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Child Soldiers in the Salvadoran Civil War

Samantha Miller

For centuries children have been used in warfare in a variety of roles, including as drummer boys, messengers, and soldiers. Modern weaponry has made it easier for children to become soldiers but at the same time it has made life increasingly dangerous for those children involved in conflict. It is estimated that in 2015 there is 250,000 child soldiers worldwide and that number is continuing to grow.¹ This paper focuses on the child soldiers who participated in the Salvadoran Civil War, both through their experiences during the war and the effect the war had on the child soldiers and families in general. There is little previous work done comparing the role of child solider on both sides of the Salvadoran Civil War, instead most scholars focus on one side or the other. However, a comparison allows us to see the direct impact the treatment of child soldiers had on those children after the war was over.

Background

A military junta came to power in El Salvador in 1979. In response to this right-winged military regime a variety of leftist guerilla groups formed, which merged in October 1980 to form the Farabundo Martí National Liberation Front (FMLN). The Salvadoran Civil War was a conflict between the military junta’s army, the Fuerzas Armadas de El Salvador (FAES), and the rebel guerillas (FMLN) which lasted from 1979-1992. Over the course of the war the FAES was supported

financially and militarily by the United States, who opposed the FMLN because it was viewed as a communist organization, while technically “only one branch of the FMLN was overtly Marxist; most of the guerilla army was made up of peasants simply seeking a better life…The United States, fueled by an irrational "red scare," backed the Salvadoran government to the tune of millions of dollars and trained many of their military personnel.”² The red scare was the main reason for much of the United States’ involvement in Latin America during the Cold War. During the Salvadoran Civil War battle raged everywhere, in both cities and villages. Which meant that the war directly affected everyday life for the entire country of almost 5 million people who inhabited El Salvador during the war.³ The Civil War did not come to an end until the United Nations brokered a cease-fire in January of 1992.⁴ At the end of the war the role of child soldiers was minimized or forgotten in order for El Salvador to maintain in good standing with other nations, however, this stance has increasingly been criticized by human’s rights groups and by the Salvadoran people.

Over the course of the war both the FAES and FMLN committed many crimes against humanity. This includes the rape of women, the burning of villages, and the killing of many innocent people including children and the elderly. During the war an estimated total of 80,000 people were killed, many of them civilians.⁵ The crime against humanity that both sides committed that is the focus of this paper is the recruitment, kidnapping, and mistreatment of thousands of children who were used as child soldiers during the war.

According to the United Nations the term child soldier “refers to any person below 18 years of age who is, or who has been, recruited or used by an armed force or armed group in any capacity, including but not limited to children, boys and girls, used as fighters, cooks, porters, spies or for sexual purposes.” Children are often used due to their “lack of fear and [they] can be easily indoctrinated.” For many groups that use child soldiers they do so because they feel justified in doing so in order to obtain their preferred outcome. During the Salvadoran Civil War “of the 60,000 military personnel in the Salvadoran army, about 48,000, or 80 percent, were under eighteen years of age. As for the approximately 8,500-strong FMLN army, around 2,000 guerillas were under eighteen years of age at any given time during the war, or a little over 20 percent of the troops.” This shows that a large percent of the combatants in the Salvadoran Civil War were children who were persuaded or forced to join either the FAES or the FMLN. The fact that both sides of the conflict in the Salvadoran Civil War used child soldiers is unique. In other conflicts it has been more common for child soldiers to be used on the rebel or guerilla side of that conflict. This aspect of the conflict makes the Salvadoran Civil War unique, and yet it is not a frequently studied aspect of the war.

My inspiration for studying this topic was the film *Innocent Voices*, which tells the story of 11 year old Chava, who experiences the threat of being taken by the FAES and the ideological pull of the FMLN. The film is loosely based off of the childhood experiences of the screenplay co-writer, Oscar Torres, who grew up in El Salvador.

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9 *Innocent Voices*, Director Luis Mandoki, 20th Century Fox, 2004, DVD.
during the Civil War. Many of the experiences shown in the film are things that will also be discussed throughout this paper, for example, recruitment methods, family ties, and the role of women. This film gives any viewer the chance to see what daily life was like for Salvadorans during the Civil War, including the joys of flying kites and first love as well as the fear of attacks and recruitment. Reviews even stated that “as an outcry against the forcible conscription of children into armies around the world, *Innocent Voices*, is an honorable film.” However, the film didn’t give any backstory about the war and on its own would leave many viewers confused about what exactly was going on in El Salvador.

**During the War**

In order to get large numbers of child soldiers there had to be an enormous amount of recruitment occurring on both sides of the conflict. Shortages of manpower led both the FAES and the FMLN to turn to recruiting children to aid their fight. This desperate need for people led to the recruitment of children by both sides, which occurred throughout the war as it was necessary. Those most at risk for recruitment were boys who “tended to be older, physically larger, economically impoverished, or orphans.” These children were either persuaded to join by other child soldiers, death of family members, the benefit of protection, economic benefits, or were simply abducted. However, “of the FMLN youth surveyed by UNICEF after the war, 91.7 percent said they joined voluntarily, compared to 46.7 percent of the FAES youth.” This means that a large portion of child soldiers, especially within the FAES, had been coerced or abducted to join instead of doing so voluntarily.

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11 Ibid.
12 Courtney, 533.
13 Ibid., 534-7.
14 Ibid., 542.
There is a multitude of stories about abduction of children during the Salvadoran Civil War, and most of those that were male were assumed to have been abducted into the military. A variety of methods were used to recruit children, “the armed forces used round-ups to fill the ranks, taking young men out of buses and cars, away from market-places or churches or as they walked down the road.”

Journalist, James Brockman, who interviewed Salvadorans during the war has stated that some “residents of El Salvador told me that the common way to recruit for the army is to grab young men as a movie house lets out, or at a village fiesta. Of course, only the poor are taken.” This reinforces the idea that boys were susceptible to being abducted anywhere, especially if they were economically disadvantaged because it was the impoverished areas that the soldiers targeted. Even if children were not formally recruited by the FAES they were still “used by the Armed Forces as soldiers and informers. Children were paid to point out suspected subversives. This practice created a dangerous situation for the child.” Children were placed between the two sides, used to spy on one another, and often given rewards for turning on their own families.

Those children who had been abducted often did not fight back or run away out of fear for their lives or more likely the lives of their family members. This is because “children often fear losing their families in conditions of war more than they fear for their own lives.” When the FAES was extremely low on soldiers they would raid orphanages or schools, recruiting even younger children than usual. The raid on schools was portrayed in the film *Innocent Voices*, as FAES soldiers “storm into a school in the heart of an impoverished rural village,

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17 Dickson-Gómez, 330.
18 Courtney, 534.
19 Dickson-Gómez, 337.
20 Courtney, 535.
bark out a list of names and forcibly conscript any boy over 12 into the military.”

This occurred as other students and the teachers stood by out of fear for their own lives. Some children, after they had been abducted, would not return to their families because they were receiving food and money from the troops which they didn’t have at home. These benefits kept them in the army, a very dangerous place to be.

Some newspapers featured the stories of those child soldiers who had been abducted. For example, an article in *Newsweek* focused on the story of Tomas Duran Cafia, a 17-year-old who had been abducted and became a soldier with the FAES, he had been serving for only a month and a half when he was captured by the FMLN during a raid on Puerto Parada. Tomas is quoted as saying: “‘I'm afraid they will do something to me,’ he admitted timidly, nodding toward his battle-toughened captors. He said two of his brothers had joined the guerrilla forces. He too had planned to join the guerrillas, but had been inducted ‘by force’ into the army. ‘If they send me away,’ he said, ‘the armed forces will come looking for me.’ Duran, like most Salvadorans, found himself dangerously caught between two sides.”

Another example is from *The New York Times*, “sixteen-year-old Jorge went to the beach and ended up in the army. He was on his way home from frolicking in the surf 15 months ago when soldiers stopped his bus and took him and two friends to a local barracks. The three youths were held for two days. Their hair was clipped and they were sent for 15 weeks of basic training in La Unión... ‘I told the soldiers I didn’t want to go but they said it was my duty.’”

Both of these examples show young boys who have been forced into service for the FAES against their will. Tomas even says that he was planning to join the FMLN but was forced into the army before he was abducted.

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21 Holden, E17.
could do so. Showing that some soldiers fighting in the army did not even believe the ideology of the side they were fighting for. These two stories support Jocelyn Courtney’s argument that “although the same kinds of children (homeless, orphaned, displaced, and economically impoverished) were likely to be recruited by both the FAES and the FMLN, the government troops relied more on forced recruitment, abduction, and coercive indoctrination methods (based on physical punishment) than the FMLN guerillas.” This argument is just one example of how the two sides in the war were very different in the ways they treated their child soldiers.

On the side of the FMLN children were more often recruited voluntarily. Some did it to avoid becoming one of the soldiers for the FAES. For others it was family dynamics which led to their early involvement in the FMLN. For example, “some Salvadoran children followed their siblings or relatives to the FMLN, while other combatants are children of guerilla fighters and were literally born into the rebel movement.” While this doesn’t necessarily show that their involvement was completely voluntary, it does show that they were less likely to have been abducted into the conflict. In the film Innocent Voices the protagonist Chava is pulled in by the ideology of the FMLN because of his Uncle Beto who is an FMLN member.

The FMLN only used forced recruitment in the early years of the war and then primarily depended on a quota system instead of abducting children. Forced recruitment stopped for the FMLN, mostly due to their reliance on the public to gain both combatants and material aid. However, there was still a quota system that soldiers participated in. Those quotas were often filled by sending “kids units” into villages to help recruit other young children into the FMLN. For his book Guerrillas, Jon Lee Anderson visited the FMLN “liberated zone” and interviewed FMLN soldiers. These interviews included young men

25 Courtney, 531.
26 Cohn and Goodwin-Gill, 40-1.
27 Ibid., 43.
28 Innocent Voices.
29 Courtney, 537-8.
who were part of the “kids unit” who recruited increasingly younger children for the cause. Carmelo and Geronimo were two of these soldiers. They were charged with recruiting more child soldiers, “like Pied Pipers, Carmelo and Geronimo lead their youthful charges back and forth through their own home villages, picking up new volunteers on each swing through. Each new kid is like gold to the guerillas, adding to their strength.”

The more children Carmelo and Geronimo recruited the stronger the FMLN grew, this was the ideology that pushed both sides to use extreme recruitment techniques.

Jocelyn Courtney’s article, "The Civil War That Was Fought by Children: Understanding the Role of Child Combatants in El Salvador’s Civil War, 1980-1992," focuses on how both the FAES and the FMLN used child soldiers. Courtney’s comparison used many of the other sources also being discussed in this paper and is a more recent publication, which means that it incorporates some new information. You will notice these factors contribute to Courtney being a valuable, and often used, source throughout this paper for information on both sides of the conflict.

The child soldiers who fought for the FAES during the Civil War were trained using a three-pronged approach. The FAES “dehumanized the enemy, glorified their own image, and demanded total obedience from their troops, quelling resistance with harsh physical punishment.” The image of the child-hero was used by the FAES to glorify the military and the child soldier’s role in helping their country. Many of the child soldiers were sent for a 15 week basic training program in La Unión where this three pronged approach was used to mentally train them while also teaching them physical skills to be used in combat. Some of the child soldiers were

31 Courtney, 543.
even sent to the United States to be trained, both at Fort Bragg, North Carolina and Fort Benning, Georgia.\(^{33}\) The indoctrination that occurred during training often concluded with participation in forced acts of violence that bonded the child soldiers more tightly to the other FAES soldiers, as well as showed their total obedience to the FAES.

The FAES child soldiers had an active role in the Civil War, typically through spying, running messages, scouting, or fighting. These children put their lives at risk on a daily basis to complete the tasks they had been assigned to. However, many of them knew that disobeying an order also would have put their lives at risk from their commanding officers. Some children were ordered to injure or kill their own families or members of their villages to prove their obedience, they complied out of fear for their own lives.\(^{34}\) Some children willingly stayed with the FAES because they had their basic needs met through military supplies, and they occasionally were paid a salary for their job.\(^{35}\)

On the other side of the Civil War “the FMNL took a greater protective role towards the children and indoctrinated them through normative motivators (based on the offer or withdrawal of psychological awards, like group acceptance or honor) and reinforced by familial relations.”\(^{36}\) Schools were created in FMLN camps that had the necessary resources to educate the children residing there. At school the children would memorize biographies of local heroes and learn about the revolutions that had taken place in Nicaragua and Cuba, as well as how to be a good revolutionary.\(^{37}\) There was also the ideal of communal solidarity which made the FMLN seem more like a family.\(^{38}\) The child soldiers had shared experiences which made


\(^{34}\) Courtney, 544.

\(^{35}\) Ibid., 537.

\(^{36}\) Ibid., 531.

\(^{37}\) Cohn and Goodwin-Gill, 94.

\(^{38}\) Courtney, 545.
them connect very easily and form family-like groups. Within these groups the child soldiers would grow up together and “the common experiences they have had and the life they share now gives them a bond that is perhaps greater than if they were true blood siblings.”

Many of the child soldiers used by the FMLN had experienced the loss of one or both parents, which meant that they wanted to find a family which also included older individuals who could been seen as parental figures. In Guerrillas, Jon Lee Anderson interviewed multiple FMLN soldiers including Ulises who had taken 13 year old Melvin under his wing to teach him the radio code used by the FMLN. Ulises said the following about Melvin in the interview, “it’s like he needed the fatherly influence. He liked to have someone pay attention to him.” This shows just how much the FMLN formed families while they fought. These family, unlike the FAES, included female guerillas as well. Women and girls could “provide backup support, managed the camps, and served in active combat.”

The women of the FMLN had a greater amount of equality than was traditional in Salvadoran society. Women and girls were present in every aspect of the war in the FMLN, both in supporting and active roles. In fact “the majority of women and girls who joined the FMLN participated in supporting roles, cooking and sewing uniforms. Others took a more active role as medics or in logistics, carrying supplies and coordinating the movements of soldiers. A minority of women and girls fought as combatants.” Women and girls were especially valuable as nurses or medics. One of the FMLN members interviewed for Jon Lee Anderson’s book Guerrillas was the young nurse Aracely, who worked in one of the FMLN kids units. She had been involved in the FMLN for five years and at nineteen was the oldest girl in the unit, this means that she was looked up to like an older sister by the other girls around her, which shows the family

39 Anderson, 217.
40 Ibid.
41 Courtney, 547.
42 Dickson-Gómez, 330.
dynamic achieved by the FMLN. Some girls also joined in on the fighting like Elva, a former child soldier interviewed for Julia Dickson-Gomez’s article “Growing up in Guerrilla Camps: The Long-Term Impact of Being a Child Soldier in El Salvador’s Civil War.” In Elva’s case she was a combatant, which “violated Salvadoran gender roles in which it is unacceptable and dangerous for a woman to express anger or aggression.” However, to the FMLN women were valuable fighters who added to their numbers.

Another fact of life that occurred due to the mixture of both genders in the FMLN camps was casual sex resulting in pregnancy. Many female guerillas told of accidental pregnancies which caused them to leave the front for a time for their safety. They would then return to the front after giving birth. The FMLN gave female members twelve months to spend with their newborn babies, but many returned earlier to continue the fight. Some of those females were child soldiers, like Aracely who was fourteen when she got pregnant. Those females often left their children with mothers or grandmothers who lived in safer areas, this can be seen both in Aracely’s story and also with others like Elva who got pregnant at fifteen and left her son with her mother.

At the beginning of the conflict FMLN child soldiers primarily held support positions, but as the conflict increased they transitioned to active combat roles. Child soldiers occupied support roles like “porter, cook, and sentry... young fighters did everything from preparing tortillas and coffee to putting together explosives and popular armaments. They also worked as backup personnel- as correos (runners) to carry messages between commanders.” Later their roles became more active as they infiltrated the FAES to gather

43 Anderson, 214.
44 Dickson-Gómez, 342.
45 Anderson, 220.
46 Ibid., 215.
47 Dickson-Gómez, 333.
48 Courtney, 545.
intelligence and became armed fighters among the FMLN ranks.\textsuperscript{49} One example of the expanding roles of child soldiers in the FMLN is Samuel. Samuel joined the FMLN at eleven years old, after his father death, and first worked as a messenger and porter before becoming a combatant who fought alongside the other FMLN soldiers.\textsuperscript{50}

Child soldiers on both sides of the Civil War had to leave their childhoods behind and become premature adults due to the circumstances of war. Those children had to make political and economic decisions typically reserved for adults.\textsuperscript{51} Often times this occurred due to the loss of one or both parental figures, especially when it was the loss of the father which caused a lack of economic support for a family. When this occurred “that burden falls on boys who must become the ‘man of the house’ when the father is absent,”\textsuperscript{52} either due to death or due to commitment to the war.

However, these are not simply occurrences due to the war. Children having to step up to provide for the family due to a lack of parental support had occurred before the war began. The children who stepped into those responsibilities showed a sense of selflessness that is “due in large part to the degree to which children’s identities are bound to their families.”\textsuperscript{53} The notion of childhood innocence is an extremely Euro-American ideal that has only recently been developed.\textsuperscript{54} This means that children in El Salvador increasingly played a role in the Civil War due to a tradition of children helping within the family, which seemed strange to Westerners who pushed for the idea of a protected childhood. In many cultures around the world, as well as in the history of Western societies, children begin helping their families and communities when they are very young and

\textsuperscript{49} Cohn and Goodwin-Gill, 95.
\textsuperscript{50} Dickson-Gómez, 333.
\textsuperscript{52} Dickson-Gómez, 335.
\textsuperscript{53} Ibid., 337.
\textsuperscript{54} Read, 398.
gain more responsibilities as they get older. This means that in El Salvador there was already an unclear distinction between adulthood and childhood as responsibilities were placed on individuals no matter their age.

The war foist moral questions upon the children of El Salvador, especially by forcing them to choose a side in the conflict. It has been shown in El Salvador that often times when the child was able to pick a side, they chose the FMLN. Various conflicts around the world have shown that “children’s political commitments, like those of adults, combine political ideology and moral idealism with personal loyalties and collective memories of suffering that must be vindicated.” Research has shown that children are moral agents. Children begin caring about others at 18 months old, and that care for others tends to get stronger as they get older. This shows that, even at a young age, children are “active moral agents continually developing a concern for the common good, and not as completely innocence beings isolated from adult cares.” So while some parts of the world, especially the United States, views childhood as an isolated time, it is viewed very differently in other areas of the world. Years of research on the front lines of wars in Africa led Carolyn Nordstrom to observe that “children often have a well-developed moral, political, and philosophical understanding of the events in their lives and worlds. Years of research on the front lines of war have taught me that even very young children have profound opinions on conditions of justice and injustice, violence and peace, in their lives.” These observations have since been extended to apply to all children, including the child soldiers of El Salvador.

Child soldiers were routinely exposed to violence from very young ages, both in the FAES and the FMLN. They were also given the task

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55 Peterson and Read, 227.
56 Ibid., 224.
57 Read, 400.
58 Ibid.
of committing acts of violence and also defending themselves from acts of violence. For example, FAES soldier in training at La Unión had to learn to fight and also had to defend themselves when the FMLN attacked their base.\textsuperscript{60} Children exposed to routine acts of violence at a young age are more likely to become violent adults. This was a concern due to the normalization of violence that occurs during times of war, especially a Civil War as bloody as the one seen in El Salvador. Child soldiers are also more likely to resent both sides of a conflict, have psychological damage, be socially impaired, and unable to be financially independent in the future.\textsuperscript{61} Some experiences of violence can even go so far as to cause “psychosomatic reactions such as headaches, as well as severe psychosis, such as schizophrenia.”\textsuperscript{62} All of these combined to make readjustment to normal life after the war that much more difficult for the child soldiers.

**After the War**

After the Civil War ended in January 1992 children were excluded from the programs created for the veterans of combat, simply because neither side would recognize that they had used child soldiers. In fact both sides “attempted to demobilize children before the formal process began to avoid negative international attention and to minimize the government’s support obligations.”\textsuperscript{63} This meant that children were cast out from the bases and camps that they had been in and “they usually had no more than their weapons and the clothes on their backs.”\textsuperscript{64} They were forced to return to homes that were often destroyed or inhabited by other families, and where they were often looked down upon depending on what side they had fought for during the war. Although there are some records of FMLN child soldiers who were still in the camps when UNICEF demobilized the guerillas,

\begin{itemize}
\item \textsuperscript{61} Courtney, 524.
\item \textsuperscript{62} Peterson and Read, 219.
\item \textsuperscript{63} Courtney, 549.
\item \textsuperscript{64} Ibid., 551.
\end{itemize}
however, there were no programs created to assist them in returning to civilian life.\textsuperscript{65} However, the peace and stability of post-war society depended on reintegrating all soldiers, even children, back into society.

It was in this reintegration that El Salvador failed. Six years after the end of the war “71 percent of all former child soldiers said ‘nothing had helped them transition to civilian life’”\textsuperscript{66} There was a lack of economic opportunities which meant rampant unemployment. Many soldiers, especially children, were forgotten about and they turned to whatever means necessary to support themselves and their families. Child delinquency in El Salvador has risen since the end of the war.\textsuperscript{67} Violent crimes have also increase after the war due to the “inadequate employment opportunities and support services and easy availability of military weapons.”\textsuperscript{68} Many former members of the FAES and FMLN formed criminal organizations and gangs, turning to “violence as a survival technique.”\textsuperscript{69}

The lack of economic opportunities was not the only problem, there was also a lack of accessible education. Some literacy training programs had existed during the war but they were largely ineffective.\textsuperscript{70} Basically the child soldier’s “didn't return from the war educated, they returned traumatized.”\textsuperscript{71} Even after the war education was not available to all and there were many impediments against child soldiers getting an education. Those impediments include: education facilities that had been destroyed during the war, a shortage of qualified teachers, and the need for the former child soldiers to be in the workplace instead of in schools.\textsuperscript{72} There was also a lack of funds for expanding education opportunities, which further limited

\textsuperscript{65} Courtney, 550.  
\textsuperscript{66} Courtney, 554.  
\textsuperscript{67} Cohn and Goodwin-Gill, 114.  
\textsuperscript{68} Dickson-Gómez, 346.  
\textsuperscript{69} Courtney, 555.  
\textsuperscript{70} Cohn and Goodwin-Gill, 139.  
\textsuperscript{71} Dickson-Gómez, 344.  
\textsuperscript{72} Courtney, 552.
former child soldiers’ ability to gain an education which might assist them economically.\textsuperscript{73} Some child soldiers who managed to go back to school were embarrassed to be in classes with students so much younger than themselves that they gave up. This led to a generation of Salvadorans who had little to no education at all.

Another problem that many child soldiers faced was the psychological damage caused by the violence they had both experienced and inflicted on others. Many children who participated as combatants in war have nightmares of their experiences, often reflecting the death of loved ones or the horrors of fighting. Research has shown that “child soldiers were far more disturbed than children who were victims of violence.”\textsuperscript{74} There is concern that the long-term psychological effects of the experiences of child soldiers in the Salvadoran Civil War will be the break-down of morality, but research on the topic is basically nonexistent.\textsuperscript{75} There is also the challenging aspect of gender due to the role of female child soldiers in the FMLN. For example, “some research has suggested that girls show greater psychological resilience in times of war because they are given greater freedom to express fear and sadness. While this may hold true in some contexts of war, expression of fear and sadness was necessarily repressed for both boys and girls in El Salvador because to express such emotions would label one as a subversive and therefore target one for repression.”\textsuperscript{76} While it is typically seen as acceptable for girls to express their emotions, it is not acceptable for former child soldier of either gender to show any emotion or they will become targets. This only serves to add to the psychological effects of the war and may worsen the reintegration process.

Many of the problems that occurred after the war have since been attributed to the displacement of children and families during the war. There are many “negative effects of displacement on the education,
health care, nutrition, economic stability, and physical and mental health of Salvadoran children and their families.”

Due to displacement it was difficult to provide services to families who were in need after the war. Displacement also meant that many of the people with the skills needed for those services, like teachers and doctors, had left due to the war and there simply was not people there able to provide the needed services. This drastically affected many Salvadorans and prevented them from being able to fully reintegrate to society upon the end of the war.

Much of what the FMLN had promised during the war had been discarded in the effort to make peace. This led to disillusionment of revolutionary ideology and the FMLN after the war. Some of the FMLN child soldiers who had joined the war for ideological reasons felt disillusioned at the end of the war when the “social justice promised by the FMLN had not been achieved.” The soldiers, both children and adults, “resented the lack of assistance they received from their FMLN leaders after the conflict ended.” Disillusionment was common, however, it was “perhaps greater for youth because they had even less control and choice over their participation.”

The FMLN had promoted gender equality during the war which also did not occur when peace came. Women had been promised economic, social, and political equality by the FMLN during the war and were usually treated as equal to their male counterparts during the war. Also after the war ended the role that women and girls had played and their contributions were often minimized or completely ignored. As a result the female soldiers who returned home typically went right back to the gendered task of caring for their families. At the same time women who remained politically active after the war were punished socially for doing so, often times by being abandoned or ostracized. For example, Elva, a child soldier who had had

77 Peterson and Read, 219.
78 Dickson-Gómez, 347.
79 Courtney, 552.
80 Dickson-Gómez, 343.
81 Ibid., 344.
children during the war, returned to her village to take care of her family. She received an education, got a job, and was the primary source of income for her family. Elva’s position of power led to jealousy issues which resulted in her husband’s abandonment. This meant that Elva became a single mother to five children when she was just 25-years-old herself.\(^82\)

Single parent households, especially single mothers, were a common sight at the end of the Civil War. As men were less financially stable and turned to alcoholism they increasingly abandoned their families, leaving women to care for families alone.\(^83\) Another contribution to single parent households were men who moved to other countries for better economic opportunities. This can be seen in the story of Yesenia who became a single mother when her son’s father moved to the United States. In telling her story Yesenia said “in my case, I’m a single mother. I didn’t agree, my son’s father went to the U.S. when he was six. The years went by and he decided to stay. I said to myself, okay, we’ll just have to figure this out ourselves.”\(^84\) Another story that also shows the struggles of a single mother is the fictional portrayal in *Innocent Voices*. In the film, Kella is a single mother to three children because her husband left for a job in the United States.\(^85\) She does whatever she can to provide for her children, working multiple jobs and even moving to a safer area. The stories of Elva, Yesenia, and Kella show that many women rose above obstacles and continued to support their families, in spite of the challenges that single mothers faced in the Salvadoran economy and society.

The recruitment and use of child soldiers was not the only crime against humanity that occurred for Salvadoran children during the Civil War. Many children were also kidnapped and then sent to

\(^{82}\) Ibid., 348.
\(^{83}\) Ibid., 346.
\(^{85}\) *Innocent Voices*. 
foreign countries to be adopted, which became a source of money for the FAES. These children had either been given up for adoption by their parents for protection or had been “stolen as war trophies by bands of soldiers.”

This use of stolen children “was part counterinsurgency strategy and part business venture. Many of the stolen children were sent to orphanages, where they were adopted internationally in a wartime system that had tinges of compassion and greed.”

This means that Salvadoran children who had been adopted internationally “grew up in the United States and Europe, curious about their heritage but knowing nothing of their original families. Many thought their relatives were dead.” The usefulness of male children as child soldiers for the FAES means that a majority of the children sent for international adoption were female.

In the early 2000s a database was put together by the University of California Berkeley and Pro-Búsquesda, a Salvadoran organization, to reconnect disappeared children to their families. This database was used in the cases of Angela Fillingim and Suzanne Berghaus, two women who had been adopted by families in the United States during the Salvadoran Civil War. Angela was given up by her mother, to “protect her from war as well as from her family’s disapproval of her unwed pregnancy.”

Angela was only 6 months old when she was given up in 1985. She was then adopted by a family in northern California and at 21 years old she was able to reconnect with her mother and brother in El Salvador. Suzanne was kidnapped by FAES soldiers in 1982 when she was 14 months old amidst her mother’s objections. She was adopted by a family in Massachusetts and at 26 years old she was able to reconnect with the family that she...

89 McKinley, A31.
90 Ibid.
had been taken from. Pro-Búsquesda has made several complaints about the Salvadoran government due to its unhelpfulness at reuniting these families. This may stem from an unwillingness on the governments part to acknowledge the past misdeeds committed by its armed forces. The Salvadoran government has created its own organization to reunite families, but it is dismissed by many because it has not been as successful as the Pro-Búsquesda database.

**Conclusion**

As this paper has shown, the child soldiers of the Salvadoran Civil War were treated poorly on both sides, both during and after the war. However, the children in the FAES had a drastically different experience than the children in the FMLN, both in recruitment, training, experiences, and treatment after the war. The FAES was stricter, more violent, and focused on results, all while ignoring the actual needs of the children they had forcibly recruited. The FMLN was driven by ideology, connected like a family, included female combatants, and yet at the end of the war they also forgot about the role of the child soldiers. The Salvadoran Civil War affected every aspect of society and fundamentally changed a generation of people as they were physically and psychologically scared by the violence of the war and the lack of assistance they received after the war ended.

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92 Ibid.


*Innocent Voices*. Director Luis Mandoki. 20th Century Fox, 2004. DVD.


Rethinking Church and State

America’s Neutrality-Obsessed Separation, Its Formation, Its Compromised State, and the Way Forward

Benjamin Giles

Religion has long been a part of political and otherwise public life, usually in union with political power. This relationship has yielded great benefits for mankind, but it has also produced civil strife, religious warfare, and other harms. By the time of the American Founding, a new way of approaching this relationship emerged, one that sought to keep religious and political power separate. This paradigm became ingrained in the American consciousness and the federal Constitution after independence, but not the state law or American jurisprudence, at least until much later. Church-state separation was gradually integrated into these institutions over time, where it eventually interacted with liberal constitutional principles that seek to keep the government and Constitution neutral among ends. As a result, America now has a far different conception of church and state separation, where church and state are construed as two separate spheres that must not mix. Neutrality-obsessed church-state separation, as I will call this new conception, represents a fall from grace when compared to the Founders’ separation and the separation I will advocate later. The first part of this paper traces those changes in American thinking on church-state separation that have led to its corruption.

After discussing how America has arrived, this paper will outline the challenges, particularly from the Religious Right, that neutrality-
obsessed church-state separation faces that render it unable to function properly before proceeding by outlining the need for a church-state relationship of some form.

Finally, this paper lays out a framework of principles for building a church-state relationship: a tension between democratic inclusion and freedom of religious conscience. The current balance, as this paper will argue, too greatly favors democratic inclusion, and so the scales must be moved to give greater favor to freedom of religious exercise.

I. The Gradual Formation of America’s Neutrality-Obsessed Church-State Separation

The mere concept of separation between secular authority and religious authority is clearly a modern phenomenon, since such a separation would have been unthinkable for much of world history. Edel describes ancient thinking on church and state:

As tribes grew into nations and more complex political and religious organizations evolved, the distinction between political and religious decision making sharpened. For thousands of years, however, these two processes went hand in hand, with little thought given to the separation of church and state. On the contrary, any suggestion that the two be divorced would have been considered both heretical and treasonable: heretical in its challenge to established religious doctrine; and treasonous in its challenge to the authority of the ruler, whose position was based on the will of the god or gods that he and his people worshipped.¹

The state of affairs Edel describes prevailed in much of Europe and western thought for centuries, with an assortment of related problems. For example, England after the split with the Roman Church saw the monarch placed at the head of the new Church of England, a fusion of religious and secular power that persists to this day. When James II, a Catholic, took the English throne in 1685, tension arose that resulted

in the Glorious Revolution, which deposed James II and placed William III, a Dutchman, on the throne. The Revolution might have been avoided had the union of English church and state not occurred. Since the English settled their North American colonies during this time of post-Henry VIII union of church and state, they carried a similar model to the New World, at least until the English Civil War.

The colonies formed before the English Civil War followed a model of union between secular and religious power that mirrored the English. Within England itself: three religious groups dominated (with one officially sanctioned church): Anglicans, Puritans, and Catholics. Hutson argues that these three groups ultimately shared a similar vision for religion and its relationship to the state: “All believed that the state must assist the orthodox church in its jurisdiction, promoting its doctrines and suppressing dissent from them by force, if necessary.” As these groups began to colonize the eastern coast of North America, they took these principles with them. The Church of England was the official church in colonial Virginia, and the Puritans built their own quasi-utopian society in Massachusetts. In these and other early colonies, the modus operandi was to unify religious and secular power under an established church.

That model for colonization changed with the English Civil War, after which a new emphasis on pluralism and religious toleration emerged. Colonies established after the War possessed a greater degree of religious freedom than the older colonies. Among these new colonies was Pennsylvania, which became known for its successful use of religious pluralism. It was these colonies that could later provide a blueprint for the Founders of how religious pluralism could work in a society.

The dual approach in the colonies created a landscape of church and state relations that was by no means uniform, and, in states with

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3 Ibid., 12–13.
official churches, contradicted both the thinking of the Founders towards church-state separation and modern neutrality-obsessed separation. Hutson describes the diverse landscape:

The religious map of the colonies in 1689 [the founding date of the last of the thirteen colonies] resembled Joseph’s coat with its multiple hues and colors. In some colonies the state compelled obedience to one official church; in others it was stripped of all power over citizen’s consciences. There were colonies in which religion was regulated in some places but not in others. And there were colonies in which the brand of religion supported by the state refrained from regulating religion but signaled its intention to do so in the future.5

It was within this framework that the colonies functioned into the eighteenth century, and it was within this framework that the Founders and early American leaders were raised.

The Founders, chief among them Jefferson, supported a positive role for religion in democratic society, but were nonetheless concerned with limiting religion to keep both it and the state free of corruption. Reichley argues that religion was primarily appreciated for its role in developing citizens: “Almost all of the principal founders of the United States, including Thomas Jefferson, were convinced that the health of republican government depends on moral values derived from religion.”6 Ragosta adds that for Jefferson, “the contribution of religion … to the ‘legitimate objects of society’ should not be missed. This was a view of long standing with Jefferson and a belief broadly shared in early America.”7 There is no doubt that the Founders saw religion as integral to the republic’s success, yet they also had a clear sense that religion would depart from its beneficial role without a separation of church and state. Ragosta summarizes Jefferson’s

5 Ibid., 1.
thoughts on the matter: “He was convinced that any alliance between church and state would prostitute both and undermine the noble republican experiment, and it is clear that his concern went to both government interference with religion and religion’s interference with government.”\(^8\) Ragosta continues: “Critically, for Jefferson, both true religion and the republic depended upon liberty of the mind, including full religious liberty. Of necessity, such liberty included separation of church and state.\(^9\)”

An immediate objection may be raised that if Jefferson argued for a separation of church and state, then he would be a hypocrite to advocate that Americans be taught religious morals. However, this objection is framed in a neutrality-obsessed mindset, and as Ragosta notes: “He was certainly emphatic that government should neither encourage nor endorse religion, but he never sought to purge religion ... from the public sphere.\(^{10}\)” Jefferson was concerned with the mixing of religious and secular power structures. He had no issue with those in the government and the populace being religious, since religion could instill virtues needed to preserve the republic. Such principles were enshrined in the First Amendment to the Constitution.

The idea of separation between church and state achieved its first constitutional expression in the First Amendment, which was carefully designed to keep the federal government from establishing religion but also from impeding free exercise of religion so as to preserve the purity of both the church and the state. As Michael Sandel notes: “The religious interest served by separation is in avoiding the corruption that comes with dependence on civil authority,” while “the political interest served by separation is in avoiding the civil strife that has historically attended church-state

\(^{8}\) Ibid., 35.
\(^{9}\) Ibid., 39.
entanglements. A series of interests competed in the formation of the First Amendment, since the issue of how the federal government interacted with religion would have serious consequences for both those states that had established churches and the project of religious pluralism. In the end, the First Amendment was formed by a compromise that confined its effects to the federal government:

As previously shown, the First Amendment “compromise” was between those who wanted to prevent the federal government from interfering with state establishments, but were more than happy to restrict federal authority severely; those who wanted to keep a distant federal government out of people’s lives, and supporters of Jefferson and Madison who wanted to prevent government interference in religion (sometimes overlapping groups).

This view of church-state separation, where the federal government takes a laissez-faire approach to religion and the states are left more or less free to handle religion however they like, persisted until the passage of the Fourteenth Amendment. During that time, oddly enough, the states revoked the official status of their established religions. Despite this erosion, Americans remained very religious, enough so that Alexis de Tocqueville took serious note. Tocqueville’s 1835 edition of Democracy in America was written in two volumes: one devoted to American politics, the other to American civic institutions. However, Tocqueville actually planned three volumes: the first two as they appeared, and a third on religion in America. American religion continued to inculcate moral values for citizenship, and Americans themselves were very proud of both their religion and

their church-state separation.\textsuperscript{15} During this period and throughout the nineteenth century, church influence in politics steadily waned, but the post-Civil War amendments to the Constitution, particularly the Fourteenth Amendment, made the federal government and courts more involved in American religion.

The Fourteenth Amendment was born of a recognition that the Bill of Rights provided for certain rights that may have been protected by the federal government, but not state governments. As a result, the Amendment was written in such a way that the courts interpreted it to extend the protections of the Bill of Rights to individuals when state law did not provide those protections.\textsuperscript{16} This move placed the federal government in a position to enforce a whole host of liberties, including religious liberty through neutral separation of church and state. Thus, the Fourteenth Amendment constitutionalized church-state separation, previously only a principle in the American mind.

Finally, the Fourteenth Amendment and subsequent judicial rulings began a time of further decrease in church influence in the state. Eventually, the Amendment and the rulings established the principle of aggressive neutrality between church and state. According to Michael Sandel, this system of neutrality finally triumphed in 1947, and it has persisted since. This system is problematic, as it coincides with the liberal value of the person as a freely choosing self.\textsuperscript{17} Under such a conception, all religious activities and beliefs ought to be the result of a free choice by an individual, and there is no room for beliefs or activities undertaken through duty. Thus, because all religious activities must be the result of a free choice by an individual, government must ensure complete neutrality between church and state.

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\textsuperscript{15} Ibid., 257, 258.


\textsuperscript{17} Sandel, \textit{Democracy's Discontent: America in Search of a Public Philosophy}, 56, 62–63.
\end{footnotesize}
Now we can see the development of neutrality-obsessed separation, which represents a significant departure from the separation in early America. In early America, religion was a valuable institution for the formation of citizens and political leaders. It inculcated moral duties and principles and provided a restraint for excessive political passions. Now, as Reichley writes, the situation has changed: “In more recent times some Americans have come to regard religion as a kind of consumer value, like sports or travel, that should be available in a pluralist society but that makes no essential contribution to the moral foundation of democracy.” The role of religion as a contributor to the “good objects of society” has eroded, and secular value systems have failed to fill religion’s old role. Yet, there are still many who feel a longing for a restored role of religion in America, and they have taken action towards that end. So, we arrive at the current state of dysfunctional tension in church-state separation in America: a missing part of the formation of citizens coupled with a tension between a conservative movement that seeks to restore religion’s old role and other interests that seek to preserve the status quo.

II. The Compromised State of Neutrality-Obsessed Church-State Separation

In the present day, the liberal effort of the last sixty to seventy years to enact neutrality-obsessed church-state separation now faces mixed results. In one sense, America’s sacred public centers are no longer religious, but civil. American public life is more and more focused around malls and other commercial venues, sports stadiums, and offices as opposed to churches. This preference for the civil can be seen in the fact that Al-Qaeda chose to attack symbols of American capitalism and consumerism, American politics, and American militarism as opposed to any targets with religious symbolism on September 11, 2001. In addition, the Supreme Court has regularly held that government must be neutral towards religion and vice versa

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in order to protect the free choices of individuals with regards to their religious beliefs. Such neutrality-obsessed separation has rarely been questioned judicially.\textsuperscript{20} Beyond the judicial realm, Jefferson’s idea of a wall of separation between church and state construed as complete neutrality now has a firm presence in the American consciousness, a victory for the current form of separation.

At the same time, liberal neutrality-obsessed separation has left the ability of American politics, law, and society to deal with matters of religion significantly wounded. This principle is nowhere more apparent than in the conflict between liberal neutral separation, which hinges on the freely choosing self, and the sense that many Americans still have of religious duty and obligation. These citizens do not hold their beliefs or behave as a result of completely free choice, and so a neutrality-obsessed government and court system will find it hard to ensure religious liberty for these Americans.\textsuperscript{21} The presence of difficulty in securing a basic liberty for citizens who feel bound by religious duty is a very serious problem, and it shows a flaw in current church-state separation, but it is not the only one. A new and ongoing conservative movement seeks to place religion in a public role similar to (or even greater than) the one it had in the early republic. This movement is commonly known as the Religious Right, and it poses a direct challenge to the very existence of neutrality-obsessed separation, or possibly any form of separation.

The greatest test of, or rather challenge to, modern neutrality-obsessed church-state separation began in the 1980s when a period of awakening brought religion and religious ideals back to the public sphere after they had been somewhat bracketed in the preceding decades. Evangelical Protestants drove this new period of awakening, in a reversal of their previous stance towards the issue. Prior to the 1950s, evangelicals largely supported church-state separation, but that support withered in the 1950s through the 1970s as a reaction to events ranging from the 1954 \textit{Brown} case to the election of John F.

\textsuperscript{21} Ibid., 65.
Kennedy and an assortment of school prayer and Bible study Supreme Court cases in the decades leading up to the 1980s.\textsuperscript{22} Dissatisfied with the moral state of the country and its politics, evangelicals and others began to assert their consciences in American politics and culture, including through the political activities of ministers like Pat Robertson.\textsuperscript{23} This new political and religious movement, which persists to this day, came to be known as the Religious Right.

By the time of Ronald Reagan’s presidency, this revivalist project thrived and has continued to do so since. At the core of this movement is the belief that the law of God should be enacted in America, and that believers ought to unleash their full arsenal of political tools to realize this vision.\textsuperscript{24} As the epilogue of his book \textit{Clear and Present Danger: Church and State in Post-Christian America}, author William Stanmeyer writes “A Letter to a Christian Citizen,” virtually a manifesto of the new revivalism. Stanmeyer expresses the new revivalist dedication so clearly (and, in his fundamentalist devotion, so alarmingly), that he is worth quoting at length:

> Like an army sitting still, we become an easy target. If we do nothing about the economic, political, and legal rules that structure our public life and much of our private lives, we abandon those rules by default to the manipulation of people who have a theological agenda and a social vision hostile to our faith. We can no more stand aloof, above the fray, when “good” or “bad” laws are made than we could walk by on the other side of the road when we come upon a traveler beaten, robbed, and left half-dead in the ditch. We are called to intervene.\textsuperscript{25}

\textsuperscript{22} Ragosta, “Federal Control: Jefferson’s Vision in Our Times,” 181.
\textsuperscript{24} Ibid., 124.
Of particular note in this passage is the metaphor Stanmeyer uses of America as a mauled traveler, drawn from the parable of the Good Samaritan. For Stanmeyer and other new revivalists, asserting religious beliefs in politics is about aiding an ailing entity. To them, it is a benevolent thing to do, but in fact their fundamentalist devotion to their beliefs poses a direct threat to both neutrality-obsessed church-state separation and democracy as a whole.26

Yet, despite the problems posed by this ideology, it has had a significant impact on American politics. Those of religious conviction dominated (and still dominate) the pro-life movement and similar social movements.27 Court cases involving religious liberty, prayer in schools, religious expression in public spaces and institutions, and questions of the scope of both the Establishment and Free Exercise Clauses of the First Amendment are a frequent occurrence and they garner a great deal of public attention.28 Most alarmingly of all, the past twenty years have seen an expansion of legislative moves at the state level to bypass the federal government and the stricter neutrality practices there in order to enact laws friendlier to religion. Between 1995 and 2009, various state legislatures around the country passed 87 different laws along these lines.29 These laws are varied in both language and effects, but they nonetheless challenge the idea of a government whose role is limited with regards to religion.

So it can be seen that the movement represented primarily by the Religious Right represents a significant breach in neutrality-obsessed church-state separation and presents that separation with its greatest challenge to date. The pervading church-state separation and the new revivalism are at an impasse. Both ideologies are opposed in such a way that they cannot seem to be able to agree on the proper relationship of religion to the state and culture.

Yet, it is absolutely necessary to find a proper balanced relationship between church and state. The Founders correctly believed that religion could contribute to the formation of morals necessary in a good citizen. Indeed, in a time hostile to tradition, when these values that reinforce democracy can no longer rely on custom to persist, religion is more important than ever in its role as their incubator.\(^3\) In addition, there is no dismissing the power of religion in world affairs, and attempts to build the good society using purely secular means have been no more successful than attempts to do so using religious means. Religion, simply put, is here to stay, and it is a force that must be accounted for.\(^3\)

At the same time, government still must take caution in regards to religion, since there are dangers that come with giving religion too much power in society. Certain aspects of religion, especially their tendencies to make absolute truth claims, can be antithetical to democracy. These aspects are resistant to the democratic mindset, where consensus and compromise is key to successful governing, and it is virtually impossible to realize one’s full agenda.\(^3\)

Thus, we are left with a complex paradox that defies easy resolution. On the one hand, religion is crucial as an incubator for values and institutions that form the backbone of a democratic society, so it must be given at least some room. On the other hand, religion possesses the

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tendency to run wild in ways that could do more harm than good, so we must take care to check its power. Trying to balance these ideas with a greater emphasis on checking religion’s power has produced mixed results, so a new balance is needed.

III. The Case for Greater Deference to Free Religious Exercise

We have now demonstrated that contemporary neutrality-obsessed church-state separation is a flawed system, and while it may have a future, it does not deserve one. Therefore, we are left with the task of outlining a more effective way to construct our church-state separation. In doing so, we are presented with the challenge of properly balancing the duality of principles at the center of any church-state arrangement.

The question at the core of the quest for an effective church-state separation is one enshrined in the two clauses of the First Amendment that pertain to religion: the Establishment Clause and the Free Exercise Clause. These two clauses reference two warring principles: democratic inclusion through the prevention of any governmental religious establishment and protection for religious exercise as well as the expression of religiously informed consciences through the Free Exercise Clause. These principles, when applied without restraint, are mutually exclusive. If an emphasis is placed only on democratic inclusion, then religious expression in both consciences and policy must be suppressed and kept out of any public processes to avoid exclusion. In a similar way, complete freedom of religious conscience facilitates the creation of policies and court rulings that clearly favor a specific belief set, thereby excluding entire sets of religious beliefs and morals, a practice neither desirable nor practical in a multicultural democratic society such as ours.

Forming any relationship between church and state involves striking a balance between these two principles, and an optimal balance leans slightly in favor of religious conscience so that religion can be used to inculcate moral virtues that are beneficial to democracy while maintaining checks on religious conscience to allow government to function and prevent the establishment of a theocracy. However, even
once such a relationship is established, it must be constantly reevaluated, as the freedom of religious expression can produce new variants of religions, and democratic inclusion changes with conceptions of citizenship. The final part of this paper will argue that giving greater favor to the freedom of religious exercise and religious conscience is a reliable solution for the current problems with church-state separation, but it is not to be taken as a permanent solution.

The current liberal form of neutrality-obsessed church-state separation, to its detriment, places great emphasis on democratic inclusion as opposed to expression of religious conscience. This emphasis is based on the worry that giving religious conscience too much power in the state can work against democratic principles. Such a worry is not unfounded, since most of the world’s religions tend to make absolute truth claims along with claims that any other contrary doctrines from any other religious traditions are absolutely false. This viewpoint is antithetical to democracy in principle because democratic governing takes place as a result of deliberation and compromise; activities rendered irrelevant in the presence of absolute truth claims. The threat of this viewpoint is very real, as evidenced by the stances, actions, and popularity of the Religious Right, which seeks to make government legislation reflect Biblical moral teachings.

In response to this threat, neutrality-obsessed separation greatly favors protecting democratic inclusion by seeking to keep religion and religious conviction bracketed from public life. However, even if this move was justified in creating an effective church-state separation, it fails to keep religion out of politics and public life. (Indeed, Gorski goes so far as to credit the emergence of the

Religious Right to the prevalence of neutrality-obsessed separation.\textsuperscript{35) Since the role of a legislator is to represent a constituency and the viewpoints of those constituents, legislators from areas where the Religious Right has a strong presence can actually gain electoral benefits by bringing issues of church and state to the fore of legislative activity. Beyond the constituency scale, many recent Republican presidential candidates have had to cater to the Religious Right, since conservative evangelicals form a significant contingent of Republican primary voters that candidates need to win over for the Party’s nomination.\textsuperscript{36)

Further, neutrality-obsessed separation, by seeking to bracket religion from public life, stifles the good elements of religion for democracy by taking away key components of religious practice, leaving American religion too compromised to effectively perform its role as a moral incubator. Privatized American religion as it is now treated separates from its uses of ritual, place, and doctrine, elements that possess significant public and social aspects and are normally considered essential to a religion’s character.\textsuperscript{37) As for the beneficial role religion can play, Jefferson and many others saw it as a potent force for inculcating and sustaining moral virtue in citizens. Jefferson and Madison wanted a secular government with church-state separation, but they also clearly wanted a religiously engaged citizenry and government where religious convictions were common and frequently expressed.\textsuperscript{38) The difficulty we encounter is that many

\textsuperscript{35} Gorski, “Religious Pluralism and Democratic Inclusion: The American Recipe for Peace,” 624.
of the moral virtues that Jefferson and Madison believed religion could cultivate and maintain are based in doctrine or tradition of some other form, elements that are now compromised in American religion, primarily due to its bracketing by neutrality-obsessed separation.

It seems obvious, after tracing all of the faults in American religion as the result of a church-state separation that places a great emphasis on protecting democratic inclusion, that the metaphorical scales are in fact out of balance, and that they must be shifted to give slightly more favor to protecting religious conscience and religious exercise. Beyond simply attempting to alleviate some current problems American church-state separation faces, there are also other practical reasons for such a shift. First, American religion is becoming an increasingly decentralized and varied phenomenon. The advent of so-called “New Age” spiritualities and individual spiritualities has introduced a great deal of subjectivity into American religion combined with an increasing distaste for established religions, leading to the point that American citizens now hold a plethora of different religious beliefs. Moreover, some of these beliefs are radically different from the Christianity that was historically prevalent in the country.39

As the spectrum of American religion morphs and comes to encompass non-traditional belief systems, the number of de facto religious minorities in America grows. These minorities can be quite small, so small that they might be left out of the representative system or ostracized for what might be deemed bizarre or dangerous beliefs. Thus, the potential for exclusion from the democratic process grows with the decentralization of American religion, and so the government is obligated to intervene in some way, probably by becoming more accommodating to religious conscience. This ultimately means that free religious exercise may occasionally require government support,40 an egregious violation of neutrality-obsessed separation, but a necessary one if the state chooses to continue its rightful practice of ensuring equal participation in the democratic system.

40 Ibid., 144.
Second, free religious exercise in principle requires that citizens be able to act on their religious consciences in arenas of public life. As stated before, religion exerts a powerful influence on beliefs and morals, in some cases being the primary or even sole influence in their formation. Citizens whose beliefs have been informed by a religious tradition often take these beliefs very seriously, therefore to bracket such beliefs or morals by virtue of their being based in religion is an act of exclusion against those who consciences were formed in a strongly religious context. As this paper has emphasized repeatedly, religious conscience must be checked, but pure neutrality-obsessed separation has no such check, preferring to simply bracket religious conscience from public life. Free religious exercise simply cannot be protected when religious conscience is completely bracketed.

What this paper has laid out is the need for a shift of emphasis and a rethinking of the way the United States conducts and conceives of its church-state separation. The liberal neutrality-obsessed separation born of American policy and jurisprudence since the end of World War II simply cannot stand, since it leaves American religion bracketed and too compromised to be of benefit. Religion, a potent force for the inculcation and preservation of first principles and civic virtues, is almost unable to perform this purpose because religious conscience and religion itself has been bracketed from American life and broken down, losing some of its crucial characteristics. What is needed is a fundamental shift in jurisprudence and government policy that will give more deference to religious conscience, but not to too great an extent. Such a shift will allow religious conscience and religious influence to return to the public sphere, where it can continue to work towards the purpose that Jefferson and many of the Founding Fathers wanted it to fulfill. While the circumstances in which Jefferson and the Founding Fathers thought about religion are long gone, their principles may still very well provide one of the best frameworks for church and state today.

To be sure, a shift in values pertaining to American religion is a change that possesses a cultural facet as well as a governmental one,
rendering such a shift a difficult and likely time-consuming process. The processes that built neutrality-obsessed separation took decades, if not centuries, to unfold, and so it is realistic to expect their reversal to take at least as long. However, it is apparent after analyzing the flaws of neutrality-obsessed separation that such a change must occur, regardless of the time spent enacting it. At the same time, this change has many variables, and so the details are far too complex for a paper like this. Such questions will be debated by, researched, and argued over by policy experts, lawmakers, and judges for decades to come.

Nevertheless, this shift is possible, but it remains important to keep in mind that the outline of a solution this paper proposes, while it is a good one that can work to fix many of neutrality-obsessed church-state separation’s problems, cannot be expected to permanently solve the issue of church and state. The history of this relationship is a long and complex one, and if it possessed an easy solution, that solution would likely have been found by now. Due to the representative nature of politics and the myriad of public opinions concerning religion in the electorate, we can expect to see issues of religion come up repeatedly in the political process, since legislators and administrators representing these various beliefs about religion are bound to emerge over time. So, for the foreseeable future, the debate over church-state separation will continue as it has for centuries, if not millennia, with the scales holding the two competing principles of democratic inclusion and freedom of religious exercise and conscience moving back and forth. However, if American democracy hopes to collect the benefits from a religious citizenry while preserving the positive aspects of her democracy, the scales must tilt slightly more in favor of freedom of religious conscience in the end.

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DeRolph v. State

How Limited Government vs. Large Government Debates Affect Race and Education in Cincinnati

Jonathan S. Hogue

Literature Analysis

The Philosophy, Politics and the Public Honors Programs (PPP) require students in their final undergraduate year to examine and analyze an aspect of the public. During this analysis, students are encouraged to engage philosophical, political and social commentary in order to comprise a holistic understanding of the public sphere.

For this project, the title is “DeRolph v. State: How Limited Government vs. Large Government Debates Affect Race and Education in Cincinnati.” The analysis explains racial inequality through a philosophical and political lens to ask if large or limited government philosophies affect educational standards for Cincinnati’s communities of color. Based on a review of a range of primary and secondary texts, readers will note that an active government approach is necessary for maintaining education equality in the public sphere.

The thesis’s literature derives from three sources: legal documents, social commentary and philosophical works in order to meet the multidisciplinary requirements of the PPP program.

The thesis’s legal background contains information from the Ohio Constitution, prominent law journals and documents crafted by legal teams that were a part of the DeRolph v. State. For example, Obhof’s extensive work in “DeRolph v. State and Ohio’s Long Road to an
Adequate Education” explains DeRolph in detail. The article reviews the DeRolph from a legal scholar’s perspective and describes information in an anecdotal form, which is beneficial for readers not accustomed to the Court’s complex language. The follow is an example: “In negative terms, [education inequality] meant that a student's success [would] depend on circumstances outside of his or her control, such as the geographic location or wealth of the family.”

Obhof’s work along with the Ohio Constitution and Bricker articles provide the technical and legal perspective that is necessary for readers to understand institutionalized discrimination in Cincinnati, income and race inequality that impedes the education system from providing a “through and efficient” experience for every pupil.

Following these legal explanations, the thesis contains numerous arguments from social and political commentators who follow education reforms in American politics. Readers will find sources from newspapers such as the New York Times and the Atlantic, data from Gallup polls, excerpts from academic journals, government statistics, and anecdotes from educators in Cincinnati’s most marginalized communities.

These sources are crucial to the argument because they represent the myriad of opinions that surround racism and education reform efforts. A highlighted article that represents the necessity of these articles is Wesley Hogan’s “Cincinnati: Race in the Closed City.” Hogan and others follow the legal discussion surrounding instances like DeRolph and explain the racial and social tensions that affect educational quality for students of color. Hogan’s article provides background on issues of inequality that range from education and housing to employment. All factors are important in showing why communities of color are marginalized in Cincinnati, and Hogan’s perspective

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supports the argument that communities that lack a “through and efficient” education will be victims of cyclical marginalization.

Also, Hogan and several authors take controversial stances on past policies directed at creating more inclusive cities. Hogan’s explanation of controversies and Cincinnati’s failure to fully incorporate people of color into civic life gives insights into how the city’s mistreatment of students stems from a system of government that rewards discriminatory behavior and fails to provide an education system that ignores racial biases. It also illustrates how commentary from outside contributors gives readers a balanced approach to understanding DeRolph’s implications.

A large section of the thesis discusses the philosophical tensions that influence political debate. Finally, readers will see arguments from John Locke and Baruch Spinoza in order to understand how conservative and liberal Cincinnatians might argue for policies in the public sphere. In the text, the thesis states, “When discussing philosophy’s placement in American politics, it is important to examine debates about how the relation of government, individual pursuits and the public’s general welfare can secure a harmonious state. In terms of a conservative versus liberal philosophical debate, literature by John Locke and Baruch Spinoza are examples of philosophy’s quest to answer political questions that align with American political ideologies.” Without this examination, the thesis would fail in its quest to explain how political ideologies affect racism and education in the public.

The goal is for readers to gain a deeper understanding of educational inequality in the Queen City. As stated by numerous scholars, there is not a single remedy to solve educational inequality or racism. However, the difficulty in finding remedies does not give citizens or government the excuse to remove themselves from the debates that are necessary to improve the lives of people in the public sphere.
Need For *DeRolph*

*Education then, beyond all other devices of human origin, is the great equalizer of the conditions of men, the balance-wheel of the social machinery.*

Government is a necessary institution. There is no other body in civic society that has the ability to defend liberties, provide for the general defense and ensure that citizens’ basic needs are met. Government’s placement in society is secure. However, while Americans argue that government’s existence is necessary, political matters outside of providing basic needs are cause for intense debate. The philosophical difference between an active, large government and a small, limited government is at the heart of American politics and how citizens allow government to manage civic institutions like education.

In 1991, a complaint filed by the Ohio Coalition for Equity & Adequacy of School Funding in Perry County challenged the constitutionality of Ohio’s funding system. For the next 12 years, the plaintiffs and state officials debated about how local and state government officials should not only use government authority to support equitable education standards, but also provide districts with the authority they need to prescribe changes necessary for their pupils. An examination of this debate in Cincinnati shows that the struggle for an equitable education is a challenge city and state leaders still must address for the sake of students of color. With a careful examination of the litigation filed by the Ohio Coalition, individuals can see how limited government and large government debates affect not only personal liberties, but how people of color are disproportionately marginalized by an inequitable education funding model in Cincinnati.

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In 1997, the Ohio Supreme Court heard arguments in DeRolph v. State. The Court examined communities’ reliance on property taxes for funding sources and the argument that Ohio violated the state’s constitution’s clause that mandates “a thorough and efficient system of common schools throughout the state.” The DeRolph court ultimately ruled the funding model was unconstitutional and instructed the legislature to reform the state’s educational funding system. Almost 20 years later, little action has been taken to implement the Court’s ruling.

Today, Cincinnati’s communities of color suffer from excessive income inequality. More than 53.1% of Cincinnati’s children live in poverty. Out of the 14,000 families that live in poverty, data show that 76 percent represent Black families. For yearly salaries, Black Cincinnati families make only $24,272 compared to the $57,481 for whites. If school districts rely on property taxes for funding, then communities of color where a majority of the citizens are below the poverty line will suffer compared to white regions in tristate.

What Is A Quality Education?

Americans agree that a quality education promotes equality in the public. Politicians, business leaders and average citizens believe in the idea that an education provides individuals the opportunity to reach their God-given potential if they properly apply themselves and work hard. Despite the rise in class and race inequality in America, across social boundaries 94 percent of citizens believe that a quality education is important to civic life.³

In its very governmental code, Ohio asserts that a quality education is necessary. “[Ohio] will secure a thorough and efficient system of

common schools throughout the state.”

After 1975, education spending decreased, and school districts were forced to diversify ways students would receive a sufficient education. Districts proposed tax levies, petitioned state leaders for additional funding and cut local costs to meet goals, but educators’ ingenuity in raising dollars could not avoid the inequality present in Ohio’s funding models.

Judicial observer Jerry Obhof states that the struggle for an equitable education began with petitions to intervene in education funding in the 1920s. According to Obhof, 1923 *Miller v. Korns* “challenged the state’s practice of appropriating tax revenues to apportioning money raised in one school district to be spent in another district [as] unconstitutional.” In a ruling that would be strengthened with the decision *DeRolph v. State*, the Ohio Supreme Court in *Miller v. Korns* stated that the "thorough and efficient" clause "calls for the up building of a system of schools throughout the state, and the attainment of efficiency and thoroughness in that system is thus expressly made a purpose, not local, not municipal, but statewide."  

The Court’s ruling had an immediate effect on how Ohio’s legislature addressed education inequality. In 1935, the Ohio legislature instituted the Foundation Program Funding Model and provided large sums of tax dollars to all school districts. The Foundation Program allocated to “each district a certain minimum level of funding, provided the district [met] its own minimally required effort by imposing an agreed upon minimum tax rate.” Obhof states that in the next four decades, state legislators used their authority to increase funding at a record pace. During the 1960s and early 1970s, Ohio

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6 Ibid, 90
provided roughly one-third of the operating costs for school local districts.\(^7\)

In the mid-1970s, Obhof explains, attention shifted from efficiency to equality. Thirty states were challenging the use of property taxes as the main revenue source for school funding. Ohio, not removed from the national debate, faced criticism from opponents of income inequality that argued the state’s funding model in, “negative terms, meant that a student's success [would] depend on circumstances outside of his or her control, such as the geographic location or wealth of the family.”\(^8\)

From the 1920s-1970s, individuals argued that the Court should take an activist role, but justices engaged in judicial restraint and ruled that problems regarding funding inequalities were attributable to issues of taxation that were outside of the Court’s jurisdiction.

In 1976, according to Obhof, the Court’s approach to education changed when, “the Board of Education and Superintendent of Schools of Cincinnati, along with parents, students, and other individuals, brought an action for declaratory judgment against the State of Ohio.”\(^9\) The plaintiffs argued in *Board of Education V. Walter* that Ohio’s funding scheme violated the Ohio Constitution’s Equal Protection Clause and the "thorough and efficient" standard of the Education Clause. The lower courts favored the plaintiffs; however, the Appellate Court partially reversed the decision, stating that the state did not violate the “thorough and efficient” clause, but it was operating unconstitutionally in terms of the equal protections provision.

Obhof argues this legal precedent helped “the Court [to argue] that education was a fundamental right, and that there was no compelling state interest justify the disparities in funding.”\(^10\) Following the

\(^7\) Ibid, 90  
\(^8\) Ibid, 90  
\(^9\) Ibid, 90-92  
\(^10\) Ibid, 92
Appellate Court’s decision, the Ohio Supreme Court, in a continuation of legal precedent, ruled that the education disparity was a taxation issue rooted in "the way in which Ohio has decided to collect and spend state and local taxes rather than ... the way in which Ohio educates its children."\(^{11}\) However, the Court’s “unambiguous statement that it had jurisdiction in such cases … acknowledged that it is the province of the legislature to determine a funding scheme. But, it stated that where legislative enactments violate the fundamental law (such as the requirements of the Ohio Constitution), the courts have not only the power, but also the duty, to declare such enactments invalid.”\(^{12}\)

Advocacy groups like the National Education Access Network argue the Walter decision was crucial to DeRolph because, “the court left the door open for possible future ‘adequacy’ litigation when it said that a funding system would violate the constitution if ‘a school district was receiving so little local and state revenue that the students were effectively being deprived of educational opportunity.’”\(^{13}\) The Walter Court’s decision had an immediate effect on the education system. Following the Court’s ruling the General Assembly created an Education Review Committee which worked in conjunction with an Equal Yield Formula legislators used when drafting education budgets. Obhof argues that Ohio legislators, following a national trend, increased standardized testing, teacher in-class goal requirements and facility updates in schools across the state in order to create a more “thorough and efficient” system. Initially, the Court deemed the legislators’ actions to be constitutional. The Education Review Committee followed the Equal Yield Formula which “recommended funding of $715 per student ... [but] was easily\(^{11}\)\(^{12}\)\(^{13}\)

\(^{11}\) Ibid, 90-93
\(^{12}\) Ibid, 93
surpassed by establishing a funding level of $960 per student.” Obhof explains “schools were also eligible to receive up to an additional $420 per student through the second tier of the formula” which convinced the Court that the legislature fulfilled its duties under the Education Clause because the Equal Yield Formula enabled districts to meet the minimum standards set by the Education Review Committee.”

Obhof writes that three years after the Walter decision, the legislature eliminated both the Equal Yield Formula and the Education Review Committee that were crucial to the Court's wishes. In 1990, the legislature reintroduced the Foundation Program, which was designed to allocate $4,000 per student in 1992. However, in the 1992-1993 fiscal year, the state inadequately provided $2,817, and left individual districts with the job of cutting costs in order to meet the state’s annual goals. While it is legal for school districts to allocate extra dollars for education budgets, Obhof claims that the issues post-Walter and prior funding battles left some students at a disadvantage. The inequality of district wealth and improper state education funding encouraged Ohioans to challenge the state in court in an action that would lead to DeRolph v. State.

On December 19, 1991, a coalition of five Ohio school districts filed a complaint in the Perry County Court of Common Pleas regarding Ohio’s funding model. The Ohio Coalition for Equity & Adequacy of School Funding, the legal team that represented the five school districts, argued that the state’s existing model for education funding failed to secure high quality educational opportunities for Ohio’s students because the reliance on the use of property taxes as the main

15 Ibid, 93-94.
16 Ibid, 90-97.
source of school district revenue encouraged inequality in the education system.

This suit against Ohio was a continuation of trend of similar lawsuits and legal precedents that were created in the 1990s. *The New York Times* reported in March of 1990 that low-income school districts across the nation were turning to the judicial branch for guidance on ways to find “equity in school finance.”\(^{17}\) In the span of 14 months, Kentucky, Montana and Texas high courts ruled that their states’ education funding models were unconstitutional. Describing a situation that also existed in Ohio, the *Times* stated that:

> Nationwide, the traditional property-tax system of raising money for education locally has been under assault for 20 years, and vast changes have resulted. In 1979, for the first time, state governments contributed more money to education nationwide than local school districts. But the state courts are finding that the legislatures have not sufficiently reduced the wide variance in spending among districts. [The result is …] poor school districts often tax at higher rates than rich ones, the lack of valuable property means they can still fall several thousand dollars short on spending for each pupil.\(^{18}\)

Litigation encouraged judicial activism across the country to galvanize legislative bodies. Conservatives argued this movement was fueled by “judges allow[ing] their personal views about public policy, among other factors, to guide their decisions.”\(^{19}\) At the federal level, the House Education and Labor Committee “introduced a bill in January [1990] that would bar states from receiving federal education funds if they had big disparities in what is spent among school districts.”\(^{20}\) For the *DeRolph* team, the national shift on education

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\(^{18}\) Ibid


solidified their reasoning to challenge Ohio in court and pressure lawmakers towards adopting new laws for funding models.

On October 25, 1993, the trial in *DeRolph v. State* began. The initial trial included 70 witnesses, more than 500 exhibits and concluded after 30 days of argument. In July of 1994, Perry County Judge Linton Lewis Jr.’s ruling stated that, “education is a fundamental right and that Ohio's system of school funding is unconstitutional.”

Initially, political leaders were unreceptive to Judge Lewis’s ruling on the state’s funding model. Republican Governor George Voinovich instructed state defendants to file an appeal against the lower court’s ruling. In August of 1994, the Governor’s Office, the Ohio State Board of Education and other state-sponsored education agencies argued and won an appeal of the lower court’s ruling.

Following the overturned decision, the Ohio Coalition for Equity & Adequacy of School Funding filed an appeal to have the Ohio Supreme Court accept jurisdiction of the case. In January 1996, the Ohio Supreme Court agreed to the coalition’s request and began hearing arguments on the *DeRolph* case. The court listened to oral arguments for seven months from members of the coalition and state officials. On March 24, 1997, the Ohio Supreme Court, in a 4-3 decision, ruled in favor of the coalition stating, “that the current funding model [is] unconstitutional and orders a ‘complete, systematic overhaul’ of the system with enactment required within 12 months by March 24, 1998. The Court remands the case to the trial court to conduct a hearing and issue findings as to whether the anticipated remedial legislation satisfies the mandates of the Ohio Supreme Court.”

On the state’s motion for Reconsideration and Clarification, the Ohio Supreme Court ruled:

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22 Ibid.
1) local property taxes may be used as part of the funding solution, but they may no longer be used as the primary source of funding for a thorough and efficient system of schools; 2) school district borrowing may continue through March 23, 1998; and 3) the Supreme Court will not retain jurisdiction of the DeRolph case because the trial court is in the best position to be a trier of fact and gatherer of evidence and to make decisions about the progress and constitutionality of the enacted legislation. The Supreme Court states that “it would be the trial judge's responsibility to rule on the constitutionality of the enacted legislation and to render an opinion. Any party could then appeal that decision directly to this court for final determination.”

Conservative commentators argue the Ohio Supreme Court’s decision in DeRolph v. State I was an example of judicial activism. The Ohio Supreme Court, like Kentucky, Montana and Texas courts, used the judicial branch as institution to rewrite policies prescribed by elected lawmakers. For the judicial branch to instruct and give the legislature a mandate to reform education spending models was a landmark precedent in Ohio. Following the court’s April decision, the judges ruled that the legislature had until July 1, 1998 to revise funding legislation. In a motion filed in March 1998, the plaintiffs argued that recommendations from state officials following the decision were “inadequate and will have no effect on the operation of the State’s school funding laws.”

Echoing sentiments from other school districts that filed similar petitions, the Coalition told the Court:

It is now the State’s responsibility, in the remedy phase of this litigation, to purge itself of the finding of unconstitutionality by affirmatively demonstrating that it has established an ‘entirely new school financing system’ that is consistent with the constitution and this Court’s decision of one year ago. Plaintiffs urge the Court that if the State has appropriately answered the DeRolph decision then the State defendants have nothing to fear from immediate judicial

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23 Ibid.
24 Ibid.
review. Plaintiffs further state that if the State has not appropriately answered the *DeRolph* decision then delay is intolerable. 

In a sign of solidarity with the legislature, the court understood the reforms were a “burden of production,” but “proof must show by a preponderance of the evidence that the constitutional mandates have been fulfilled.”

Following the Court’s mandate, the legislature failed to act. Education non-profits, school officials and state legislators, angered by inaction, filed a Brief of amici curiae with Judge Lewis on behalf the plaintiffs in *DeRolph I*. In retaliation, state officials filed a motion to strike portions of amici briefs submitted by legislators and the Ohio Association for Gifted Children - stating that both briefs contained “information extraneous to the record and are beyond the scope of an amicus brief.” In February 1999, Judge Lewis ruled that the state’s response to *DeRolph I* was unconstitutional. State defendants, then Republican Governor Robert Taft, Senate President Richard Finan, and House Speaker Jo Ann Davidson filed two amicus briefs with the Ohio Supreme Court in an effort to block Judge Lewis’s ruling. Subsequently, 16 briefs were filed, which forced the Court to hear additional arguments for *DeRolph II*.

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25 Ibid.
26 Ibid.
27 Cornell University Law School: Legal Information Institute, “Amicus Curiae Definition,” accessed April 8, 2015, https://www.law.cornell.edu/wex/amicus_curiae. Definition: Latin for "friend of the court." Frequently, a person or group who is not a party to a lawsuit, but has a strong interest in the matter, will petition the court for permission to submit a brief in the action with the intent of influencing the court’s decision.
29 Ibid.
Similar to the previous decision, “the Supreme Court issue[d] [an] opinion holding that Ohio’s school funding system remained unconstitutional and [gave] the State until June 15, 2001 to bring the system into compliance. The Court retained jurisdiction to review the legislation enacted in response to its remedial orders.”

In a continuation of the debate, the Court allowed additional amicus briefs to be filed. Then Congressman Ted Strickland and 15 groups filed an amicus brief in support of the plaintiffs in DeRolph II. In response to Strickland’s efforts, five briefs were filed in support of the state. The briefs reopened arguments for the Court to review a case for DeRolph III.

In DeRolph III, the Court issued the following ruling: “Ohio’s school funding system is unconstitutional, but [the Court] orders State defendants to alter the methodology for determining the per pupil base support and accelerate the phase-in of parity aid, at which point the system will become constitutional.” In 2002, additional appeals caused the Ohio Supreme Court to rule for a fourth time on the DeRolph case. In DeRolph IV, the Court’s ruling struck down DeRolph III recommendations and made DeRolph I & II the standing law of the case. In an effort to discourage future litigation, the state filed a Complaint of Writ of Prohibition to the Court. The complaint, granted by the Court, “prohibited the trial court from conducting the status conference sought by the DeRolph plaintiffs and foreclosed any further proceedings in the case.”

Efforts were also made to move the discussion to the U.S. Supreme Court, but justices denied the plaintiffs’ petitions.

DeRolph v. State made a significant impact on how citizens viewed government’s role in managing local civic institutions. Ohioans can see how an activist Court, using a large government approach, favors greater intervention that in turn benefits the welfare of Ohio’s students. Limited government proponents, represented by Republican

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30 Ibid.
31 Ibid.
leadership during the case, viewed the Court’s ruling as a threat to the political autonomy of school districts to create laws the adequately reflect the needs of their students. The debate regarding the perception of limited and large government philosophies continued after the DeRolph ruling, but the ideas presented would not hold the same weight had it not been for the plaintiffs. These men and women challenged government to reevaluate its role in creating a “thorough and efficient” school system for all of Ohio’s students.

Race in Cincinnati

There is a palpable sense that Cincinnati is a divided city. Visitors to the city’s urban neighborhoods observe dilapidated homes, crumbling infrastructure and signs of economic distress, while a five-minute drive in the opposite direction shows neighborhoods with well-kept parks, people walking dogs and signs of robust businesses. These differences affect the morale in a neighborhood and the manner in which citizens feel their communities have the ability to address economic and political challenges.

Following the 2008 recession, numerous non-profits, businesses and government agencies have focused on helping Black America return from the economic brink. Today, the U.S. unemployment rate is 5 percent.\textsuperscript{32} For Americans outside of the general figure, the unemployment rate’s dramatic fluctuations are little cause for celebration. For Hispanic and African Americans, the national rate does not represent minorities’ experience. March’s Hispanic unemployment rate was 5.6 percent and 9 percent for Black Americans. This 4 percentage point difference highlights racial disparities affecting funding for public education and racial inequality in America.\textsuperscript{33}


\textsuperscript{33} Ibid.
For Cincinnati’s Black community, the struggle for an equitable economy has been years in the making. In “The State of Black Cincinnati,” the Urban League of Greater Southwestern Ohio illustrates the disparities that impede African Americans from attaining sustained growth by citing local unemployment figures in their report for 2015. The report says, “Overall, unemployment figures have decreased significantly for workers in Cincinnati, to 4.3 percent, according to recent government figures, yet the unemployment rate for African Americans is still in double digits. African Americans continue to lack significant economic parity with Cincinnati’s majority community.” The Urban League finds it difficult to encourage funding for minority businesses and disagrees with Cincinnati leaders’ conservative policies. Its report concludes, “This reality makes it hard for African Americans to be optimistic that genuine [economic] progress is possible.”

The morale of Cincinnati’s Black communities has been decimated by years of economic injustice and the lack of representation in the Cincinnati’s business and non-profit sector which has created a segregated system that ignores minority citizens’ needs.

Noting low community morale, the Urban League conducted a series of surveys to gauge how Black Cincinnati viewed the city’s affairs. Responses to three questions stood out in the survey: Rate Cincinnati as an Inclusive and Welcoming City, Rate the Quality of Life You are Experiencing Today and Rate Your Overall Job Opportunities Currently available in Cincinnati. In each poll, more than half of Black respondents’ experiences were more negative than those of whites, Hispanics or Asians questioned in the survey.

Morale & Education

For disadvantaged communities, education is a means to progress. Blighted communities of color rely on the success of a quality education to give students tools necessary to compete in an economically competitive city such as Cincinnati. The pain of poverty is not removed when students enter the classroom. For students of color, particularly Black students, personal and family issues stemming from inequality in the community impede students from retaining information and performing at the same level as counterparts in white communities. Through data and accounts from educators, community groups and non-profits, individuals can see the correlation between economic underdevelopment and the effect it has on the ability of communities of color to be educationally competitive in Cincinnati.

The Urban League reports that of the 50,000 school aged children who live in Cincinnati, “about 33,000 students, preschool to 12th grade, attend Cincinnati Public’s 55 schools.”

Data show that of Cincinnati Public School’s 33,000 students, 63 percent or nearly 23,000 students are Black and 73.4 percent or 24,000 students are from economically disadvantaged families. Cincinnati Public Schools working with a smaller tax base are at a structural disadvantage compared to affluent suburbs with larger tax bases outside of the region. This resource drought accounts for the reason why only two in ten Cincinnati public or charter school students attend high performing schools, and the district’s 73.6 percent four-year graduation rate is more than eight percent lower than the state average.

36 Ibid, 65.
The Urban League argues expectations about education are low because discrimination and inadequacy have become the norm for communities of color.

A K-12 education is compulsory, so we know [minority] children are held accountable for attending school. However, the community’s expectations must exceed that requirement. Indeed, they must go beyond even what the state reports on an annual basis. The question is this: Is the quality of the K-12 education our students are receiving worthy of supporting the community’s hopes for its youth? The community must demand evidence of whether the K-12 education our students receive adequately prepares them for college or career in a manner that motivates them.\textsuperscript{37}

Education in communities of color has the opportunity to be a great equalizer if it is properly administered by civic institutions. In a discussion about disparity in the public, Wesley Hogan wrote in his 2001 article, “Cincinnati: Race in a Closed City” that Cincinnati’s decline has hurt Black communities’ ability to progress. “Cincinnati has been in decline for more than 40 years.”\textsuperscript{38} Poor Black communities lack the power to effectively respond, and there are few white allies.” Note that Hogan, like the Urban League, argues that inadequate support from leaders or allies is largely responsible for the unequal conditions facing African Americans in Cincinnati.

The institution of public education should not be administered based on color, but on a child’s desire and ability to learn. Black students in Cincinnati should not be required to obtain their education from an institution that lacks allies from the racial majority and operates on a funding model that disrespects their rights as citizens. As Hogan states, “Cincinnati tells us that our places require that our citizenship become defined not so much in what we are against, as in what we are

\textsuperscript{37} Ibid, 66.

for. More than voting or keeping abreast of current events, citizenship carries the obligation, the duty, the opportunity to serve in the ordinary, routine, quotidian moments and events of our lives.” If civic institutions respect their role in administering a proper form of education, then communities of color can maximize their civic power to fulfill their duty to Cincinnati’s civic affairs.

Education is civic tool necessary for an equitable means of progress. Civic society does not succeed when citizens use talents selfishly, but rather works best when the city finds innovative ways to incorporate all of civic society’s talents into the social framework and create a place where everyone’s God-given abilities are nurtured and allowed to grow. It is then the role of public institutions, such as education, to work in a colorblind fashion so that communities of color do not witness “their citizenship increasingly disconnected from the people and places in which they live.” Public institutions failing to administer a “thorough and efficient” education enhance this disconnect and codify discrimination through law and customs that have no place in Cincinnati.

Philosophy’s Relationship to Citizenship

Citizenship is the common thread that connects all Americans. We are a nation bound not by race or religion, but by the shared values of freedom, liberty, and equality.

40 Ibid, 27.
America is a place of diverse people and ideas. Scholars and citizens alike agree the United States and its imaginative citizenry are examples of how coalitions connect the needs of the individual to the progression of overall society. While coalition building usually takes place in political environments, Americans ignore non-political institutions’ roles in educating, motivating and challenging systems of power ability to encourage social advancement. Public education is a prime example of a non-political institution that is crucial to social progression because it is necessary for the creation of a public that respects the idea of citizenship and its ability to share values which support freedom, liberty and equality among the citizenry. Cincinnati has struggled to use education to support equality in its citizenry. Today, Cincinnati’s citizenry struggles to capture the essence of what an efficient education system’s role is in safeguarding liberty for communities of color. Political polarization and unfair systems of power have eroded public education’s ability to create virtuous students who are prepared for numerous challenges in and outside of the classroom. Regardless of conservative or liberal ideologies, the American value of equal opportunity requires government has to play a role in ensuring civic institutions, such as education, are properly supported to give every citizen the tools necessary to fulfill their civic duty.

American Political Ideologies & Philosophical Discussion

To understand how civic institutions and government work together, individuals must review the political and philosophical arguments that guide popular discussion. In terms of education, local government is an active player. When citizens discuss how government should function, most responses follow a conservative or liberal approach to governance. In the article, “What Americans Mean When They Say They're Conservative,” Economist author Connor Freidersdorf states American conservatism is “an embrace of localism, community and family ties, human scale, and a responsibility to the future [which is

supported by] a desire to be left alone by government, often coupled with a belief that being left alone is a natural right.”\textsuperscript{42} Conservative principles are associated with limited government because they argue it supports individual advancement. Liberal Americans argue in favor of the concept of “a strong role of government in regulating capitalism and constructing the welfare state” for the advancement of others.\textsuperscript{43} American liberalism slightly departs from the traditional definition, but it is associated with the idea of a large, active government to care for the welfare of citizens. These ideas encapsulate how Americans, particularly Cincinnatians, view government’s role in civic affairs.

When discussing philosophy’s placement in American politics, individuals must examine debates about how government, individual pursuits and general welfare secure a harmonious state. In terms of a conservative versus liberal philosophical debate, individuals can review literature from John Locke and Baruch Spinoza as examples of philosophy’s quest to answer political questions which align with American political ideologies.

John Locke’s writing had an indelible impact on Western political philosophy. During his lifetime, Locke was closely associated with the English Whig political party that argued for a strict constitutional adherence that acutely defined government’s role to balance power with the public. His philosophical contributions focused on natural rights, property and the role government has in maintaining personal liberty. In \textit{Two Treatises of Government}, Locke argues individuals are free “to follow [their] own will in all things…and not to be subject to the inconstant, uncertain, unknown will of another man.”\textsuperscript{44} For conservative Cincinnatians, Locke’s words resonate with political debates on education.

Locke argues the state of nature provides individuals with undeniable rights which are separate from government’s authority. In the natural world, individuals tacitly consent to a social contract or agree to follow the customs and norms supported by the public. This consent provides individuals with the ability to exercise their freedoms in ways that supersede government’s ability to regulate the minute affairs of everyday life. For Lockean conservatives, state government is not a part of the community’s day-to-day function. Individuals at the community level possess the ability to exercise freedom to demand remittance from, “he who has suffered the damage has a right to demand in his own name, and he alone can remit: the damned person has this power of appropriating to himself the goods or service of the offender, by right of self-preservation, as every man has a power to punish the crime, to prevent its being committed again, by the right he has of preserving all mankind.”

Locke contends that in a state of nature everyone is his or her own judge and jury. If inequality is a public issue, Lockean conservatives argue individuals have the right and necessity to obtain remittance for wrong doings and preserve their status in the natural world. Government does not possess power to regulate local issues like educational inequality, because Locke argues, government’s purpose is limited for “the preservation of property being the end of government, and that for which men enter into society.” According to a Lockean conservative, combatting education inequality is not in the state government’s power. For education to properly cultivate virtuous citizens, it is important for the institution to teach in a manner which does not “harm another in his life, health, or liberty [because] all men are naturally in…a state of perfect freedom to order their actions.”

The ruling handed down during the DeRolph v. State decision rejects devolution of power to local municipalities to allocate education funding. A conservative could argue it is the role of a virtuous education system to act in “the name of such actions as are

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45 Ibid, Ch. 2 papa 11.
47 Ibid, Ch.2, par.6 & Ch.2, par.4.
most conducing to the good of the society.”

If individuals in affluent, white municipalities are economically ahead of minority districts, then by Lockean philosophy, their funding should not be decreased to accommodate for inequalities that are outside of that community’s control, such as hiring discrimination, lack of economic development and effects of years of racial segregation. Lockean Conservatives argue these are past issues that must be resolved by individual communities by prescribing laws which reflect the needs of their residents.

For philosophically liberal Cincinnatians, Baruch Spinoza is a thinker they can cite in an effort to answer Lockean calls for restrained government in education. Writing from a religious perspective, Spinoza argues that individuals do not possess the ability to properly regulate passions on their own. Rather, Spinoza contends it is the role of government and laws to work in an active manner for the general welfare of all citizens in the public.

Spinoza writes, “men are not always able to regulate their affairs with sure judgment.” In Spinoza’s argument about the natural world, individuals act in ways that negate social welfare and preserve their advancement of the need of the whole. It is not the solely the fault of the individual, but the blame falls on passions which supersede the public’s ability to act in a fair and equitable manner.

In terms of education at the local level, Spinozian liberals argue affluent municipalities who pool large amounts of wealth are incapable of “pursu[ing] things and judg[ing] them to be in their interest merely because they are carried away…by their passions – which have no regard for other things.” A lack of civic regard

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49 Definition of philosophical passions: inclination unmanageable; break the psychological.
51 Ibid, Ch. 5, par.8.
removes citizenship and the need for coalition building from the public. It is in the best interest of affluent school districts to encourage educational equality for the entire state because all are members of the same civic body. Spinoza’s arguments are partially in agreement with Locke in the sense that both men believed freedom allowed individuals “to accept their own opinion” on affairs and argue that the beliefs of each work well “for his own gain or loss.”

The difference comes from Spinoza’s argument that freedom’s place in civic affairs can come at a price if government is incapable of restraining passions that do not promote the general welfare. “No society can subsist without government” because the public needs “laws which moderate and restrain desires.”

Spinozian liberals would argue that the Court’s decision in DeRolph v. State aligns with their argument that government should restrain economic and unjust passions from disrupting equitable advancement. Affluent school districts receive exorbitant funding, to some extent, because of unjust economic practices and government policies. Data show Cincinnati’s communities of color have not received the same amount of economic, political and civic support as white counterparts, which in turn created a climate where communities of color fail to progress economically. In an active, large government approach, the Court’s mandate that local property taxes should not be the determining factor of a child’s education limits the ability of economic inequality to impede the state from administering a sufficient education system. For communities of color who are victims of unfair passions, active, large government is necessary if equality is to be maintained and citizenship of students of color is to be respected by the citizenry at large.

The Road Ahead

In terms of the future, there is not one simple answer to Cincinnati’s problems with education and racial inequality. The courts, Urban League and philosophical arguments represent a fraction of the

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52 Ibid, Ch.17, par.4.
53 Ibid, Ch.5 par.8.
problems facing Cincinnatians of color. For this project, the purpose of the work is to argue for a more inclusive public dialogue which incorporates ideas from a myriad of sources in order to cultivate a more virtuous Cincinnati.

For Cincinnatians who battle education inequality, the fight is more complex than the data represent. For instance, in the neighborhood of Evanston, more than 68 percent of the community is Black. In terms of economic development, a majority of Evanston’s households make less than $10,000 a year. Lifelong residents in the community point to initiatives aimed at improving education and development, but most fail due to the lack of understanding of how racism has affected public institutions like education in Cincinnati.

Monna Beckford is a Resource Coordinator at Evanston Academy, a charter school. Her school serves students from Kindergarten through sixth grade and outscores districts in more affluent parts of Ohio. For Beckford, the reliance on data and political rhetoric about her community fails to grasp the work that is needed to help residents improve their lives. “Racism in Cincinnati is so deep; it’s as if you can cut it with a knife.”

Beckford argues that Cincinnati as a whole is working towards creating a more inclusive city, but residents of color do not have the resources or the knowledge of how to take advantage of these opportunities. “Failure falls on the state, the community and individuals in not moving together to make a more inclusive Cincinnati,” but for CPS “data do not show how students perform.” Beckford continues, “The state’s test is too hard and uses complex language that students in underperforming schools cannot

55 Ibid.
comprehend.” Education policies prescribed by state and local officials negate the fact that education at every level is a unique experience: “Our teachers do not have time to teach. Today it is all about testing … and preparing [students] for testing which can disproportionately hurt students of color.”

In the long run, education must be administered by public institutions that understand inequality and its placement in the public. Cincinnati’s students of color possess the capability to change their narrative. If citizens care about the general welfare of the city and its residents, it is the role of government to act in a way that best meets the needs of every community. This requires proper implementation of the DeRolph v. State, input on education reform from educators in the field and a focus on giving communities of color the ability to express citizenship through education in a manner that does not bind them by “race or religion, but by the shared values of freedom, liberty, and equality” which define American democracy. That is the essence of a harmonious and equitable public.

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Ohio Const. art.VI, § 3,


Effectively Communicating Train Safety Measures to the French Public

Lyndi Vinson

Millions of people use public transportation every day. Trains are practical, but can also pose some risks. Especially after the recent attacks in Europe, public transportation is becoming a target for terrorism. For example, most recently on March 22, 2016, bombs were set off in the Brussels’ airport then again at the Maelbeek metro station the same day (Le Monde, 2016). Only a few months before, terrorist attacks occurred in Paris. From 2004 to 2006, there were 342 people injured by the tram system in France. Of that number, five were killed (IBSR, 2009). The tram injuries could have been prevented by informing the public on some simply, safety precautions. The terrorist attacks were not as forewarned, but precautions can be taken in the future. With this growing fear of lack of safety, a campaign is needed to reassure and to inform the French public on safety measures that the train system is making as well as safety precautions the passengers can take upon themselves. This crucial information can be distributed through campaigns on several platforms based on the target audiences using different communication techniques, such as implicit versus explicit conclusions, ELM, fear and warmth appeals, EPPM and direct effects model of immediacy.

The Target Audience

It’s important to know our audience and which platform serves each purpose to more effectively inform the public on train safety before going into detail on ways to effectively communicate these safety
measures. The target audience for the train system is the younger generation as well as the older generation. Both audiences use the following types of channels: mass media, Internet/social media, small media, group interactions and one-on-one interactions (Robinson et al., 2014).

People 18-29 years old are frequent users of social media and technology. Of the mass media, young people use television, radio and newspapers for entertainment and to get information (Robinson et al., 2014). Facebook, Instagram, Twitter, Snapchat, YouTube, other online platforms are used frequently as well (Robinson et al., 2014). Facebook is used mainly for connecting with friends and entertainment. However, Facebook created a ‘safety check’ after the Paris attacks, which allowed those living or visiting Paris to inform their friends that they were safe (Deluca, 2015). Therefore this platform could be an option for a campaign promoting safety. Although, according to Charmarkeh (2015), face-to-face contact is the best way to spread a message when wanting to convey emotion. When face-to-face contact isn’t possible, YouTube is also a great platform to reach the masses (Charmarkeh, 2015). Social media is used more for planning social events (Ofori-Dwumfuo & San Antonio, 2015). Texting, though useful for quick messages, was found to be too “obtrusive and invasive of their personal space” (Ofori-Dwumfuo & San Antonio, 2015).

The elderly, ages 65 and over, make up 33% of France’s population (González-Oñate, Fanjul-Peyró, & Cabezuelo-Lorenzo, 2015). This generation uses social media and technology differently than the younger generation previously discussed. Gonzalez-Oñate et al. (2015) created a questionnaire and analyzed how the elderly uses technology. The study looked at technological gadgets, television watching, social networks, Internet and buying habits, information and media competence (González-Oñate et al., 2015). The elderly are users of social media, electronic devices and online platforms. Social media use is mainly for sharing photos and videos with family and friends in order to stay in touch (González-Oñate et al., 2015). This platform could be useful in sharing messages; however, it focuses more on comedic posts or relationship building sharing posts rather
than a serious topic such as train safety (González-Oñate et al., 2015). Nonetheless, especially after the recent train terrorist attacks, it is a viable platform to use.

González-Oñate et al. (2015) concluded the elderly generation is the age group that spends the most time on the Internet. Their main purpose for using the Internet is to stay informed as well as connected with family. The most common online purchase for this group is tickets for transportation (González-Oñate et al., 2015). Therefore, it is crucial to develop campaigns through websites and more specifically, through transport websites (González-Oñate et al., 2015). The campaign will receive more views by the elderly target audience, and by connecting the train’s website with safety, the viewer will feel the train company is taking all precautions to ensure the customer’s safety.

The elderly also received new technology enthusiastically and were knowledgeable on new technological devices and social networks (González-Oñate et al., 2015). The tablet was the number one device used by 52% of elderly according to Gonzalez et al. (2015). Applications and games were not used as frequently by this generation; therefore, campaigns should not focus on these devices (González-Oñate et al., 2015). Mass media is another crucial channel for the older generation. González-Oñate et al. (2015) found that television (28%), newspapers (24%) and radio (23%) are the most popular ways of staying informed.

**Current Safety Measures**

After understanding the target audiences, it’s important to know what safety measures are in place and will be put in place to assure the safety of the passengers. Eurostar has been putting its own safety measures into effect after a train attack (Anderson). The attack on the Thalys train in August of 2015 caused Eurostar to take greater safety measures and installed metal detectors at each train gate (Les Echos, 2015). TGV, another train company in France, doesn’t want to take these same measures. Guillaume Pepy, the president of the SNCF, said it would require passengers to arrive earlier and security
measures would be similar to an airport’s security system (France Inter). In an interview after a mass shooting on a train headed to Paris, Pepy drew attention to a terrorist attack on a Tunisian beach. He claimed one couldn’t put a metal detector on a beach (Beardsley, 2015). Attacks can happen anywhere, but SNCF wanted to focus on smart security rather than costly security. Each year France screens a hundred million air passengers at a cost of a billion dollars (Beardsley, 2015). There are 6 billion rail passengers in France each year alone (Beardsley, 2015). Therefore to screen all rail passengers, it would cost France $20 billion (Beardsley, 2015). SNCF wants to shift the focus not on screening the luggage, but instead verifying the identities of passengers (Beardsley, 2015).

Alain Vidalies, the Secretary of State in charge of transportation, wants to enforce baggage check within the rail system (France Intern, 2015). The ministères de l’Intérieur et des Transports (Ministers of Interior Security and Transport) decided on an increase in baggage check security, as well as an increase in the number of armed patrol guards in the train stations and on trains (Les Echos, 2015). The surveillance agents within the station were also given the right to search any baggage and person that appeared to be suspicious (Les Echos, 2015). These safety measures were taken to increase the safety of the passengers.

Spain is believed to have the most secure train system of Europe after the 2004 Madrid terrorist train bombing (France Inter, 2015). This attack killed 191 people and 1900 people were injured; suitcases of long distance passengers were systematically checked (France Inter, 2015). After these attacks up until 2015, Spain, along with Eurostar, is the only train that screens passengers and their luggage (Beardsley, 2015).

After the Brussels bombings in March of 2016, “the city reported its terror threat level up to four” and shut down its transportation preventing planes, buses, trams and the metro from running (Le Monde, 2016; Berger, 2016). A lockdown was placed on the border of Belgium and France, and the Thayls and Eurostar train services were temporarily stopped (Perez, 2016). Heavily armed police and
bomb-sniffing dogs were put in place in many other countries post-attacks such as Egypt, Greece, the Netherlands and Austria (Perez, 2016). Even the metro and airports within the United States increased their security levels (Perez, 2016).

Safety Precautions Passengers Can Take

Train companies are continually trying to improve the safety of their passengers, but there are also precautions passengers can take to increase their own safety. Operation Lifesaver (2016) provided six passenger rail safety tips to inform the public on ways to stay safe. First, it’s important to stay alert (Passenger Rail Safety Tips, 2016). It’s crucial to “obey all warning signs and signals” as well as limiting headset and cell phone use (Passenger Rail Safety Tips, 2016). Secondly, passengers should never sit on the edge of a platform (Passenger Rail Safety Tips, 2016). Often there is a line marked on the platform a few feet from the track in which passengers should not cross until the train has stopped. “Passengers should stay at least three feet from the train while it is coming in or out of the station” (Passenger Rail Safety Tips, 2016). Another important precaution is to hold on to poles and seats while on board, and listen to directions from the train operator (Passenger Rail Safety Tips, 2016). There is a gap often between the train and the platform; it’s important to mind this gap when boarding and getting off (Passenger Rail Safety Tips, 2016). Lastly, passengers should pay attention to all signs and markings to know where it is safe to be and never cross any tracks (Passenger Rail Safety Tips, 2016). Though these rules were stated for American train safety, they can be applied and adapted to French and European train safety as well.

Elements That Make Up an Effective Campaign

Given the safety measures currently being created in France, it is important to incorporate this information into an effective campaign. The effectiveness of the campaign will increase by using proper techniques and concepts to persuade the viewers (Gass & Seiter, 2014). These campaigns can communicate messages that “influence knowledge, awareness, and social norms, and help to change many
health-related behaviors,” including how the public views train safety within France (Robinson et al., 2014). If effective, it could be adapted to other country’s train systems in Europe.

**Explicit versus Implicit Conclusions**

Advertisers choose between two strategies to sell a message: explicit and implicit conclusions (Kardes, Kim, & Lim, 1994). Explicit conclusions are considered hard-sell strategies in which “any claim that is made in a message is directly stated by the person sending the message” (Gass & Seiter, 2014, p. 194). However, with this type of message, receivers might distrust the message because they feel they are being told what to believe (Gass & Seiter, 2014). Implicit conclusions are soft-sell strategies in which the message is more subtle (Gass & Seiter, 2014). This allows the audience to draw their own conclusions eliminating resentment by not being told what to do or believe (Kardes et al., 1994). A disadvantage includes the audience might fail to draw the anticipated conclusion or might draw the wrong conclusion (Kardes et al., 1994).

Sawyer and Howard (1991) argued that when a message is relevant to a person on a personal level, that person should be more likely to draw his or her own conclusions. An implicit conclusions approach should be used for those who are not personally involved with a subject; they are more likely to be persuaded by this approach (Sawyer & Howard, 1991). Sawyer and Howard (1991) also found when subjects viewed advertisements that were personally relevant, implicit conclusions produced a greater persuasion. Kardes et al. (1994) found it is better to let “receivers draw their own conclusions about a product when the receivers have a lot of knowledge about that type of product” (Gass & Seiter, 2014, p. 195). In contrast, for people with little knowledge about the product, explicit conclusions should be used to persuade (Kardes et al., 1994). The most important factor is to know what type of person is in the audience for determining the message type. The French public is quite aware of the train system; however, in regards to safety measures, an explicit conclusion approach is best. This isn’t about selling a product; this is about the safety and protection of lives. Therefore the message needs to be
clearly stated and not left for the passengers to interpret and draw conclusions on their own. Once the conclusion approach is decided on, other factors go into developing an effective campaign strategy.

**The Elaboration Likelihood Model of Persuasion**

The Elaboration Likelihood Model of Persuasion, or ELM, proposes two routes to persuasion: the central route and the peripheral route (De Barnier, 2006). The central processing involves cognitive elaboration, or thinking about and analyzing the message’s content based on the presented evidence (De Barnier, 2006). Peripheral processing involves concentrating on cues that aren’t directly related to the message (De Barnier, 2006). Whether a person chooses the central or peripheral depends on motivation and ability (De Barnier, 2006). In regards to motivation, a person engaging in central processing requires more mental effort and will have greater motivation (De Barnier, 2006). Therefore, typically a person who uses the central route will have high involvement and interest with the topic (De Barnier, 2006). Low involvement will lead to less motivation to process on the central route and therefore peripheral route processing will occur (De Barnier, 2006). Those who use central processing and high involvement need to be given accurate, qualitative information since they are using more mental effort and directly focusing on the message. The audience that uses peripheral processing and low involvement needs to be given quantitative information since this process doesn’t involve much focus on the content of the message.

**Appeal to Emotions**

One technique that can be applied to a marketing strategy is an appeal to emotions. This includes fear, warmth and a combination of appeals. The attachment theory states people develop emotional ties to specific brands (Gass & Seiter, 2014). Another way to reach people emotionally would be to appeal to fear. Fear appeals usually contain “gruesome content in the form of vivid language, personalistic language or gory pictures;” the purpose is to instill fear within the
The presence of fear increases the chance of a behavioral change (Block, 1993).

It is more effective to launch a national campaign that plays on the public’s current fears rather than having to create a new fear. For example, the attacks in Paris in November 2015 as well as the recent attacks in Brussels on March 22, 2016, have generated fear among Europeans and to those traveling in Europe, without having to persuade or instill any message. Therefore, one type of campaign that could be effective when addressing train safety would be to focus on the recent train attacks. This fear would force people to follow the rules for their own safety.

When one sees how something can negatively affect one’s self, it can instill fear as well (Gass & Seiter, 2014). A YouTube video showing footage of children falling in between the train and the platform immediately calls on the fear emotion. The viewer identifies the young girl or boy who is falling as their child, grandchild or niece/nephew depending on the age of the audience. After viewing, often the shock of what the viewer just witnessed, causes him or her to react in some way. The fear appeal is common in public health messages, advertising and elsewhere. Scare tactics are used to increase anxiety and sell a message or product (Gass & Seiter, 2014).

The Florida “Truth” campaign was launched in 1998, and used paid TV and radio advertisements along with print media to reduce tobacco use in the United States (Rosenberg, 2012). This tobacco counter-marketing campaign targeted young teenagers and exposed the tactics that tobacco companies use (Robinson et al., 2014). The campaign focused on “the truth about addiction and the health and social consequences of smoking” (Robinson et al., 2014). One “Truth” commercial portrays the tobacco as an animal that has come back from the dead during a science class dissection; it tries to attack the high school students. This is an effective fear tactic showing how tobacco can negatively affect the health of its consumers by literally killing (Robinson et al., 2014).
Extended Parallel Process Model (EPPM)

Witte’s extended parallel process model, or EPPM, shows the ways fear is applied to an individual (Witte, 1992, 1994). First, an individual “appraises the perceived threat of the hazard” (Witte, 1992, p. 338). A perceived threat is a combination of beliefs about the significance of the threat or perceived severity of the threat, and perceived susceptibility or the “individuals’ beliefs about their risk of experiencing the threat” (Witte, 1994, p. 114). If it’s perceived as a moderate to high threat, fear is produced and the individual evaluates the efficacy of the suggested response (Witte, 1992). Efficacy is the effectiveness, practicality and simplicity with which a recommended response deters a threat (Witte, 1992). However, when there is no perceived threat or a low perceived threat, no response is provoked (Witte, 1992). When the perceived threat and perceived efficacy are high, danger control processes occur (Witte, 1992). This motivates the individual to control the danger by thinking of ways to avoid the danger (Witte, 1992). When danger control processes dominate, “individuals respond to the danger, not to their fear” (Witte, 1992, p. 338). When there is a high-perceived threat, but a low-perceived efficacy, danger control processes are initiated as well (Witte, 1992).

The fear evoked by the threat increases when individuals believe they are unable to effectively prevent the threat (Witte, 1992). They cope with their fear by providing maladaptive responses such as denial, avoidance or panic (Witte, 1992; Gass & Seiter, 2014). When fear control processes dominate, “individuals respond to their fear, not to the danger” (Witte, 1992, p. 338). Witte (1992) concluded that fear leads to message rejection and cognitions, such as perceived threat and efficacy, lead to message acceptance. The “threat determines the degree or intensity of the response, while efficacy determines the nature of the response” (Witte, 1992, p. 345). Overall, if used correctly, fear appeals can produce behavioral change (Witte, 1992).

Witte (1994) conducted a study to test the EPPM’s proposals on fear control and danger control processes. The topic was the fear appeals of AIDS. A sample was collected of 146 undergraduates; the requirements were each participant had to have had sexual
intercourse, not have been in long-term monogamous relationships, and had not participated in a class on AIDS before the study (Witte, 1994). The participants were told their task was to evaluate AIDS education materials and their reactions would be recorded to help refine the material (Witte, 1994). The students were presented with fictitious educational material in which each message emphasized different issues (Witte, 1994).

The material consisted of a low threat, moderate threat and a high threat message (Witte, 1994). The low threat message showed images of clinical laboratory tests describing how AIDS affected Africa and non-college students; it also used neutral language (Witte, 1994). The moderate threat message contained images of intermediate stages of the disease, and mentioned the effects on heterosexuals within the United States (Witte, 1994). This reference to American heterosexuals could be a perceived susceptibility (Witte, 1994). Lastly, the high threat message emphasized the severity of late-stage AIDS victims and used highly vivid language (Witte, 1994). The emphasis was also placed on college students and the personal risk of contracting the virus (Witte, 1994). After studying the images and information, participants completed 7-point Likert-type questionnaire evaluating the images based on self-efficacy, efficacy, susceptibility and severity (Witte, 1994). Fear arousal was also measured by having participants rate their mood after looking at the images based on the following adjectives: “frightened, tense, nervous, anxious, uncomfortable and nauseous” (Witte, 1994, p. 121).

Witte (1994) found significance on the perceived threat measure. Also, the perceptions of threat in a high or low efficacy group were not significantly affected (Witte, 1994). Using Tukey’s multiple-range test, significance was shown that those who read the high threat message, believed AIDS to be a greater threat than those reading the moderate and low threat messages (Witte, 1994, p. 123).

Witte’s (1994) findings showed consistency with the EPPM’s predictions overall. This study supports EPPM’s claim that when danger control processes dominate, people think of ways to avoid the threat (Witte, 1994). The results of the fear control processes also
revealed when participants “defensively avoided the threat or reacted against the message, they did not think about the responses recommended to avert the threat” (Witte, 1994, p. 129-130). Also, less fear was experienced by participants who put into place a more defensive avoidance style (Witte, 1994). Therefore, like the EPPM, fear control processes are used to control the emotion of fear (Witte, 1994). Witte’s study supports the EPPM’s principle that “fear is significantly associated with message rejection responses and unassociated with message acceptance response” (Witte, 1994, p. 130). This study does not explain when fear can be used to positively correlate and negatively correlate with fear control responses (Witte, 1994).

Warmth Appeals

Warmth appeals could be used by the train systems in France to balance out the fear appeal tactic. The warmth appeal emphasizes family, friends and a sense of belonging (Gass & Seiter, 2014). This method could be effective in establishing brand loyalty to the train system as well as promoting safety (Gass & Seiter, 2014). This combination of appeals can also be very effective. The customer will not only remember the dangers of the train system, but can balance out the feeling by associating the train with something positive. For example, the National Safe Kids Campaign launched a mass media health campaign in 2014 (Robinson et al., 2014). This campaign combined mass media with distribution of product. In this campaign, they distributed free and reduced-price helmets. Their campaign and promotional material effectively focused on safety but also the sense of protection with family. The National Safe Kids were effective in specifically promoting the importance of wearing a helmet “to prevent injury and deaths related to wheeled sports” (Robinson et al., 2014, p.362). This organization increased children’s use of helmets with this tactic among multiple platforms.

Lessard et al. (2010) examined the use emotional and behavioral reactions to parents’ attempts to change their children’s dietary habits through persuasion and warmth appeals (Lessard, Greenberger, & Chuansheng, 2010). Specifically, the findings suggest that, when high
perceived parental warmth is used, youths “may perceive persuasion tactics such as giving information, expressing concern, and encouraging behavior change, as relatively caring, helpful, and supportive of their own efforts to improve their diet-related behaviors” (Lessard et al., 2010). However, when low perceived parental warmth is used, these same tactics could be viewed as intrusive, unwarranted, and manipulative (Lessard et al., 2010). Therefore, the use of a warmth tactic can convey a sense of caring and support and produce greater persuasion.

**Direct Effects Model of Immediacy**

The direct effects model of immediacy suggests that “warm, involving, immediate nonverbal behaviors” enhance the effectiveness of a message being persuasive (Gass & Seiter, 2014, p. 169). The contexts include: intercultural, educational, organizational, athletic and interpersonal settings (Gass & Seiter, 2014). Therefore in whatever advertisement is used, it is important to use nonverbal cues to enhance the persuasive effectiveness of the message.

Crane and Crane (2010) conducted a study to find the best nonverbal communication strategies physicians could employ in order to increase positive clinical outcomes. Facial expressions, gaze direction, head nodding, body orientation, handshaking and synchrony were the categories studied to find the most effective nonverbal communication strategies (Crane & Crane, 2010). Research supported that a physician’s nonverbal communications influences the patient’s experience including a patient’s satisfaction (Crane & Crane, 2010). The findings concluded the best practices among the studied categories. It was stated the physician should smile, make equal eye contact while listening and talking, use more affirmative head nodding and orient his body towards the patient (Crane & Crane, 2010). Also, the physician should lean forward and stay three feet away during personal conversations (Crane & Crane, 2010). This study supports the direct effects model of immediacy, in that it supports the effectiveness of nonverbal behaviors causing persuasiveness.
Crane and Crane’s (2010) findings can be applied to a campaign promoting train safety measures as well. By understanding the persuasive effectiveness of nonverbal behaviors, nonverbal communication can be incorporated into the campaign. For example, smiling and the proper body orientation among actors within a commercial can help persuade the target audience.

The same method and tactics cannot always be applied across all channels or platforms; traditional mass media, Internet and social media, small media, group interactions and one-on-one interactions require different methods also based on their audiences (Robinson et al., 2014). Each platform must be tailored to effectively persuade clients that the French train system is safe and the campaign should inform them of the most up-to-date safety measures. Campaigns and promotional material must be adapted to target the wide audiences wanting to be reached. The young versus elderly were not included, but target audience research related to implicit versus explicit conclusions, ELM, fear and warmth appeals, EPPM and direct effects model of immediacy should also be analyzed. The French communication style should be applied as well when designing an effective marketing campaign strategy.

**Theoretical Extension**

A campaign needs to be developed to target both the young and elderly generations. This campaign should incorporate the demographic data gathered on these audiences as well as utilize implicit versus explicit conclusions, warmth appeals, and fear appeals to reach the end goal of increasing ticket sales for Eurostar post-attacks. A test audience would be acquired to gage the effectiveness of the campaigns. The first test group would be French-born citizens ages 18-29. The prerequisite would be they have traveled with Eurostar before. For the French elderly test group, they would also be required to have traveled with Eurostar before the recent attacks in Paris and Brussels.

The young generation’s main source of information comes from television, radio and newspapers (Robinson et al., 2014). The
television platform would be utilized with the creation of an informative commercial to air on channels with higher rates of viewers ages 18-29. This commercial would demonstrate the warmth appeal and explicit conclusions would be used.

The scene would start with a group of young travelers purchasing a Eurostar train ticket and entering a French train station. The next scene would show the newly installed baggage check area. The young travelers would be laughing and smiling; this demonstrates the warmth appeal by showing friendship. A scene would show the travelers quickly getting through the baggage check and the metal detectors both located on the platform next to the train. During this scene, a voice over would state, “Baggage check and metal detectors were recently installed to ensure the safety of our precious cargo, yourself and your friends. But don’t worry, you’ll quickly be on to your next destination!” This promotes the warmth appeal again by creating a sense of belonging. The passengers are a part of the Eurostar train company’s family and place value on their lives. It also promotes that these safety measures won’t add too much travel time for travelers.

By the end of this voice over, the young travelers would be on the train, sitting in their seats, all smiling and chatting with each other. Some passengers within the group would be looking at a map and travel books, while smiling, to show their next destination. This shows the use of nonverbal behaviors and the direct effects model of

Figure 1: Storyboard for Eurostar commercial targeting the younger generation.
immediacy. These smiles convey warmth and enhance the effectiveness of the persuasive message. The message is Eurostar is a safe train company, and these new safety measures will make travel even safer while not being inconvenient. The commercial would end with the Eurostar logo and the motto, “Eurostar, your safety is our priority.” The commercial uses explicit conclusions by clearly stating the newly installed safety measures and doesn’t leave the audience to draw their own conclusions.

The test group would measure how effective the warmth appeal is at persuading them to use Eurostar. Through a series of Likert-scale questions, the questionnaire would measure the perceived safety of the Eurostar passengers who use other trains compared to Eurostar’s trains. It would also measure if Eurostar made them feel included in the brand and if Eurostar created a sense of belonging as though they cared about the safety of its passengers. This information would be useful in improving the campaign as well as deciding to move forward with airing the commercial to the French public.

The other target audience for train companies is the elderly generation. This group is the age group that spends the most time on the Internet (González-Oñate et al., 2015). The Internet is used to stay informed and the most common purchase online is tickets for transportation (González-Oñate et al., 2015). Therefore, a campaign has been created using the knowledge of their demographics’ online use as well as implicit versus explicit conclusions, and fear appeals. Three persuasive pieces of advertisements were created to gage the level of effectiveness. It is important to find out the perfect amount of fear to unveil to the French public without causing so great of fear that the public would not want to use the train system. These advertisements would be evaluated by a test group of elderly French people.

The first platform utilized is the online ticket purchasing option on Eurostar’s website. This online advertisement would appear in between searching for a train and purchasing the ticket(s). This advertisement states, “We don’t take risks with your safety.” It then states, “Introducing new safety measures: Luggage check at the train
station and the installation of metal detectors.” This would be the first level of fear presented to the test group. This presents a mild-level threat and the perceived fear is low and not clear.

This uses explicit conclusions, in that, the audience is not left to interpret the new safety measures or the role of the train company; these measures are directly stated in the advertisement. However, the fear appeal in this advertisement is more implied. It does not mention the recent train bombings in Paris or Brussels; however, the call to safety is often sought out by train passengers. This campaign would receive many views by the elderly target audience. This
advertisement would be used in the test group to test if the fear is too low to be effective.

Almost one third of the elderly generation uses television as a source of information (González-Oñate et al., 2015). Therefore, another part of the campaign, targeting the elderly generation, includes two short commercials that would be aired on television channels with higher rates of elderly aged viewers. The fear appeal would be present in both of these videos. The first commercial would display a moderate-level of perceived fear.

The commercial would start with an elderly and young couple standing in line in the baggage check area. The young couple would say, “This is ridiculous. We shouldn’t have to go through this much security. We’ve been using trains for years and we still feel safe.” The elderly couple would hear their conversation and comment back, “Excuse me, my son and my grandchild were killed in the Paris attacks last November; these security measures are needed!” The scene would end with Eurostar’s logo and the motto, “We don’t take risks with your safety.” This moderate level of perceived fear would be tested by the elderly test group to determine its effectiveness. It would measure the test group’s level of fear, the willingness to use Eurostar, the willingness to use train transportation, and the level of safety Eurostar is perceived to have.

Lastly, the other commercial would exhibit a high-level of fear. It would start with an array of scenes of the train station attacks and bombings that took place in Madrid in 2004, Paris in 2015 and even more recently, in Brussels in March of 2016. After showing these horrific scenes, a screen would state, “We can’t let this happen
again.” The scene would show passengers going through the new security measures and a voice over would state, “Eurostar is increasing security with the installment of metal detectors and baggage check.” The passengers would include elderly travelers traveling with their children and grandchildren.

![Figure 4: Storyboard for a Eurostar commercial targeting the elderly generation exhibiting a high-level of fear.](image)

The commercial starts by identifying a major relevant fear, terrorist attacks on train transportation. Witte’s (1992) EPPM model says when the perceived threat and perceived efficacy are high, danger control processes occur. This motivates the individual to control the danger by thinking of ways to avoid it (Witte, 1992). The fear evoked by the threat increases when individuals believe they are unable to effectively prevent the threat as well (Witte, 1992). This commercial provides a response to decrease the perceived danger; it provides ways to stay safe to its passengers. Therefore, this decreases the fear and becomes an effective commercial and the goal would be to increase train use post-attacks.

This commercial would be shown the elderly test group to measure if a high-level of fear would be effective in persuading them to use Eurostar for their train transportation. After viewing all three advertisements, it would be determined which level of fear is the most effective. The criteria to determine this consists of: the test group’s level of fear, the willingness to use Eurostar, the willingness to use train transportation, and the level of safety the perceive Eurostar to have after viewing each advertisement. Before testing, I believe the
most effective amount for the French public is the commercial presenting a moderate-level of fear. I predict the commercial with a high-level of perceived fear will cause the test group to not want to travel with the train system even after security precautions have been taken. The moderate-level still addresses the attacks and fear in society, but doesn’t give graphics showing the violence and damage caused by these train station bombings.

This campaign needs to be developed to persuade passengers of both target audiences discussed to continue riding the Eurostar train. By incorporating the demographic data gathered on the target audiences, as well as utilizing implicit versus explicit conclusions, warmth appeals, and fear appeals, the end goal of increasing ticket sales for Eurostar post-attacks can be achieved. A test audience would provide information on how to develop an effectively persuasive campaign.

References


Effect of Media Bias on Credibility of Political News

Lauren Morris

Abstract

When different media sources favor a party, they end up attracting an audience who shares beliefs and supports them as a credible source, thereby disengaging the other side of the audience who no longer perceives them as a reliable source of information. This study examined the effect of the candidate’s political party (Democratic vs. Republican) and the news source where it came from (Fox News vs. CNN). Participants were randomly assigned to one of eight news stories about a hypothetical congressional candidate. Results showed that CNN was perceived as slightly more credible than Fox News regardless of political party. Results also showed that a Democratic candidate was perceived slightly more credible than the Republican candidate regardless of what news source the story came from. Overall, findings suggest general skepticism towards media sources and political candidates.

Introduction

Often media outlets can be seen as biased towards the different parties, which could make them lose their credibility as a reliable source. Certain programs, Fox News being the most notable, have taken scrutiny in the past for being biased towards the Republican Party. The hostility of the reporter can be a factor as well as gain or lose viewership by how they come across when talking about the different parties. When these different media sources favor a party,
they end up attracting an audience who supports them as a credible source, thereby disengaging and ultimately losing the other side of the audience who no longer perceives them as a reliable news outlet. In the political world of the United States, this mainly relates to whether the media’s viewers are one of the two main parties; Democratic or Republican, which will be the focus of this study. The purpose of the current study is to examine if media outlets lose their credibility as a reliable source to the viewers the more they become biased towards a specific political party.

Wicks, Wicks, and Morimoto (2012) examined how people decided what media outlets to watch correlating to their political predispositions, also known as partisan selective media exposure. Wicks et al. wanted to update previous research conducted by Klapper (1960), which argued that selective exposure operates within predispositions and reinforces belief systems. They use a range of traditional and social media used in the 2012 election to assess if partisans watch equal amounts of rival and non-rival outlets to their party. Wicks et al. concluded that a month prior to the election, there were clear differences between the Democratic and Republican parties. They also found conservatives to be predominantly White and religious people who participated in religious projects, and listened to Fox News and Christian Talk radio, whereas Liberals tended not to identify with religion, were predominately female, and used newer media outlets.

Moeller, Vreese, Esser, and Kunz (2013) studied the impact of both online and offline news media on internal efficiency of young adults. Internal efficiency is the belief that one can understand and participate in politics. In general, online news media intends to have a positive impact due to the interactivity of people. Results showed that newspaper usage was the strongest predictor of internal efficiency. The online sources had a slight effect on internal political efficiency, whereas television had little to no effect. Civic messaging was added to make any effect on political efficiency disappear (one’s understanding of the influence of political affairs).. Simply put, civic messaging is anything that gets adolescents involved online, and is one of the most important predictors in internal efficiency. Moeller et
al. generally found that internal efficiencies showed strong drive in predicting first time voter turnout (an increase by 50% compared to not having an influence of internal efficiencies).

Richardson, Huddy, and Morgan (2008) examined the relation between the hostile media effect and biased assimilation. Previous research had shown that hostile media effect and biased assimilation are contradictory to one another. Hostile media effect is a phenomenon where people perceive neutral-based news as hostile and biased against their party. Biased assimilation is the idea that we interpret incoming stimuli congruent to our personal preconceptions (Richardson et al. 2008). Using presidential debates of the Bush-Kerry election, Richardson et al. (2008) tested the scenario that partisans could interpret a message to favor their side. This scenario showed that the hostile media effect and biased assimilation are not contradictory, but instead partially overlap.

Wei, Chia, and Lo (2011) explored the relation between third-person effect and media perception, similar to the study done by Richardson et al. (2008). However, the purpose of their study was to research the perceived impact of polls, not debates. Due to the huge impact of election polls in campaign coverage they focused on how perceived polls are impacted by social influences and media hostility. Unlike Richardson et al. (2008) Wei et al. found a positive correlation between third person perception and hostile media effect, which caused a joint effect between the two studies of the perception of media. Results showed that voters saw others more vulnerable than themselves, and that America may expect divergent perceptions from the different parties no matter how balanced the polls might be. Also voters’ media bias positively correlated with third-person perception, which was opposite findings of Richardson et al. (2008). The researchers concluded that American voters tend to think they are smarter and better than other voters, making them overthink the vulnerability of others, and underestimate their own vulnerability.

Morris (2007) researched the consequences of a fragmented (divided by party on which program they watch) television news audience. More reports of the media being biased and cynical have intensified
levels of skepticism towards programs. “For example, a poll conducted in 2004 found that over two-thirds of the U.S. public (69 percent) saw at least a fair amount of political bias in the news and only 7% saw no bias at all” (Morris 2007). Fox News was the channel that showed most fragmentation only appealing to those who “became disillusioned by their media” (Morris 2007). Fox News was also found to have very distinct opinions about Bush and distinct voting patterns. It was concluded by Morris, that Fox news watchers tend to have a different perception of reality than those of other news channels audiences, and their key factor of success is due to the hostile media effect. However, the study by Morris did not examine content or empirically test whether Fox news is the actual cause behind one’s political views to be altered.

Coe et al. (2008) examined two trends: the blurring line between hard (pressing issues) and soft news (not-necessarily time sensitive) and an increase in overt partisanship. The study analyzed factors that led partisans to choose a preferred cable news program over others and how the viewers’ leanings influence content perceptions of programs, specifically CNN, Fox News, and The Daily Show. The results showed that age did not have a relationship with the exposure to CNN or Fox News, but education had a negative prediction on Fox News. The results from Coe et al. (2008) ultimately revealed “political partisanship plays a significant role in exposure to CNN, Fox News, The O’Reilly Factor, and The Daily Show.” Results also indicated that liberals perceived slightly more story and program bias in Fox News reports. These results show that “partisanship influences viewers’ perceptions of bias in cable news programs and content” (Coe et al. 2008). These findings are consistent with the relative hostile media phenomenon (another term for perceived bias). In conclusion the results of both studies show an increase in partisanship being a driving force of media and the need for incorporation of partisanship in news messaging.

Turner (2007) investigated name association of the newscast with the stories, believing that attaching a label to a news story would be an ideological cue regarding content. Turner specifically studied CNN (liberal viewpoint) and Fox News (conservative viewpoint), which
tend to epitomize bias. “Preliminary evidence demonstrates that at least 35% of the American public perceives FNC [Fox News Channel] as being overtly conservative and at least 26% perceive CNN as being liberally biased” (Turner, 2007). The label could create cognitive roadblocks for viewers to properly interpret the actual story. In the case of labeling the story with FNC or CNN, the message is overwhelmed by where it was coming from. Furthermore, the labels have put a strong bias on the newscast from the opposite party (CNN is seen as biased by the conservative party). Turner (2007) showed that CNN and FNC can show identical news stories and receive different feedback. However, the effects tend to vary widely depending on the individual’s ideology and how they personally perceive the news.

Johnson and Kaye (2015) asked, “Why do people rely on media that they do not deem credible?” They compared the difference of perception between that of traditional news sites (newspapers and televisions) with that of social media (Twitter and Facebook). Earlier studies found a link between credibility and motivation where users of the internet judge online political information as higher in credibility than those that go online for entertainment purposes. Motivation and credibility are also linked in traditional news sources. Results from Johnson and Kaye (2015) found that all traditional sources (except FNC) were found to be more credible than social media sites. This shows that traditional sources strive to be unbiased. However, the traditional sources are only moderately credible, showing they are below the expectations of being non-biased. The motivations for social media are seen as overpowering the moderate credibility of traditional sources, meaning, “users are willing to trade credibility for need satisfaction” (Johnson and Kaye, 2015).

Many factors from the different studies such as selective exposure, biased assimilation, and name association were used in the current study to examine if media outlets lose credibility as a reliable source to the viewers the more they become biased towards a specific political party. Hypothesis 1 is that by name association, participants will believe a report from CNN over Fox News, even if the report is the same. Hypothesis 2 is that participants will believe Fox will favor
a Republican candidate over a Democratic candidate, and CNN will favor a Democratic candidate over a Republican candidate.

Method

Participants

Out of 174 total participants, 101 participant’s data after manipulation check were collected through the participant pool and Canvas site at Xavier University (Appendix A). Participants were also recruited through acquaintances of the researcher through email and social media. Participants received research credit for their participation if they were in the Psychology Participant Pool at Xavier University and were told they were participating in a study on perception of media and politics. Out of the 101 participant’s data, 22.8% were male, 75.2% were female and 2 people preferred not to respond, where the age of participants ranged from 18-25. 81.2% of participants were Caucasian, 5 percent were African American, while 3 percent were Hispanic. For political party affiliation, 35.6 percent of participants identified themselves as Republican, 31.7 percent as Democratic, 19.8 percent as Independent, and 10.9 percent were not affiliated with any party/ do not vote.

Design

The current study used a 2x2x2 between-subject, factorial design. However, due to the manipulation check, only a 2x2 between-subject factorial design was used, eliminating the third independent variable after a majority of participants failed the manipulation check. The first independent variable was the type of party. The two levels were Democratic or Republican and were manipulated. The second independent variable was which news station the article came from. The two levels of this independent variable were Fox News and CNN and this variable was manipulated as well. The third independent variable was the type of ideology the state holds where the candidate lives (this independent variable was removed from the data). There also was a fourth manipulation check on whether or not the citizen believed the candidate was fit for the job, but it was not used in the
analysis of the data. The two levels were between a liberal state and conservative state and were manipulated. There were two dependent variables. The first dependent variable that was analyzed was whether or not the news source was a credible source, and the second dependent variable was the credibility of the candidate. Both were based on 5 point scales that measured from strongly disagree to strongly agree.

**Materials and Measures**

All materials and measures were conducted online and included an informed consent (Appendix A), and one vignette (Appendix B), which presented one of the eight conditions (using random assignment). A questionnaire relating to the vignette (Appendix C), a personal opinion questionnaire based on political values (Appendix D), a manipulation check (Appendix E), and a demographics packet (Appendix F) were also included. At the end, participants were redirected to a separate credit form where data were collected for those who needed research credit (Appendix G) and then everyone received a debriefing form (Appendix H).

**Procedure**

After following a link, participants first saw the informed consent (Appendix A) and were told their answers cannot be correlated back to them, ensuring complete anonymity. One of eight vignettes (Appendix B) were randomly assigned using Qualtrics and after reading the vignette participants then filled out the questionnaire related to the vignette (Appendix C) and personal political opinion based questionnaire (Appendix D), as well as a manipulation check (Appendix E). They were then given the demographics (Appendix F) before being redirected to a credit form (Appendix G) where they had to fill out to receive research credit. Those who were not participating for research credit were also redirected to this page to read the debriefing form. After filling out the credit slip, they were given a debriefing form (Appendix H), which reminded them of their anonymity for complete reassurance.
Results

A 2 x 2 between-subjects factorial analysis of variance (ANOVA) was conducted to investigate the effects of media bias on credibility of the news source and also a congressional candidate. Results for credibility of the news source showed that news channel had a significant main effect, $F(1, 97) = 10.42, p = .002$, such that CNN ($M = 3.24, SD = 0.60$) was perceived more credible than Fox News, ($M = 2.82, SD = 0.67$). This supports Hypothesis 1. There was no other significant main effect found for political party, $F(1, 97) = 0.00, p = .962$, and no significant interaction between news source and political party, $F(1, 97) = 0.20, p = .889$. Refer to table 1 for the ANOVA summary table. Results for credibility of the congressional candidate showed that there was a significant main effect of the candidate’s political party, $F(1, 97) = 4.95, p = .028$, such that participants perceived the Democratic candidate ($M = 3.16, SD = 0.77$) as more credible than the Republican candidate ($M = 2.86, SD = 0.57$). There is no significant main effect of the new source and no significant interaction between political party and news source. Given that there was not significant interaction, Hypothesis 2 was not supported.

Table 1

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
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</thead>
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<td>.001</td>
<td>.002</td>
<td>.962</td>
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<td>.002</td>
</tr>
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<td>.008</td>
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<td>.889</td>
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<tr>
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<td>97</td>
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</tbody>
</table>

Credibility of News Source
Table 2

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<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Party</td>
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<td>2.24</td>
<td>4.95</td>
<td>.028</td>
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<td>97</td>
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</tr>
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</table>

Credibility of Political Candidate

Discussion

The purpose of this study was to examine if media outlets lose their credibility as a reliable source to the viewers the more they become biased towards a specific political party. Hypothesis 1, CNN is more credible than Fox, was supported. In general it did not matter if the candidate was Republican or Democrat, CNN was perceived more credible than Fox. The means for the news company were neutral (CNN had a slightly higher mean than Fox), overall finding that the participants were skeptical of the credibility of the news sources. Given that there was not significant interaction, Hypothesis 2 was not supported. However participants viewed the Democratic candidate more credible than the Republican candidate, no matter the news source. The credibility means were also neutral for both political parties, suggesting that participants were skeptical of the credibility of the candidates. It is interesting to note that only 32% of participants were Democratic therefore political party of the participants should not have affected the findings.

Theoretical and Practical Implications

A wide range of media outlets can use this study to determine viewership, including Television hosts, newspapers, online news outlets, and even blog posts. Anyone in politics, specifically political campaigns, can also benefit from this study on how they come across to the media and what can be done differently. This study can
theoretically help media outlets understand the importance of how they present their information and how they come across to the audience in order to help them with their viewership numbers, as well as not be discredited as a reliable news outlet to be used for future references.

**Study Limitations and Future Directions**

Some limitations to this study included not having enough participants to have a significant effect, which was controlled by having the study eliminate one of the independent variables and having the researcher’s acquaintances participate as well. Since political orientation stems from a variety of background characteristics, it was hard to gain information needed to determine factors of their pre-existing beliefs. To control this an extensive demographics form was included, but it did not give much insight into pre-existing beliefs, however random assignment was used to address individual differences. Another limitation was that the study used a hypothetical candidate and while it controlled for candidate bias, it was not realistic. Future studies should try to use a stronger manipulation of the independent variable that was removed from this study: the residency of the candidate.

**Conclusions**

Results showed that CNN was perceived as slightly more credible than Fox News regardless of political party, supporting Hypothesis 1. Given that there was not significant interaction, Hypothesis 2 was not supported. Results also showed that a Democratic candidate was perceived slightly more credible than the Republican candidate regardless of what news source the story came from. Overall, findings suggest general skepticism towards the credibility of both media sources and political candidates, due to neutral means found in the study.
References


doi:10.1177/0002764213506208
Appendix A

Informed Consent Form

You are being asked to participate in a research project conducted by Lauren Morris investigating perceptions of media and politics. In order to participate in this study, Xavier University requires that you provide your consent. This study is being conducted in partial fulfillment of the course requirements for PSYC 222 & 224: Research Methods and Design II. This project is covered under the class’s Course Certification approval, provided by Xavier University’s Institutional Review Board (IRB), and was individually reviewed by the IRB. If any issues arise over the course of the study relating to your rights as a research participant, you should contact Xavier University’s IRB at (513) 745-2870 or via e-mail at irb@xavier.edu.

Your participation in this study will involve reading a vignette, followed by a few questionnaires and a demographics form. The total time to complete this study is approximately 15 minutes.

There are no foreseeable risks or discomforts related to your participation in this study. For participant pool credit you must fill out a form on a separate webpage with your name and class. If you are not in the participant pool, you do not have to fill out a credit slip, and no research credit will be granted, but I do appreciate your time and assistance in this study. Your responses will remain anonymous and there will be no link between you and your responses. In addition, any demographic information you provide will not be used for identification purposes and will only be reported on an aggregated basis.

Refusal to participate in this study will have no effect on any future services to which you may be entitled from Xavier University. You are under no obligation to participate in this study, and you are free to withdraw at any time without penalty.

If you have any questions at any time during the study, you may contact the researcher, Lauren Morris, at morrisl@xavier.edu, or the professor supervising this study, Dr. Dalia Diab, at diabd@xavier.edu.

By reading the vignette and completing the questionnaires, I am agreeing to participate in this study.
Appendix B

Vignettes

John Smith (Democrat), who is running for the open U.S. Senate seat, has started new legislation that might put him in trouble. Smith currently holds a position as a state senator and plans to introduce a bill to implement new, friendlier immigration laws into his more conservative state. His plan seems more on the far left of the scale of the political spectrum according to a poll taken by prospective voters which seems to be what his voters don't want. “I see his plan is moving our state to more of a capitalist government and that is not what America should be”, said Sara Miller a resident of the conservative state.
-Fox News

John Smith (Republican), who is running for the open U.S. Senate seat, has started new legislation that might put him in trouble. Smith currently holds a position as a state senator and plans to introduce a bill to implement new, stricter immigration laws into his more liberal state. His plan seems more on the far right of the scale of the political spectrum according to a poll taken by prospective voters which seems to be what his voters don't want. “I see his plan is moving our state to more of a socialist government and that is not what America should be”, said Sara Miller a resident of the liberal state.
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-CNN

John Smith (Democrat), who is running for the open U.S. Senate seat, has started new legislation that could boost his campaign Smith currently holds a position as a state senator and plans to introduce a bill to implement new, friendlier immigration laws into his more liberal state. His plan seems more on the far left of the scale of the political spectrum according to a poll taken
by prospective voters which seems to be what his voters want. “I see his plan is moving our state to more of a socialist government and that is what America should be”, said Sara Miller a resident of the liberal state.

-CNN

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-Fox News

John Smith (Republican), who is running for the open U.S. Senate seat, has started new legislation that might put him in trouble. Smith currently holds a position as a state senator and plans to introduce a bill to implement new, stricter immigration laws into his more liberal state. His plan seems more on the far right of the scale of the political spectrum according to a poll taken by prospective voters which seems to be what his voters don't want. “I see his plan is moving our state to more of a capitalist government and that is not what America should be”, said Sara Miller a resident of the liberal state.

-CNN

John Smith (Republican), who is running for the open U.S. Senate seat, has started new legislation that could boost his campaign. Smith currently holds a position as a state senator and plans to introduce a bill to implement new, stricter immigration laws into his more conservative state. His plan seems more on the far right of the scale of the political spectrum according to a poll taken by prospective voters which seems to be what his voters want. “I see his plan is moving our state to more of a capitalist government and that is what America should be”, said Sara Miller a resident of the conservative state.

-Fox News

John Smith (Republican), who is running for the open U.S. Senate seat, has started new legislation that could boost his campaign. Smith currently holds a position as a state senator and plans to introduce a bill to implement new, stricter immigration laws into his more conservative state. His plan seems more on the far right of the scale of the political spectrum according to a poll
taken by prospective voters which seems to be what his voters want. “I see his plan is moving our state to more of a capitalist government and that is what America should be”, said Sara Miller a resident of the conservative state.

-CNN

Appendix D

Opinion based political survey

Please rate the extent to which you agree or disagree with each of the following statements based on your personal attitudes and behaviors.

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree

The issue in the vignette is one that matters to me
I watch FOX News on a regular basis
I actively involve myself in political conversations
The issue in the vignette is something I am opposed to
I attend events (rallies, protests, information sessions, talks) involving political conversation
I watch CNN on a regular basis
I actively watch news reports involving political conversations
The issue in the vignette is something I agree with
I vote in primary elections for the President of the United States
I vote in state/local elections
I vote in federal elections (U.S. Senate, House, and Presidential)
Appendix E

Manipulation Check

Please answer the following questions related to the news story you read:

Which Political Party did the candidate belong to?
- Democratic
- Republican

What type of state did the candidate reside in?
- Conservative
- Liberal

Which news site did this vignette come from?
- FOX
- CNN

Did the citizen think the candidate was fit for the job?
- YES
- NO
## Appendix F

**Demographics**

The following items collect demographic information about individuals participating in this study. This information will not be used for identification purposes and will only be reported on an aggregated basis.

### Gender

Male  Female  Other __________  Prefer not to respond

### Race/Ethnicity

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<thead>
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<th>Caucasian or White</th>
<th>Black or African American</th>
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<td>Indian or Alaska Native</td>
<td>Hispanic</td>
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<tr>
<td>Pacific Islander</td>
<td>Multiracial</td>
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<tr>
<td>Other __________</td>
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### Age

_______

### Year in School

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### Political Ideology

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<td>Highly Liberal</td>
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</tbody>
</table>

### Political Party Affiliation

- Republican
- Democratic
- Independent
- No Party
- Other __________
Appendix G

Credit Survey

Are you in the Psychology Participant Pool? If no, there is no need to answer the following questions but please answer this question and read the debriefing form.
   Yes
   No

Please provide the following information to receive research credit, read the debriefing form, and then click submit

First and Last Name
Professor’s Name
Course
Role of temperature and shade coverage on behavior and habitat use of captive African lions, snow leopards, and cougars

Caitlin Mack

Abstract

Big cats are native to a wide variety of environments. Unfortunately, conservation is needed for many of these species, so a population is kept in zoos. Oftentimes, captive cats living in these zoos are not in their native climate, which can create unique challenges in animal husbandry and exhibit design. For this study, the African lions (Panthera leo), snow leopards (Panthera uncia), and cougars (Puma concolor) residing at the Cincinnati Zoo & Botanical Garden were observed in their outdoor enclosures from the public viewing area. I expected cats native to cold climates, such as the snow leopards, would be more active during periods of lower temperatures. They were observed on ten different days between September 2015 and February 2016, for a half hour each day, a total of fifteen observation hours, in temperatures ranging from 33°F to 73°F. Outdoor enclosures were diagramed and divided up into sections. A behavioral code was created with behaviors coded by letters. The cats’ behavior
and position in their enclosures were recorded at every minute mark for thirty minutes. The big cats displayed cooling behaviors more frequently on warm days, primarily through seeking shade. Lions were observed more frequently in shaded portions of the exhibit during temperatures greater than 51°F. Temperature was found not to have a significant effect on the average activity levels. The activity levels and environmental preferences in cats appear to be influenced by both the climate they grew up in and their species’ native climate. Both should be taken into consideration when designing habitats for big cat species in captivity.

**Introduction**

Big cat species live in a wide array of ecosystems. As such, they have evolved different adaptations to live in these different environments, such as heat regulation. African lions (*Panthera leo*) are native to the hot, arid regions of Africa. They are classified by the International Union for Conservation of Nature (IUCN) as Vulnerable (Bauer et al, 2015). Snow leopards (*Panthera uncia*) are native to the alpine regions of Central and South Asia. They are classified as Endangered by the IUCN, which is more severe than vulnerable (Jackson et al, 2008). Cougars (*Puma concolor*) have a large species range from Canada to the tip of Chile. They are well adapted to deal with a variety of conditions. Because they have such a wide geographic range, they are classified by the IUCN as Least Concern (Nielsen et al, 2015).

Cat species in a zoological setting are often not kept in their native climate zone. This creates a challenge in exhibit design, especially in outdoor exhibits, as the needs of each cat species are different. Wild cougars tend to be solitary and were found to prefer lower elevation as the winter grew colder (Alexander et al. 2006). Lions, on the other hand, are social animals, with the need to reinforce their bonds through behaviors such as head rubbing (Matoba et al. 2013). Behavioral enrichment has been found to be beneficial for orphan lion cubs that were not been able to learn social behaviors from their mothers (Ncube and Ndagurwa 2010). Captive cougars (Maia et al. 2012) and snow leopards (Sulser et al. 2008) have been shown to
become less active during periods of construction or other noise. Sometimes the exhibit design may also affect the activity levels of cats through the creation of microclimates. Lions were found to spend more time in the shade on sunny, warm days, while tigers were more likely to engage in cooling behaviors such as solar radiation input and evaporative heat loss. (Young et al. 2013). This kind of information is important in order for big cats kept in captivity for conservation purposes to be able to live healthy, enriched lives.

In this study, I observed differences in how three species of big cat, native to different environments, reacted to changes in their environment, specifically the effect of temperature and seasonal changes. I looked at this through observing frequency and type of activity and spatial preferences the cats exhibited within their enclosures. I hypothesized that snow leopards and lions would demonstrate the largest change in both activity levels and spatial preferences as the seasons changed. Cougars would remain the most constant. Snow leopards would become more active in the cold and lions will become more active in the heat. A scan sampling model was used in order to get an array of activity, since most cats species sleep most of the day.

**Methods**

**Subject and Enclosure Information**

All study subjects were residents of the Cincinnati Zoo. The zoo is located within a temperate climate with changing seasons. All study subjects were kept in outdoor enclosures while observations were being taken. The study subjects were two snow leopards, two cougars, and five African lions (Figure 1). The snow leopards were a young breeding pair. Their exhibit was oblong, with the elevation rising through the enclosure. The cougars were brothers. The cougars’ exhibit contained a grassy area on one side with rocks and a cliff face at the other side. The lions consisted of a breeding pair with their three yearling female cubs. Their exhibit was mostly flat, with a slope going down to a water feature. All subjects had either been born and raised at the Cincinnati Zoo or had resided there for over one year.
All subjects were observed during their normal routines, with no interference from the observer.

**Figure 1.** Study subjects: African lions, breeding pair and three female cubs (top); snow leopards, breeding pair (bottom left); cougars, brothers (bottom right)

**Observation Methods**

Species were observed ten different days from late September 2015 through early February 2016. All observations were carried out somewhere between the hours of 9AM and 3PM, typically on the
weekend. All three species were observed for thirty minutes within the same day as the other species. The observer watched the cats from the public viewing area of each of their exhibits. Instantaneous scan sampling was used, with observations on activity type and animal location within enclosure recorded every minute. A shorthand code was created for each behavior type. Each behavior type was noted if an animal was doing more than one. The animal enclosures were divided up into sections, and these sections were noted every minute as well (Figure 2).
Statistical Analysis

An activity score was calculated for each cat based on ranking behavior categories in intensity of activity. These scores were averaged to find the average score for each cat species. A multiple regression analysis was performed using Wessa Regression Software for average activity score versus species, time of day, temperature, and time of year. An analysis was also performed for percentage of time spent in shade versus species, temperature, and sunshine and the interaction between temp & sunshine.

Results

Cats were observed on ten occasions with the temperature ranging from 33°F to 73°F and cloud coverage ranging from completely sunny to fully cloudy days.

Lions were found to be less active than cougars and snow leopards (p<0.05) according to the average activity level of the three species. Multiple regression models looking at the effect of temperature, season, and time of day on average activity level yielded no significant results.

When looking at how the big cats used the natural variability in sun exposure in their exhibits, all three cat species were found to spend more time in the shade on days where the temperature was over 51°F (Fig. 3). Multiple regression showed a significant interaction between cloud coverage and temperature. The three big cat species spent most time in the shade on warm, sunny days with snow leopards spending more time in the shade than the lions and cougars (Table 1).

As temperatures got colder, the lions and cougars changed their preferred section of their exhibit. On warmer days, the lions preferred section 10, a shaded portion of their exhibit. On colder days, they spent more of their time in section 5, which is unshaded. The cougars preferred section 7, which is shaded, on warmer days and section 1, which is unshaded, on colder days.
Discussion

The results of this experiment support earlier studies. Another study looking at microclimates in captive tiger and lion exhibits found that lions spent more time in the shade on warm, sunny days versus other days (Young et al. 2013). There was evidence with these cats that both the native climate of their species and the environment with

Table 1: Multiple regression results with location in exhibit. Percentage of time spent in exposed areas of exhibit varied with cat species. More time was spent in exposed areas on cloudy days, especially when it was also colder.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>S.D.</th>
<th>2-tail p-value</th>
<th>1-tail p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>0.6045</td>
<td>0.3643</td>
<td>0.1095</td>
<td>0.05477</td>
</tr>
<tr>
<td>Lion &amp; Cougar vs. Snow Leopard</td>
<td>-0.3182</td>
<td>0.1129</td>
<td>0.009271</td>
<td>0.004636</td>
</tr>
<tr>
<td>Temperature</td>
<td>0.002544</td>
<td>0.00662</td>
<td>0.7042</td>
<td>0.3521</td>
</tr>
<tr>
<td>Sunny</td>
<td>-1.505</td>
<td>0.5843</td>
<td>0.01629</td>
<td>0.008147</td>
</tr>
<tr>
<td>Interaction of Temperature &amp; Sunny</td>
<td>0.02736</td>
<td>0.01083</td>
<td>0.01822</td>
<td>0.009112</td>
</tr>
</tbody>
</table>

Figure 3: Percent time spent in shade. The graphs to the left show percent of time spent in shade per species, depending on temperature and cloud cover. Cold days were defined as temperature 51° F or under. Warm days were temperatures greater than 51° F. All three cat species were indifferent to temperature on cloudy days, but responded to temperature on sunny days. This demonstrates the interaction between temperature and cloud coverage.
which the individual cat is familiar influenced behavior. In support of
the effect of native climate, the snow leopards were found in the
shade more often than the cougars or African lions. This is possibly
due to the snow leopards’ thick coats, as compared to the other two
cats. Since snow leopards evolved for the extreme cold of the
mountains of Central Asia, they are built to retain any heat they can
get. The evidence for the influence of the environment familiar to the
individual was that all three species shared similarities in activity and
shade-seeking. Also interesting was that the cougars and lions in this
study changed their preferred habitat area as the weather changed.

Looking forward, this study gives evidence that in exhibit design, it is
important to take into account the native climate of the species, the
habitat variability tolerance of the species, and the climate with which
the individual cat is familiar. One of the goals of exhibit design is to
prevent stress behavior by providing enrichment. One way to do this
is to provide diversity in shade and elevation within the habitat. For
future research, it would be interesting to have a wider-ranging study
using multiple zoos in various climates and environments and
comparing results between them to see if the trends were similar
between the different locations or if there are differences.

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The Influence of Fallback Foods on Skull Morphology in the Family Hominidae

Matt Sanfilippo

Abstract

Fallback foods are defined as resources of relatively poor nutritional quality that become particularly important dietary components in times where preferred foods are unavailable. Consumption of these foods is correlated with times of great stress and mortality within a species, indicating their potential to act as a selective pressure on the feeding adaptations of organisms. The focus of this study was on the individual adaptations that have evolved in the family Hominidae (the Great Apes) as a response to the fallback foods particular to each species. Three members of Hominidae were selected for examination; Pongo pygmaeus (the Bornean Orangutan), Pan troglodytes (the Common Chimpanzee), and Gorilla gorilla (the Lowland Gorilla) based on the significant variation between their known fallback food selections. P. pygmaeus is known for consumption of unripe fruits, seeds, and barks, G. gorilla is notorious for consumption of low quality terrestrial herbaceous vegetation (THV), bark and woody pith, and P. troglodytes frequently expand their territory in search of preferred foods, rather than defaulting to lower quality food sources. Sample images of each organism were obtained from the Field Museum of Natural History (Chicago, IL). Measurements were then made of several relevant cranial-morphological indices using the image analysis software ImageJ. Mean values, standard deviation, and
analysis of variance were calculated using the statistics software SYSTAT. Significant differences were found among the three species examined in moment arm of both the temporalis muscle and masseter muscle, the height of the dentary, and the mechanical advantage of the temporalis muscle at M1, suggesting the potential evolutionary impact of fallback foods on some of these features.

**Introduction**

As human beings, our fascination with our own evolutionary history leads us almost categorically on a path of discovery to our closest living relatives, the Great Apes. Throughout our antiquity, and even before we understood the process of evolution, we have searched for answers in the remains of our forebears and those species similar to us. As a result, in the modern era of scientific discovery, many studies have examined the Great Apes as an answer to our developmental questions, particularly the question of how we evolved to consume the foods we do in the way that we do. One such study of Hominidae examined the effects of “fallback foods” and their importance in primate evolution in terms of tooth enamel morphology (Constantino et al., 2009).

The term “fallback foods” is one without a truly standardized definition. In general, it is accepted that fallback foods are foods of relatively low nutritional quality that become highly important in the primate diet when preferred sources of food are scarce or altogether unavailable (Marshall et al., 2008, Constantino et al., 2009, Watts et al., 2012). Their use is generally inversely proportional to the consumption of those foods that classify as preferred or high quality. In this case, “quality” refers to the ease of energy extraction from the source of food, such that those foods with low processing needs and high output may be considered preferred (Watts et al., 2011). Fallback foods can be any number of edibles, and have been shown in certain instances to play an important role in shaping both the behavioral and physiological adaptations among many animals, including all members of the family Hominidae (Strait et al., 2013, Constantino et al., 2009).
The ability to gather and store energy cannot be overstated for its adaptive importance. Food, second perhaps only to water, is of obvious and fundamental importance to all life on our planet, primates included. For many species it is a key determinant of fitness and it may determine a species geographic range and population size (Marshall et al., 2008). More specific to organisms however is the ability to process food effectively; including the morphological, biochemical, and mechanical adaptations that make the consumption of food easier (Anapol and Lee, 1994, Taylor, 2002, Terhune, 2013). This is especially true of fallback foods, which serve as the last resort in numerous instances, making the ability to consume fallback foods efficiently a selective pressure throughout thousands of years of primate evolution to shape anatomical traits (Marshall et al., 2008).

Although fallback foods vary by region and species, the preferred foods among the Great Apes appear to have a certain degree of consistency to them. Common as the preferred food among Pan troglodytes (common Chimpanzee), Pongo pygmaeus (Bornean Orangutan), and Gorilla gorilla (lowland Gorilla) appears in almost all cases to be soft ripe fruits (Constantino et al., 2009, Watts et al., 2012). The case of fallback foods however sees a significant divergence among these closely related species. For the common chimpanzee in cases of preferred food unavailability, the species has a unique behavioral response; they will break off into smaller foraging parties and begin to search more extensively for their preferred soft, ripe fruits (Constantino et al., 2009, Watts et al., 2011). In the case of the Bornean orangutan, the scenario is different. Because of their natural habitat location, P. pygmaeus must go through much of the year without any possibility of finding ripe fruits. Thus they are often driven to consume harder fallback foods such as, unripe fruits, bark, nuts, and seeds (Constantino et al., 2009). Finally, in the case of the lowland gorilla, the species exhibits the consumption of some of the most low-quality and toughest foods of all. Common fallback foods for G. gorilla include; terrestrial herbaceous vegetation (THV), bark, woody pith, and tough fibrous fruits. Thus in summary, it is generally agreed upon that members of G.gorilla consume the most mechanically demanding fallback foods, while Chimpanzees consume the softest with Orangutans representing a relative intermediate.
Based on this previous research, a study was conducted in order to ascertain the potential effects that differences in fallback food consumption between species of Hominidae could have on the evolution of Great Ape skull morphology, particularly as it relates to the development of chewing muscles (Taylor, 2002, Schmittbuhl et al., 2007, Armfield and Vineyard, 2010). To do this, variables indicative of morphological masticatory characteristics were measured (e.g. mechanical advantage at both temporalis and masseter muscles, dentary height, and muscle attachment points). It is hypothesized that because of the distinct differences in fallback food toughness between *P.troglodytes*, *P. pygmaeus*, *G. Gorilla*; there will be a corresponding difference in the relative adaptations in skull morphology to better consume these foods, lending support to the theory that fallback foods do indeed act as a selective pressure. It is expected that Gorillas will exhibit greater indicators of enhanced masticatory morphology because of the high mechanical demands of their fallback diet. It then follows that Chimpanzees should show the least amount of adaptation and Orangutans should represent the intermediary between the two.

**Materials and Methods**

For the purpose of this study, pertinent images of specimens were obtained from the Field Museum of Natural History, Chicago, IL. The organisms chosen for this study were readily available extant members of the family Hominidae. The sample included specimens of *G. gorilla* (Western Gorilla, n=5), *P. pygmaeus* (Bornean Orangutan, n=8), and *P. troglodytes* (Common Chimpanzee, n=5). Using ImageJ, an Image Processing and Analysis software program (NIH), linear measurements of the cranium and mandible were taken from the digital images. From these cranial and mandibular measurements, indices were computed and standardized (by dividing by skull length or jaw length, respectively). The indices were then used to calculate mechanical advantage of both the temporalis and masseter muscles at the lower first molar. These indices were next analyzed using the statistical package SYSTAT 10.2 to generate means and standard deviations of each variable. An analysis of variance was performed on
the variables to determine if there were any significant differences between species.

**Table 1**: Definitions of variables and indices used in the study.

<table>
<thead>
<tr>
<th>Index</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAM</td>
<td>Moment Arm of Masseter m.- distance from approximate midpoint of mandibular condyle to ventral border of masseteric fossa</td>
</tr>
<tr>
<td>MFL</td>
<td>Masseteric Fossa Length-taken at widest point</td>
</tr>
<tr>
<td>HOD</td>
<td>Height of Dentary-distance from height of mandibular condyle to ventral border of mandible</td>
</tr>
<tr>
<td>LTRL</td>
<td>Lower Tooth Row Length-distance from front of canine to back of M3</td>
</tr>
<tr>
<td>JL</td>
<td>Jaw Length</td>
</tr>
<tr>
<td>MAT</td>
<td>Moment Arm of Temporalis m.-distance from midpoint of mandibular condyle to midpoint of coronoid process</td>
</tr>
<tr>
<td>MAMo</td>
<td>Lever Arm at Molar 1-line at HOD to front of M1</td>
</tr>
<tr>
<td>TFL</td>
<td>Temporal Fossa Length</td>
</tr>
<tr>
<td>SL</td>
<td>Skull Length-distance from anterior point of maxilla to opisthocranion</td>
</tr>
<tr>
<td>UTRL</td>
<td>Upper Tooth Row Length-distance from front of canine to back of M3</td>
</tr>
<tr>
<td>MAM1T</td>
<td>Mechanical advantage at M1 by temporalis m. (MAT/MAMo)</td>
</tr>
<tr>
<td>MAM1M</td>
<td>Mechanical advantage at M1 by masseter m. (MAT/MAMo)</td>
</tr>
</tbody>
</table>
The definitions of all measurements taken and indices calculated are shown above in Table 1. The diagrams in Figure 1 and Figure 2 illustrate these measurements on the Chimpanzee, *P. troglodytes*.

**Figure 1**: Mandible of *P. troglodytes* showing the variables measured in the experiment. 1 (MAM), 2 (MFL), 3 (HOD), 4 (LTRL), 5 (JL), 6 (MAT), 10 (MAMo).

**Figure 2**: Cranium of *P. troglodytes* showing the variables measured in the experiment. 7 (TFL), 8 (SL), 9 (UTRL).
Results

The linear measurements and calculations by indices were subject to statistical analysis. From this it was found that the Orangutan exhibited a significantly longer MAM (moment arm of the masseter) than either the Gorilla or the Chimpanzee (p<0.005) and a significantly longer MAT (moment arm of the temporalis than the Gorilla (p<0.05), (Table 2). The Orangutan and Gorilla exhibited significantly larger HOD (height of the dentary) than that of the Chimpanzee (p<0.05). The Mechanical Advantage of the Temporalis muscle at the first lower molar (as calculated above, Table 1) was found to be significantly greater in the Chimpanzee and the Orangutan than the Gorilla (p<0.05). There were no significant differences observed among the rest of variables and indices.

<table>
<thead>
<tr>
<th>Index</th>
<th>Pongo pygmaeus</th>
<th>Pan troglodytes</th>
<th>Gorilla gorilla</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAM</td>
<td>0.850 (0.054) c,g</td>
<td>0.713 (0.047) o</td>
<td>0.756 (0.071) o</td>
</tr>
<tr>
<td>MFL</td>
<td>0.468 (0.015)</td>
<td>0.422 (0.040)</td>
<td>0.444 (0.034)</td>
</tr>
<tr>
<td>HOD</td>
<td>0.800 (0.041) c</td>
<td>0.591 (0.053) o,g</td>
<td>0.777 (0.100) c</td>
</tr>
<tr>
<td>LTRL</td>
<td>0.541 (0.019)</td>
<td>0.549 (0.024)</td>
<td>0.550 (0.055)</td>
</tr>
<tr>
<td>MAT</td>
<td>0.357 (0.047) g</td>
<td>0.359 (0.041)</td>
<td>0.280 (0.050) o</td>
</tr>
<tr>
<td>MAMo</td>
<td>0.786 (0.048)</td>
<td>0.766 (0.016)</td>
<td>0.779 (0.076)</td>
</tr>
<tr>
<td>TFL</td>
<td>0.479 (0.041)</td>
<td>0.535 (0.038)</td>
<td>0.514 (0.061)</td>
</tr>
<tr>
<td>UTRL</td>
<td>0.332 (0.035)</td>
<td>0.314 (0.017)</td>
<td>0.309 (0.031)</td>
</tr>
<tr>
<td>MAM1T</td>
<td>0.456 (0.063) g</td>
<td>0.468 (0.045) g</td>
<td>0.358 (0.042) o,c</td>
</tr>
<tr>
<td>MAM1M</td>
<td>1.087 (0.117)</td>
<td>0.931 (0.042)</td>
<td>0.979 (0.141)</td>
</tr>
</tbody>
</table>

Table 2: Mean values and standard deviations of the standardized measurements and indices for each species. Superscript letters indicate that the denoted species differs significantly from the listed species. Superscripts are defined as follows: G- Gorilla, O- Orangutan, C- Chimpanzee
Discussion

In agreement with the hypothesis, the Gorilla and the Orangutan were observed to have relatively larger dentaries (HOD) when compared to the chimpanzee. This is significant because HOD has previously been shown to correlate with the robustness of the Temporal Mandibular Joint (TMJ) and size of the masseter muscle (Durmont, 1997; Terhune, 2013). These morphological features (TMJ robustness and masseter size) are important indicators of enhanced masticatory morphology, and as such may indicate an adaptation for consumption of more mechanically demanding foods in both Gorillas and Orangutans.

Overall however, the results indicate that the data collected from this study did not support the hypothesis. Direct calculation of mechanical advantage indicated a higher mechanical advantage of the temporalis in the Orangutan and the Chimpanzee suggesting that these two species have evolved more robust jaws and jaw-closing musculature. Additionally, the Orangutan, which appeared to have the most intermediate mechanically demanding fallback foods, exhibited significantly larger MAM and MAT values. These values are important for estimating the mechanical advantage given by leverage in chewing, which is calculated as $MA = \frac{L_i}{L_o}$ (where $L_i$ is the in-lever, and $L_o$ is the out-lever). Thus the increased length of moment arm (or in-lever) measured indicates greater mechanical advantage of both the masseter and temporalis muscles at the lower first molar in the Orangutan as compared with the other species in the study.

One possible explanation behind this peculiar find may deal with the masticatory method responsible for the processing of fallback foods, and not just the mechanical demand of the food itself. Previous studies conducted relating in particular to fallback foods have shown that adaptations in the Gorilla include features such as larger relative tooth size and thicker occlusional enamel (Constantino et al., 2009). These particular adaptations are useful advantages in the Gorilla fallback diet, which is highly folivorous in nature (comprised of mostly leaves, pith, bark, and THV) and therefore requires more daily
chewing cycles and greater protection against surface wear (Constantino *et al.*, 2009; Taylor, 2002). In contrast, this study focused in particular on morphological indicators of bite force and muscle size, and has revealed evidence that in these categories, members of *P. pygmaeus* are more adapted for a mechanically demanding fallback diet than are members of *G. gorilla*. The answer to this puzzle may lie in the particular chewing methods involved for the respective fallback diet of each species. Because Orangutans are known to chew on foods of relatively high hardness (i.e. nuts, seeds) with their post-canine teeth, they may require a greater bite force than other members of Hominidae to cope with the cracking process of mastication. Consequently it follows that measurements indicative of a higher mechanical advantage for chewing via both temporalis and masseter muscles (MAT and MAM respectively) at the lower first molar would be significantly larger in *P. pygmaeus*.

In conclusion, on the basis of the variables measured, members of *P. pygmaeus* were shown to have the greatest degree of adaptation in their chewing morphology. This can be observed as the combination of their significantly larger HOD, MAM, and MAT measurements. In theory, this could be due to the unique hardness of Orangutan fallback foods, which would require a larger one time bite force to process as compared to organisms whose diets are more folivorous or frugivorous. This data is limited by the number of images available, thus a future study with a greater cohort may prove useful. Additionally, certain indices (particularly dental features) were not measured in this study. It may be worthwhile in future studies to examine these in conjunction with the morphological characteristics examined here.

**References**


Cosmic Reionization and Early Star-Forming Galaxies:

New Constraints on the Epoch of Cosmic Reionization

Pengfei Xu

Abstract

According to Big Bang cosmology, the formation of stars that marked the end of the “dark ages” in the early Universe began re-ionizing the intergalactic medium, representing an important era of evolution in our Universe. Observation from high redshift galaxies indicates that reionization ended at redshift $z \approx 6$, but many of the properties of the physical environment that affect the process of reionization remain uncertain. However, recent observations of the integrated optical depth $\tau$, of Thomson scattering to the cosmic microwave background reported by the Planck collaboration provide important constraints on the physical parameters that defined the state of the early Universe. We perform a simple analysis of reionization informed by these new observations to set new constraints on those parameters.

1. Introduction

Cosmic reionization represents an important era for the evolution of the Universe. Galaxies and Quasars begin to form. Early intergalactic Medium are makeup of neutral hydrogens, which absorb UV photons of energy 13.6 eV to be ionized. Early star-forming galaxies consist of many massive stars, producing a lot of UV light and re-ionizing the intergalactic medium. Observations from high redshift galaxies
indicate that reionization ended at redshift $z \approx 6$, but the process and duration of reionization remains less certain. By introducing the constraint provided by the integrated optical depth $\tau$, of Thomson scattering to the cosmic microwave background, the physical parameters that define the states of early Universe are limited. The Wilkinson Microwave Anisotropy Probe (WMAP) has provided a value $\tau =0.088 \pm 0.014$, which indicates that reionization began at $z \approx 15$ or earlier (Bromm & Yoshida 2011; Dunlop 2013).

However, consistent with the value of $\tau$ provide by WMAP, a significant population of high redshift star-forming galaxies is required (Robertson et al. (2013). The Planck Collaboration et al. (2015) recently provided a lower value for optical depth $\tau = 0.066 \pm 0.012$. Using the new value of optical depth $\tau$, we set new constraints on the physical parameters that define conditions for reionization. All cosmological calculations assume flatness and the most recent Planck cosmological parameters ($h= 0.6774, \Omega_m = 0.309, \Omega_m h^2 = 0.02230, Y_p = 0.2453; \text{Planck Collaboration et al. 2015}$).

2. Reionization and star formation History

The universe is expanding because space is expanding. The light traveling through space becomes stretched, transforming visible light into the infrared wavelength we call cosmological redshift. Redshift is used to describe the distance of distant objects in space. The greater the redshift, the greater the distance from earth, and the further we look back in time. So redshift is also used to represent time in cosmology. To plot $t$ as a function of redshift $z$

$$t(z) = \frac{9.77}{h} \int \frac{1}{\sqrt{\Omega_m (1 + x)^5 + \Omega_E (1 + x)^2}}$$

where $\Omega_m=0.3$, $\Omega_E=0.7$, $h=0.67$, the converge between redshift and time shown in Fig.1
Photons from star-forming galaxies dominate the reionization process, an accounting of the evolving SFR density will provide a measure of the time-dependent cosmic ionization rate

\[ \dot{n}_{\text{ion}} = f_{\text{esc}} \xi_{\text{ion}} \rho_{\text{SFR}}, \]

Where \( F_{\text{esc}} \) is the fraction of photons produced by stellar populations that escape to ionize the IGM, \( \xi_{\text{ion}} \) is the number of Lyman continuum photons per second produced per unit SFR for a typical stellar population, and \( \rho_{\text{SFR}} \) is the cosmic SFR density. The fiducial value we adopted are \( F_{\text{esc}} = 0.2 \) and \( \xi_{\text{ion}} = 10^{53.14} \) number of photons per second produced per unit SFR (Dunlop et al. 2013). To model \( \rho_{\text{SFR}} \), we adopt the four-parameter fitting function

\[ \rho_{\text{SFR}}(z) = a_p \frac{(1 + z)^{b_p}}{1 + [(1 + z)/c_p]^{d_p}} \]

and perform a maximum likelihood (ML) determination of the parameter values using Bayesian methods (i.e., Multinest; Feroz et al.)
2009) We find parameter $a_p = 0.01306$, $b_p = 3.66$, $c_p = 2.28$, and $d_p = 5.29$.

The IGM ionized fraction $Q_{\text{HII}}(z)$ is computed by evolving the differential equation

$$\dot{Q}_{\text{HII}} = \frac{n_{\text{ion}}}{\langle n_H \rangle} - \frac{Q_{\text{HII}}}{t_{\text{rec}}}$$

where the IGM recombination time

$$t_{\text{rec}} = \left[ C_{\text{HII}} \alpha_B(T)(1 + Y_p/4X_p)\langle n_H \rangle(1 + z)^3 \right]^{-1}$$

is calculated by evaluating the recombination coefficient $\alpha_B$ at IGM temperature $T = 20000\text{K}$ and a clumping fraction $C_H = 3$ (e.g., Pawlik et al. 2009; Shull et al. 2012). Reionization history that uses fiducial values ($C_H = 3, F_{\text{esc}} = 0.2, T = 20000\text{K}$) is shown in Fig. 2, which consistent with the constraint form reionization ended at redshift $z \approx 6$.

**Figure 2:** Reionization history as function of redshift $z$
3. Thomson Optical Depth

If the photons from star-forming galaxies dominate the reionization process, Thomson optical depth can be used to place an additional constraint on $\rho_{SFR}$ (Robertson et al. (2013). The Thomson optical depth is given by

$$\tau(z) = c \langle n_H \rangle \sigma_T \int_0^z f_e Q_{H\Pi}(z') H^{-1}(z')(1 + z')^2 dz'$$

where $c$ is the speed of light. The comoving hydrogen density $n_H = X_p \Omega_b \rho_c$ involves the hydrogen mass fraction $X_p$, the baryon density $b$, and the critical density $\rho_c$. The Thomson scattering cross section is $\sigma_T$.

Setting factor $n$, clumping fraction $C_H$, escape fraction of photon $F_{esc}$ and temperature $T$ as free parameters. Observation indicates that the range of free parameter $n = 0.5 \sim 2$, $F_{esc} = 0.05 \sim 2$, $C_H = 1 \sim 10$, $T = 5000K \sim 20000K$. Combine these parameters and define new magnitude parameters

$$A = n F_{esc} \quad B = \frac{C_H}{(\frac{T}{10000})^{0.845}}$$

We tested different combination of value, then find the value of A and B both consistent with reionization ended at $z \approx 6$ and Thomson optical depth $\tau = 0.066 \pm 0.012$. New constrains of parameter (A,B) is shows in Fig. 3.
Figure 3: New constraints of Parameter (A, B) Consistent with \( z \approx 6 \) and \( \tau = 0.066 \pm 0.012 \)

To do a simple analysis, we used a maximum and minimum value of (A, B). All the parameters are consistent with the \( z \approx 6 \) and \( \tau = 0.066 \pm 0.012 \), but reionization process is different with different parameters. (Fig. 4)

Figure 4: Reionization History as function of redshift \( z \). Solid line-Upper limit of ((A, B) = (0.4, 9.22)). Dashed line- Lower limit of (A, B) = (0.15, 0.557)
We performed a four parameters analysis on the maximum and minimum value of A and B. Separate parameters $C_H$ and $T$ in B, where

$$B = \frac{C_H}{T} \left(\frac{T}{10000}\right)^{0.845}$$

Plot $B_{\text{Max}}$ and $B_{\text{Min}}$ with $T$ vs $C_H$. (Fig. 5)

![Graph showing constraints on $B_{\text{Max}}$ and $B_{\text{Min}}$](image)

**Figure 5:** Constraints on Temperature and Clumping Factor $C_H$

Since observation indicates that $C_H = 1\sim10$ and $T = 5000K\sim20000K$ all the value exceeding this range can be excluded. Therefore, all the value from $B_{\text{Min}}$ can be excluded. Only the value of second half of $B_{\text{Max}}$ is consistent with both condition for $T$ and $C_H$.

$$A = n F_{\text{esc}}$$

Plot $A_{\text{Max}}$ and $A_{\text{Min}}$ with $F_{\text{esc}}$ vs $n$. (Fig. 6)

Observation indicate that $n = 0.5\sim2$ and $F_{\text{esc}} = 0.05\sim2$. All the results exceeding this range will be excluded. Since $A_{\text{Max}}$ has $F_{\text{esc}}$ greater than 0.2, all the value of $A_{\text{Max}}$ can be excluded. All the value of $A_{\text{Min}}$ is consistent with both conditions for $n$ and $F_{\text{esc}}$.
4. Conclusion

The new value of the optical depth $\tau$ of Thomson scattering reported by the Planck consortium indicates that star-forming galaxies drive the process of Reionization. The result form Thomson optical depth $\tau$ is compatible with reionization completed at $z \approx 6$. By applying the constant of the new value of Thomson optical depth $\tau = 0.066 \pm 0.012$, we significantly reduced the requirement for re-ionization process. We only performed a simple analysis with upper limit and lower limit value of $A$ and $B$. A further four parameter analysis that includes all value of $A$ and $B$ can be performed using computer to give us the full picture for conditions of reionization.

Reionization ended very quickly at $z \approx 6$. Our research provides a picture for the process of reionization with a different value. The lower requirement for reionization also has important implications for the study of redshift 21-cm line of natural hydrogen in intergalactic medium (e.g., van Haarlem et al. 2013; Bowman et al. 2013; Pober et al. 2014), which can be used as a probe for early IGM and star forming galaxies.
References


“Only Genius, Wit, and Taste to Recommend Them”

Metafiction and Feminine Literary Pursuits in *Northanger Abbey* and *Atonement*

Tori Link

**Abstract**

Metafiction is a literary technique in which a literary work relies on intertextuality to offer intellectual or social commentary on the functions of genre or fiction. Jane Austen’s *Northanger Abbey* is a work of metafiction that examines the Gothic novel and the role of female writers, characters, and readers. Austen challenges the Regency Era opinion that novels are an inferior literary form because they are inherently feminine through her careful commentary on genre and reader attitude. This conversation continues today in the novel *Atonement* by Ian McEwan, which contains an epigraph from *Northanger Abbey* and is inspired by the themes in Austen’s novel. By placing Austen at the forefront of a novel that heavily relies on an intertextual understanding of modern British literature, he reinforces Austen’s place within the literary canon. Austen and McEwan used metafiction to be part of an ongoing conversation about the credibility and recognition that is owed to women writers.

**Read this Article Online: [http://wp.me/P6AtH6-4m](http://wp.me/P6AtH6-4m)**
Imaginative Feminism in Austen’s Marriage
Conclusions

Jessie Frank

Abstract

When Jane Austen emerged onto the literary scene in the nineteenth century, her work marked a decisive shift away from the popularized Gothic novel of her time and toward realism. Rather than saturating her plots with implausible events and fantastic characters, Austen’s novels impeccably depicted the realities of common people living ordinary lives in Regency England—realities that, for women, included a lack of choices and limited autonomy. In this patriarchal society, women entered into marriage almost compulsively, and Austen reflects these constraints through her use of the marriage plot. That her works focus heavily on marriage does not, however, dually mean that they enforce or promote female submission to a male other. Instead, Austen’s texts can be read as feminist in that they critique rather than support marriage and highlight female oppression. Seeking to uphold realism on the one hand and feminism on the other, Austen cannot feasibly conclude her novels in such a way that grants her heroines a satisfying amount of agency—such a feminist ending would turn her realism into fantasy. In this essay, I will argue that in order to preserve the texts’ realism while maintaining their feminist glow, Austen provides scant details about the union of hero and heroine so as not to petrify a conclusion involving female subordination. Her novels’ lack of disclosure thus prompts the reader to imagine a progressive, feminist continuation of the novel that
Austen cannot plausibly create within its pages. Furthermore, I will argue that this imaginative potential has sociopolitical implications for the reader, who is in turn invited to imagine alternative possibilities unknowable within the premises of their own reality.

Read this Article Online: http://wp.me/P6AtH6-4o
The Nineteenth-Century Enigma

Amy March as Champion and Challenger of Society

Emily Hogya

Abstract

Louisa May Alcott’s *Little Women*, an American classic beloved by many young readers, is oft recognized by scholars as an examination of nineteenth-century subversive feminism, embodied by the tomboyish and resolutely unconstrained Jo March. However, Amy, the precocious, charming, and materialistic youngest March sister, is just as often overlooked as an equally commanding figure in Alcott’s early feminist discourse. Perhaps it is her seemingly complacent subscription to social expectations of feminine behavior, her fascination with traditionally “female” preoccupations that prompts readers to ignore her dissident potential. This potential is present though, and is what I explore in this essay. I argue that Amy is both champion and challenger of nineteenth-century societal norms, simultaneously embracing that which society dictates she must become and rebuffing it. Indeed, the very act of consciously molding herself into the ideal image of feminine refinement demonstrates her agency and self-possession, two characteristics quite at odds with such an image. I explore how Amy’s social maneuvers secure for her a wealthy husband and the life of a wealthy gentlewoman, though her forceful attempts at encouraging her husband to abandon his indolence in favor of activity resonate with insubordinate
implications. Thus, Amy is much more nuanced than traditionally read. Ultimately, I argue that Alcott’s portrayal of Amy taps into powerful dichotomies between conformity and rebellion, between the socially acceptable and the socially rebellious, and illuminates the complexities inherent to interpreting a woman that desires the conventional, but also is able to achieve the conventional by her own artistry, finesse, and agency.

Read this Article Online: http://wp.me/P6AtH6-4q
The Angelic Doctor as Poet

Aquinas’ Pange Lingua and the Aesthetics of Latin Poetry

David Nussman

Abstract

Saint Thomas Aquinas wrote a total of five Eucharistic hymns for the institution of the feast of Corpus Christi in the year 1264. This research paper analyzes the stylistic features of one of these hymns, the Pange Lingua. The text of the hymn is considered, so any melodies to which the hymn has been set are outside the scope of this essay, which is at its core a literary analysis. In other words, the hymn is viewed as a poem.

In the Pange Lingua, Aquinas uses word-play and verbal allusion as tools for the development of imagery. This method of poetical expression bears noticeable resemblance to that of classical lyric poetry—in which a poem commonly features an extended series of images, which convey the logical steps in the poem’s message or train of thought. On the one hand, the imagery veils the poem’s message in mystery; but on the other hand, the imagery makes the poem’s message more tangible and engaging.

The imagery found in Aquinas’ Pange Lingua is on par with Aquinas’ Eucharistic theology. Aquinas held that the Holy Sacrifice of the Mass is a participation in Christ’s Sacrifice at Calvary. The Pange
*Lingua* expresses this point by blending imagery pertaining to the Crucifixion with imagery pertaining to the Eucharist. This fusion of imagery begins in the hymn’s opening line, which is based on the opening line of an earlier hymn (penned by Venantius Fortunatus) about the Crucifixion.

The Eucharistic hymns of St. Thomas Aquinas do not receive much attention in contemporary scholarship. The main cause of this deficiency seems to be that the hymns are not well-suited to the current interests of various academic disciplines. While this lack of secondary sources certainly poses difficulties, it also encourages a more thorough engagement with the primary source.

**Read this Article Online: http://wp.me/P6AtH6-4s**
A Kantian Redefining of the Conception of “Art”

Linnea Head

Abstract

In this paper, I analyze Kant’s theory of art through the claim from Clement Greenberg that Kant was the first Modern Formalist. Formalism is the way in which we judge a value of a work determined by its formal properties such as a line, shape, color, etc. Modernism is defined by breaking away from a style or movement in traditional or classical arts. Clement Greenberg has co-opted the term formalism to mean modernism and has thus conflated Kant’s theory for his own. Greenberg’s theory gifts modern art with the concept of absolute autonomy, but as a by-product he pushes the discussion of quality into the background. Kant and Greenberg differ in two respects, through the criteria of beauty and through Kant’s aesthetic ideas. Fine art is beautiful art for Kant: a declaration produced through reflective judgment that occurs when the imagination (the power of intuitions) harmonizes with the understanding (the power of concepts). Second, in his explication of aesthetic ideas, Kant assigns the production of fine art to genius and the judgment of fine art to taste. Greenberg’s discussion only covers taste, which is what I highlight to be the cause for modernism’s allowance of both bad art and non-art to pass as fine. Through my explication of Greenberg’s overarching criticism (I), the relationship between Greenberg and Kant (II), an analysis of Kant’s theory of art that is compatible but not restricted to modern formalism (III), and an example of art, Yves Klein’s Blue, through both a Kantian and Greenbergian lens to demonstrate the loss of discerning value through Greenberg’s
modernism (IV), I hope to revive value judgment in art criticism covering all movements; past, present, and future.

Read this Article Online: http://wp.me/P6AtH6-4u
"I Learned it From the Radio"

The Effects of Music Genre on Conflict Communication Between Romantic Relationships

Brooke Mills

Abstract

Although music is a large part of most people’s daily lives, many don’t stop to examine the impact it could be having on the way they communicate with others. However, music, persuasion, and priming are so integrally intertwined that further examination of the relationship beckons researchers more and more today. This essay explores whether or not music may serve as a priming mechanism for subsequent behaviors and conflict resolution styles. It also highlights the connection between music, social learning theory, priming, and conflict resolution.

Read this Article Online: http://wp.me/P6AtH6-4w
Disparities and Consequences

Racial and Socioeconomic Differences Between Neighborhoods in St. Louis and Cincinnati and Their Lasting Effects

Leah Efken

Abstract

Most residents consider the city they live in a civic space, somewhere they can work, play, raise a family, and fulfill their ideas for being their best, most productive, contributing selves. However, cities throughout the United States often lack ways to meaningfully unify and engage their communities, resulting in citizens being less-informed about local conflicts. Often, these local conflicts arise out of inequalities between adjacent neighborhoods. While problems such as these inequalities are common across America cities, local organizations that research and understand their cities’ troubles are better poised to engage and address the inequalities between residents who, although literally neighbors, may lead drastically different lives. Organizations at the local level who conduct research and publish their opinions often inform the best scholarship on local-level issues. This type of source, in conjunction with pieces of national scope comprise the body of research used to explain the pattern of inequalities found across neighborhood borders of both Cincinnati, Ohio and St. Louis, Missouri. These inequalities are evident in racial and socioeconomic demographics, and the national research speaks to the repetitious nature of the differences; similar discrepancies are
found in cities throughout the United States. Analyzing data trends on income and race, spanning both time and location, makes it clear that there is not only a correlation between income and race. In fact, a person’s location alone may almost determine their experiences and achievements during their lifetime. As the frustration with racism and injustice mounts in cities with a history of inequality (as recent events in Cincinnati or St. Louis suggest it has), communities often protest through heated or violent backlash. Linking demographic analysis with an examination of recent events, this study seeks to explain a) the historic rise and policy causes behind the inequalities between two neighborhoods in both Cincinnati and St. Louis and b) the economic, health, social, and other effects of the inequalities. Ultimately, cities with issues like the ones presented in this analysis must address residents’ lack of unity as a civic and philosophical contradiction to the purpose of a city.

Read this Article Online: http://wp.me/P6AtH6-4y
Contributor Biographies

Leah Efken (Class of 2016) graduated with an Honors Bachelor of Arts in Philosophy, Politics, and the Public and a minor in French. She was involved in a number of student organizations, including Alpha Sigma Nu, Phi Beta Kappa, French Club, and the Xavier University Chamber Orchestra. She will begin work as a Social Research Analyst at 1919 Investment Counsel in Cincinnati this summer. “Disparities and Consequences: Racial and Socioeconomic Differences Between Neighborhoods in St. Louis and Cincinnati” was advised by Dr. John Fairfield, of the History Department.

Jessie Frank (Class of 2017) is pursuing majors in both Political Science and English and a minor in Peace and Justice Studies. She values her work as a tutor at Xavier’s Writing Center and her involvement with the Center for Faith and Justice, where she furthers a passion for social justice. In her free time, she can be found reading and writing poetry, dancing, and listening to music. “Imaginative Feminism in Austen’s Marriage Conclusions” was sponsored by Dr. Jodi Wyett, Associate Professor of English.

Benjamin Giles (Class of 2018) is currently pursuing an Honors B.A. in Philosophy, Politics, and the Public as well as a B.A. in Philosophy with a minor in History. His interest in questions political, historical, and philosophical drive his interest in conversations along those topics. He also enjoys reading, writing, video games, running outdoors, traveling (especially by air), generally spending time with friends, and practicing his Catholic faith. After graduation, he hopes to work in politics or pursue further schooling in philosophy. "Rethinking Church and State: America's Neutrality-Obsessed Separation, Its Formation, Its Compromised State, and the Way Forward” was sponsored by Dr. John Fairfield, professor of History.

Linnea Head (Class of 2016) is currently working towards a B.A. in Philosophy with minors in English and Psychology. She is the captain of Ethics Bowl and involved in Greek Reading club and Young Americans for Liberty. After graduation, she intends on pursuing
either constitutional law or Jurisprudence. In her free time, she does Crossfit, spends time with her family who mostly live in Cincinnati, and paints. Her essay, “A Kantian Redefining of the Conception of ‘Art’,” was spurred an interest in aesthetics because of her artistic interest. This essay was sponsored by Dr. Timothy Brownlee, Professor of philosophy.

Jonathan S. Hogue (Class of 2016) is a Philosophy, Politics and the Public (PPP) major with minors in History, Political Science and Spanish from Aurora, Illinois. His work, “DeRolph v. State: How Limited Government vs. Large Government Debates Affect Race and Education in Cincinnati” was a part of the PPP capstone process. After Xavier, Jonathan will move to Washington, D.C. for a year a service work as an education aide with AmeriCorp’s City Year Program.

Emily Hogya: (Class of 2017) is currently working to earn her B.S.B.A. in Finance, Economics, and Accounting, though she keeps her creativity flourishing through courses in her English minor. She is a founding member and Vice Chair of the Williams College of Business Dean’s Student Advisory Board, as well as a brother in the professional business fraternity Delta Sigma Pi and a University Scholar. She also maintains memberships in the business honor societies Beta Alpha Psi and Beta Gamma Sigma. Her internship at Fund Evaluation Group, LLC, a Cincinnati-based investment advisory firm, has kindled her passion for portfolio management, and she hopes to pursue a career in asset management for family office, trust, and endowment clients. She also aims to earn her Chartered Financial Analyst (CFA) and Chartered Alternative Investment Analyst (CAIA) professional designations. She loves taking barre classes, spending time with her family and friends, and reading classic novels. “The Nineteenth-Century Enigma” was sponsored by Dr. Jennifer McFarlane Harris, Assistant Professor of English.

Caitlin Mack (Class of 2016) graduated cum laude with a B.S. in Biology, with minors in Chemistry and Psychology. While at Xavier, she was heavily involved in Alternative Breaks, completing five trips and co-leading one, Xavier Players, and Active Minds, serving as
president her senior year. She was also a University Scholar and worked as a biology, chemistry, German, and statistics tutor for the Learning Assistance Center. After taking a year off from school, she plans on pursuing a PhD in zoology. “Role of Temperature and shade coverage on behavior and habitat use of captive African lions, snow leopards, and cougars” was sponsored by Dr. George Farnsworth, Associate Professor of Biology and Environmental Science.

**Samantha Miller** (Class of 2016) graduated cum laude with a B.A. in History with minors in Secondary Education and Gender and Diversity Studies. In her last semester at Xavier she was student teaching at Wyoming High School in Cincinnati. She also spent her last year at Xavier as President of the History Club as well as volunteering at STAF, a local animal shelter. Samantha is pursuing a career as a high school history teacher in the Cincinnati area. “Child Soldiers in the Salvadoran Civil War,” was sponsored by Dr. Julia O’Hara, Professor of History.

**Brooke Mills** (Class of 2017) is currently working toward her B.A. in Public Relations and Communication Studies. She is the former CEO of Aramis Consulting, a student-run business out of the Williams College of Business, and she is also involved in several groups on campus. After graduation she plans to pursue a career with GE Global Communications, where she will be interning during her senior year. She is passionate about Xavier and is thankful for her time there. She is particularly thankful for the faculty at Xavier who have been impactful during her college career, including: Dr. Thomas Wagner, Dr. Alexandra Korros, Dr. E. Paul Colella, Dr. Lisa Ottum, Don Tassone, Kevin Prothero, Owen Raisch, and everyone in the Interfaith office.

**Lauren Morris** (Class of 2017) is currently working towards a B.S. in Psychology with minors in Criminal Justice and Political Science. She currently interns at Cincinnati City Hall and is the President of Xavier's Phi Alpha Delta Pre Law Chapter. Lauren is also the secretary of Political Science club, and involved in other various community service activities through the CFJ. After graduation she hopes to pursue a degree in law working on public policy. "The
Effects of Media Bias on Credibility of Political News" was sponsored by Dr. Dalia Diab, Professor in the School of Psychology.

David Nussman (Class of 2017) is majoring in the Honors Bachelor of Arts (H.A.B.) program, and is pursuing a minor in Philosophy. A Cincinnati native, David previously graduated from Covington Latin School, an accelerated college-prep school with an intensive liberal arts curriculum. He therefore entered college at a young age, and is set to attain a bachelor’s degree by the age of 20. In addition to his academics, David has regularly been a member of Jazz Ensemble and Percussion Ensemble. He also devotes much time to Life After Sunday, a club that gathers several nights a week for prayer and the Sacraments. “The Angelic Doctor as Poet: Aquinas’ Pange Lingua and the Aesthetics of Latin Poetry” was sponsored by Dr. Thomas Strunk, Associate Professor of Classics.

Matt Sanfilippo (Class of 2016) earned a B.S. in Biology with a minor in Chemistry. While at Xavier Matt was an active participant in club sports, playing both Rugby and competing with the Bass Fishing team. He also served as the president of the Xavier chapter of Mortar Board senior honor society. He will be attending medical school beginning in the summer of 2016. His research was sponsored by Dr. William Anyonge, Professor of Biology.

Lyndi Vinson (Class of 2016) earned a B.A. in French and Communication Studies. As an undergraduate, she served as president of French Club, communications officer for Citizens of the World and was an Interlink mentor with the CIE who helped international students adapt to the US and Xavier. She spent her junior spring semester studying abroad in Paris, France and recently accepted a teaching position in France starting in October 2016. In her free time, she loves traveling, learning languages, art and cooking/baking.

Pengfei Xu: (Class of 2016) is an international student from China. He earned a B.S in Theoretical and Mathematical Physics with minor in Mathematics. He is also trilingual in Chinese, English and Japanese and has studied abroad in Japan. During his time at Xavier, he worked as a lab teaching assistant for the physics department. Pengfei
will attend graduate school in physics or engineer school. In his free time he enjoys reading, meditation and playing guitar.