to be evaluated in both *Bolsa*-inclusive and *Bolsa*-exclusive forms. Also important for the fortunes of the PT are its past showings. PT vote share in previous elections is likely to correlate strongly with PT vote share in the most recent election. By comparing municipalities in which the PT won for the first time with others in which the party had previously performed well, it will be possible to isolate the effects of past PT victories on current PT support.

Because the *Bolsa* program is in many ways insulated from political interference, there is little reason to believe that benefits are being targeted at PT supporters. Almost everyone who is eligible for benefits receives them, leaving little room for politicians to build clientelistic networks around the program. Deputies do have the power to expand the program, as they did in 2006. It is, however, illegal for them to change the eligibility rules too close to an election.

Other factors that may affect support for the PT at the municipal level include the party affiliation of the mayor and governor, and the degree of support for Lula. Some studies have found that the percentage of a city that self-identifies as Pentecostal Christian is significant for certain election results. Family income per capita, median income, and the Gini coefficient of income inequality (which the census bureau calculates for each municipality) may also have important effects, as might the percentage of the population that self-identifies as non-white, the median age, and the gender balance in a community. Large cultural differences separate Brazilians living in different regions; some results will likely be stronger in some regions than in others.

Education, too, is likely to be important.

When Brazilians go to the polls they must choose candidates from among dozens of parties. In addition to dozens of socioeconomic factors, personal ideology, the political affiliation of family members, friends, or acquaintances, media sources, and geography all play a role in their decisions. This study will attempt to assess the role of welfare money in poor voters' political decision calculus. My hypotheses describe empirical results that will be visible if the *Bolsa* induces voters to support the PT.

#### Research Plan

The proposed paper will rely on election results, opinion polls, census data, and the rolls of the *Bolsa* Família program. The dependent variable the paper will study is support for the PT; election results are the single most important tool for measuring support for a party. Opinion poll data make it possible to track the public's reaction to policy changes as they happen. Census data will provide the values for the independent variables that I will include as controls. It will also provide criteria on which to analyze municipalities that meet certain profiles. The MDS' detailed *Bolsa* program rolls give the exact percentage of *Bolsa* recipients in a community. To help make the leap from aggregate data to my claim, which ultimately concerns individual behavior, I will need direct evidence that the Bolsa influences at least some individuals' behavior. Some panel surveys that ask questions about past voting choice also ask whether respondents receive *Bolsa* money. This type of information would help support a claim about individual behavior. To verify the assumption that the *Bolsa* is, on its own, free from political influence, I have interviewed officials at the Ministry for Social Development and, if possible, Brazilian congressmen. Because they claimed that the MDS does not respond to political pressure I accept the previously stated assumption that the political consequences of the Bolsa do not reflect a program that is being used for purely-political ends. A politically-influenced program would have to be studied through the lens of clientelism, and greater attention would have to be paid to the patterns of *Bolsa* installation during the rollout period, when the rate of payments to eligible persons differed widely across Brazil.

The data referred to above is available online. Brazil's Supreme Electoral Court maintains a free public database of election returns to the municipal level. Several organizations conduct opinion polls in Brazil, the most reliable of which are Datafolha, the Getúlio Vargas Foundation, Vox Populi, and the Latin American Public Opinion Survey. Census data is also available through the website of the Brazilian Institute for Geography and Statistics. The *Bolsa* rolls are also available online. I received funding to travel to Brazil to conduct interviews with professors at three universities, the news editors of O Globo newspaper in Brasília, economists at the Institute for Advanced Economic Studies (an non-partisan government think tank), officials at the US Embassy in Brasília, and the staff of the social development ministry office that administers the *Bolsa* program.

A first set of OLS regressions will test for a relationship at the municipal level between PT vote share and the share of the population receiving *Bolsa* benefits. These regressions will control for population size, PT vote share in the previous election, municipal GDP per capita, median income, the share of population with income in the lowest quartile of national income, the share of the population that is non-white, the share of the population that identifies as Pentecostal, and the share of votes cast for Lula. A second set will test for a relationship between per capita *Bolsa* payments and PT vote share. A third will test for a relationship between *Bolsa* payments as a share of municipal GDP and PT vote share. These tests will be run on both the 2006 and 2010 national elections.

Another set of regressions will treat the change in PT vote share over time as the dependent variable. Most of the same controls will apply, though municipal GDP will be replaced with municipal GDP growth. Because a major source of municipal GDP growth in the period under study was the

*Bolsa* Família, one model will control for municipal GDP growth not including *Bolsa* payments, while another will use overall municipal GDP growth.

One of the most important factors in the 2006 election was the 2005 Mensalão scandal. Eighteen congressmen from several parties were implicated in the vote-buying scheme, which may have hurt the PT and its affiliates in some areas. To understand how the Mensalão might have affected state-level party organizations, I will create a dummy variable that indicates whether, in the state under observation, one or more federal deputies was implicated. This variable will not matter 2002, is likely to be highly significant in 2006, and, I suspect, be of diminished importance in 2010. If the presence of an implicated deputy in a state correlates with a decline in PT vote share between 2002 and 2006, this variable will have to be included in other models. The Bolsa Familia was not rolled out overnight. Some communities did not receive program benefits for several years after it was first implemented. This provides a natural experiment to compare places that are similar in all respects other than treatment. The type of analysis I use to analyze these cases depends on the number available. Because some communities that experienced delays experienced them because they did not have internet access, poverty may confound an attempt to use the staggered rollout as an experiment. The census bureau produces a measure of human development in municipalities that scores municipalities based on literacy rates and infrastructure. By matching municipalities with similar human development index scores, it may be possible to find communities that differ only with respect to whether they began receiving Bolsa money in a given year. If these broadly similar communities behaved differently in the 2006 elections, they are strong support for *Bolsa*'s influence on voter preferences. Depending on the number of communities that can be matched in this way, I will study them statistically or present them as case studies.

A final set of matching tests will attempt to diminish the confounding effect of poverty on support for the PT. Because the MDS registers

people who are close to the income cutoff for *Bolsa* eligibility, it is possible to compare communities on the basis of the ratio of MDS registrants to *Bolsa* recipients. I will separate municipalities into three groups: those in which more than 75 percent of MDS registrants receive benefits, those in which less than 25 percent of registrants receive benefits, and those in which the ratio of beneficiaries to registrants ranges from 25 to 75 percent. If the mean PT vote share differs between groups, there is reason to believe that the *Bolsa*'s role in shaping voter preferences is different from the effects of poverty.

#### Conclusion

Many of the countries interested in implementing CCT programs are young democracies. In such countries, it is easier for political parties to exploit the resources of the state to build patronage networks and dominate the political scene (Sartori 1976; Templeman 2010). An unscrupulous party might try to build a national political machine around a large CCT program. For this reason, it is essential that governments and international aid organizations understand how CCT programs shape politics in the countries that use them. The *Bolsa* Família has lifted millions of people out of extreme poverty; other CCT programs have done the same. Better understanding of the *Bolsa* might make it possible to know what kinds of institutional arrangements must be in place for CCT programs to succeed.

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# Sweetland Prize for Excellence in Upper-Level Writing (social sciences 2010/2011)

# Oh SNAP! The Real Cost of Cuts to the Supplemental Nutrition Assistance Program

From POLSCI 381: Anton Camaj, Eileen Divringi, Jake Gatof, Nicole Johnson, Ji Won Moon, and Azure Nowara (nominated by Mika Lavaque-Manty)

Most work in POLSCI 381 was collaborative; the final end product was a research proposal. This paper is by far the most sophisticated and innovative of the student projects. Its research question and hypotheses are genuinely significant and would be—are!—worth pursuing by social scientists. Some group members had prior expertise in geographical information systems (a rarity still among political science graduate students), and the ability to think spatially and in terms of spatially oriented methods help make the proposed study innovative. It shows what wonderful potential our undergraduates have as researchers, even though so many of our undergraduate courses ignore actual inquiry.

Mika Lavaque-Manty

## Oh SNAP!: The Real Cost of Cuts to the Supplemental Nutrition Assistance Program (SNAP)

#### I.) Abstract/Introduction:

The impact of food quality and sufficiency on an individual's overall health is both intuitive and empirically verified—so why have public policy decisions not reflected this sensibility? Debates over healthcare and Medicaid reform are often framed in terms of overall costs. It is no secret that a whole host of diet-related chronic illnesses—from diabetes and heart disease to hypertension—are both expensive to treat and entirely preventable. These illnesses, along with the adverse medical condition of obesity, are especially prevalent among the food insecure, suggesting significant preventative potential for food assistance programs.

Between 2007 and 2009, the number of participants in governmental food assistance programs increased by about 10 million, reaching a total of 42 million. Yet in August 2010, the United States Senate passed two pieces of legislation that resulted in cutting funds allocated to SNAP (Supplemental Nutrition Assistance Program), commonly known as "food stamps." These cuts totaled a loss of \$14.1B in benefits. While the program represents an imperfect attempt at addressing hunger-related issues, it had effectively curbed a portion of recipients' food insufficiency prior to these cuts. Additionally, data suggest that preventative measures to combat food insecurity and obesity have been cost-effective, especially among children (Wang, Yang, Lowry, & Wechsler 2003).

For needy families, the food budget provided through SNAP has been a vital safety net for maintaining a nutritional diet—thus limiting the development of chronic diseases that result from poor eating habits. High levels of food insecurity are strongly correlated with high levels of obesity (Dinour, Bergen, & Yeh 2007). Given that many people who receive food stamps also rely on government-subsidized health insurance, such as the Medicare

or Medicaid programs, SNAP health consequences are not only of interest to public health initiatives, but to US budget concerns as well. However, regardless of whether or not food stamp participants are currently enrolled in these programs, the health costs of these cuts will inevitably be distributed across the whole population in 2014, when the individual mandate requiring all citizens to purchase health insurance comes into effect.

Our project's main goal is to address the following question: will cuts to the Food Stamp Program lead to higher food insecurities, insufficiencies, and, consequently, health care costs? Previous research has revealed that cuts in food stamps have led to lower food security, as expected, and higher health care costs due to obesity (Pylypchuk & Meyerhoefer 2008). Since obesity is commonly associated with several other health issues, the consequences of food insecurity can be rather costly. As such, efforts to save money via making cuts to SNAP may lead to higher costs elsewhere.

We believe that cuts to SNAP would lead to higher food insecurities and therefore higher health costs due to obesity, obesity-related illnesses, and poor nutrition. Thus, we predict a cut to SNAP funds would in fact increase costs in the long run by worsening food insecurity and increasing rates of chronic illness. Such a finding would be of huge importance for future policy decision-making, as it would support the fiscal case for programs aimed at preventing food-related health problems.

#### II. Importance of Study

Food consumption is the most basic and important part of maintaining good health. Past studies have indicated that without sufficient funds, people tend to resort to unhealthy food products and eating habits because of financial constraints and fear of anticipated hunger. It has also been reported that such consumption patterns result in higher rates of obesity and other food related health complications such as Type II Diabetes and malnutrition. Therefore, it is reasonable to predict that the reduction of food stamp benefits

can harm the health of recipients due to the aforementioned reasons.

Health of individuals from food insecure households is not merely a matter of humanitarian or charitable concern but also an important factor in determining the cost of public health care. Many food stamp recipients are below the federal poverty line and consequently eligible for Medicaid. This suggests that an increase in health problems among food stamp recipients may increase the cost of Medicaid – a program already struggling with budgetary constraints. Ironically, part of the budget from the recent SNAP cut was used to subsidize Medicaid. In doing this, it seems the federal government may have solved a short term problem by fueling a long term problem.

#### III. Background

SNAP (Supplemental Nutrition Assistance Program), as its name suggests, was created to close the nutritional gap between food secure and food insecure households. Due to the recession, the number of food insecure households increased by more than 10 million since 2007. Most of this increase came in the earlier years, with little since 2009. Part of the reason for this slowing was that the American Recovery and Reinvestment Act (ARRA), commonly known as the stimulus package, increased the amount of money that goes to food stamp recipients.

The average monthly SNAP benefit per recipient was \$115 per month in March 2009. That amount rose to \$133 per recipient in April 2009. Since the consumption of food is a necessity and not a luxury, it was considered one of the most cost-effective programs in the stimulus package. It was reported that every dollar spent on food stamps lead to \$1.73 in economic growth, compared to \$0.32 per dollar spent on tax cuts (Zandi, 2008).

However, in August of 2010, the U. S. Senate voted to cut funding for SNAP. The rationale was that (1) the cost of food has been lower than what the program had anticipated, and (2) the government needed funding for Medicaid and education. The cut was more than \$14 million. By April

of 2014, it is projected that the food stamp benefits for a family of four will drop by \$59 a month (curiously, the amendment to cut roughly \$35 billion in oil and gas subsidies failed to pass just one month prior).

More than 1,400 organizations from around the country have voiced their opposition by signing a letter to Congress. They have emphasized that of the 40 million Americans who depend on SNAP, 41 percent had incomes at or below one half of the poverty line, nearly half are children, and benefits already averaged less than \$4.50 per person per day even after the ARRA boost.

#### IV. Review of Literature/State of Analytical Knowledge

High levels of food insecurity have been shown to correlate well with high levels of obesity (Dinour, Bergen, & Yeh 2007). Obesity is commonly known to lead to other problems such as Type II Diabetes, Cardiovascular Disease and Hypertension. In the United States, efforts to curb food insecurity and obesity epidemics have been implemented through the Food Stamp Program (FSP), which later became referred to as SNAP. Despite these efforts, data suggest that FSP participation has has had a limited effect on the food insecurity problem (Wilde 2007). Consequently, obesity is still prevalent and thus the excess health costs associated with obesity are still widespread. While the Food Stamp Program has yet to fulfill its purpose, data shows that preventative measures to combat food insecurity and obesity have been cost-effective, especially among children (Wang, Yang, Lowry, & Wechsler 2003).

#### a). General Food Insecurity Impacts on Nutrition and Health

How does food insecurity impact nutrition and health? Studies have shown that individuals from food insecure households are likely to have poor health practices, higher BMI, and higher possibility of developing Type II Diabetes due to their food consumption patterns.

Children from persistent food insecure households (from kindergarten to third grade) generally had higher BMIs and common weight gain (Jyoti, Frongillo, and Jones, 2005). Food insecure teens had less access to healthy food and greater preferences for unhealthy food, commonly eating greater than 30% of daily calories from fat (Widome, Neumark-Sztainer, Hannan, Haines, and Story, 2009).

Other studies tried to explain the possible causes of obesity in food insecure individuals using food consumption patterns and psychology. Sarlio-Lähteenkorva and Lahelma (2001) observed a correlation between fears, experiences of food restrictions and BMI. Obese subjects were more likely to buy cheaper, less healthy food than the normal weight subjects because many of them had fear from past experiences of running out of money to buy food. Townsend, Peerson, Love, Achterberg, and Murphy (2001) found a stronger correlation between overweight status and food insecurity among the mildly and moderately food insecure than the extremes of the food security scale. It is expected that involuntary temporary food restrictions are the cause of this phenomenon. This process is known as the "food stamp cycle" hypothesis: temporary periods of reduced food availability (for example, a benefit recipient who receives food stamps every first week of the month may experience food insecurity in the last week of the month) may trigger binge eating in times of increased food availability, leading to weight gain.

Food insecurities have consistently been associated with rises in obesity. Food stamp cuts will likely increase food insecurities in America. Therefore, we expect to see greater levels of obesity among participants after SNAP cuts.

## b). The Impact of the Food Stamp Program on Nutrition and Food Sufficiency/Insufficiency

Participation in the Food Stamp Program has been illustrated to reduce food insecurity by 22-29% for the median food insecure household

(Mykerezi, Elton & Mills 2010). However, on average participants only receive \$3-5.87 a day (varying by state and income) which, though it may decrease overall food insecurity, does not provide enough money for healthy food purchases in current American markets. This leads us to the question of how membership in the Food Stamp Program (FSP) affects nutritional choices and overall health status.

According to a study by Diane Gibson, FSP participation data from 1979 to 1996 illustrates that current and long-term FSP participation increases the probability of obesity by 20.5% (Gibson 2003). Furthermore, a later study conducted by Diane Gibson found that participation in the FSP yields a strong correlation between a mother's overweight or obese status and her daughter's overweight or obese status. However, mother-only and daughter-only overweight and obese statuses were less prevalent among FSP participants. This suggests that FSP participation may have an effect on the household not only on the individual (Gibson 2006). A study done by Pylypchuk and Meyerhoefer supports Gibson's finding by illustrating that female participants compared to eligible non-participants were 6.7% more likely to be obese and 5.9% less likely to be of normal weight. However, they also showed that FSP eligible participants compared to non-eligible participants have higher body mass indexes (BMIs) (Pylypchuk & Meyerhoefer 2008).

The health issues associated FSP participants are evident. If members are receiving benefits, what could be the cause of their poor health? A study by Rose, Donald and Rickelle Richards shows that fruit consumption increased with easier grocery store access, where "easy access" was defined as shorter travel time and car ownership. Additionally, participating households that found dietary choices important and had some awareness of the Food Guide Pyramid recommendations also consumed greater quantities of fruits. Therefore, participants with poor nutrition may have limited access to grocery stores due to their location in concentrated low income neighborhoods

(Rose, Donald, & Richards 2004). Regardless, a study by Gurthrie, Frazao, Andrews and Smallwood reports that in 2004-05, low-income, four-person households spent \$54 a month on fruits and vegetables (on average), \$17 a month less than higher-income, four-person households. The authors attribute this to the higher costs of fruits and vegetables. As such, participants are more likely to budget their food stamps in order to buy more, less expensive foods (Guthrie, Frazao, Andrews, & Smallwood 2010).

While foods stamps are clearly necessary to lower food insecurities, unless the state provides greater benefits that will allow for healthy purchases, health statuses in relation to obesity and obesity-related diseases will remain stagnant or possibly deteriorate.

# c). Impact of Dietary Problems on Health Care Costs:

What is the Impact of Dietary Problems on Health Care Costs? Studies have shown that the poor dietary habits and sedentary behavior can lead to obesity and chronic diseases such as Type II Diabetes. Because the average food insecure individual has less desirable dietary practices than the average food secure individual, the food insecure individual has an increased propensity towards the development of these illnesses. These obesity-related chronic diseases are incredibly expensive to treat. Illnesses such as Type II Diabetes, gall bladder disease, and hypertension account for 7% of healthcare costs by some measures. Furthermore, food insecure individuals with poor dietary habits are largely reliant on government subsidies for medical care and food assistance. As result, these dietary practices have an immense public cost in terms of Medicare and Medicaid expenditures, suggesting that preventative government policies are cost-effective (Colditz 1999).

Some studies attempt to quantify the current percentage of health-care spending that goes to treating obesity-related diseases. These studies found that treatment of obesity-related diseases made up 30% of healthcare costs, with pharmacy services and in-patient care causing a 105% and 39%

cost increase, respectively. Likewise, those with BMIs of 25-29.9kg/m2 and greater than 30 kg/m2, respectively, had 1.2 and 1.84 times the annual number of pharmacy dispenses than those with BMIS of 20 to 24.9 kg/m2. Over time, healthcare costs for those with high BMIs increase, thus providing an economic rationale for government interventions against obesity (Thomson, Brown, Nichols, Elmer, & Oster 2001). Some of these studies focus on the costs associated with changes in obesity amongst a particular demographic. Women over 40 who maintain their weight were shown to collectively spend \$53 million less on health care than their counterparts who gain weight. "There is a substantial health cost burden associated with the increasing prevalence of overweight women in the United States" (Gorsky, Pamuk, Williamson, Shaffer, & Koplan 1996).

Other studies focus on the costs of a particular obesity-related disease. For example, heart disease— often an outcome of poor dietary habits and physical inactivity— cost \$35.3 million in 2000. These costs are borne by taxpayers, employers, and individuals in the form of higher taxes to subsidize public insurance programs and increased health insurance premiums (Garrett, Brasure, Schmitz, Schultz, & Huber 2004). Another manifestation of this public cost can be seen in the heightened medical costs of Type II diabetic Medicare/Medicaid recipients. As demonstrated by multivariate modeling, when an individual develops diabetes, complications, or comorbidities, their healthcare costs increase. Furthermore, Type II diabetes prevention, including the improvement of dietary behaviors, were proven highly cost-effective and potentially cost saving in the long run (Brandle, Zhou, Smith, Marriot, Burke, Tabaei, Brown, & Herman 2003).

On a different note, some studies highlight the impact that the disproportionate prevalence of obesity amongst low-income individuals may have. Healthier foods are more expensive— in general, prices decrease when calorie amounts increase. Thus, low-income standing is a contributor to the persistence of poor dietary habits. As a result, many low-income indi-

viduals develop chronic illnesses and are forced into disability-related early retirement, which has a major economy-wide impact. Many of these people become increasingly dependent on government subsidies without adding productivity to the labor market (Yach, Stuckler, & Brownell 2006). Sturm (2002) shows that those who live within in-egalitarian communities have less access to healthy foods, and thus have an increased likelihood of becoming obese. He also argues that obesity should be regarded as a disease in and of itself, due to its widespread prevalence.

Wang and Dietz (2002) performed an economic analysis on hospital discharges with obesity-related diseases. Over the past 20 years, the proportion of discharges with obesity-associated diseases has increased dramatically in the past 20 years. This increase is largely due to increased obesity amongst younger generations. Yang, Lowry, and Wechsler (2003) suggest strong economic benefits could result from a School-Based Obesity Prevention Program. Such programs minimize a child's proclivity towards becoming obese and developing obesity-related diseases. This reduction drives down the aforementioned health care costs in the long run.

# V. Conceptual Model and Theory and Definition of Variables:

Preceding research has illustrated a positive correlation between obesity and food insecurity. Obesity increases the risk of many physical and mental health conditions. Consequently, high levels of obesity have proved to increase healthcare costs. Based upon these findings, we propose that the 2010 SNAP cuts will increase food insecurities for participants in Southeast Michigan and therefore increase the prevalence of obesity-related diseases and the healthcare expenditures to treat them. We predict that the US policy efforts to save money through SNAP cuts will instead generate greater spending through government-subsidized healthcare.

Essentially, our experiment deals with the relationship between two primary variables. The independent variable is SNAP spending, which will be

examined in two instances – before the recent cuts and after. The core dependent variable, we argue, is healthcare costs. We expect them to relate inversely, as follows:

#### H: $\Delta$ HCC = $1/(\Delta$ SNAP)

However, we acknowledge that the relationship is much more complex and indirect than this simple model would suggest, reflecting the impact of SNAP spending (or lack thereof) on a variety of health-related dependent variables that in turn affect healthcare costs. These additional dependent variables include obesity and chronic illnesses (OC), food security (FS), and availability of healthy food (AHF) and their relationship to SNAP spending is represented in the sub hypotheses:

 $H_1$ :  $\Delta OC = 1/(\Delta FS)$   $H_2$ :  $\Delta OC = 1/(\Delta AHF)$   $H_3$ :  $\Delta SNAP = \Delta FS$  $H_4$ :  $\Delta SNAP = \Delta AHF$ 

 $H_5$ :  $\Delta SNAP = (\Delta AHF\Delta FS)/(\Delta OC)$ 

Sub-hypothesis 1 is derived purely from past research that has convincingly demonstrated the link between food insecurity and obesity (Dinour, Bergen, & Yeh 2007). Despite our previous acknowledgment that SNAP has had only a limited impact of general food security (Wang, Yang, Lowry, & Wechsler 2003), we believe that sub-hypothesis 3 is reasonable because reduced food budgets (which is an inherent outcome of SNAP cuts) necessarily imply greater food insecurity.

Sub-hypotheses 2 and 4, because they involve issues of access, are slightly more problematic from a methodological standpoint. Access to healthy foods is subject to a variety of confounding variables, including mac-

ro-economic changes that relocate resources away from city centers. Despite this, it is hard to deny the relationship between limited access to nutritious, low-calorie foods such as fresh fruits and vegetables and obesity and chronic illnesses such as diabetes. Furthermore, by making the empirically supported assumption that healthy foods cost more than their heavily processed counterparts (Yach, Stuckler, & Brownell 2006), we can reasonably infer the relationship between SNAP funding and access suggested by sub-hypothesis 4 (again, household food budget reductions will imply reduced access to these foods). Sub-hypothesis 5 summarizes the relationship of these dependent health variables to SNAP.

Finally, we have additional sub hypotheses regarding how these health variables affect the overall cost of health care:

$$H_6: \Delta HCC = \Delta OC$$
 
$$H_7: \Delta HCC = \Delta OC/(\Delta FS \times \Delta AHF) \rightarrow \Delta HCC = 1/(\Delta SNAP)$$

The direct relationship between rates of obesity/chronic illness and healthcare cost that produces sub-hypothesis 6 are also derived directly from the literature. The summary equation in sub-hypothesis 7 was created using the relationships established in sub-hypotheses 1, 2, and 6. Because this summary equation yields the inverse of the summary equation in sub-hypothesis 5, we can infer the equation that comprised our original hypothesis.

# VI. Hypothesis

Preceding research has illustrated a positive correlation between obesity and food insecurity. Since obesity increases the risk of many physical and mental health conditions, high levels of obesity have also led to increased healthcare costs. Based upon these findings, we believe that the 2010 SNAP cuts will increase food insecurity for participants in Southeast Michigan and

therefore increase the prevalence of obesity-related diseases and the health-care expenditures to treat them. We predict that the US policy efforts to save money through SNAP cuts will instead generate greater spending through government-subsidized healthcare.

# VII. Methodology

For this study, our we plan to conduct a longitudinal study using 1000 female-headed households as our subjects from in the southeast Michigan: Wayne County region (all of which were participants in the SNAP program both pre- and post- cut). Wayne County was selected because it has a strikingly high use of both food stamps and high rates of chronic obesity-related illnesses. Importantly, all households with confounding predisposing towards obesity and obesity-related illnesses were not included in this study. To obtain these subjects, we will vie for the assistance of District offices of state representatives and senators, local community organizers, and churches to solicit participants. To validate that those who inquire for participation are SNAP beneficiaries, we will require the submission of disbursement stubs, W-2s, and social security information. As an incentive, in addition to receiving routine monthly physicals for the families, we will also provide them with day care vouchers for their young children for the amount of hours they participate monthly.

The manner in which food stamps are distributed will need to be taken into account. County food assistance policies divide food stamp recipients into nine groups, each receiving a different date on which their food benefits will be available. Benefits are issued one day later each month for 1 to 11 months. While the exact day changes each month, the general section of the month (beginning, middle, end) stays the same. For example, if one group's food stamp benefits become available on February 3<sup>rd</sup>, they will be available March 4<sup>th</sup>, then April 5<sup>th</sup> and so on. Another group may have benefits available on February 15<sup>th</sup>, March 16<sup>th</sup>, and April 17<sup>th</sup>. Groups 1-3

received their benefits at the beginning of each month, Groups 4-6 in the middle and Groups 7-9 at the end. We used the county categories to compare health, healthcare costs, and individual concerns about food insecurities. In order to eliminate any bias on date of receiving food stamps we will gather data equally from each aforementioned group. Likewise, we will further divide participating subjects into households that have a food budget outside of food stamps, and households that have no budget outside of food stamps. While food stamp benefits decrease with income increases, "outside budgets" can allow for less food insecurities and greater freedom in grocery choices. The FSP eligibility income-to-needs ratio was calculated by dividing the FS eligibility income of a family by the poverty threshold appropriate for the family's size. This allowed us to calculate if the family had a food budget outside of their Bridge Card (the food stamp dispersement mechanism in Michigan).

While many food stamp recipients live in regions defined as "food deserts," it is important that access remains stable across our study's timeline. In order to monitor this stability we measured a household's access to healthy foods each year to ensure that access to healthy foods was not drastically changing and altering food choices. This will be determined using the US Census Bureau's Zip Code Business Patterns data. Healthy food outlets include grocery stores with more than four employees and produce/farmers' markets, as defined by their North American Industrial Classification System (NAICS) codes.

The data we will collect is intended to create a fair representation of the costs associated with the development of obesity as a result of food insecurity along with the costs associated with obesity-related diseases. Towards this goal, with the study population's permission, we intend to collect all hospital, physician, and other healthcare related bills and receipts from these families. Likewise we will survey these heads of household in order to assess the availability and consumption of nutrition-rich foods. Furthermore we

will take measurements of all household member's BMIs. The standard BMI calculation will be used for this monthly measurement. Heights and weights of each study participant will thus be recorded for this calculation.

This survey, healthcare cost data collection, and BMI measurements will occur longitudinally. Measurements will be taken at the end of each month/ food stamp cycle. All healthcare costs that are related to the treatment of obesity-related illnesses will be considered as a part of this study. The longitudinal survey that we will conduct is intended to properly assess the nutritional value of these household's diets.

Some of the proposed study questions are listed directly below:

- (i) What would be your best estimate as to the number of fruits and/or vegetables consumed weekly per/person in your household?
- (ii) What would be your best estimate as to the number of processed or frozen foods consumed weekly per/person in your household?
- (iii) As time since receiving monthly food stamps increases does difficulty to afford nutritious foods (list provided to them) increase?
- (iv) When during your monthly benefit cycle do you eat the most?
- (v) Is your food consumption stable throughout the month, or greatest at one point?
- (vi) Have you or anyone in your family been diagnosed with any of the following diseases (Type II diabetes, Cardiovascular Disease, Hypertension, etc.)
- (vii) Does the monthly stipend from the SNAP program allow your family to afford the FDA suggested nutritional values?
- (viii) Would you generally say your food consumption has increased or decreased over the past month?

In order to conclude that cuts to food stamps do in fact lead to a decrease in food sufficiency and access to healthy foods, thus increasing obesity and obesity-related illnesses, we assume that the affordability of healthy foods is the primary factor influencing obesity rates. While other societal, institu-

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tional, and cultural influences may contribute towards high obesity rates, our study attempts to control these factors. As previously mentioned, we will monitor changes in the availability of healthy foods in southeast Michigan through US Census data.

# VII. Expected Findings

If our hypothesis is confirmed we will observe changes across all data points. Following the SNAP cuts, we expect to see increases in obesity (BMI data collection) and healthcare costs of obesity-related illness (healthcare billing collection) as well as decreases in food security and accessibility to healthy foods (survey data collection). On the other hand, if we were to confirm the null hypothesis, we would see no such trends or perhaps increases in food security and accessibility to healthy foods. Because many of the recipients rely on government-subsidized health care, we would also expect to see higher costs imposed on Medicare and Medicaid.

# VIII. Conclusion: Limitations and Implications

Billions of dollars will be spent over in the next few decades to treat health outcomes associated with obesity in the United States (Thompson *et al.*, 2001). Thus, a substantial health burden is associated with the increasing prevalence of overweight people, especially in low-income areas. Female SNAP recipients already pay \$202 out of pocket per year for obesity attributed medical expenditures (Meyerhoefer & Pylypchuk, 2008). Food stamp program participation has lowered the severity of food insecurities, yet cutbacks to the program may erase this success.

The mildly and moderately food insecure are commonly overweight. There is also a strong correlation between feelings of food insufficiency among poor women and symptoms of depression. This is attributed to stress caused by difficulties in providing food for one's family and self (Seifert *et al.*, 2004). The 2010 SNAP cuts could transform the health statuses of millions

by increasing the food insecure population.

The evaluation of this policy decision should be of interest to policy-makers, public health officials, and clinicians. Preventing excess coronary heart disease, gallstones, osteoarthritis, hypertension, and diabetes through the prevention of weight gain, particularly among the Medicaid dependent, is a cost-effective strategy for the United States. We expect that policies aimed to educate citizens about nutrition, to increase fresh food and grocery stores accessibility in low-income areas and to reduce food insecurities would create a healthier population and decrease healthcare costs. However, without the support of this study, our policy proposals have no legitimacy. Discussions of cost cutting can no longer be divorced from discussions of policy effectiveness, as they all-too-often result in measures that are counterproductive and cruel.

In the wake of domestic budget cuts and our continuing economic difficulties, reversal of these cuts seem unlikely. In an effort to combat the long-term effects, we would suggest the implementation of preventative programs. According to Wang et al (2003), preventative programs set in place in elementary schools encouraged healthier eating habits, thus lowering the risks of contracting an obesity related disease. They found that allocation of public resources was a cost-effective plan and would advise federal and state level lawmakers to do so. Programs designed to prevent obesity-related disease are less costly, in economic and human terms, than simply treating the diseases once they occur.

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# English Proficiency and Spousal Support are Associated with Higher Self-rated Health in a National Sample of Asian American Immigrants

From PSYCH 391: Jennifer Sun (nominated by Perry Silverschanz)

Jennifer Sun's paper exemplifies the papers I hope to see my students able to write by the end of the course I teach each year: Advanced Research Lab in Personality Psychology. What makes Jennifer's paper particularly special is that it was not even her final paper—this was only the third of four major assignments during the semester. Even though my students use provided datasets and carry out secondary data analysis, Jennifer's paper nevertheless represents creative hypothesis development, critical evaluation of both the literature reviewed and her results, and strict structural and organizational adherence to American Psychological Association's 6th edition publication standards. I feel these accomplishments highlight her strengths in social scientific writing, most especially given the limitations of data gathered by outside researchers for purposes other than those of the student. (I stress to my students that the goal of the papers is not to have significant findings, but also to be able to write intelligently about findings counter to one's hypotheses.) In six years of teaching this course, I do not hesitate when I say this paper is the closest to a perfect demonstration that has ever been submitted to me of the skills I attempt to teach!

Perry Silverschanz

# English Proficiency and Spousal Support are Associated with Higher Self-rated Health in a National Sample of Asian American Immigrants

#### **Abstract**

While spousal support has been shown to buffer the effects of disease-related stress on health outcomes, few studies have looked at how spousal support can protect against acculturative stressors such as lack of English proficiency. The present study investigates if spousal support influences the relationship between English proficiency on self-rated mental/physical health for a national sample of married Asian American immigrants. For 1217 married Asian American immigrants (584 men and 633 women, mean age = 44.33 years), higher levels of English proficiency and spousal support were both independently correlated with better ratings of mental/physical health, but spousal support did not impact the association between English proficiency and self-rated health. Possible interventions to increase language proficiency and spousal support for Asian American immigrants are proposed.

#### Introduction

Life is stressful. You have a cold that does not want to go away. You get into a fight with your best friend. You run into a traffic jam on the way to work. People experience numerous physical, social and psychological stressors every day. While low levels of short-term stress can be adaptive, chronic long-term stressors can result in serious mental and physical health issues. So the question is: what can you do to prevent daily stressors from escalating to a point where it affects your health? One answer seems to appear over and over again in the literature: seek social support.

The stress-buffering model of social support proposes that support is related to well-being primarily for people under stress (Cohen, Underwood & Gottlieb, 2000). The present paper focuses on the impact of a specific type

of social support, namely spousal support, on buffering the effects of stress on physical and mental health. The relationship between spousal support and health has already been well-established in clinical populations. In a study of female patients with osteoarthritis, those who reported increased marital adjustment from pre- to post-spouse-assisted coping skills treatment were more likely to report less physical disability and show less pain behavior at the completion of treatment (Keefe *et al.*, 1996).

But does spousal support play a role in protecting against non-physical stressors such as acculturative stressors? One type of acculturative stress that affects recent immigrants to the United States is lack of English proficiency. Studies using data from the National Latino and Asian American Study (NLAAS) have shown a relationship between English proficiency and health outcomes in Asian American populations. Takeuchi *et al.* (2007) found that Asian men who spoke English proficiently generally had lower rates of lifetime and 12-month mental health disorders compared to non-proficient speakers. Thus, given the association between English proficiency and mental health, can spousal support help to improve the health of non-proficient Asian American immigrants?

The purpose of the current study is to 1) replicate the finding that high levels of English proficiency are associated with better mental/physical health and 2) investigate if spousal support can act as a buffer against lack of English proficiency on health outcomes for a national sample of married Asian American immigrants. While previous studies (Keefe *et al.*, 1996; Takeuchi *et al.*, 2007) have looked primarily at physical ailments and mental health disorders, the present study focuses on a more global measure of health status: self-rated mental/physical health. Given that past studies have found self-rated health to be a reliable and valid measure of an individual's health status (Lundberg & Manderbacka, 1996), this single-item measure should be able to capture the range of health conditions present in the sample. My first hypothesis is that married Asian American immigrants with higher levels of

English proficiency will have higher ratings of mental/physical health. The second part of the hypothesis is that there will be a greater effect in individuals with high levels of spousal support. In other words, individuals who have low English proficiency and high spousal support will have higher ratings of health than individuals with the same level of English proficiency but low spousal support.

#### Method

#### **Participants**

The present study uses data from participants in the National Latino and Asian American Study (NLAAS), a nationally representative survey conducted by Survey Research Center (SRC) at the University of Michigan's Institute for Social Research (ISR). The purpose of the study was to estimate the prevalence of mental health issues and the use of mental health services by Latino and Asian Americans in the United States.

The survey sample included Latino and Asian American adults living in the United States, excluding institutionalized persons and those living on military bases. The survey divided respondents into four target Latino populations (Cuban, Mexican, Puerto Rican, and other adults of Latino descent), four Asian American populations (Chinese, Filipino, Vietnamese, and other adults of Asian descent), and a control population of non-Latino, non-Asian white respondents. Surveys were administered to a total of 4,864 respondents: 2,095 Asian respondents, 2,554 Latino respondents, and 215 non-Hispanic, non-Asian white respondents.

The subpopulation used for analysis included 1217 respondents (584 men and 633 women). Three thousand four hundred thirty-two participants were dropped because 1) they did not meet one or more of the selection criteria (Asian American, married, immigrated to the United States) or 2) they did not answer, refused to answer, or answered "don't know" to one or more of the questions being studied (English proficiency, spousal support, self-rated mental/physical health). All respondents in the final sample were Asian

American, and the mean age of the sample was 44.33 years.

#### Measures

All measures collected were based on self-report. Standard demographic information including race, age and sex was collected.

**Self-rated physical/mental health**. The respondent's self-rated health was assessed based on the respondent's answer to the question, "What number would you use to describe your own overall physical and mental health during the past 30 days?" (measured on a scale of 0 = worst possible health to 100 = perfect health).

**English proficiency.** The respondent's English proficiency was assessed based on the respondent's answer to the question, "How well do you speak English? (Would you say poor, fair, good, or excellent?)" (measured on a scale of 1 = Poor to 4 = Excellent). For analyses, English proficiency was recoded into two categories (1,2 = Low Proficiency and 3,4 = High Proficiency).

**Spousal support.** A composite measure of spousal support was derived based on the respondent's answers to a series of four questions: 1) How much does your [(spouse/partner)] really care about you? 2) How much does your [(spouse/partner)] understand the way you feel about things? 3) How much can you rely on your [(spouse/partner)] for help if you have a serious problem? 4) How much can you open up to your [(spouse/partner)] if you need to talk about your worries? (all questions measured on a scale from 1 = A lot to 4 = Not at all). The responses to all four questions were reverse coded (1 = Not at all to 4 = A lot) and then summed to create a composite scale of spousal support (4 = minimum to 16 = maximum). For analyses, spousal support was recoded into two categories (high= above mean versus low= below mean) (Alegria, Jackson, Kessler & Takeuchi, 2007).

#### Procedure

Participants were chosen based on a multistage area probability sample design. The sampling process was conducted in four stages: 1) selection of U.S. Metropolitan Statistical Areas (MSAs) and counties, 2) selection of area segments within MSAs, 3) selection of housing units within area segments, and 4) random selection of eligible respondents within housing units. The survey population was stratified based on the eligible adult's ancestry or national origin. Adults of Puerto Rican, Cuban, Chinese, Filipino and Vietnamese descent were oversampled. More detailed information on sampling procedures can be found in Alegria, Jackson, Kessler & Takeuchi, 2007. Face-to-face, computer-assisted interviews were conducted in respondents' homes between May 2002 and December 2003. To accommodate respondents who were not fluent in English, the survey was translated into four languages: Spanish, Vietnamese, Chinese, and Tagalog.

#### Results

The first part of my hypothesis was that married Asian American immigrants with higher levels of English proficiency would have higher ratings of mental/physical health. To test this hypothesis, a Pearson's product moment correlation test was conducted, and as predicted, level of English proficiency was positively correlated with self-rated health (r = .19, p<.001) (See Table 1 and Figure 1). In addition, the results of the t-test indicated that there was a significant difference in self-rated health for individuals with low levels of English proficiency and high levels of English proficiency (low = 84.32, high = 88.63; t(1140) = -5.64, p<.001) (See Table 2 and Figure 2). The second part of the hypothesis was that there would be a greater effect in individuals with high levels of spousal support. In other words, individuals who have low English proficiency and high spousal support will have higher ratings of health than individuals with the same level of English proficiency but low spousal support. As expected, the results of a two-way ANOVA

showed a main effect for English proficiency level (low M = 84.32, high M = 88.63) on self-rated health, F(1, 1216) = 27.19, p<.001. There was also a main effect for spousal support (low M = 85.15, high M = 87.69) on self-rated health, F(1, 1216) = 6.57, P = .011. However, there was not a significant interaction between English proficiency level and spousal support, F(1, 1216) = 0.12, n.s. (See Table 3 and Figure 3). Counter to expectations, spousal support does not seem to affect the relationship between low English proficiency and self-rated health.

#### Discussion

The stress-buffering model of social support proposes that support is related to well-being primarily for people under stress. While there are many types of stressors, the majority of studies have looked at the benefits of spousal support on alleviating physical stressors ranging from surgery and chemotherapy to osteoporosis and pain. The current study expanded the range of stressors studied to include acculturative stress, or more specifically lack of English proficiency. In addition, the present study focuses in on a less studied population: Asian American immigrants.

Based on previous studies that demonstrated the ability of spousal support to act as a buffer against stress-related disease (Keefe *et al.*, 1996), the present study hypothesized that spousal support could influence the association between English proficiency and self-rated health in a national sample of Asian American immigrants. Analyses showed that while higher levels of English proficiency and spousal support were both independently correlated with better self-rated mental/physical health, levels of spousal support did not appear to have any protective effects against the negative health consequences of limited English proficiency.

This result, however, does not necessarily mean that spousal support does not play any role in the relationship between English proficiency and self-rated health. The lack of significant findings may be due partly to the way spousal support measured in this survey. While our study conceptualized spousal support as single general construct, there are many types of spousal support including instrumental (e.g. directly helping with a problem), emotional (e.g. showing empathy and giving reassurance), informational (e.g. giving advice or suggestions), and appraisal (e.g. passing along information for evaluation; Tardy 1985). Upon closer investigation, the four questions that were used to construct our measure of spousal support seem to be primarily measures of emotional spousal support. Three of the four questions (How much does your (spouse/partner) really care about you? How much does your (spouse/partner) understand the way you feel about things? How much can you open up to your (spouse/partner) if you need to talk about your worries?) gauge how well one's spouse/partner responds to emotional needs. Only one of the questions (How much can you rely on your (spouse/partner) for help if you have a serious problem?) could be construed as a measure of instrumental or informational support. Therefore, the results of our study may indicate that emotional spousal support does not influence the relationship between English proficiency and health. From a practical point of view, it is not hard to see why this might be the case. While emotional spousal support may temporarily help to relieve the stress associated with limited English proficiency, long-term stress relief can only be accomplished by instrumental (e.g. helping spouse/partner enroll in English classes) or informational (e.g. giving spouse/ partner information on how to find a conversation partner) support.

Accordingly, one of the limitations of this study is the lack of differentiation between different types of spousal support. Future studies should consider using more specific measures of spousal support that can discern between the different types of support and then consider each type in turn. Another limitation of this study is that all measures in this study were based on self-report. While self-reported measures are usually fairly reliable and correspond well with objective measures, they are subject to social desirability effects and other biases. Unlike other studies that used diagnosis of mental/

physical disorders as their health measure (Keefe *et al.*, 1996; Takeuchi *et al.*, 2007), the measure of self-rated health used in this study cannot be verified with health records. Self-rated health is more subjective, and respondents may be using different frames of reference when making these judgments about their health. Furthermore, the measure only captures the mental/physical status of respondents over the 30 days prior to survey administration. Respondents could have had exceptionally good or bad health that is not reflective of their overall health status. Other researchers should consider using a broader, more global measure of physical/mental health.

From a theoretical perspective, this study did not support the idea that spousal support can ameliorate the negative health consequences of limited English proficiency. However, the fact that spousal support and English proficiency both independently impacted self-rated mental/physical health may have implications of its own. Namely, interventions that increase English proficiency and/or spousal support could lead to better health outcomes for Asian American immigrants, regardless of the underlying mechanisms.

Given the effects of English proficiency on self-rated mental/physical health, one basic intervention could be providing Asian American immigrants with immediate language resources upon arrival in the United States. Future studies should consider implementing such an intervention and examining the effects on subsequent mental/physical health measures.

As for spousal support, it may not matter how spousal support impacts health, only that it does. Therefore, interventions that seek to improve spousal support may be beneficial to Asian American immigrants regardless of its underlying mechanisms. One possible intervention that could be used to increase spousal support is active constructive responding. Studies have shown that how a spouse/partner responds to good news may be more predictive of personal well-being than how a spouse/partner responds to bad news (Gable, Reis, Impett &Asher, 2004). Furthermore, close relationships in which one's spouse/partner characteristically responds enthusiastically to

the sharing of good news were associated with higher relationship satisfaction (Gable *et al.*, 2004). Thus, interventions that encourage regular sharing of good news and active support may translate to better health outcomes for Asian American immigrants.

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Table 1
Correlation of English Proficiency and Self-Rated Health in a National Sample of Married Asian American Immigrants (N =1217)

	1	2
1. English Proficiency		
2. Self-rated health	.19*	

<sup>\*</sup>p<.001

Table 2 Self-Rated Health for Varying Levels of English Proficiency for a National Sample of Married Asian American Immigrants

English proficiency	n	M(SD)	
Low	592	84.32 (14.59)	
High	625	88.63 (11.88)	

*Note.* Self-rated health measured from 0 = worst possible health to 100 = perfect health.

Table 3
Self-rated Health for Varying Levels of English Proficiency
by Spousal Support for a National Sample of Married Asian
American Immigrants

	Spousal Support					
	Low (n=555)			High (n=662)		
	m	SD		m	SD	
Low Proficiency	83.51	14.05		85.22	15.15	
High Proficiency	87.26	12.01		89.50	11.73	

*Note.* Self-rated health measured from 0 = worst possible health to 100 = perfect health.

Figure 1. Correlation between English proficiency and self-rated health for a national sample of married Asian American immigrants. Self-rated health measured from 0 = worst possible health to 100 = perfect health.

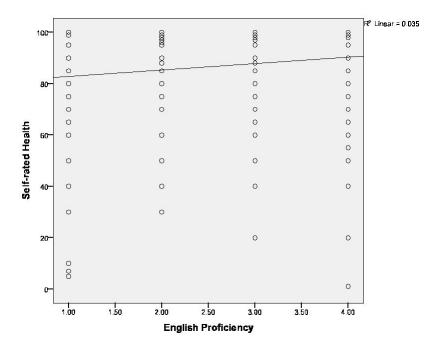


Figure 2. Mean self-rated health as a function of English proficiency level for a national sample of married Asian American immigrants. Self-rated health measured from 0 = worst possible health to 100 = perfect health.

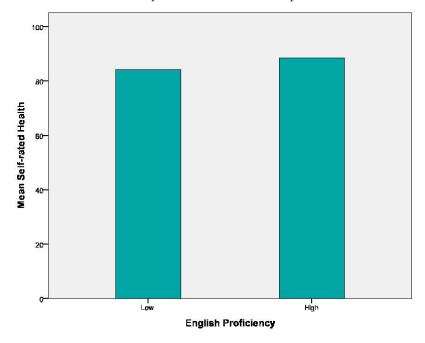
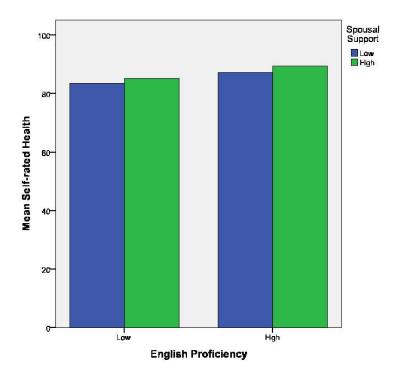


Figure 3. Mean self-rated health as a function of English proficiency level for individuals with high and low spousal support in a national sample of married Asian American immigrants. Self-rated health measured from 0 = worst possible health to 100 = perfect health.



# Sweetland Prize for Excellence in Upper-Level Writing (humanities 2011/2012)

# Bringing the Revolution Home or Fulfilling the Law?

From Hist 399: Aaron Bekemeyer (nominated by John Carson)

In this paper, Aaron clearly and succinctly lays out the pre-history of the sanctuary movement in the United States. He explains what precisely was meant by the sanctuary movement and then deftly shows how the interplay of politics and religious/cultural sensibilities led to a range of reactions to developments in Central America among American Catholics. These varied from conservative Catholics' strong support for President Reagan's policies in Central America to the rise of various left-wing groups, starting with Witness for Peace and eventually including the sanctuary movement, who opposed American policy and sought to aid Central Americans in their struggles and as refugees. Throughout, Aaron attends carefully to the diversity of factors influencing his story and to the multiple positions his various actors took.

Iohn Carson

# Bringing the Revolution Home or Fulfilling the Law?

Central America, Ronald Reagan, and the Roots of the U.S. Sanctuary Movement

Jim Corbett, the Rev. John Fife, and a handful of other members of a small group known as the Tucson Ecumenical Council (TEC) established Tucson's Southside Presbyterian Church as the nation's first public sanctuary on March 24, 1982, and within just a few years the sanctuary movement had become a national sensation. By the end of the year, Corbett's activism had found favorable reception in reporting by national papers like the Washington Post and the Chicago Tribune, and in December, the TV news show 60 Minutes ran a sympathetic special on Corbett and the sanctuary movement.<sup>2</sup> By August 1988, the Chicago Religious Task Force on Central America estimated that the movement included 464 public sanctuaries, a figure that did not include any religious communities that may have supported the movement in quiet, unofficial ways.<sup>3</sup> The sanctuary movement appeared to surge into existence out of nothing, but the forces that brought it about were at work years, decades, and even centuries before this moment. The U.S. sanctuary movement was a complex phenomenon born of the convergence of various currents in religious history and in the history of the Americas. In order to understand why the movement came about when and in the manner that it did, it is important to assess the ways these various historical forces interacted to produce it.

We can understand the emergence of the sanctuary movement from two primary perspectives, the first of which involves examining the external, political factors that produced a Central American refugee crisis in the first

<sup>1</sup> Ann Crittenden, Sanctuary: A Story of American Conscience and the Law in Collision, New York 1988, pp. 69-73.

<sup>2</sup> Ann Crittenden, Sanctuary, pp. 102-104.

<sup>3</sup> Chart listing denominational and geographical breakdown of sanctuaries in August 1988; Wisconsin Historical Society (WHS), Records of the Chicago Religious Task Force on Central America (CRTFCA), 1982-1992, M93-153, Box 4, Folder 66.

place. To be clear, the United States certainly did not cause the civil wars that raged in El Salvador, Guatemala, and Nicaragua throughout the 1980s. These conflicts emerged from economic and political tensions between wealthy landowners and impoverished agricultural workers that had plagued Central America since the colonial period and that came to a head in the decades prior to the civil wars.<sup>4</sup> However, American foreign policy had left a deep footprint in Central America since the inception of the United States, and US involvement in the region took a particularly deadly turn in the 1980s as the Reagan administration turned US Central America policy into another weapon of the Cold War.<sup>5</sup> Greg Grandin has argued persuasively that the United States' choice to fund and train right-wing paramilitaries in the Central American civil wars stemmed from the desire of neoconservatives in the White House to reassert American military power in the world and against its chief Cold War opponent, the Soviet Union. The Reagan administration came to see Central America as, in some ways, "the most important place in the world," in the words of a conservative think tank founded just before the 1980 presidential election. Fighting Central American "Communists" (the label, applied to various left-wing forces in the region, was dubious) became the centerpiece of Reagan's Cold War policy.

The Central American wars certainly would have produced refugees even absent US involvement, but by inserting itself into these conflicts, Washington placed itself in a curious situation. The aid it provided to right-wing regimes and paramilitaries likely exacerbated the conflict and augmented the number of refugees fleeing the region, and thus more Salvadorans and Guatemalans sought asylum in the United States. These refugees brought with them stories of atrocities and personal tragedy stemming from state-sponsored violence, stories that contradicted the White House's official

<sup>4</sup> Christian Smith, Resisting Reagan: The U.S. Central America Peace Movement, Chicago 1996, pp. 5-16.

<sup>5</sup> Greg Grandin, Empire's Workshop: Latin America, the United States, and the Rise of the New Imperialism, New York 2006, pp. 2-4.

narrative of supporting righteous conservative governments against Communist radicals.<sup>6</sup> The US policy of taking sides in these conflicts aggravated the refugee crisis that brought this policy to the attention of most Americans in the first place, and religious communities in the Southwestern United States were among the first to take notice.

The other important perspective from which to understand the emergence of the sanctuary movement entails an investigation of the factors internal to religious history and the history of US social movements that made the American religious community receptive to the challenge of sanctuary. A variety of actors in American society might have responded to the Central American refugee situation, but that an ecumenical coalition of Christians and Jews did so first and most strongly demands an explanation. In the broadest sense, the practice of sanctuary had roots stretching back to the Middle Ages. Sanctuary activists also looked back to the significantly less ancient US abolitionist movement of the 19th century, seeing their work with refugees as a new Underground Railroad.

There were also more proximate causes of the US religious community's response to the Central American refugee crisis. A small but significant number of mainline religious leaders participated in the Vietnam antiwar movement of the late 1960s and early 1970s, most significantly in the guise of Clergy and Laymen Concerned About Vietnam (CALCAV), a moderate organization that advocated a ceasefire and negotiated settlement in Vietnam. A small number of churches even offered sanctuary to US military servicemen protesting the war, and in the second half of the 1970s many churches served as official sponsors of Indochinese refugees resettling in the United States.<sup>9</sup>

<sup>6</sup> See the Chicago Religious Task Force on Central America's refugee testimony files at WHS, Records of the CRTFCA 1982-1992, M93-153, Box 4, Folders 55-56; M2004-170, Box 2, Folder 3-4.

<sup>7</sup> Larry Stammer, "Illegal Alien Smuggling: New Partner," *Los Angeles Times*, February 3, 1983, A16.

<sup>8</sup> Crittenden, Sanctuary, pp. 62-63.

<sup>9</sup> Nancy Zaroulis and Gerald Sullivan, Who Spoke Up?: American Protest Against the War in Vietnam, 1963-1975, Garden City 1984, p. 263; Helen Fein, Congregational Sponsors of Indo-

These experiences of serving refugees and of protesting government military policy (sometimes in radical ways) helped pave the way for the dawn of the sanctuary movement in the early 1980s.

The connections between Central America and US congregations, particularly Roman Catholic congregations, were also instrumental in the emergence of the movement. The killing of four American Catholic missionary workers in El Salvador in 1980 prompted, among other responses, the organization of the Chicago Religious Task Force on Central America, the group that would serve as a national umbrella organization for the sanctuary movement. Sister Darlene Nicgorski, one of the leading sanctuary activists in Tucson, was radicalized by her observation of violence directed against the Catholic Church in Guatemala. Most significant was the assassination of Oscar Romero, the Archbishop of San Salvador, in early 1980. Archbishop Romero had called for peace between government forces and left-wing guerrillas in El Salvador but was killed by the government for his views. Many sanctuary activities among Catholics and non-Catholics alike paid homage to his struggle for peace and commemorated his death.

But even these conditions were insufficient to muster a truly large number of participants for the sanctuary movement. Some Christians and Jews chose to protest US Central America policy through other movements like Pledge of Resistance and Witness for Peace.<sup>14</sup> Unlike the governing bodies of most other mainline US churches, the National Council of Catholic

chinese Refugees in the United States, 1979-1981, London 1987.

<sup>10</sup> Crittenden, Sanctuary, pp. 87-89.

<sup>11</sup> Darlene Nicgorski's sentencing statement, read on July 1, 1986, to the federal court in Tucson, AZ, before Judge Earl H. Carroll; WHS, Records of the CRTFCA 1982-1992, M93-153, Box 4, Folder 48.

<sup>12</sup> Miriam Davidson, Convictions of the Heart: Jim Corbett and the Sanctuary Movement, Tucson 1988, pp. 17.

<sup>13</sup> Virginia Escalante, "Housing Emigres Obeys God's Law, Church Contends," *Los Angeles Times*, November 17, 1983, p. LB1.

<sup>14</sup> Smith, Resisting Reagan, pp. 70-86.

Bishops did not endorse sanctuary until late 1987.<sup>15</sup> Fundamentalist Christians failed to participate in the movement at all, and evangelical leader Pat Robertson's Christian Broadcasting Network supported the government's Central America policy, going so far as to contribute millions of dollars in aid to the right-wing rebels in Nicaragua.<sup>16</sup> There was thus by no means a unified Christian response to the Central American refugee crisis and to US foreign policy in Central America, and the sanctuary movement must be understood as one among many Christian responses to these situations.

# "The most important place in the world."

In 1980, Ronald Reagan unseated Jimmy Carter and succeeded him as the president of the United States. This election inaugurated a new era in American history marked by the ascendancy of conservatism in political life, and though Reagan was constrained in his ability to effect a significant rightward shift in domestic policy, his administration's foreign policy largely fits contemporary American memory of him as a far-right conservative. Reagan demonstrated his anticommunist bona fides by organizing support for the mujahideen fighting the Soviet occupation of Afghanistan and training and organizing Central American opposition to left-wing insurgencies and governments, in addition to several smaller military engagements.<sup>17</sup>

By aiding different parties in military conflicts around the world while refusing to commit American troops to these conflicts, Reagan continued what was known as the Nixon Doctrine, Richard Nixon's policy of fighting communism by funding anticommunist forces without directly risking American lives. Nixon expected American allies to fight their own wars

<sup>15</sup> U.S. Catholic Bishops Speak Out," *National Sanctuary Newsletter*, January 1988, p. 5; WHS, Records of the CRTFCA 1982-1992, M2004-170, Box 1, Folder 51.

<sup>16</sup> Christians Oppose TV Evangelist's Aid to Right-Wing Groups in Central America," press release of Synapses, Inc., April 13, 1985; WHS, Records of the CRTFCA 1982-1992, M2004-170, Box 1, Folder 7.

<sup>17</sup> Bruce W. Jentleson, "The Reagan Administration and Coercive Diplomacy: Restraining More Than Remaking Governments," *Political Science Quarterly* 106 (Spring 1991): 58.

with their own manpower, though the US could provide additional economic and military aid. Nixon had developed this policy in response to domestic opposition to the Vietnam War. The antiwar movement in the United States protested the government's support for the Saigon government in South Vietnam and the large and rising death toll for American troops, and by mid-1973, Nixon had withdrawn virtually all American combat troops from Vietnam. But Washington under Nixon and Gerald Ford continued to support the South Vietnamese until Saigon fell to the North in 1975 and even expanded some fronts of the war, beginning secret bombings of Cambodian to eliminate Vietcong outposts in 1969. Americans' disgust and exhaustion did not fade with the end of the United States' decades-long entanglement in Vietnam's civil war, however, and for some years following the country experienced "Vietnam syndrome," a strong popular aversion to US use of military force against the countries around the world that Washington considered the proxies of the Soviet Union. Description of the Union of the Union.

Many in the Reagan administration hoped to "cure" Vietnam syndrome, and the administration both embraced the Nixon Doctrine and went beyond it by developing a policy of "rollback." Reagan's White House team consisted largely of neoconservatives, hawkish former Democrats who were virulently anticommunist. Neoconservatives balked at Nixon's policy of détente with the Soviet Union and at Jimmy Carter's emphasis on promoting human rights and believed that open and aggressive military force were necessary to check the threat of Soviet influence and world communism. As Reagan shared many of these convictions with his neoconservative colleagues, White House policy throughout the 1980s emphasized a shift from "containment" of communism to those countries in which it already existed

<sup>18</sup> Nancy Zaroulis and Gerald Sullivan, Who Spoke Up?: American Protest Against the War in Vietnam, 1963-1975, Garden City 1984, p. 403.

<sup>19</sup> Ibid., p. 217.

<sup>20</sup> Sean Wilentz, The Age of Reagan: A History, 1974-2008, New York 2008, p. 153.

<sup>21</sup> *Ibid.*, pp. 51-52.

<sup>22</sup> Ibid., p. 153.

to "rollback." Proponents of rollback felt that the United States, as the supreme military power and moral beacon among nations, needed to reverse the spread of communism by crushing it altogether. Jeane Kirkpatrick, an academic who later became Reagan's ambassador to the United Nations, provided the intellectual framework for Reagan's foreign policy. In her writing she revived a distinction between "authoritarian" and "totalitarian" states. In both types of state, the government restricted democracy and freedom through repression, but Kirkpatrick considered the former to be amenable to eventual regime change. Totalitarian states like the Soviet Union, however, gripped by ideological fervor, simply could not move toward economic and political freedom and had to be opposed by force. The liberal internationalism of Carter was wildly optimistic, she said, and the only way for Washington to truly comport itself morally was to forcefully oppose evil totalitarian regimes.<sup>23</sup> The Reagan administration saw the opportunity to topple the leftist Sandinista regime in Nicaragua and aid the Salvadoran and Guatemalan governments in fighting their leftist insurgencies as the perfect occasion to take on Kirkpatrick's Hobbesian world authority and implement rollback.<sup>24</sup>

In the late 1970s and 1980s, Central America faced a slew of political and military crises affecting virtually the entire region. Leftist militants had risen up in El Salvador and Guatemala in an attempt to overthrow these countries' military dictatorships, and the FSLN, or "Sandinistas," had successfully overthrown the Somoza dictatorship in Nicaragua and now faced a counterrevolutionary insurgency in the form of the "contras," a loose coalition of conservative and former regime elements. These conflicts emerged in the context of a long history of social inequality and civil unrest. The Spanish conquest of Central America in 16th century introduced a strict hierarchy in which landowners maintained their wealth and power through practices

<sup>23</sup> Grandin, Empire's Workshop, pp. 73-78.

<sup>24</sup> Ibid., pp. 110-112.

<sup>25</sup> The following paragraphs on Central America draw heavily on Smith, *Resisting Reagan*, pp. 4-17.

of violence toward and exploitation of largely indigenous agricultural laborers. Resistance by natives and peasants alternated with brutal repression by the elites. In the second half of the twentieth century, these conditions only worsened. Farmers came to devote more land to export crops than basic food, greatly increasing rural poverty and malnutrition. Changing agricultural practices also augmented the number of landless peasants. These factors, in combination with volatile commodities prices and earthquakes that struck Nicaragua and Guatemala in the 1970s, pushed the misery of most Central Americans passed the critical threshold. Religious, labor, and revolutionary groups who had been working to educate and organize peasants over the previous decades seized the opportunity, and civil war broke out in all three countries.

These conflicts, however, originally emerged individuals calling from moderate reforms who were radicalized by state repression. Nicaraguan dictator Anastasio Somoza, for instance, responded to such calls with brutal violence, instructing National Guard troops to carry out random murder, looting, rape, and property destruction. As this violence intensified throughout the 1970s, Somoza's domestic and international supporters called on him to deescalate his repression and to resign, but he remained remarkably firm. FSLN rebels finally overthrew him in late 1979, but not before he called in bombings of Nicaraguan cities. The situation was similar in Guatemala and El Salvador. Since 1965 an insurgency had been fighting Guatemala's military junta, which had come to power in 1954 following the US-backed overthrow of a progressive civilian government. In El Salvador's 1972 election, right-wing candidate Arturo Molina stole the election from center-left reformist José Napoleón Duarte, imprisoning, torturing and exiling him and

repressing protests with overwhelming violence. Dissidents, shocked and disillusioned by such brutality, increasingly turned to violent resistance to fight the government, which responded by increasing the intensity of its repression. Each of these militant left-wing resistance movements emerged in the context of local economic, social, and political developments. Though Communists sometimes participated in them—they formed part of the Sandinista coalition, for instance, alongside other socialists and progressive capitalists and Catholics<sup>26</sup>—these insurgencies were not the result of Soviet imperialism. They were homegrown movements that shared the goal ending government repression and violence and instituting egalitarian policies that would promote democracy and prosperity. Reagan and the neoconservatives, however, failed to take a nuanced view of the Central American rebels, seeing them simply as Soviet Communist, a virus that, if left unchecked, would spread throughout the region and eventually threaten the United States. This outlook first emerged on the neoconservative radar in 1980 when the Committee of Santa Fe, a conservative think tank-like organization formed shortly before the 1980 election, published a paper called "A New Inter-American Policy for the Eighties." The paper portrayed the United States as on the wane in the face of an ascendant USSR and exhorted Washington to project its military power to confront this existential threat. Curiously, the paper focused especially on Central America, identifying it as "the most important place in the world" for American foreign policy, the region in which America needed to fight communism most intensely.<sup>27</sup>

The Reagan administration moved quickly to adopt this view of Central America and make the region the centerpiece of its foreign policy. The White House organized a domestic and worldwide support network to ship arms to the *contras*, enabling those groups more radically opposed to the Sandinistas to develop into a full-fledged armed counterrevolutionary

<sup>26</sup> Grandin, Empire's Workshop, p. 112.

<sup>27</sup> Ibid., pp. 70-71

movement.<sup>28</sup> Washington directly trained some Salvadoran troops and also distributed manuals to them throughout the 1970s and 1980s explaining how to carry out effective psychological torture.<sup>29</sup> The United States had been providing similar funding for the Guatemalan military since the 1954 coup as well, and by the early 1980s these troops were a formidable killing machine capable of committing hundreds of civilian massacres in the span of a just over a year.<sup>30</sup> Central American refugees themselves testified to the US-backed violence they had observed in the countries. Many sanctuary churches interviewed the refugees under their care and recorded their accounts of the violence in Central America. The First Universalist Church of Minneapolis, for instance, recorded the story of Marlon Machado, a 22-yearold Salvadoran who, along with his mother, had been imprisoned and tortured by the Salvadoran National Guard and whose father was murdered by the army.<sup>31</sup> Another refugee, Pedro Antonio Ramos, was a member of the Commission on Human Rights of El Salvador and fled the country in June 1983 and eventually found refugee in a sanctuary church in Tucson. In March 1983 the president of the commission, Marianella García Villas, had been killed, the seventh in a string of the deaths of commission members believed to have been carried out by right-wing paramilitary groups or "death squads." Ramos fled when friends informed him that the government would target him next. As he explained in an interview with the Arizona Republic, on behalf of the commission he "photographed thousands of corpses and helped families search for hundreds of missing and captured Salvadorans." He was aware, too, that US support for the Salvadoran government facilitated the massacre of thousands and believed that were Washington to cut off its aid, the military junta would face "financial collapse" and "would be able

<sup>28</sup> *Ibid.*, pp. 113-115.

<sup>29</sup> Ibid., p. 107.

<sup>30</sup> Ibid., p. 109.

<sup>31</sup> Personal Statement of Marlon Machado on Acceptance of Church Sanctuary, First Universalist Church of Minneapolis, February 3, 1985; WHS, Records of the CRTFCA 1982-1992, M93-153, Box 4, Folder 55.

to realize the necessity for a dialogue with the guerrillas."<sup>32</sup> Ramos' occupation in El Salvador and his time in the United States perhaps positioned him better than others to understand the connection between US aid and government-sponsored violence in El Salvador, but every refugee knew all too well the devastation brought upon the populations of these Central American nations and for which the United States was partly to blame. The total violence was staggering: Greg Grandin estimates that during Reagan's eight years as president, his Central American allies killed over 300,000 people, tortured as many or more, and forced millions into exile.<sup>33</sup>

## The American Religious Response to the Refugee Crisis

Though the sanctuary movement was one of the most prominent and controversial responses by the American religious community to the Central American refugee crisis, it was only one among many ways people of faith chose to respond to this crisis. The movement was also perhaps one of the most left-wing or radical responses adopted, but the American religious left protested U.S. foreign policy in the region in other ways as well. Two other social movements stand out alongside sanctuary as prominent examples of such dissent: Witness for Peace and the Pledge of Resistance. Witness for Peace began in 1983 and focused on Nicaragua. Lay and ordained religious workers began organizing trips directly to Nicaragua so that travelers could observe the civil war for themselves, and realizing that the Nicaraguan conflict was not as the U.S. government described it, return to testify to what they had seen and pressure the administration to change its contra policy. Over the course of the decade, over four thousand "delegates" flew to Nicaragua for Witness for Peace and returned to tell their stories.<sup>34</sup> Pledge of Resistance was the most traditional social movement among the U.S. Central

<sup>32</sup> Dee Michaels and Andy Hall, "Q&A: Salvadoran Exile," *The Arizona Republic*, September 2, 1984, p. C3.

<sup>33</sup> Grandin, Empire's Workshop, p. 71.

<sup>34</sup> Smith, Resisting Reagan, pp. 70-78.

American peace movements. Led by Christian peace activists based at the Kirkridge Retreat Center in northern Pennsylvania, participants in this movement pledged to travel to Nicaragua in the event of a U.S. invasion of that country and directly interfere with the invasion. Pledge activists eventually realized that such an invasion was unlikely, but they still carried out a number of acts of protest and civil disobedience.<sup>35</sup> As the decade progressed, the Pledge picked up steam and spread across the country. In early February, an estimated 42,352 Americans had signed the pledge, and the Summer 1986 Pledge of Resistance Newsletter included a calendar and map of Pledge actions from February to May of that year that listed 224 protest actions in 44 states and Washington, D.C.<sup>36</sup>

These were separate movements with distinct origins and organization, but their common religious commitment and political goals produced some overlap among them. Though the CRTFCA focused primarily on overseeing and coordinating the sanctuary movement, it participated in a number of other Central America peace activities as well, including Witness for Peace and the Pledge of Resistance. It supported, for instance, several pledge actions in January 1983 and in an early February mailing affirmed its continued commitment to the movement. This same mailing referred to the "mutual support between the sanctuary churches and the Pledge of Resistance." And this claim did not simply reflect CRTFCA's participation in both movements. In late January 1985, a national sanctuary convention took place in Tucson to discuss the movement and look to its future. Jim Wallis, the editor of the left-wing Protestant *Sojourners* magazine and one of the leaders of Pledge of Resistance, spoke at this event and encouraged attendees to sign the Pledge.<sup>38</sup>

<sup>35</sup> Ibid., pp. 78-86.

<sup>36</sup> CRTFCA mailing to "CD Pledge Signers," undated; WHS, Records of the CRTFCA 1982-1992, M2004-170, Box 1, Folder 31. *Pledge of Resistance Newsletter*, Summer 1986, pp. 4-5, 8; WHS, Records of the CRTFCA 1982-1992, M2004-170, Box 1, Folder 31.

<sup>37</sup> CRTFCA mailing to "CD Pledge Signers," undated; WHS, Records of the CRTFCA 1982-1992, M2004-170, Box 1, Folder 31.

<sup>38</sup> Kerry Ptacek, "Bringing the Revolution Home...," Newsletter of the Institute on Religion and Democracy, March 1985, p.4; WHS, Records of the CRTFCA 1982-1992, M93-153, Box

Moments like these indicate the existence of solidarity and even some overlap in participation between the different organizations constituting the U.S. Central America peace movement.

The religious left was by no means the only segment of American Christians to respond to the Central American civil wars and refugee crisis. Conservative, evangelical, and fundamentalist churches also became politically engaged with these issues, though to a large extent this engagement took the form of criticizing the sanctuary movement. The March 1985 newsletter of the conservative Institute for Religion and Democracy, for instance, voiced many of the Reagan administration's own criticisms of sanctuary—that Salvadoran refugees did not really qualify as refugees under international law, that they were instead economic migrants, that violence in El Salvador was on the wane, and so on. The newsletter also contained a column titled "Bringing the Revolution Home..." on the national sanctuary convention that had taken place in Tucson earlier that year. The column suggested that attendees were religious radicals willing to "undertake massive civil disobedience in the event of any escalation of U.S. military involvement in Central America primarily by occupying federal offices." It also claimed that some sanctuary members hoped to "make the refugee community in the U.S. an arena for radicalizing Salvadorans before their return to El Salvador."39 This latter worry echoed what many conservatives feared and what a 1985 report by the Council for Inter-American Security claimed: that the sanctuary movement sought to "spread Latin American 'liberation theology' (which maintains that Jesus Christ was a Marxist) to the North American religious community."40 Conservative religious critics generally saw the religious and humanitarian justifications for sanctuary as a façade that disguised sanctuary activists' true

<sup>5,</sup> Folder 19.

<sup>39</sup> Ibid., pp. 4-5.

<sup>40</sup> The Sanctuary Movement: Revolution Walking Across Our Border," *West Watch: A Report on the Americas and the World*, April/May 1985, p.1; WHS, Records of the CRTFCA 1982-1992, M93-153, Box 5, Folder 19.

radical left-wing convictions and conspiracies. They oscillated between seeing Salvadoran and Guatemalan refugees as simple economic migrants who did not qualify as refugees and seeing nearly every refugee as an actual or likely "Marxist-Leninist" revolutionary whose radicalism threatened both US efforts to squash "Communism" in Latin America and American security, prosperity, and freedom. On this view, sanctuary workers came across as anything from irresponsible law-breakers helping non-refugees settle in the United States to dangerous radicals themselves, complicit in an assault on America and the free world.

In addition to vigorously criticizing the sanctuary movement, the Christian Right also actively supported the Reagan administration's Central America policy. Such political engagement was a relatively new phenomenon for American evangelicals. Traditionally they had preferred to stay aloof from American politics, but as the power of the federal government expanded after World War II and began legislating public morality topics like abortion—previously the exclusive purview of religious authorities—they began an active engagement in politics and became an important voting and support bloc for conservatives in the late 1970s and 1980s. Feeling that Jimmy Carter had not effectively promoted evangelical interests during his tenure as president, Christian Right organizations such as Jerry Falwell's Moral Majority and the Religious Roundtable rallied around Ronald Reagan in the 1980 election. 41 Perhaps the greatest example of evangelical support for Reagan's Central America policy was the Christian Broadcasting Network's provision of material aid to the *contras*. CBN was a TV broadcasting company owned by Pat Robertson, one of the leading evangelical personalities of the 1980s. In early 1984, the Virginian-Pilot ran a story indicating that CBN had been shipping goods to Central America for free using Navy ships, a practice that was illegal without official Congressional approval.<sup>42</sup> Further details emerged over the

<sup>41</sup> Robert Wuthnow, *The Restructuring of American Religion: Society and Faith Since World War II*, Princeton, 1988, pp. 198-206.

<sup>42</sup> April Witt, "Navy ships CBN goods to Central America," The Virginian-Pilot, July 11,

course of the following year, and by mid-1985 it was clear that CBN had been supplying food aid to Nicaraguans and military aid to the contras to the tune of \$7 million. On *The 700 Club*, CBN's flagship religious talk show, Robertson had repeatedly requested that viewers contribute funds for these activities, which were known as Operation Blessing. CBN denied the claim that they had aided the *contras* and promised that their aid was nonpolitical, but an anonymous administration official allegedly admitted that Operation Blessing had allowed the CIA to divert more funds to arming the Nicaraguan rebels. 43 A Sojourners article later pointed out that even CBN's food relief efforts were harmful, drawing displaced Nicaraguan refugees in Honduras into dangerous areas and increasing aid dependency. Sojourners claimed, too, that funds raised for these purposes often went directly to the *contras* instead. The article also noted that CBN was not the only private organization aiding the *contras*; it included a table listing other organizations that had contributed millions of dollars to the rebels, including the World Anti-Communist league and Friends of the Americas, a Baton Rouge-based aid organization founded by Louisiana Representative Louis Jenkins that operated on the Nicaragua-Honduras border. 44 All of these organizations were in fact part of the Reagan White House's public-private support network for Central American policy that included other religious organizations like Sun Myung Moon's Unification Church, businessmen, drug traffickers, private security firms, ex-military men, and even states like Saudi Arabia and Taiwan. 45 CBN's Nicaraguan aid operation was thus quite political, enmeshed as it was in this network centered on Washington itself.

The religious right and left mobilized the most enthusiastic responses to the Central American refugee crisis, but moderates and other religious

<sup>1984,</sup> p. 1.

<sup>43</sup> Press release for Synapses, Inc., "Christians Oppose TV Evangelist's Aid to Right-Wing Groups in Central America," April 13, 1985; WHS, Records of the CRTFCA 1982-1992, M2004-170, Box 1, Folder 7.

<sup>44</sup> Vicki Kemper, "In the Name of Relief," Sojourners, October 1985, p. 8-10.

<sup>45</sup> Grandin, Empire's Workshop, p. 115.

individuals of complex political affiliations engaged with the crisis as well. Catholic bishops constituted one of the most interesting such groups. I will examine the bishops' response to the crisis and to the sanctuary movement in greater detail in Chapters 2 and 3, but for now it is worth noting that their stance with respect to these topics is difficult to classify as strictly left-wing, liberal, or conservative. In some ways, this ambiguity is not surprising; throughout the 20th century, many bishops had mixed conservative opinions on some social issues with progressive attitudes about economic and social justice, and their stance toward sanctuary largely reflected this history. 46 Sanctuary critics and supporters alike among the bishops did support granting Salvadorans extended voluntary departure, a form of safe haven in the United States that did not grant the refugees asylum but allowed them to remain in the United States nonetheless.<sup>47</sup> They remained divided over whether sanctuary was an appropriate response to the crisis, however, and many shied away from it because they believed it illegal.<sup>48</sup> This aversion to civil disobedience and sympathy for the refugees' plight often produced complex and creative responses among the bishops, as with Archbishop John Mahony of Los Angeles, who favored strong support for Central American refugees but refused to endorse sanctuary and rejected any suggestion that he was "liberal." Positions like Mahony's indicate that religious responses to sanctuary encompassed a wide variety of attitudes and strategies, many of which did not easily fit a simple left-right model of political engagement.

# Sanctuary Emerges

Before Southside Presbyterian's declaration of public sanctuary in early 1982, religious-based refugee work in Tucson lacked a coherent intel-

<sup>46</sup> Timothy A. Byrnes, Catholic Bishops in American Politics, Princeton 1991, pp. 35-43.

<sup>47</sup> Crittenden, Sanctuary, pp. 201-202.

<sup>48</sup> George Volsky, "U.S. Churches Offer Sanctuary to Aliens Facing Deportation," *The New York Times*, April 8, 1983, p. A16.

<sup>49</sup> John Dart, "Mahony, New Archbishop for L.A., Sees the Church as 'Voice' for Rights," *The New York Times*, July 18, 1985, p. OC\_A4.

lectual framework. Individuals like Jim Corbett and his colleague, Southside pastor and sanctuary co-founder John Fife, simply observed the suffering and struggles of the Salvadoran and Guatemalan refugees arriving from Mexico and did all they could to help them. Initially, their charisma and enthusiasm and the support of their religious communities sustained their work. Both men were part of the Tucson Ecumenical Council, a coalition of 60 churches in the Tucson area, which organized some of the earliest refugee aid in the country. In addition to providing food and shelter to refugees when possible, as early as 1980 the TEC began working with the Manzo Area Council, a private agency that helped undocumented Hispanics deal with their immigration difficulties. Manzo and the TEC worked together to help bail Salvadoran refugees out of detention and attain court hearings over their refugee status, though the work was grueling and often unsuccessful.<sup>50</sup>

Jim Corbett worked with the council but was very much a loner. Before joining the TEC's efforts, he wrote two letters to Quakers and other people of faith informing them of the Central American refugee crisis and urging them to take steps to aid the refugees.<sup>51</sup> He made a trip to a detention center in Southern California to see how Salvadoran refugees were being treated, and after joining up with the TEC, he made several exploratory trips south of the border. During the summer of 1981, Corbett traveled to Nogales in the Mexican state of Sonora and convinced Father Ramón Dagoberto Quiñones to help move Central American refugees across the border. Throughout the movement Corbett himself made border runs to aid this process.<sup>52</sup>

Late in 1981 Immigration and Naturalization Services (INS), the federal agency that oversaw immigration and refugee matters, informed the TEC that they might be indicted for their work, and after considering various responses to this warning, the Tucson group decided to go public. Until this point they had been quietly providing for the basic needs of the refugees, but

<sup>50</sup> Crittenden, Sanctuary, pp. 31, 40.

<sup>51</sup> Ibid., pp. 31, 40.

<sup>52</sup> Ibid., pp. 49-54.

they decided that publicizing their work and embracing the centuries-old church tradition of sanctuary would strengthen their position vis-à-vis the government. The provision of church sanctuary was a practice that emerged in the Middle Ages that allowed fugitives from the law to take refuge in a church building and remain immune from apprehension or prosecution as long as they stayed there. The practice was recognized by both medieval European canon law and, as late as the 18th century, by English common law as well. Sanctuary largely died out as a legally recognized practice after this period, but the Tucson group traced its legacy through later, similar practices carried out by religious individuals, most notably the Underground Railroad of the U.S. antislavery movement that smuggled southern slaves to freedom in the north.<sup>53</sup> Even more recently, as part of the antiwar movement during the Vietnam years, churches ranging from Boston to Honolulu gave sanctuary to conscientious objectors who refused to deploy to Vietnam.<sup>54</sup> This most recent iteration of sanctuary was small, but the TEC had both a long tradition and recent memory to draw on as they adopted sanctuary as their working model. They would house, feed, and otherwise assist Central American refugees in full view of the media and the government.

The Tucson group became the most famous and influential center of sanctuary activity, but the TEC cannot claim full ownership of the origins of the movement. Sanctuary activity arose independently in several other locations along the U.S.-Mexico border as well. In 1981, as the TEC was moving from less controversial refugee work to a public sanctuary model, other churches in Southern California were considering taking the same step.<sup>55</sup> Southern California church sanctuary workers, however, never developed much independent leadership in the movement, and they generally cooperated with and deferred to the Tucson activists. But sanctuary work also emerged independently in Texas, and Texan sanctuary activists worked to

<sup>53</sup> Ibid., pp. 62-63.

<sup>54</sup> Zaroulis and Sullivan, Who Spoke Up?, p. 263.

<sup>55</sup> Crittenden, Sanctuary, p. 63-64.

a large extent independently of Tucson's influence and authority. In March 1983, for instance, the diocese of Brownsville opened Casa Oscar Romero, a shelter for Central Americans in nearby San Benito. Casa Oscar Romero was never a declared sanctuary, but two of its workers, Jack Elder and Stacey Merkt, were tried (twice in Merkt's case) for their sanctuary work. 66 Bishop John Fitzpatrick of Brownsville was also supportive of sanctuary, though he never explicitly endorsed the movement. He once paid \$27,000 out of pocket for bail for Merkt and Elder, and he testified at the trials of multiple sanctuary workers. 57

As the network of sanctuary churches quickly expanded from its southwestern epicenter and spread across the country in 1982, the TEC soon found that it lacked the resources to coordinate sanctuary activity at such a large scale. To help with coordinating refugee placement and sanctuary establishment, Corbett and Fife recruited the Chicago Religious Task Force on Central America, a coalition of various religious-based organizations that had formed several years earlier in response to the killing of four American missionary workers in El Salvador. CRTFCA began its sanctuary work by organizing Chicago's Wellington Avenue Church of Christ as a sanctuary.<sup>58</sup> The practice spread a bit slowly at first—at the end of 1982, Corbett estimated that the TEC had helped 350 refugees into the country (a measly tenth of a percent of undocumented Salvadorans who had entered the United States at the time), and Fife claimed that fifteen churches around the country of various denominational affiliations had declared themselves sanctuaries. Support for the movement quickly spread, however. By August 1983, the sanctuary movement had already received official endorsements from national religious organizations like Clergy and Laity Concerned and the national bodies of

<sup>56 &</sup>quot;Bishop's Sanctuary Work Draws Heat," The Los Angeles Times, March 2, 1985, p. B5. Robert Reinholds, "Churches and U.S. Clash on Alien Sanctuary," The New York Times, June 28, 1984, pp. A1, A16.

<sup>57</sup> María Cristina García, Seeking Refuge: Central American Migration to Mexico, the United States, and Canada, Berkeley 2006, p. 209n88.

<sup>58</sup> Crittenden, Sanctuary, pp. 87-91.

several Christian denominations, including the American Friends Service Committee, the Mennonites, the Presbyterian Church U.S.A., the United Methodist Church, the Unitarian Universalists, and the United Church of Christ.<sup>59</sup> In June 1987, CRTFCA claimed that 393 churches and synagogues had declared themselves sanctuaries, a group that included Jews, Catholics, and virtually all the major non-evangelical Protestant denominations.<sup>60</sup> But with this increased activity came increased scrutiny, and on January 10, 1985, an undercover INS investigation of the movement culminated in the delivery of indictments to sixteen sanctuary workers, including Fife, Corbett, and other key Tucson sanctuary workers and TEC members. 61 The trial lasted well into 1986, and while it returned convictions for most of the accused, their punishments were light. (Jim Corbett, remarkably, was found not guilty of all charges.<sup>62</sup>) Despite worries that the trial would irreparably damage the movement, the number of sanctuaries nationally continued to climb for several years, though the strength and centrality of the Tucson group did diminish after the trial.<sup>63</sup> The trial also highlighted philosophical issues that had plagued the movement since its inception. Was the provision of sanctuary primarily a humanitarian act, or was it better understood as political protest? Was it perhaps legal after all, or was it a form of civil disobedience made permissible by fidelity to a higher, religious law? Sanctuary workers around the country could not settle on an answer to these questions, and to some extent TEC and CRTFCA represented two philosophical poles in the movement, the TEC favoring a primarily humanitarian understanding of sanctuary work and CRTFCA endorsing a view of sanctuary as civil disobedi-

<sup>59</sup> Detroit Sanctuary Project Mailing, August 16, 1983; Bentley Historical Library, Episcopal Church, Diocese of Michigan Records, 1830-2001, Box 17, Folder: Latin American Refugee Issues and Peace Movement 1983-85.

<sup>60</sup> CRTFCA flyer, June 1986; Walter P. Reuther Library, Organization in Solidarity with Central America Records, Box 3, Folder 6.

<sup>61</sup> Crittenden, Sanctuary, pp. 192-193.

<sup>62</sup> Ibid., pp. 322-323, 336.

<sup>63 &</sup>quot;Despite Prosecutions, the Sanctuary Movement is Still Vital, Growing, Its Activists Insist," *The Los Angeles Times*, July 11, 1987, p. A5.

ence and political protest. Differences between these two groups had become intense by late 1984 and were threatening to divide the movement, and the 1985 indictments and the show of solidarity they prompted were likely the only factor that prevented a major split.<sup>64</sup>

But that did not stop sanctuary activists from attempting to resolve these theoretical questions, and Jim Corbett took up the task in "The State, the Law, and the Sanctuary Movement," an essay dated May 8, 1985. Corbett attempted in this essay to deconstruct the dilemma of choosing between religious law and earthly law, arguing that it is both a legal and a religious imperative for faith communities to offer sanctuary and that these two domains did not in fact make use of separate logics and jurisdictions.

Corbett opened by forcefully laying out that dilemma faced by most participants in sanctuary: congregations who participated in the movement "consider the practice of sanctuary to be integral to the practice of their faith. The U.S. Justice Department considers it to be a criminal conspiracy."65 Corbett noted that congregations join the practice of sanctuary "because this is fundamental to human decency and to the practice of prophetic faith," and that as a result legal questions are an "afterthought." But failure to consider the legal dimensions of sanctuary put sanctuary participants at a disadvantage, ceding ground to the federal government and courts and allowing them to knock out one of the central supports of the movement. Indeed, Corbett did not question the legality of sanctuary; for him, if "migrant Salvadorans and Guatemalans are refugees rather than 'illegal aliens'"—and he did not doubt they are—"then we are obliged by international law to protect them from the officials who are capturing and returning them." He believed that the "right to protect war victims and the persecuted is a practice of our Covenant faith that is established by the existing body of humanitarian and

<sup>64</sup> Crittenden, Sanctuary, pp. 202-204.

<sup>65</sup> Jim Corbett "The State, the Law, and the Sanctuary Movement," May 8, 1985; Wisconsin Historical Society, Records of the Chicago Religious Task Force on Central America 1982-1992, M2004-170, Box 2, Folder 5.

human rights law." By claiming this right, Corbett also emphasized the concordance of religious and legal justifications for sanctuary. This concordance was important to his message, but because his audience already enjoyed the confidence endowed by their religious convictions, he devoted this essay to the legality of sanctuary, ultimately contending that it was not only permissible but also incumbent on communities of faith to practice sanctuary.

To bolster this claim, Corbett was careful to reiterate his view of the state of affairs that necessitates the practice of sanctuary in the first place: the Salvadoran and Guatemalan governments' reign of terror against its own citizens that forces them to seek asylum to the north and the United States' complicity in this violence. He sums up his view succinctly:

During recent months, refugees have surged out of El Salvador. They report massacres by the military that are beyond anything previously suffered. Most of these mass murders are perpetrated by aerial attack in areas that are now free-fire zones. The idea is to use military assault to uproot the people and then to force the survivors into "model villages" under strict military supervision. The process is called "pacification." It has become the Pentagon's final solution to the Third World problem. 66

Salvadorans, according to Corbett, suffered from a joint effort by the governments of El Salvador and the United States to eliminate domestic opposition to the government through the use of brutal military force. On this understanding, anyone who fled this situation was clearly a refugee, someone who "has 'a well-founded fear of being persecuted for reasons of race, religion, nationality, membership in a particular social group, or political opinion," according to the UN Refugee Protocol that Corbett cited.<sup>67</sup> Moreover, his

<sup>66</sup> Emphasis in the original.

<sup>67</sup> UN General Assembly, Convention Relating to the Status of Refugees, 28 July 1951, United Nations, Treaty Series, vol. 189, p. 152, available at: http://www.unhcr.org/refworld/

use of the phrase "final solution" tied the situation in Central America to the events that spawned the Refugee Protocol in the first place, namely, the war crimes of World War II, including the Nazi genocide of the Jews. Corbett drew this connection more than once, early on rooting the principle of sanctuary in "the Nuremburg principles [that] were declared almost 40 years ago" and arguing later that, if "unchecked, military pacification of the Third World is likely to become as murderous as the death camps." By nearly equating the Holocaust with U.S. policy in Central America, Corbett drove home the urgency of aiding Guatemalan and Salvadoran refugees and of changing U.S. policy in the region.

He also devoted several pages to debunking the Reagan administration's own justifications for its deportation of Salvadoran. He identified three main defenses offered by the government: that, because Mexico could grant refugees asylum, their trips to the United States were for economic, not political, reasons; that deported Salvadorans suffered no persecution upon return to El Salvador; and that, since El Salvador was now a democracy, its gross human rights violations were "a thing of the past." As for the first defense, Corbett contended that Mexico did not in fact grant asylum to Salvadorans and that, as a non-signatory to the UN Refugee Protocol, there was no way to make it do so. Moreover, he suggested that the US might even pay Mexico to deport Salvadorans and thereby save Washington the trouble of doing so itself. He dismissed the government's labeling of the refugees as economic migrants as "ridiculous," noting that there was plenty of readily available evidence to bolster their claims to refugee status. Finally, he argued that the Mexico argument was a "false issue," as "nothing in the law permits the U.S. government to return refugees who have resided in or crossed other countries, nor does the fact that refugees have economic needs alter their status as refugees." He responded similarly to the government's other two defenses of its policy, attempting to show that the administration's attempts to show that

docid/3be01b964.html [accessed 19 December 2011].

returned refugees did not face persecution were a "calculated fraud" and that the claim that El Salvador was now a terror-free democracy was just as faulty.

After arguing that U.S. policy violated international refugee law, Corbett attempted to demonstrate that the "crisis of legitimacy" this violation created forced the burden of enforcing international law on individuals and communities of faith. "All of us," he declared, "are in a position to check it [military pacification of the Third World] right here at home, where it confronts us in the presence of refugees who need to avoid capture. And, whatever our insensitivities, our churches and synagogues are leading the way by providing sanctuary." Everyone, from individuals to states, is answerable to international law, and when one institution (the state) fails to enforce these laws, "[p]rophetic witness is then the community's only nonviolent way to hold the state accountable—which means that it is then up to the church<sup>68</sup> to serve as the community's institutional foundation for complying with humanitarian and human rights law." With this bold claim, Corbett established continuity between the political-legal and religious realms. International refugee law for Corbett embodied principles that accord with both secular, humanistic sensibilities and religious obligations. All institutions and individuals must uphold these principles, and when the state fails to do so, the church is "next in line" to establish institutional support for the law. According to this interpretation, then, individuals and communities who gave sanctuary did not need to choose between their religious and legal obligations: the two were identical.

Most strikingly, Corbett concluded by arguing that, given the forgoing claims, sanctuary was not a form of civil disobedience as conventionally understood. Rather, sanctuary was "categorically distinct" from civil disobe-

<sup>68</sup> By "church," Corbett did not refer to any one Christian denomination or even Christianity as a whole. He explains: "Adherents of the prophetic faith enter into a community covenant to become a people that hallows the earth with peace and justice. (Christians sometimes call this covenant people 'the church', [sic] and it is this generically ecumenical useage that I have been contrasting with 'the state." This definition allows him to include all Christians as well as Jews in "the church."

dience, and "[a]s community with the persecuted, sanctuary is the foundation for socially creative peacemaking that is significant measure outside the range of civil disobedience." Sanctuary was not the violation of laws but the fulfillment of international law that lacks adequate institutionalization in the state. Through this creative definition, Corbett capped off his argument for the legality of sanctuary and the coincidence of the religious and legal obligations of sanctuary participants. In a rhetorically skillful final sentence, Corbett declared these points "clear but superficial" and exhorted his readers "to go deeper," to explore the relationship of sanctuary religious community and law.

Inventive and persuasive though his arguments may be, Corbett was only one participant in sanctuary, and he was always something of an idiosyncratic loner (and proudly so). That he felt the need to justify the legality of sanctuary and announce that it was not civil disobedience shows that these were contested claims. As a symbol, sanctuary was not totally defined, and different participants understood their actions in different ways. However, Corbett remained a significant and respected figure in the movement throughout the 1980s, and his amateur philosophy and legal theory no doubt resonated with many who chose to take on the practice of sanctuary.

### Conclusion

The sanctuary movement emerged in the early 1980s thanks to a convergence of external and internal factors. The long postcolonial history of Central America produced the conditions for civil war in the 1970s and 1980s, prompting hundreds of thousands of refugees to seek asylum in the United States. US involvement in these wars meant that the arrival of these refugees was not just a humanitarian crisis but a "return of the repressed" for the Reagan administration, a sign of the violence and destruction in which it was complicit. Drawing on centuries-old church traditions and more recent

<sup>69</sup> Emphasis in the original.

examples in American history, many religious individuals across the country formed a movement for peace in Central America and just treatment of Central American refugees in the United States, developing the sanctuary movement, Witness for Peace, and the Pledge of Resistance. Sanctuary activists faced stern criticism and resistance from religious and secular conservatives and from the Reagan administration, but they persisted in their activism throughout the decade.

One of the most remarkable features of the sanctuary movement was its ecumenical nature, the ability of Christians, Protestants, and Jews to find common faith-based reasons to come to the support of the Guatemalan and Salvadoran refugees. But this ecumenism did not mean that the different religious groups who participated had exactly the same reasons for doing so or the same experiences in the movement. The Catholic Church in particular stands out among the various groups who participated. Catholic participation by laity, clergy, and religious was strong, yet, despite the vigorous support of a handful of bishops, these individuals received only middling support at best from the hierarchy as a whole and often stern criticism from conservative Catholic groups organized by laity. Catholics were one of the largest groups to participate in the movement as well, and individual Catholics had a variety of reasons for becoming involved with the movement and understandings of the significance of their work. In Chapter 2, I will examine the first years of Catholic participation in the sanctuary movement, outlining the variety of Catholic attitudes toward it and describing the development of early Catholic sanctuary work.

# The Gun

From English 325: Ryan Pavel (nominated by Alex Ralph)

The essay concerns Ryan's relationship with guns. Much of it centers on experiences during his military service in Iraq. I found it moving, unpredictable, self-aware, and deeply thoughtful.

Alex Ralph

#### The Gun

I was never really handy with guns. The first time I shot a real one, I nearly knocked myself unconscious—there's a difference between knowing the proper technique and actually utilizing the proper technique. Out on Uncle Lee's porch in some backwoods southern state where no one cared about the occasional blast and gleeful shout as a kid unloaded rounds into a tree stump, trying to shoot a can, secretly aiming for a squirrel. I had no idea what type of gun it was; I was simply in awe of the power I held in my hand.

The opportunity to use a real gun was rare when I was a kid; usually my exploits didn't involve actual weaponry. More often than not my ammunition was bb's or potatoes, which we attempted to launch across the lake near my house. My church small group leader introduced me to the beauty of the potato gun on a Sunday afternoon-something about juxtaposing flames and soaring potatoes with the peace of God was quite satisfying. The group was hooked after that and we spent the better part of the summer taking trips between Home Depot and my garage, always running out of supplies but never out of ideas. We were teenagers and we wanted to launch a potato across a lake. We were overcome with our own brilliance as we drafted and constructed a potato cannon, which in theory was capable of launching 5 projectiles at once. In our excitement to try it out, we hauled it down to the lake and dumped a can of hair spray into its chamber while shoving potatoes down the shaft, unspooled the wire to the grill lighter, and clicked it, all without giving the primer and glue enough time to dry. Flames shot out every poorly sealed crack and the lighter fired from the cannon and soared into the lake. The only thing that didn't move was the mess of potatoes.

But guns and ammunition weren't always to remain an innocent pastime for me. I left for boot camp in San Diego without ever really knowing why, except for the incessant thought that I wanted my life to mean something. I told anyone who would listen that I was joining to serve my country, but I knew that it was a reason far more selfish than that. I wouldn't have joined had a recruiter not pestered me and I wouldn't have joined the Marine Corps had the obnoxious recruiter been from any other branch. I couldn't get the idea out of my head that college at seventeen would have gone to waste on a pathless education, and the responsible person within me wouldn't allow tens of thousands of dollars to be uselessly spent. I lacked ambition and direction, things I felt I could find within the rigid military lifestyle. So I signed the papers and was greeted with a stiff handshake and, a few months later, an M16 A2, a weapon I had absolutely no idea how to use.

In boot camp, it's Groundhog Day, and you end up scrubbing, sprinting, lunging, and cleaning without a thought as to why it's all happening. Your only reprieve is sleep, but by the time your head hits the pillow you've already passed out. You don't dream, you just sleep as if you've never rested before. It was here that I got to know my rifle. I carried it with me everywhere and at night I'd wake up in a cold sweat, spring out of my rack, and check the lock on it just to make sure that no one else could steal it. I was taught to revere this thing almost as if it were a holy relic, taught to think of it as a direct reflection of my commitment to the Corps. I sat cross-legged on the California ground with my disassembled rifle on my footlocker, listening to the drill instructor ramble on about the importance of cleanliness while I lubed up every component and scrubbed them systematically. First the barrel, then the bolt carrier assembly, then the charging handle, then the buttstock – endlessly brushing like a lunatic at carbon buildup that wasn't actually there. I knew its every blemish, every chip, every speck of rust – each an inexcusable sign of neglect on behalf of its previous owners. Like every recruit, my identity became inseparable from my rifle's serial number, emblazoned in white ink above the magazine well and branded firmly into the psyche of the Marine I was becoming.

As was the case with so many elements of basic training, I didn't take the time to question what I was doing; I just obeyed and attempted to

stay within the good graces of the instructors. I became a cog in an ancient machine that none of my peers seemed to question, leading to an unsettling sense of guilt and shame when I dared to attempt to think for myself. It's latching on to someone else's autopilot without having a clue as to why you're flying or where you're flying to. Is it any wonder that I felt displaced when I arrived?

The first time I fired the M16 passed without fanfare or recognition, and it was at that point that I decided that guns weren't for me. All the hype and dedication to this inanimate object and yet the gun had the audacity to make only the slightest popping sound when I pulled the trigger. A hundred of us on the firing line and it sounded like Goliath pouncing on oversized bubble wrap—how much respect could that sort of weapon deserve? Certainly less than I had been giving it. Although the gun had lost some of its allure, I still held it proudly and kept it obsessively close. It was more than a military accessory; it was the very embodiment of my authentic military experience, something that was always on the verge of coming into focus but never was never fully revealed, something I embraced because the contract I had signed said I had to. As strong as my connection to the Corps became, after that initial experience on the firing line I always felt a little out of place, like the gun didn't quite belong in my hands. I had made a convenient peace with the fact that I was continually armed, and, in military tradition, I was content to ignore the far reaching consequences of such a decision.

When basic training was over, I had a hard time catching up with reality. My parents flew in from Chicago and brought most of my distant family with them. After the graduation, I had no idea how to conduct myself. I was still in my dress uniform so I couldn't act like I had in the past, I just stood awkwardly in the restaurant and ordered a Coney Dog, praying that the spell would be broken so I could snap back to the son, nephew, cousin, and grandson that they all knew me to be. I couldn't fit in and I didn't know why. Spending all that time with the gun had changed me, I realized with

indignation. I had been so focused on becoming a Marine that I hadn't really considered its implications. I was different now and I saw that it would take some time to bring my pre-boot camp personality back into the fold of my new Marine life, not exactly a skill they help you master in training.

Our flight departed from LAX and I couldn't tear my gaze from the aerial view of the training grounds over which I had sweat and toiled. I saw recruits performing the same routines I had gone through days or weeks before and I smiled at their misfortune. "Would you be able to kill someone?" She didn't even preface the question, she just hit me with it, with the honesty and piercing discernment a good mother possesses. The ground beneath blurred and the clouds swept around the plane. I inclined my head in her direction and tried to look her in the eyes, silently pleading with her to take the question back. I think that at that moment we both felt ashamed, me for thinking the answer was yes and her for knowing what my answer would be. "I mean, if it came down to me or him..." I trailed off in a meek tone of voice. Some Marine I had become. Some man. I thought the gun was supposed to change all of that.

Deployment is, in many ways, a test of the type of Marine you imagine yourself to be. By the time I was sent to Iraq, I considered myself a proficient linguist, interpreter and translator, but a proficient Marine above all. My familiarity with the M16 A2 encouraged my delusions; I knew how to clean it and aim it at a paper target, why shouldn't I know how to kill someone with it? In boot camp I had only shot at paper silhouettes, but in Marine Combat Training, where I was sent ten days after graduating boot camp, I had taken aim at Bin Laden and Zarqawi, a transparent attempt to dehumanize the enemy. And after having spent a year and a half learning Arabic in Monterey, I felt like a tremendous asset to the Marine Corps, an asset that was ready to be deployed. I slung my weapon with confidence as I grabbed my bags and stepped off the flight into Al-Taqqadum, a US controlled base 90 miles west of Baghdad. I choked on the clotted air as I walked down the

ramp and realized that the heat wasn't actually coming from the nearby jet engines, this was simply summertime in the Middle East. Within a few hours, I was in the bunker, my home for the next seven months. I stretched out in my rack and for the first time really began questioning what the hell the US was doing there. It's perfectly simply to ignore it when you're not personally involved and it was surprisingly easy to avoid throughout all of my training, but once I was there it hit me harder than I could have expected.

It was in those idle moments between work and communicating with loved ones back home that began to haunt me. Twelve hours a day with headphones on, translating and scripting. Work, eat, run, email, sleep. Rinse and repeat. But once the lights went out, I was left only with my conscience. Here I had travelled halfway across the world only to end up locked at a desk with an endless queue of work before me. The price of being highly skilled with a language, it seemed, was that you were more useful working in a safe, air conditioned environment than you were adventuring throughout the country. To be this physically close to the Iraqis, working with their language day in and day out without any genuine interaction was torture. I needed to get out and see this country, I needed to leave the bunker and understand why we as a foreign military were in these towns. My gun was getting dusty.

On one crisp October evening that opportunity came. Finally, I'd be able to meet the guys who go out and do stuff, not sit in bunkers and fiddle with equipment. As the sun set, my team leader and I left base and travelled over the river to Camp Habbaniyah, a base split 50/50 between the Americans and the Iraqis. My leg was bouncing the whole ride, making my rifle chatter as it clunked against my magazines. My dog tags gave a reassuring tug at my chest hair as our vehicle mounted a speed bump at the entrance to the HET compound. HET are the Human Exploitation Teams, the guys who travel around town to gather intelligence directly from the people instead of relying on subversive means of collection, employment I envied with every fiber of my being.

I had only met one HET guy before, and even though a child could have identified him as a tool, I venerated Dave because of who he made himself out to be. There was nothing intimidating about his person other than the rank he wore on his collar: Staff Sergeant. In the military hierarchy, Staff Sergeant falls right in between the ranks of those who really make the decisions and those who really do the work. It's this confounding position that brings out the worst in many Marines, who are anxious to try out their newfound responsibilities of leadership only to realize that they're nearly as impotent as before, only now they're the fall guys for anything that goes wrong. Dave had recently been promoted and was absolutely willing to flex his rank over anyone willing to submit, which I, a young first time deployer, was. Years later, it's difficult for me to isolate Dave's personality from my experiences with HET as a whole, as if he has morphed into this dense amalgam of bombastic pretense and confident ignorance. But on that night he was my hero.

Guns, action and bravado go a long way in the mind of an impressionable junior Marine. I was blinded by it all, and when I met Dave's coworkers I gripped my M16 with pride I hadn't felt since before that first experience on the firing line. It was as if I forgot my perplexing relationship of apathy and utility towards guns altogether, for in this moment, this metallic masterpiece was my connection to HET, something I craved an allegiance with. We sat around a fire and barbequed meat purchased from a nearby market, them talking idly of recent adventures in town and me listening with an endearing fervor. Their radio squawked and one of them got up to take the call. There was a mission to tend to, he said. Chuck, a Staff Sergeant who worked with Dave, strapped his pistol to his leg and cocked his head towards me, "You speak Arabic, right?" Yeah, I replied in a tone reminiscent of when I answered my mother's question as to whether or not I'd be able to kill someone. "Well, let's go then. It'll be good practice." My enthusiasm melted as quickly as it had formed, leaving in its place an inferno of worry and doubt—I

hardly felt ready to take on this task of translation.

Suddenly I was bouncing down the road towards the Entry Control Point headed towards my first mission. After Chuck had rhetorically asked if I wanted to ride along with him, I had reached for my M16 and walked towards the vehicle. All the HET guys laughed and said I looked ridiculous carrying that Howitzer...where was my pistol, they asked? I wasn't issued one. Dave, in a moment I perceived to be magnanimous and pristine, offered me his M9 for the trip. Regardless of my begrudging attitude towards my rifle, after so many years of training it had become a part of me. I couldn't imagine haphazardly letting someone else borrow it, not unless I had complete confidence in their ability to use it. And now this Staff Sergeant whom I barely knew was allowing me to use his pistol—perhaps he saw more potential in me than I did in myself. "It's a left handed holster, but that shouldn't screw you up too much." I reached for the gun with trembling hands, too proud to admit that I had never been formally trained with a pistol. How hard can it be? I flashed back to Uncle Lee's backyard and allowed myself a brief moment of panic. Alright, let's do this. I thrust the holster into my belt, not taking time to ensure it was fastened, and hopped into the car, praying I wouldn't actually have to use it. This was the first time I had ever carried a pistol with one in the chamber, and I was on my first mission where I'd have to use my alleged ability to translate for the first time, and the holster was left-handed. I didn't even know where the safety was. Godspeed.

We arrived at the entrance to the base and climbed out of the vehicle. A chill slipped down my collar as we walked towards the convoy of Iraqi Special Forces vehicles. I fondled the pistol, partly to renew my sense of security and partly to make sure it wasn't about to blow a hole in my leg. The Iraqis were angry because the American guards didn't want to let them on the base – they didn't have the proper paperwork. Chuck stepped forward and introduced himself to the head of the convoy, using Arabic he had picked up while in country. The Iraqi officer launched into an Arabic tirade of indigna-

tion and fury, only pausing to breathe and to motion viciously to his heavily armed convoy, emphasizing how many men were being held up because of a simple paperwork glitch. Their 50-Caliber machine guns mounted on top of their vehicles glistened in the moonlight, and the part of me that had seen too many movies imagined a scenario erupting of utter chaos and destruction. My companion looked at me for translation, and although I understood most of what the Iraqi Captain had said, I just stood there, caught up in the strange environment – trying to force my brain to figure the situation out.

On the drive back to the HET compound, I didn't really hear anything the Staff Sergeant was saying to me. He had used his limited Arabic skill to pacify the situation, graciously lifting me off the hook. I kept a hand on the M9, ashamed that I had let Dave's team down while he had trusted me with it. It was the embodiment my failure. We parked the car next to where the guys were huddled around the remains of the barbeque fire. My thoughts were fragmented and I had a hard time concentrating on the task of getting out of the car and talking with the group, knowing I'd have to own up to my lacking performance as an interpreter. As I opened the door, I felt the loaded gun slipping from its holster. In a fit of panic, I spastically threw out my hand, hoping to catch it before it fell. Instead, I flung the door open and Dave's gun, one in the chamber and all, slammed to the ground not ten feet from him and his group.

I heard the metal crash against the concrete, but I didn't hear the gasp of the other Marines. I was already gone, checked out, resolved to a failed career and reputation as the least competent Marine to ever deploy. Adrenaline had coursed through my veins since the moment Dave had handed me his pistol, and I had spent the majority of that energy boost building terror that something was about to go wrong. By the time something did happen, I shifted straight into absolute ambivalence. If you prepare for something long enough, no matter how tragic the ending, it's always some kind of relief. I sat in the backseat of the car with the door cracked and sighed, almost

at peace with the situation. I took a deep breath and then I heard the cacophony of angry Marines ready to give me a piece of their collective infuriated mind. The shouts echoed in my head until I felt ready to chime in with a few of my own, leading to irrational bouts of blame and anger, like a toddler who isn't getting his way. This was Dave's fault for giving me the pistol. Didn't he know I wasn't trained with it? And it was left-handed... I can't be responsible for that. I knew it wasn't actually his fault, but he was my release, my scapegoat. I watched him as he approached the fallen gun next to me; I was trying to catch a glance of his chevrons in the dim light, as if focusing on the rank could help channel my fury. I framed him for my guilt, and so convincing was my rationale that in that moment I actually believed he was responsible. If it weren't for Dave and his goddamn gun, I'd still have a reputation worth working for. That bastard. I was nearly ready to write off the Marine Corps and military operations as a whole. I was possessed with a foreign sense of righteous indignation, a feeling that wasn't worth conveying to the angry mob because I knew none of them would understand and because deep down I knew that I alone was to blame for the incident.

For me, it was never a question of whether or not I'd be able to use a gun to kill, it was how I would deal with the incessant stress of coming to terms with that very question, gnawing at me when I would lay awake at night and every time I aimed down the rifle's sights at a firing range. These weren't potatoes anymore; these were bullets. Bullets in a borrowed gun that I had just let bash into the ground – it seemed the only greater insult would have been if the round had fired and nailed Dave himself in the leg. Within ten seconds, I had reached acceptance of the situation after having shot-gunned my own variety of the five stages of grief. I accepted responsibility for letting the gun slip and stepped out of the vehicle with the confidence of knowing, once and for all, that guns were not for me. I greeted Dave's chevrons with an incidental smirk, which hardly lessened the ferocious scolding I was about to take.

When my friends asked about deployment, I left that part out unless I was feeling self deprecating and wry. I went on a handful of missions over the course of my first tour, none as jarring as the initial disastrous one. On the second mission, I was still terrified, and I gripped my gun tightly and compulsively ensured that it wasn't about to clatter to the ground. The fear of Dave coursed through my veins and I felt a renewed responsibility to show the world my capabilities as a Marine. The vigor was short lived. By the time I reached the end of my time in Iraq, my care and concern for the weapon was forced and progressively neglected. As the memory of humiliation and terror dwindled, my weapon and I reached a new height of acrimony - the veil had been lifted and I recalled why I hadn't really enjoyed the presence of the rifle since those first rounds were shot in basic training. I couldn't wait to end the tours and my enlistment, finally returning the rifle to its home in an armory. And I imagined the rifle desired an owner who would once again cherish and respect it, taking care to scrub its carbon buildup and repeatedly check its lock in the middle of the night, just as I had back when I was learning how to be a Marine in San Diego, back before I knew ambition and drive. Back when I was still green.

A few months before I left for boot camp, my high-school girlfriend yelled at me for signing up for something that would change me forever. We used to go bowling together and I'd always wear this silly orange hunting hat, flinging eight pound balls at pins and dancing our way down the lanes. In an unusually perceptive moment, she asked me whether or not I'd still go bowling with the orange hat after I became a Marine. Of course I would, I assured her. I'll still be me, just a more disciplined and directional me. I signed my discharge papers six months ago and headed back to my parents' house, anxious for life as a civilian. Sifting through boxes of old possessions, I found the bowling hat, put it on, and stared at myself in a mirror. With a malice tempered by years spent as a servant of the gun, I flung the hat into the garbage.

# Sweetland Prize for Excellence in Upper-Level Writing (humanities 2010/2011)

# A Break from Conventionality

From SWC 300: Deanna Willis (nominated by Matt Kelley)

The autoethnography assignment asks the prospective teachers/peer tutors who take the class to reflect usefully on their own histories as writers. Most students opt to approach the assignment chronologically: "In the beginning, I wrote with a big pencil and went to first grade. . . and here I am at the University of Michigan." Deanna's sense of play with the assignment led to approach the ideas of the paper more thematically. In our class, we talk a lot about the issue of voice—how a student's personal voice is challenged or compromised or even enhanced by the introduction of the academic discourse of an elite institution. Deanna's paper was about voice and she created essentially a definition paper that both engaged with and parodied the conventions of the traditional academic paper. The colloquial tone of the paper is pretty risky, but this assignment encourages such risks and this risk-taking enhances the other elements of the paper: the mix of uncertainty and confidence, the detailed examples and the reflective conclusion. She really made the assignment her own.

Matt Kelley

# A Break from Conventionality

Finding my voice has been tough. It has been a battle between what I, as a writer, and what I, as a student, truly want to express throughout a paper. David Bartholomae is right when he says that students attempt to write in a privileged discourse that is not their own, and I am a living testament to this statement. This reading really made me realize that I write for my reader and not for myself; however, I want this paper to be different. I don't want to write this with a specific professor in mind. I'll meet the requirements, but I'll try to do so unconventionally and experimentally. Who knows? Maybe by writing from my voice's perspective I'll be able to create my first genuine piece of writing.

Let the fun begin.

How am I feeling right now? I'm quite anxious, to be honest. As Deanna's personal voice, I've never really been able to find myself in academic papers before. Oh sure, sure, I used to come across as really confident; in fact, I've been penalized for my overly confident tones in the past. Oh yes, this brings me to CPC. Never heard of it? I'll give you a brief definition.

**College Prep Composition (CPC)** *n.* a high-school English class in which the teacher prepares juniors and seniors for the expectations of collegiate level writing; 2) a course that challenges you to question all that you thought you knew about writing and to admit to yourself that you are, in fact, compositionally incompetent; 3) the most epic of all epic failures.

Additional Acronyms:

Crap! I Can't Procrastinate in this Class

The Crap you Pooped in the Can this Morning is More Insightful than this Paper

Hopefully I Can Pass with a C

Sounds fun, right? This class was where I started to question myself, or my qualities as a voice: its assignments served as my first "serious" forms of writing, but I expressed myself as I did through every other writing assignment in the past—as a self-absorbed, arrogant, and egotistical voice. Oh yes. I thought I was the crème of the crop. Let me be, for I'm too busy creating brilliance with every word for me to subject myself to your criticism. Ah, but I've changed now; I would characterize myself as less cocky and formulaic and as much more humble and investigational, but these changes were all founded upon the lessons I learned throughout CPC.

### Lesson Number One: Get Off Your High Horse.

Mrs. Besco, this can't be my beautiful close reading of a Shakespearean play: it's covered in red ink! This "B" at the bottom of the paper better stand for "Brilliant," because that is exactly what this piece of writing is. It's brilliant. Look at how confident I come across in this sentence:

The different situations of Hermia and Helena create a hierarchical dichotomy between a woman's appearance and how she is valued by the opposite sex; in other words, this passage's sole purpose is to prove that the overall worth of a woman is bestowed upon by the male perspective.

How do I know the sole purpose of this passage? What authority do I have to make these types of claims? Well, Mrs. Besco, all I can say is that I have always been an overly confident voice and that this confidence has continuously been manifested within the overall tone of my writing, and not once have I received any form of criticism. Where is this criticism coming from, anyways? I feel lost! I feel blindsided!

Why do I feel this way? Well I'll tell you why! Coming across as an overconfident know-it-all is the only way I know how to help validate the

claims made within Deanna's writing. How are her ideas important to an "expert" reader when I don't convey myself as an expert, too? My cockiness leaves no room for interpretation, which only forces the reader to adhere to and agree with my ideas. Are you telling me, Mrs. Besco, that this is incorrect? You want me to become more humble? I remain convinced that modesty within an argumentative paper translates into a form of mediocrity, but I suppose I'll give it a try. Watch out, CPC, because I'm going to kick some serious heinie at being modest.

OOPS. I mean I'll do my very best to convey a sense of modesty within my writing. There. Better already.

# Lesson Number Two: Stop Being so Redundant, Repetitious, and Verbose.

Another B. Another paper. I started to express myself as more humble, Mrs. Besco. This literary criticism review on Ralph Ellison's novel *Invisible Man* is filled with argumentative claims, but I presented them in a way that still leaves room for the reader's interpretation. Oh, so it's not my confident tone that poses an issue, but it is my redundancy?

It is true, then. Now that I no longer convey myself as confident, I repeat everything I say but in a different way. I'm overly wordy and verbose. Using unneeded, unnecessary words ultimately prolongs my sentences and makes them more lengthy and complex. I feel that placing similar, alike words next to one another enhances my qualities as a voice, for it helps me sound intelligent and it also increases the intricacy of the text. This redundancy is also reflected within the heavy use of colons and semi colons: implementing these grammatical constructions within the overall sentence structure ensures that my point is being conveyed to the reader.

This will be a tough, difficult problem to fix, Mrs. Besco: now that I am no longer speaking as a "privileged voice," I feel that I must overcompensate for this tone by repeatedly embedding my argument within my reader's

head. Since there is room for interpretation, I need to validate my claims in as many ways as I can: the entire goal of a literary analysis is to actively support the thesis, and I do so through my verbose tendencies.

Huh. Look at that. I just did it again.

## Lesson Number Three: The Five Paragraph Essay is the Holy Grail of Writing.

Introduction: Finally, a form of writing I can rely on! Every aspect of my paper is laid out for me: I will have one introduction, exactly three body paragraphs, and one conclusion. I'll use corny movie analogies in order to begin my academic paper, just like I used for this literary criticism review on the novel *Ethan Frome*: "In the movie *The Prince of Tides*, the main character, Tom Wingo, leaves his wife and three children to help cure his suicidal sister in New York." I will then spend the rest of the introduction talking about this analogy, and I will only write one sentence, a.k.a. the thesis, which pertains to the actual topic that my essay is about.

Body paragraph: I must never stray away from the "ABCD" structure within my body paragraphs. My "A" will always be my topic sentence; my "B" will provide support for my topic sentence; my "C" will be an actual quote; and my "D" will serve as my quote explanation and as a transition into the next paragraph. Just as there is a strict structural format for the body paragraphs, there is also a structured organization for the conclusion.

Conclusion: Be original: restate the thesis verbatim as seen in the introductory paragraph. Take the next six to seven sentences and summarize what you already stated within your body paragraphs, and be sure to leave the reader with a lasting impression of your paper by asking fifteen questions regarding the future implications of the topic.

Oh thank you, five-paragraph essay, for you have given me structure. Since no other organizational format for writing has been provided to me, I will apply you to every writing assignment I receive from this day forward,

including future fifteen page essays and honors theses in college.

As a voice, I felt overly constrained by these three lessons. I had to stop myself from being cocky, I had to learn how to control my redundancy, and all of my creative inclinations were suppressed by the strict format of the five-paragraph essay. With no other aid and without having the time to express myself in non-academic writing, such as journals or letters, these lessons became my safety net when I was introduced to collegiate level writing courses.

## Collegiate Lesson Number One: Forget all you learned in high school.

Start from scratch? No way, especially when I have a Pro Con paper to write in this English 125 class. How do I start my introduction, how do I build my body paragraphs, what should a conclusion look like, and how do I possibly experiment with its format? Professor Candar, you aren't giving me any answers.

I'm getting anxious: I feel myself slipping into my old habits again. As insecure as I am, I need to sound overly confident when I'm making a claim regarding illegal immigration and the Guest Worker Program. I know—I'll do this with adverbials such as clearly, obviously, and undoubtedly. Yeah, that's good, that's good. What else can I do? Oh, that's right—I'll start to over articulate the ideas in support of the argument. I'll use colons—lots and lots of colons.

The teachers are holding such high expectations, and I really do not want to disappoint them. I don't want to disappoint myself. I need to think like the professors, and I, as a voice, need to reflect these ideas in an articulate and intelligent manner. I need to forget any hint of myself that I have found, because I don't need to write for myself, but rather for my professor. I must lose myself within the discourse of my predestined reader, and I shall evaluate myself on the terms in which university faculty members will use. I shouldn't write as myself; I should write as if I am the professor's student.

I must meet the standards.

In writing from my voice's perspective, it is possible that I produced my first genuine piece of writing, but even my "voice" needed editing for academic purposes. At first, it was too choppy, angry, and bombastic, and I feared that it was not as smart or as analytic as it needed to be in order to meet the requirements of the assignment. It is creative, sure, but is it really genuine if it was formulated upon academic standards? The inevitable truth is that it is hard to break away from these institutional writing practices; however, my goal with this paper was to attempt to forego these restrictions of academic writing and to, instead, experiment with the ways in which my true voice can shine through these academic constraints.

Throughout the past five years, I have completely lost track of my voice – what does it really sound like? Bartholomae brought attention to the ways in which my voice drowned within my writing habits: he made me realize that I am a manipulator. I "accommodate [my] motives to [my] readers' expectations," and I do so by engaging in a discourse that is not only unfamiliar and confusing to me, but not my own (Bartholomae 386). Oh, don't worry. It gets worse. I remained completely unaware of these tendencies until Bartholomae made these habits explicitly known. I have been restrained by the discourses of instructional communities, and my voice is expressed within a limited "set of specifically acceptable gestures and commonplaces" (Bartholomae 387). With these constraints and high expectations in place, is there really room for a student to produce a "natural" piece of writing?

I am now, more than ever, insecure of my writing, and these insecurities are reflected within my predictable writing structures and my reliance on privileged discourses to speak for me. If I don't write in this privileged voice, why should the reader take me seriously? I am overly anxious when I write in a voice that does not sound "expert-like" or intelligent because I feel that the reader will not validate my claims if they are not presented within these linguistic terms. I have just recently become comfortable with slightly step-

ping outside of the box and experimenting with different writing formats, but to say that I have taken risks with my writing assignments is a blatant lie.

Experimentation within an academic writing is difficult because it requires originality: it requires one to transcend institutional limitations despite the knowledge that this originality will, most likely, be rejected. In order for creative, genuine writing to take place within an educational institution, both the writer and the reader need to accept unconventionality and discover the ways in which it has a place within an academic discourse.

## Miss Ann Philips: Via Air Mail

From ENGLISH 325: Carly Friedman (nominated by Aric Knuth)

Carly's essay is beautifully articulated and her exploration a delightful fusion of the personal and the intellectual. She takes the subject of letter writing and use it to think about her familial relationships as well as her own emerging and developing sense of intimacy and friendship. Her epiphanies are meaningful without being over-the-top; she manages to maintain a careful balance of using material from her own life while simultaneously reaching for ideas that a wide readership will likely identify with. The effect is quite moving and successful.

Aric Knuth

## Miss Ann Phillips: Via Air Mail

I found the letters in an old antique trunk in the basement closet. They were placed safely in a large, plastic zipped bag. There must have been hundreds of letters, all bound by loose string and rubber bands. What are these? I asked my grandpa. He looked at them, and unlike the infectious enthusiasm my grandpa normally exudes, he simply smiled, a modest reaction. Letters to your grandma from war.

It was several hours before Thanksgiving, and my grandpa—my dad's father—wanted the family to sort through the old trunk filled with old photo albums, baby books, and newspaper clippings. It had only been two weeks since my grandma died, and now, back in the same house, we were haunted by her physical absence. In the bathroom hung her bathrobe. In the closet, a pair of recently worn shoes. On her dresser sat bright red lipstick, clean underwear remained folded in bedroom drawers, and kitchen cabinets were filled with multi-colored pills and stomach medicines. Nothing in the house had changed, and we all sat immobilized in our grief. No one could comprehend the suddenness of death, the remnants of my grandma's everyday life that remained ready for her to wake up, shower, put on lipstick, take her medicines, and go out into the garden. The physical readiness of the house confused us because it contradicted the truth: my grandma was dead, and she would never again use the objects that defined her daily routines. My grandpa, acknowledging this, wanted the house cleaned.

He brought the trunk into the dining room, and instead of cleaning the house, we all found ourselves sitting in a half circle, sorting through the artifacts my grandma saved across the course of her life. Pictures emerged of my great grandfather hunched over a typewriter sitting at his office desk, my great grandfather holding my grandpa's hands, then three years old, as he attempted to walk, my grandma and grandpa lying in the grass at the University of Miami, studying for exams with books scattered across their

blanket. The trunk reawakened rusty memories of our family's past, especially for me: so many family members I never knew, numerous ghosts, hypothetical beings who had translated into old photographs, now only images of who they once were. Each thin, waxy image hinted at stories untold, voices I'd never hear, faces I'd never touch, and rooms that no longer existed. The pictures reminded my grandfather not only of the past, but of all the years he'd shared with the woman he loved. Often he broke off into long soliloquies, recalling childhood days and young love's inescapable spell.

After a while, due to my relentless curiosity, I couldn't help but to open the plastic bag filled with my grandpa's letters. No one had paid them any attention. Among the objects of our family history, I recognized those letters as something valuable, something different: the leap from images to words, from exterior illustrations to personal voice. I'd kept a journal for countless years, and I knew that the written word led to a very different understanding of a person's past. When I look at old journals, entries from five years ago sound nothing like my current self. Yet through reading old writing, I'm afforded the opportunity to listen to my own self, an odd but also beneficial—even rare—experience. I can trace my path from adolescence into young adulthood simply by reading old notebooks filled with scattered thoughts. Although my grandpa did not keep a physical journal, he wrote those letters, and they were not images like the photos in the bottom of the antique trunk, but rather records of my grandpa's voice. Letters are not technologically dependent forms of communication; they are personalized handwritten messages. And our writing—the literal pen on paper—allows for a more intimate form of conversation.

I discovered the art of letter writing, the heightened experience of communicating via ink spelled words, during a literature program through the University of Michigan. It was the summer after my sophomore year of college, and I decided NELP, or New England Literature Program, was exactly what I needed for myself: living in the outdoors. The program took

forty University students to Raymond, Maine. We deliberately left the reality of our every day lives in order to read Emerson, Thoreau and other New England authors in the peace and tranquility of the natural world. We lived communally, sacrificed all technology, and lived in wooden, unheated cabins. There were hardly any mirrors on the campsite, and after the first day we became our barest selves: warm clothes to keep us from shaking and our ideas, thoughts, and life stories to help us learn collectively. Because we turned in our cell phones, the only connection we had to family and friends, for six weeks, was letters. The old fashioned way. Envelope, stamp, and then space in between—the waiting period, as I remembered calling it. Hoping for a quick response.

I received several letters from my Paw Paw, my mom's father. I'd known him to be a tall man, lean from years of playing tennis, an avid New York Times reader and a lover of all books. He'd cut me grapefruit every time I came to visit, before I'd even rolled out of bed, because he knew I liked it for breakfast. He'd sent me sporadic emails about keeping warm in the winter snow, and mailed me post cards on my birthday. But when the family sat down for long conversations, he never joined. Incapable of more than a few minutes of quick conversation, my Paw Paw functioned more effectively through his writing than through his spoken words. And during my time in Maine, I was given the opportunity to read not postcards, or emails, but handwritten letters from my Paw Paw. I quickly learned that the man I thought I'd known was someone else entirely. Through his words emerged a sense of humor, clever puns and witty statements, and brief commentary about his life—as I'd asked him to tell me what was happening back in Louisville. The more I read, something odd took place: I felt closer to the man writing these letters, this man without a face who I'd never really known before, but I felt further away from my Paw Paw, my quiet, reserved grandfather. His words exposed a facet of his self that could not surface in every day conversation. His words gave him freedom; they gave him a separate voice.

I kept in close correspondence with a friend from school, a girl named Dana, while at NELP as well. I believed that I knew her very well; we'd lived in the same sorority house for an entire year, and dedicated Tuesday nights—after our shared poetry class—to steaming cups of tea and long conversations. We'd moved past the basics, past the initial stages of blooming friendships, and I wanted to keep in contact with her. I wanted her to hear about NELP, and I wanted to know about her time back home in Texas. Upon opening the first letter she sent me, I was convinced that the Dana writing to me was not the same Dana from school. The white, blank papers became a drawing board for Dana's internal thoughts, the ideas she rarely shared with me along with her opinions about life, love, and youth. I found not another person in her letters, but a greater depth to her being, words that she could never articulate with such precision, grace and honesty amidst a late night conversation.

Dana and my Paw Paw's written words led me to a conclusion that I now can never forget: we are dependent upon every day conversations, quick messages and hurried emails, but there is nothing like reading a hand written letter. Because they require focus, time, and thought, and because they take longer to write, letters force a writer to reflect. There exists a level of honesty we cannot always reach during spoken conversation, because our spoken voice and our written voice are not the same; our hand written words often catch us in our deepest, most sincere thoughts. And for various, often personal reasons, writing them down is much easier, much less intimidating, then speaking them out loud. There is less pressure, no immediate response or consequence; letters allow for time.

After having grown to love the art of letter writing, I couldn't believe that before me sat hundreds of my grandpa's hand written letters; I could only imagine the things I'd discover if I were permitted to read them. I knew my grandpa joined the navy during World War II, but he'd never talked much about that era of his life. Now, opening the first delicate envelope, I

wanted to read everything. Gently I pulled out the thin, yellowing paper as the rest of my family continued in conversation. The soft fall light from the glass windows illuminated the white tile floor. I swallowed. Inhaled deeply. Then peeled open the folded letter, its creases deeply engrained. I got through about three sentences when my grandpa—sitting several feet away—reached for my hands to snatch away the letter. His face was pink from stress, and his round, rock hard stomach caused him to breathe heavily. "What are you doing?" he asked quite defensively. I told him I wanted to read what he'd written my grandma. I was interested. "I don't think so," he said, mumbling something else that I didn't quite catch. Disappointed but not willing to disrespect my grandpa's wish for privacy, I put the letter back in the plastic envelope and pushed it aside. I didn't tell him about my deep connection with letter writing after NELP; I, too, was slightly embarrassed by my own desire to read my grandpa's letters. I didn't want to read something that wasn't meant for me, especially if it was too personal, or too descriptive. Only if he allowed me to read them, only if he was comfortable enough for me to read them, would I feel at ease. By the time we left Kentucky, the antique trunks had been moved back into the basement, with all of their contents locked inside. I did not, however, forget about the letters.

Last week—two years after we first sorted through the trunks—I returned to Louisville for another Thanksgiving. My grandpa, now dating another woman and hoping to spend most of his time in his apartment in Florida, decided to sell his house. The plan was that Thanksgiving morning would be devoted to dividing up household items amongst the different families, and the rest of the weekend would be reserved for packing everything into boxes. As the sorting of items began, the women made their way into the basement, where we found several dresses that my great grandma had worn during the late 1800s. Thrilled, I began to carry the garments upstairs to show them to the rest of the family, when I noticed the two antique boxes pushed against the wall. I stopped. I waited until everyone else, all of the

women, went upstairs. Then I laid the dresses down on a nearby couch, sat on the carpeted ground, and opened one of the boxes, which looked all too similar to a treasure box. Two years ago we'd looked through the antique trunks like mourners. Now I sat before the old artifacts simply as a grand-daughter, wanting to claim my share of family relics before they were thrown away.

The basement, colder than the rest of the house, smelled of dust and pool table chalk. After a few minutes, my grandpa came downstairs and sat down at the base of the staircase, mulling over the browning photographs; my aunt, with her calm demeanor, thick auburn hair and young, freckled face, followed him. This time, however, I made sure to pull the plastic bag to the side. When I thought that my aunt wasn't listening—as I didn't want her to take all of the letters for herself—I asked my grandpa what he planned on doing with all of his letters from war. "I don't know," he said, looking at me behind his small, circular glasses and red stained cheeks. "Shred them." I looked at him, horrified. "Why would you shred them?" I asked. My aunt was listening now. "What am I going to do with all of this stuff?" he asked to no one in particular. I could sense his mind faltering between memories and his present life. I felt sad for him: he couldn't keep everything, and yet he didn't want to throw it all away, because he would be throwing away all of the things that had made up his life with my grandma. "You can't throw this stuff away," my aunt said quietly. Her calmness always impressed me. "You'll send the trunks to my house in Atlanta. I'll sort through them." I kept myself silent, although if anyone had looked at me, it would have been obvious that my face—always reflective of my emotions—appeared disappointed. I didn't want to give the letters to anyone else, and I was afraid if they went to Atlanta, I'd never see them again. But my aunt had the right to what she wanted: she was a daughter, the only daughter. I was just another grandchild.

When my aunt had gone upstairs, I approached my grandpa again. Above us, in the kitchen, we could hear the pattering of scattered footsteps as the rest of the family began cooking for the Thanksgiving meal. We were the last two left in the basement, leaning against the green pool table, both lost in thought. "Listen," I said finally, "make sure you give those letters to Beth, and one day, I'll get them from her and use them to write a book." My grandpa's eyes widened. I smiled, because I knew I'd won him. He'd always wanted me to become a writer. "Well, okay," he said. As he turned off the lights, we made our way upstairs into the Thanksgiving cooking frenzy, leaving the past temporarily in the basement and embracing the craziness, the realness, of the present.

Two days later, after I'd already returned to the house I grew up in outside of Chicago, my uncle called and asked to speak with me. He asked me if I wanted any old books—an old Charles Dickens set—otherwise my grandpa was going to throw them away. I agreed to take them. Then he asked me if I wanted the old letters. I paused. "I know Aunt Beth wanted to read them first," I said, suppressing—unwillingly—my selfish desires. "So why don't you give them to her, and I'll get them sometime in the future?" As I hung up the phone, now positive that I wouldn't see the letters for a long, long time, I acknowledged my inability to say what I wanted. I was upset. Eventually I acknowledged my emotional reaction—one of childlike selfishness—as completely absurd. If I'd wanted the letters I should have said something about it. And I had come home with plenty of old items, all of which reminded me of my grandma, and they would have to be enough.

The next night, shortly after dinnertime, I sat on my parents' bed with our golden retriever, Memphis. He was nearly the same size as me, and we lay facing each other: me, wearing my glasses and pajamas, and him, an auburn fur ball, holding a stuffed dinosaur in his mouth. With the first sound of the garage door opening, Memphis leaped off of the bed, stumbled recklessly down the stairs, and dashed towards the direction of the garage door. I heard my dad's laughter. I rolled off of the bed, and once in the kitchen, I hugged my dad hello; his red eyes and pale face hinted at a long drive back

from Louisville, as he'd stayed for an extra day to finish with the packing. As my dad began to unpack his car, I noticed a white shopping bag filled with more things I'd asked him to bring back for me. I pulled the bag closer to me, so that I could see what was inside, and froze, confused.

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"Dad?"
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"Are these letters?"

"Yeah, I think so."

"I thought Beth was taking them?"

"She said you wanted some of them."

I couldn't believe it: the entire plastic bag, filled with air mail.

Of course the first thing I did was lug the entire bag into my bedroom, and hid it in the corner. Then, without hesitation, I grabbed the first stack of letters, held together with a loose pink ribbon. The top envelope was dated June 23rd, 1955, and in the corner: Palmer House, Chicago. I opened the envelope, the paper smelling like old antique markets, sourly sweet. "Hi Darling," it began, written in barely legible cursive. "I just got back from the market and I'm waiting for Harry to finish in the bathroom so I can shower before dinner." I read the entire letter once, twice, and went back for a third time. My Grandpa, apparently on some sort of leave from duty, was not writing my grandma about war, but rather giving her permission to date other men. "You asked for advice for yourself in regard to your mother and dating," he wrote. "I've told you a thousand times what I think. Go along with what she wants and date. It's only for two more months and it won't kill you." I tried to imagine my grandpa, twenty something years old, loving a woman he couldn't physically be with, telling her to date so that she could satisfy her mother until the man she really loved returned home. I was absolutely fascinated.

I decided not to read the letters in order; I pulled out one from the back of the pile. I found stationary with a picture of a large boat, called

<sup>&</sup>quot;Yes?"

U.S.S. ROANOKE CL-145, at the top of the page. "Hi darling," it started again. I skipped to the bottom of the page. "The most important thing is that you still love me and above all you're going to be in Toledo when I get home—I've dreamed and hoped for that so much." As I continued sifting through the pile of letters, I realized they were not like the letters I'd written or received at NELP; these were love letters, words converted into poetic phrases and heart felt songs. And they always ended the same way: "I love you my darling and I will forever," he'd say. "All my love, forever." Then he signed his name: Bob.

I pulled out one more letter, and found—without realizing it—exactly what I'd been hoping for. The date was ripped off of the envelope, and I began to skim the first two pages; what I read was the following:

...I sure wish I was pulling into Norfolk tomorrow morning instead of 13 mornings from now. I miss you an awful lot darling, more and more every day. All I dreamt of today was coming home to you—over and over I dreamt it and it was better every time. As I look back time seems to be going very fast, but now that it is drawing to a close it seems that time is just standing still. I wish to hell that it would go faster. I also dreamt of everything we've done and places we went, I never felt more lonely in my life—I never wanted more in my life to be with you than then...I wish that you could be with me. I still say that someday, when we can afford it, we're going to take a cruise in these waters—there is nothing in the world like it. Sometimes I wish I had a million dollars so that we could travel while we're young and just the two of us see the world together—really a dreamer aren't I—but still it is fun thinking of it....I only hope and pray that I can make you happy and give you everything you want the rest of your life—at least darling,

I'll try my hardest. One thing you'll always have is my love and devotion...I love you darling, and I always will.

A love letter at its best. I began to understand why my grandpa had been so hesitant to give me the letters, why his first inclination was to shred them, destroy them, ruin them so no one else could ever read them. His words were not just accounts of his adventures aboard ship, or carefully articulated ideas about his life: they were, more than anything else, declarations of his undying, eternally promised love for my grandmother. His dreams, his hopes, his future plans all lay confessed on those old, white stationary pages. They read more like journal entries than letters, with the exception that one person was allowed to read them: his lover.

I realized, now, that I'd wanted those letters not just because they were remnants of my grandpa's past, but because I wanted—I had to—know more about the love between my grandpa and my grandma. I had to move backwards in time, to know what he was thinking as a twenty-something-year old young man, to hear my grandpa's voice not only as a my grandpa but as a young adult, as a lover, as a friend. Stacks of photographs leave room for imagination, for hypothesized conversations, possible moods and echoes of laughter. But with the letters, filled with my grandpa's words, confessions, questions, and descriptions, there was little room for guessing. We all want to know what people were like in the past. The desire is partly voyeuristic, but also stems from the human tendency to want to know people in our life entirely, thoroughly, completely. My letters at NELP expanded my understanding of the people I loved. My grandpa's letters allowed me to temporarily step into his past self.

I'd never thought of my grandparents as anything other than my grandparents. Because I've only known my grandpa as my grandpa, I've never been able to imagine—full heartedly—what he was like as a young man at sea. For my father, it's not so difficult, because I grew up under his roof; I've

seen moments of his childhood, of young adulthood, creep into his every day self. I can envision him at all ages of life. But I couldn't do that with my grandpa, or even with my grandma. They were always too old. The parents of my parent.

Sometimes, if I really wanted to explore the depths of possibility, I imagined my grandparents raising my father and his two siblings, attending dinner parties and puffing on cigarettes outside of the front door of their home. I tried to recreate my grandpa as a camp counselor, handsome and charming, or my grandma rocking my dad to sleep on a quiet, humid Louisville night. But I'd never imagined them as twenty-year-old lovers, caught in the fury of separation, yearning for each other's warm embrace, counting the days until they could marry each other. I'd never seen that side of my grandpa before; the young infatuation of his twenties hadn't appeared in the times I'd watched him with my grandma. And yet when my grandma died and we stood out in her garden, preparing to spread her ashes across the plot of land she'd dedicated most of her life to, and my grandpa began to cry, I realized that those love letters were never words of exaggeration: my grandpa loved my grandma through her entire life—past her entire life. He still loves her. He will love her forever. And he promised her that, over fifty years ago, on the pages of blank stationary and in the heat of youth. I can't help but to imagine all of those hundreds of letters, sent via air mail, traveling across seas in countless planes, connecting two lovers not through email or text messages but through words—hundreds of thousands of hand written words. And all of them, each and every envelope, addressed the same way: Miss Ann Phillips, Via Air Mail. They trusted the letters, floating amongst the clouds, to keep their love alive.

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