SCIENTIA ET HUMANITAS

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Submission guidelines

Original unpublished undergraduate and graduate research from the natural and social sciences and from the humanities is now being accepted for the 2013 issue of Scientia et Humanitas from MTSU students and recent graduates either by themselves or in conjunction with a faculty mentor.

Articles should have approximately 15 to 30 typed, double-spaced pages and may include revisions of papers presented for classes, Scholars Week, the Social Science Symposium, or Honors theses. Papers should include a brief abstract of no more than 250 words stating the purpose, methods, results, and conclusion.

Papers may be submitted through the online submission system on the journal's website, www.mtsu.edu/~scientia.

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Preface

In this, its second print edition, *Scientia et Humanitas* continues to provide an opportunity for exceptional students at Middle Tennessee State University to showcase their research across a wide range of disciplines. *Scientia et Humanitas* continues to grow and change. We continue our efforts to improve and expand our application and editing process while maximizing our efforts to attract the best research throughout all of MTSU's disciplines.

Much like the University itself, with its commitment to promoting diversity and opportunity, this current volume of *Scientia et Humanitas* covers an eclectic range of topics and disciplines.

Social sciences are represented by no less than four projects. *Linda Purkey*, a graduate in Elementary and Special Education, takes a current look at how fears that the measles, mumps, and rubella vaccinations may be connected to autism have increased infant mortality rates. *Amber Hulsey*, a recent graduate in aerospace, surveys the slow adoption of Safety Management Systems within Tennessee Airports. *Brian Criswell*, a recent sociology graduate, looks at educating people about sociological concepts of social inequality and stratification using progressive Hip Hop. *Anna Yacovone*, a recent Global Studies graduate is doing a Fulbright Fellowship in Laos this year, examines the positive uses of interfaith dialogues to mitigate conflicts in southern Thailand

The humanities have three projects in this year's volume. *Mike Smith*, a senior English major with prior degrees in business administration and accounting and information systems, evaluates scenes from Augustine's life depicted in his *Confessions*, which he analyzes allegorically in order better to understand Augustine's faith. *Matthew Hibdon*, who recently earned his history degree, investigates MTSU's commitment to supporting National History Day competitions for high school students since the 1970s. Finally, *Lindsay Gates*, another recent history graduate, looks at the controversy over the construction of the Narmada River and the conflicts that it engendered between India's government and a grassroots movement to save the Narmada.

Within the natural sciences, *Richard Bautista*, an undergraduate in MTSU's forensic science program within biology, surveys the high degree of variability within each method of postmortem intervals (PMI) used to estimate time since death.

Being part of the *Scientia et Humanitas* staff has been a rewarding experience both because it has allowed me to help create this publication and because it has exposed me to some of the finest undergraduate research that students are pursuing at MTSU. I would like to thank my fellow editors, staff members and advisors, as well as the Honors College and its contributors, for providing the resources and opportunity for this journal to exist. Most especially, thank you to those students who submitted their hard work to our journal.

Jacob H. Verhoeff
Managing Editor

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A Current Look at the MMR and Autism Crisis

Linda Purkey

Abstract

There has been a tremendous amount of controversy between parents, autism advocacy groups, various governments and medical science about the measles, mumps, rubella (MMR) vaccine and whether or not it contributes to autism. Media coverage of a hypothesis that was published in the late 1990's suggested that autism may be a direct result of the MMR vaccination. Because little is known about the actual causes of autism, medical science has conducted several investigations that have successfully proven that the MMR vaccination does not cause autism. However, the unfortunate consequence of this dilemma is an overall decrease in much needed vaccinations. This situation not only places children at risk for three potentially deadly diseases, but it could also bring about a possible worldwide epidemic that could affect millions of people, leading to hospitalization and death.

In recent years, there has been a tremendous amount of controversy regarding whether or not children develop autism as a result of the measles, mumps, rubella (MMR) vaccine. Speculation also suggests that the vaccination leads to a greater number of diagnosed cases of autism. According to author Karen Honey (2008), who writes for the *Journal of Clinical Investigation*, many parents and autism advocacy groups continue to blame the vaccine, in spite of extensive scientific research that has provided a tremendous amount of evidence showing no link between the incidence of autism and the MMR vaccine.

Media coverage of a hypothesis that was published in the late 1990's has only added fuel to an already heated debate. Because little is known about the actual causes of autism, medical science has conducted several studies that have clearly proven that the MMR vaccine does not cause autism, but these scientific truths are still contrary to the stout beliefs and concerns of many parents. The MMR vaccine does not cause autism, and the decrease in unvaccinated children has led to an increase in measles, mumps, and rubella worldwide. The fact that the MMR vaccination does not cause autism has not affected the decline of vaccinations over the last two decades.

The positive result of the MMR and autism debate is the increase of long-overdue and much-needed funding for research regarding the causes of autism. The unfortunate consequence of this dilemma, however, is a decrease in necessary vaccinations, and lower vaccination rates contribute to an increase in these preventable diseases. This situation not only places children at risk for three potentially deadly diseases but could also bring about a possible worldwide epidemic that would affect millions of people, leading to hospitalization and death.

Edward Purssell (2004), author of *Exploring the Evidence Surrounding the Debate on MMR and Autism*, believes that the MMR and autism crisis initially began with a hypothesis paper that was published in *The Lancet* in the fall of 1998. Since that time, quite a few parents have claimed that shortly after receipt of the MMR vaccination, their child developed autistic symptoms. Medical statistics show that diagnosed cases of the disease have truly been on the increase over the last several decades (Purssell, 2004).

This is possibly due in part to media coverage of the hypothesis—henceforth known as the Wakefield hypothesis—that has created a worldwide scare of children being diagnosed with autism shortly after vaccination. Some families dated the onset of their child's neurological deterioration to occur within two weeks of the administration of the MMR vaccine (Meissner, Orenstein and Strebel, 2004).

The Wakefield hypothesis paper was written by Andrew Wakefield and his colleagues in the fall of 1998 and was based on the cases of twelve children who already had a previous history of pervasive developmental disorders and whose parents had already assumed a link between the MMR vaccine and their child's symptoms of autism (Purssell, 2004). However, Wakefield and his colleagues eventually concluded that they "did not prove an association between measles, mumps, and rubella vaccine and the syndrome described" (Purssell, 2004, p.834). In spite of this statement, the media picked up the story and chose to exploit the suggestion that these children's autistic symptoms were a direct result of the

MMR vaccination. This exaggerated media coverage alarmed parents all over the world about the safety of vaccinations.

Autism is a developmental disability included in a group of neurological disorders known as autism spectrum disorders (ASDs). Autism is a serious neurodevelopmental disorder that can cause impairments and difficulties with nonverbal and verbal communication, social interaction, the ability to pay attention, repetitive behaviors, and different physical reactions to certain sensations (Croen et al., 2006). People with autism may have intense internal struggles with cognitive processes that can range from being cognitively gifted to severely challenged. The symptoms of autism generally begin to appear physically prior to three years of age and continue for the duration of an individual's lifetime. According to Croen et al., (2006) "males are four times more likely to have autism than females," and the majority of people with autism are unable to live independently as adults.

Since the publication of the Wakefield hypothesis, many cases of autism have been diagnosed during a developmental time period when children are being vaccinated against measles, and this time period parallels the time when certain children may also be showing symptoms of autism (Meissner et al., 2004). Children generally begin to show clearly-recognizable signs of autism—such as loss of language skills—generally between one and two years of age, and this time period coincides with the MMR vaccine (Taylor, 2006). Rather than consider this overlap as two separate events, many hypothesize that the vaccine is to blame.

Children with autism generally manifest abnormal development from birth, but about 20% to 30% may experience regression and do not show symptoms of the disease until between eighteen and twenty-four months of age. These children are typically documented as having normal development up until that point (Croen, Hertz-Picciotto, Jones, Pessah and Van de Water, 2006). This may explain why certain children seem to develop autism shortly after they are given the MMR vaccine; it may be simply coincidental.

In February of 2008, the United States government agreed financially to compensate the family of a child who was nine years of age for possible autism-related injuries that were caused by vaccinations (Honey, 2008). The Center for Disease Control (CDC) paid the family of the child from a federal fund called The National Vaccine Injury Compensation Program, or NVICP, that compensates the families of people who are injured as a result of vaccines.

In response to the decision to pay the family, the president of the National Autism Association, Wendy Fournier, stated "Vaccines can and do cause children to regress into autism" (Honey, 2008 p.1586). Statements of this type from public officials like Wendy Fournier have the potential to create very strong convictions about issues such as vaccination safety among the public and can have an enormous impact on the health and safety of entire societies if they are not wholly based on fact.

When discussing this particular judgment, the director of the U.S. Center for Disease Control and Prevention (CDC), Julie Gerberding, stated, "This does not represent anything other than a very special situation" (Honey, 2008, p.1586). The judgment to pay this family

has created a stronger foundation for the argument against vaccine safety and has added strength to the controversy that certain vaccinations can and do cause autism. An important fact about this case that was not well publicized was that in this particular situation, the child was already showing signs of autism, but the parents stated that the symptoms were severely worsened by receiving vaccinations (Honey, 2008).

Children in today's society are routinely vaccinated against fourteen different diseases during their infancy and preschool years. The reason that vaccines are administered at such a young age stems from the fact that protection from these diseases needs to precede exposure to the diseases themselves (Miller and Reynolds, 2009). Beginning in 1963, the U.S. began the vaccination program against measles virus, and it has been an important part of childhood immunizations since that time. Most children, approximately 95%, will develop immunity to the disease (Meissner et al., 2004). According to Miller and Reynolds (2009), in the USA and UK, the occurrences of autism have increased, and the MMR vaccine has been implicated as the cause because the increase was noted after the release of the MMR vaccination.

While there is very likely a genetic component to autism, it does not account for every case of the disease or the noticeable increase in the number of diagnosed children over the past few years. A study that was conducted in California suggests that between 1987 and 1998, the diagnosed cases of autism rose approximately 273% and between 1998 and 2002, the cases rose another 97% (Purssell, 2004).

A possible factor for the increase is the ability of the immune system to be able to respond to certain vaccines (Purssell, 2004). Some scientists speculate that the immune system of a child has difficulty processing more than a single virus at one time. The MMR vaccine has three (Purssell, 2004).

Since the Wakefield et al., paper was published, numerous scientific studies have taken place to address the possibility of any link between the vaccine and neurological disorders, like autism. Many highly respected organizations in the medical and scientific communities have come to disagree with the Wakefield hypothesis. According to *The American Academy of Pediatrics and the Institute of Medicine*, "The evidence favors rejection of a causal relationship . . . the available evidence does not support the 'Wakefield' hypothesis that MMR vaccine causes autism or associated disorders" (Meissner, et al., p.1068). It should also be noted that since the paper's original publication, most of Wakefield's colleagues who had assisted in the research and creation of the hypothesis have retracted their initial statements and findings (Purssell, 2004).

The actual cause of autism is unknown, but scientific evidence speculates toward a combination of possible factors. The major proposed categories that are suspected to be contributing factors are genetics and certain environmental components before and after the child is born. (Parker, Schwartz, Todd and Pickering, 2004). These environmental factors fall into five classes of exposure: metals, toxic pollutants, prenatal infections, medications and pesticides (Croen et al., 2006). Croen and his colleagues claim that prenatal exposure to thalidomide may also be a possible contributing factor that has been associated with specific

autistic behaviors. Although a few studies have shown a possible correlation between xenobiotic chemicals, autism, and/or viruses, Croen et al., (2006) states that no true and solid, "methodologically rigorous investigations . . . have been undertaken" (p. 1119).

Several case-controlled and clinic-based studies have shown that if a family has a history of certain language abnormalities, social deficits and varying psychiatric disorders, they may have a higher chance of autistic symptoms in their children. There have also been several cases of autism reported after the mother was diagnosed with infections during pregnancy. Prenatal cases of measles, mumps, herpes, syphilis, and cytomegalovirus have also been associated with autism in the child. Other reports and records show that the relative risks of the mother smoking cigarettes daily during early pregnancy could also contribute to autism (Croen et al., 2006).

The link between genetics and autism has been suggested as another possible cause when viewing whether or not a family has a history of twins or siblings with autism. Croen et al. (2006) states that the probability of developing autism if a person's sibling is autistic has been estimated at 2% to 14%. Studies that have been conducted on twins suggest a "strong genetic contribution to the etiology of autism" (p, 1120). Meissner et al., author of *Measles Vaccines and the Potential for Worldwide Eradication of Measles*, states, "the weight of scientific evidence suggests that ASD is a consequence of a complex genetic mechanism that seems to affect brain growth and development in utero and in the first year of life" (p. 1068). Meissner et al., also explains that the increasing prevalence of autism that has been reported may be a result of a change in the way autism is diagnosed and the criteria that are related to diagnosis, which has been greatly improved in recent years.

Genetic components combined with environmental factors–including vaccinations–during a child's development make it very challenging for medical science to pinpoint the true cause of autism. Each individual case of autism is unique, which makes the disorder particularly challenging to understand fully from a medical and scientific standpoint.

Croen and his colleagues explain that the prevalence of autism has increased because of improved diagnostic practices—"changes in case definitions and changes in reimbursement for medical services" (p. 1120). In the pre-vaccine era, very early reports had estimated that the prevalence of autism was at four to five per 10,000 births. Croen et al., also shares that recent statistics, which state that "autistic disorder occurs in at least [one] to [two] per 1000 births[,] and autism spectrum disorder may be as high as [four] to [six] per 1000 " (p. 1121).

Another controversial issue in the MMR and autism debate is a component that is used as a preservative in the vaccine called Thimerosal. It has been suggested that vaccines that contain Thimerosal may also be a contributing factor to autism. Thimerosal is a preservative that was previously used in the MMR vaccine. It is 49.6 % ethyl mercury by weight. The purpose of Thimerosal is to prevent bacterial contamination in vaccinations that contain more than one dose of different viruses (Parker, Schwartz, Todd and Pickering, 2004).

In a peer-reviewed article entitled "Thimerosal-Containing Vaccines and Autistic Spectrum Disorder: A Critical Review of Published Original Data," Parker and her colleagues review "[ten] epidemiologic studies and [two] pharmacokinetic studies" to "assess

the quality of evidence assessing a potential association between thimerosal-containing vaccines and autism and evaluate whether that evidence suggests accepting or rejecting the hypothesis" (p. 791). The result was that the studies, "did not demonstrate any link between ASD and Thimerosal-containing vaccines[,] and the pharmacokinetics of ethyl-mercury make such an association less likely" (Parker et al., 2004 p. 794). It is interesting to note that even though the United States has discontinued the use of Thimerosal in the MMR vaccine, the diagnosed cases of autism still continue to increase.

Although the Wakefield hypothesis has been seriously undermined, many parents still continue to refuse the administration of necessary immunizations to their children. The media fervor has resulted in measles immunization programs suffering a major setback as a result of the alleged association between the MMR vaccine and autism.

In a study conducted by Cook, et al., (2004), these highly qualified medical researchers looked at the possibility of an association between receipt of the MMR vaccination and an increase in the risk of autism. The results of their case study were published in an article entitled "MMR Vaccination and Pervasive Developmental Disorders: A Case-Control Study." This study used "the method of a matched case-controlled study using the United Kingdom's General Practice Research Database" (p. 963). The study included 1294 cases and 4469 controls that "were matched by age, sex and general practice" (p. 963).

According to this study, 1010 cases (78.1%) were diagnosed with autism prior to the MMR vaccination which is "compared with 3671 (82.1%) prior to the age at which their matched case was diagnosed" (p. 963). The results of this study were not much different when the controls were isolated to children with autism and to those who were vaccinated before the child turned three years of age. As the article states

MMR vaccination was not associated with an increased risk of subsequently being diagnosed with a PDD. The findings were similar when analysis was restricted to children classified as having autism, or to children who had MMR vaccination before age [three] years (p. 966).

Cook and his colleagues finally concluded that:

We have found no convincing evidence that MMR vaccination increases the risk of autism or other PDDs. No significant association has been found in rigorous studies in a range of different settings. These are severe diseases for which very little is known about causation; this absence of knowledge itself might have contributed to the misplaced emphasis on MMR as a cause. Research into the real origins of autism is urgently needed (p.968).

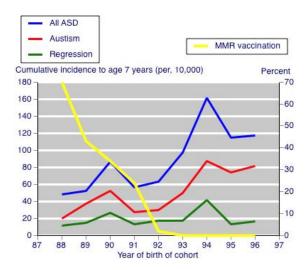
Shortly after the MMR vaccine program was introduced in Japan in April of 1989, an outbreak of aseptic meningitis occurred. Aseptic meningitis is considered to be a possible side effect of MMR vaccination. Because of this possible connection, the administration of all MMR vaccines was brought to an abrupt halt four years later (Uchiyama, Kurosawa

and Inaba, 2007). This unique situation provided an opportune chance for scientists and the medical community to conduct extensive studies and observations regarding the children that would be diagnosed with autism during the ensuing non-vaccine era.

In Japan, the MMR vaccine program was used from 1989 to 1993. A study of 904 patients with ASD was conducted by Yokohama Rehabilitation Center in Yokohama, Japan and the Institute of Psychiatry in London. This study measured the incidence of autism "before and after the termination of the MMR vaccination program" (Honda, Rutter and Shimizu, 2005, p. 573).

This study focused on the occurrence of ASD to children up to the age of seven in the city of Yokohama, which has a population of approximately 300,000. The MMR vaccination was not administered after 1993, yet the study's findings clearly show that even though no children received the MMR vaccination, the diagnosed cases of autism continued steadily to increase.

The study found that "no decline in ASD incidence occurred in the five-year period from 1988 to 1992 during which MMR vaccine usage fell from 69.8% to zero population coverage" (Honda et al., 2005, p. 575). As is shown in the following graph, the incidence of ASD continued to increase after the vaccination program was discontinued:

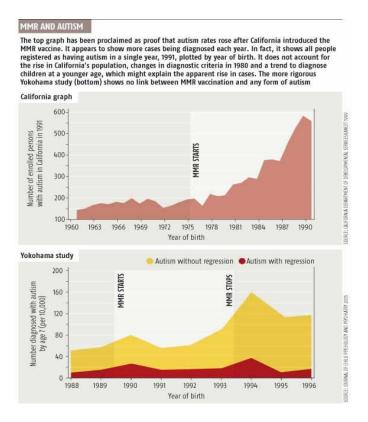


(http://www.medicine.ox.ac.uk/bandolier/booth/Vaccines/noMMR.html).

If the MMR vaccine had been responsible for an increase in autism, there should have been a decrease in diagnosed cases of autism following Japan's removal of the administration of the MMR vaccine. This study was very helpful in showing the effects of the withdrawal of the vaccine from an entire population with regard to the incidence of autism cases. The MMR vaccine cannot be attributed to the many children in Japan who were diagnosed with autism who "were born and grew up in the era when MMR was not available" (Honda et al., 2005 p. 578).

It is important to note that the frequency of children diagnosed with autism during this period was comparable to the frequency of other nations where children diagnosed with autism received the MMR vaccination. According to the study, "This frequency is at least as high as populations of other countries in which most children were vaccinated; it implies that MMR could not cause a substantial proportion of cases of autism" (Honda et al., 2005 p. 576). This study proves that failure to provide important vaccinations to children will not result in lower diagnosed cases of autism.

If the MMR vaccine is responsible for autism spectrum disorders, then it stands to reason that the number of cases of autism would be significantly higher in societies where children are receiving the vaccine. In Yokohama, Japan, the cases of autism would have been expected to increase after the vaccination program was introduced and decrease after the program was ended, but that was clearly not the case. As Uchiyama (2007) states, "If the MMR vaccination is related to 'regressive autism,' regression in the development of children with autism should be more common in the MMR generation than in the preand post-MMR generations" (p. 215). The following graph from Coghlan (2005) depicts diagnosed cases of autism in California and Yokohama in relation to the vaccine:



It is helpful to note that the Japanese MMR immunization program was terminated prior to the time period when the Wakefield Hypothesis was made public and exploited by the media worldwide. The Yokohama study concluded that, "The MMR vaccination is most

unlikely to be a main cause of ASD, that it cannot explain the rise over time in the incidence of ASD, and that withdrawal of MMR in countries where it is still being used cannot be expected to lead to a reduction in the incidence of ASD" (Honda, et al., 2005 p. 577).

What can be learned from the Japanese study is that the removal of MMR cannot be expected to reduce the cases of autism. Simply terminating the MMR vaccine will not lead to a decrease in autism or other pervasive developmental disorders, but it could unfortunately lead to a serious outbreak of measles, mumps, or rubella. An outbreak could lead to a worldwide epidemic, and an epidemic is obviously far more serious and life threatening to multitudes of human lives.

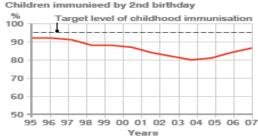
In the time before measles vaccination, the US reported three to four million measles cases each year, resulting in thousands of deaths (Meissner et al., 2004). Since the MMR vaccination program was introduced in 1963, the number of measles cases has dropped 98%. Measles infection accounts for almost half of the 1.6 million fatalities that are a result of diseases that could be prevented by proper vaccinations. It is estimated that approximately thirty-one million cases of the measles virus are contracted each year in third world countries (Meissner et al., 2004). In 2001, the World Health Organization reported 745,000 fatalities that occurred in children younger than fifteen years old (Meissner et al., 2004). This was tragically a direct result of low measles vaccination rates.

Meissner and his colleagues (2004) state that:

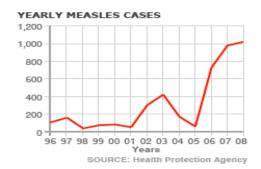
On a global basis, 98% of all deaths as a result of complications of measles occur in countries where malnutrition, especially vitamin A deficiency, is common. ... The effectiveness of a comprehensive measles immunization program on disease elimination is so profound that it is appropriate to consider the possibility of global measles eradication and how obstacles to that objective might be overcome (p. 1067).

In the US, certain states allow parents the option of becoming immunization exemptors. This means that the individual has the right to choose not to become immunized based on medical, religious, or philosophical grounds. This is believed to cause an increased risk to children who do not receive proper and timely immunizations. According to Meissner et al. (2004) "Among unvaccinated school-aged children (three to ten years of age), the risk of measles was sixty-two times greater than among properly vaccinated students" (p. 1167). The following graphs show a strong correlation between MMR immunization levels and diagnosed cases of measles. It clearly shows a decrease in the percentage of children being vaccinated and an increase in measles cases after the release of the Wakefield Hypothesis:

MMR IMMUNISATION LEVELS



SOURCE: Health Protection Agency



As the number of parents who choose to keep their children unvaccinated increases, the possibility of others in a community contracting the measles virus also increases due to a greater possibility of exposure to the virus. The decision not to receive proper vaccinations from contagious diseases can have an impact on other people in the community as well. Lack of an individual's vaccination can place many other people at a very serious risk, particularly people who may be more vulnerable, such as infants, the elderly and immunocompromised individuals (Meissner et al., 2004).

Not only is abstaining from vaccinations an important issue, but the effectiveness of the vaccine itself is a topic of concern. While the number of reported cases of measles, mumps, and rubella has been greatly reduced, the effectiveness of the vaccine is still in question. According to the CDC, "Measles transmission has been clearly documented among vaccinated persons. In some large outbreaks . . . over 95 percent of cases have a history of vaccination" (Honey, 2008 p.1586). This basically means that just because individuals are vaccinated, does not necessarily mean that they will not contract the disease.

The MMR vaccine does not necessarily offer a permanent immunity, and measles outbreaks sometimes still continue to occur in vaccinated populations (Cook, 2004). Due to a resurgence of measles outbreaks among children who had previously been vaccinated, the American Academy of Pediatrics and the Advisory Committee on Immunization Practices began recommending two doses of the MMR vaccine instead of just one. It is for this reason that it is recommended that children receive their first MMR vaccination at one year of age and the second vaccination at four years of age. In the United Kingdom, it is

estimated that about two in four children have not received their second MMR vaccination (Meissner, et al., 2004).

It is critical to realize that vaccines are intended to prevent diseases—not to treat them. In the United Kingdom, it is important to note the proportional parallel between the lower number of children who have received the MMR vaccination and the greater number of diagnosed measles cases. The amount of measles cases increased from fifty-six cases in 1998 to 971 cases in 2007 (Honey, 2008). In a recent measles outbreak in California, nine out of the twelve children that had contracted the measles virus had not received their childhood vaccination against the disease, and the three other children were not yet old enough to receive their vaccination (Honey, 2008).

It has been well documented that public concerns regarding the safety of vaccinations may result in fewer people receiving vaccination. Lower vaccination rates would ultimately lead to disease outbreaks, and money that could be spent on important autism research would be spent healing nations of preventable diseases. While many countries allow individuals to choose whether or not to immunize their children against contagious diseases, if the unvaccinated children contracts the disease, it may spread to others that do not have immunity, resulting in a possible epidemic.

When individuals choose to remain unvaccinated against highly contagious and life-threatening diseases, they inevitably jeopardize entire populations and waste valuable resources that could be used in a more productive manner, such as neurological disorder research. The US currently spends approximately forty-five million dollars each year for the MMR vaccine. It is "estimated that 1.5 billion is spent annually on treatment and prevention of measles worldwide" (Meissner et al., 2004, p. 1068).

There is always an element of risk involved when taking any type of medication or vaccination, and there is also a risk attached to the decision not to vaccinate against diseases. The Wakefield hypothesis that originally suggested the possible link between the MMR vaccine and autism is theoretically possible but is based on weak evidence. It is true that autism is on the rise, but there is no scientifically proven and absolute explanation for this increase.

The MMR vaccine is a vital part of controlling diseases that cause a considerable amount of hospitalization and death and should be taken very seriously when considering the outcome of having a child vaccinated or allowing them to remain non-vaccinated and vulnerable. Wakefield's hypothesis seems to have been counterproductive, but in reality, it has actually created a much-needed and long overdue opportunity for better funding and research for vaccinations and neurological disorders, such as autism. Parents can be assured by strong, scientific evidence that there is very little reliable information to support any connection between the MMR vaccine and autism, and refraining from vaccination may lead to a large measles outbreak and the easily avoidable and untimely tragic deaths of millions.

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Survey of Biological Factors Affecting the Determination of the Postmortem Interval

Richard Bautista

Abstract

Estimating the time since death, or postmortem interval (PMI), is an important component of medicolegal investigations. Methods for estimating PMI date as far back as ancient Egypt. Advances in scientific knowledge have provided additional tools for estimating PMI. A survey of available literature and lectures was conducted to identify biological factors that affect PMI estimation and how they are assessed. The results of this survey showed that a high degree of variability exits within each method that reduces the accuracy of their findings. However, when taken in context with each other and used in conjunction with non-scientific evidence, such as witness statements, PMI estimations can help narrow the range of the PMI to a useful degree.

INTRODUCTION

Medicolegal death investigations are undertaken to determine the cause and manner of death. The postmortem interval (PMI), or the time since death, is one of the most important determinations made during the course of such investigations. It can assist in identifying the cause and manner of death. In a criminal case, it can lead to the identification or elimination of a suspect.

It is also one of the most difficult tasks to complete. Many different factors influence the accuracy of postmortem interval estimation. At the core of an investigation is the decedent, who provides many clues that may help investigators determine an approximate time of death. Biological evidence provided by the decedent involves a number of factors that are assessed and integrated during the course of an investigation. However, it is important to place the role of PMI within a historical context to identify the challenges that death investigators face.

HISTORICAL BACKGROUND

Methods for estimating the postmortem interval date back to the ancient Greeks and Egyptians during the fourth and third centuries BCE. They understood that dead bodies cooled and became stiff over a period of time after death, even though they did not understand the physiology behind the phenomena they were observing. Using a qualitative approach they identified the following traits:

- Warm and not stiff: Dead not more than a couple of hours
- Warm and stiff: Dead between a couple of hours and a half day
- Cold and stiff: Dead between a half day and two days
- Cold and not stiff: Dead more than two days (Sachs, 2001).

The Washing Away of Wrongs, a Chinese forensic handbook written in 1247 CE and believed to be the first such text, described other methods for determining the postmortem interval. Observing the degree of decomposition of a body could suggest the time of death depending on the season. For example, in the summer a body that had been dead for three days would have a "foul liquid" purging from the nose and mouth, while such signs could be significantly delayed during the cold weather of winter. It should be noted that estimations of the postmortem interval were limited to a window of one or two days as the time of travel to a death scene could impact accuracy (Sachs, 2001).

Our current system of death investigation can be traced to the Old English "crowner," the origin of our term "coroner." The crowner was responsible for determining where, when, and how a person died. Over time, the advancement of scientific knowledge led to death investigation applications, such as the discovery of livor mortis, the settling of blood after death (Sachs, 2001). Unfortunately, the value of these scientific advances has led to misperceptions in the media as to forensic pathologists' capabilities.

SCENE EXAMINATION

Even with the current state of science and technology, estimating the postmortem interval can be problematic. An exact time of death often cannot be derived from an analysis of physical evidence. For this reason the postmortem interval is often given as a range of time, for example twelve to twenty-four hours before the body was discovered. It should also be noted that inaccuracy increases as the postmortem interval increases (DiMaio & Dana, 2007). There are essentially four primary factors that can be identified and assessed at the scene to estimate the postmortem interval: Rigor mortis, livor mortis, algor mortis, and advanced decomposition. Additional indicators of PMI in advanced stages of decomposition include insect activity, skeletal remains, and botanical evidence.

Rigor Mortis

Rigor mortis is the stiffening of the body after death. Before death, or antemortem, muscles contract and relax due to the actions of two fibers, actin and myosin. When a muscle is stimulated, calcium ions are released from the sarcoplasmic reticulum, allowing myosin to bind with actin to contract the muscle. When the stimulation stops, the calcium ions are actively transported back to the sarcoplasmic reticulum. Active transportation of the calcium ions requires a substance called adenosine triphosphate, or ATP. This causes myosin to release its connection to actin, causing the muscle to relax (Saladin, 2010). When a person dies, cellular structures start to break down, releasing more calcium ions into the muscle. At the same time, the body no longer produces ATP. Without ATP, the calcium ions build up in the muscle tissue, causing more of the muscle fibers to contract over time and produce the rigidity we call "rigor mortis" (Ribowsky, 2006).

Rigor mortis is used in estimating the postmortem interval by assessing the degree to which it occurs in the body. Rigor becomes evident approximately two to six hours after death. Even though rigor mortis occurs simultaneously in all of the body's muscle tissues, it will be noticeable first in the smaller muscle groups. It begins in the face and hands and moves progressively throughout the rest of the body. After approximately eight to twelve hours, the entire body is rigid. The body will remain rigid for another twelve to twenty-four hours. Over the next eight to ten hours, rigor will begin to disappear, leaving the body limp (Burch, 2010). The signs of rigor mortis disappear in the same order they appeared, from small muscle groups to larger muscle groups (DiMaio & Dana, 2007). Rigor disappears due to the cells breaking down as a result of decomposition; they are no longer able to maintain the muscular contraction (Ribowsky, 2006). Determining the extent of rigor involves assessing the range of motion of various joints, including the jaw, wrists, ankles, elbows, and knees and recording the degree of stiffness of each joint (Clark, Ernst, Haglund, Jentzen, 1996).

Livor Mortis

Livor mortis is sometimes referred to as lividity or postmortem lividity. With the heart no longer pumping blood through the vessels, blood begins to settle in the lowest, or dependent,

areas of the body due to the effects of gravity. It can be identified by a reddish, purplish-blue discoloration. However, if the dependent areas are pressed against a hard surface, the blood cannot settle there and results in a pale coloration (DiMaio & Dana, 2007).

Livor mortis can be seen as early as thirty minutes after death. Since lividity results from the heart stopping, it may begin appearing antemortem in decedents who die as a result of cardiac failure. Livor becomes more prominent over time (DiMaio & Dana, 2007).

Lividity is assessed by the degree of "blanching" in dependent areas. This involves pressing on areas where livor mortis is visible. Settled blood will clear the area pressed and leave it pale, or "blanched." The investigator observes how the blood returns when pressure is lifted. If the area does not blanch, fixed lividity is indicated. Lividity becomes fixed when the blood leaches out of the blood vessels and breaks down. This stains the surrounding tissue. Lividity usually becomes fixed eight to ten hours after death (Wagner, 2009).

Algor Mortis

The cooling of the body after death is referred to as algor mortis. Under ideal conditions, the body will have no drop in temperature for sixty to ninety minutes after death followed by cooling at the rate of 1 to 1.5 degrees Fahrenheit per hour (Ernst, 2010). This presupposes that the body was 98.6 degrees Fahrenheit at the time of death and the surrounding environment maintained a constant temperature in the range of seventy to seventy-five degrees Fahrenheit (Dix, 2010).

Assessing algor mortis is done by taking a variety of temperature readings. Body temperature is taken immediately upon arrival. It should also be taken one hour later; a third reading should be taken if possible (Ernst, 2010). The most accurate way to record the body reading is by inserting the thermometer probe into the rectum or the liver after making an incision in the abdomen (McFeely, 1991).

A temperature reading of the environment is important. This reading must be taken as close as possible to the surface of the body. This is referred to as the micro-environment, or "micro temp," reading (Ernst, 2010).

Advanced Decomposition

Rigor mortis, livor mortis, and algor mortis are all examples of the early stages of decomposition. However, their applicability is limited to the first two to three days after death. Beyond that, the body can be assessed based on its condition and the surrounding environment. There are basically two biological processes by which a body decomposes: putrefaction and autolysis (DiMaio & Dana, 2007).

Putrefaction is the primary cause of decomposition. It involves bacteria, mostly from the digestive tract, breaking down the body's tissues (DiMaio & Dana, 2007). Autolysis is the process where tissue begins breaking down from the action of intracellular enzymes (2007). Within the cells are digestive enzymes that are no longer held in check after death, resulting in self-digestion (Burch, 2010).

Since bacteria from the digestive tract are often the start of the decomposition process, the first outward signs can often be seen in the abdomen as a greenish discoloration. The next stage is identified by a greenish-black discoloration in the face and neck. The features may swell with the eyes and tongue protruding. Reddish purge fluid emerges from the nose and mouth. As the body continues to decompose, gases are produced which can cause the body to swell. Skin begins to slip. Skin color will start changing to green and, eventually, black (DiMaio & Dana, 2007).

Two other occurrences are worth noting, mummification and adipocere. In hot, dry conditions, the body can become dehydrated. Bacterial growth is hampered as it requires a warm, moist environment. The skin becomes dark, dry, and leathery. A mummified body can be well-preserved for years (Wagner, 2009).

Adipocere may occur in bodies that are in high-moisture environments. Fat tissue undergoes saponification, or a change to a soap-like substance. Aside from a white, waxy appearance, there is no discoloration as which occurs with decomposition. An adipocere body can be well-preserved for several months (Wagner, 2009).

Additional Indicators

Insect Activity

Forensic entomology can be used to estimate the time of death when other means, such as rigor mortis, are no longer valid. This generally means a postmortem interval greater than seventy-two hours. By identifying the insect species present, the state of growth of the insect(s) found on the body, and their rates of growth, a forensic entomologist can provide a relatively accurate estimate as to when the insects arrived on the body, which in turn can be used to estimate PMI (Howe, 2010).

Insects found on the body are carefully collected and sent to the forensic entomologist. Two sets of samples are required, one set consisting of live insects and the other set preserved in a 75% ethyl alcohol solution. Additional insect samples are taken from the immediate area of the body, approximately one to three feet away; further away from the body, approximately twenty feet away; and from the soil under the body. Data concerning ambient temperatures, the temperature of any insect masses on or in the body, and weather conditions are also recorded, as well as the condition of the body and any clothing present. The live samples are allowed to feed and grow while their rate of development is monitored. Once the species is identified, the rate of development of the sample insects can be compared with the known rate of development for that species and the environmental data collected to determine how much time had passed since the insects arrived on the body. Insects—particularly blowflies (order Diptera)—are known to inhabit bodies soon after death, so PMI can be extrapolated from this data (Howe, 2010).

Skeletal Remains

PMI estimation is often associated with soft tissue, but skeletal remains can also offer clues. Forensic taphonomy, a subfield of forensic anthropology, is the study of what occurs to organisms' remains after death. This includes the effects of animals disarticulating and scattering the remains as well as biological processes (Ubelaker, 1997).

Animals that scavenge remains often follow a pattern, dependent on the particular species. Examining tooth marks in disarticulated remains can identify the animal species that scattered them. Once the species is identified the disarticulation pattern can be determined. This pattern may include a time component which can be used in estimating PMI (Ubelaker, 1997).

The decomposition of the remains can aid PMI estimation by analyzing both internal and external chemical changes. One of the constituents of bone is citrate, making up approximately 1.5-2.0 wt%. Postmortem citrate levels remain relatively constant for approximately four weeks, after which time the levels decrease linearly over time. By analyzing the citrate content of recovered skeletal remains, it is possible to calculate an approximate time of death (Schwarcz, Agur, Jantz, 2010). Decomposition also results in biological chemicals, such as fatty acids from soft tissue, being absorbed by the soil under the remains. Analysis of the soil may provide data that can be used in PMI determinations (Ubelaker, 1997).

Botanical Evidence

Another field that can aid in estimating the postmortem interval is forensic botany. This method involves careful documentation and collection of evidence regarding the plant life immediately around, and often underneath, a body. A forensic botanist can assess this evidence and may be able to determine a time frame in which the body had been at the scene by comparing the degree of growth of the plant as well as its growing seasons and patterns. While it may not be able to provide an exact time of death, like many of the other methods described, it may be able to narrow the time frame being sought (Wagner, 2009).

AUTOPSY EXAMINATION

Once the decedent has undergone a preliminary examination at the death scene, the body is generally transported to an autopsy facility. A forensic pathologist will conduct an autopsy and, in conjunction with information provided by the investigator from the scene, will determine the cause and manner of death. Part of this determination is PMI. The two primary biological factors involved in PMI estimation based on autopsy findings are gastric emptying and vitreous humor potassium levels.

Gastric Emptying

The rate at which the stomach empties its contents has often been used to estimate PMI. An empty stomach typically has a volume of approximately 50mL but can stretch to accommodate food, anywhere from 1-1.5L for a typical meal to 4L for a large meal.

However, only 3mL of the stomach's contents enter the duodenum at a time to allow for the neutralization of stomach acid. The duodenum can also slow the transportation of food from the stomach to give it time for processing before continuing through the rest of the small intestine. A typical meal will be emptied from the stomach in approximately four hours. However, this can vary depending on the size and content of the meal. For example, a meal high in fat may take up to six hours to digest (Saladin, 2010). By comparing the composition of the decedent's last meal and when it was consumed with the amount and nature of food present in the stomach, a forensic pathologist can estimate when the decedent died (DiMaio, 2007).

Vitreous Humor

Vitreous humor is the fluid inside the eye. Vitreous humor, or intraocular fluid, is obtained by inserting a syringe into the eye and removing as much of the fluid as possible. Saline is then injected into the eye to restore its shape for funerary cosmetic purposes (Jashnani, Kale, Rupani, 2010).

Research has shown that potassium levels increase and sodium levels decrease postmortem. Most importantly potassium levels increase in a linear manner that is proportional to the time since death. This allows for the determination of PMI by analyzing vitreous humor for potassium levels and applying that data to a mathematical formula (Jashnani, et al., 2010).

In addition to vitreous humor analysis, the eyes can provide clues to PMI through changes in their physical appearance. *Tache noir sclerotique* is the appearance of a dark band that forms across the eye. When the eyes are left open postmortem, the corneas can dry out due to exposure to air and the cessation of tear production. The result is a dark area that coincides with the exposed portion of the eyes. Tache noir sclerotique can begin within two hours after death up to twenty-four hours (Clark, 1997).

RESULTS

All of these methods are affected by a number of variables, internal and external. For example, the progression of rigor mortis can be accelerated if the decedent had a fever before death or the body is found in a hot environment (Wagner, 2009). A high level of physical exertion can also accelerate its progression (DiMaio & Dana, 2007). Cold weather, in turn, can slow the progress of rigor (Wagner, 2009).

As with rigor mortis, a number of variables can influence livor mortis and its assessment. Lividity is visible until decomposition discolors the body, but it may be difficult to see in dark-skinned decedents (Wagner, 2009). Pressure from clothing or other objects can prevent livor from appearing in dependent areas, as can movement of the body after death. Compounds in the blood, such as cyanide or carbon monoxide, or cold temperatures can alter the color of lividity, which can impact its visibility (McFeely, 1991). These factors can make lividity appear to be bright red. Extensive blood loss may cause lividity to be light red or, if enough blood has been lost, nonexistent (Dix, 2010). It may also be possible to confuse

livor mortis with bruising, though this is easily rectified with a postmortem analysis of the suspected bruise(s) (DiMaio & Dana, 2007).

While it has traditionally been considered an excellent method for estimating the postmortem interval, algor mortis may be one of the most unreliable methods due to the effects of a wide variety of factors. The decedent's normal, baseline temperature may not be known antemortem and could vary throughout the course of the day. Illness or strenuous activity before death can raise the baseline body temperature. Body composition can also affect the rate of cooling, as well as the decedent's clothing, or lack thereof. Weather conditions and ambient temperatures can affect the rate of cooling, or increase the body's temperature in the event the decedent died where the immediate environment was warmer than his/her baseline body temperature (Dix, 2010). Infection, decomposition, or drug use can raise a body's temperature postmortem (McFeely, 1991).

Advanced decomposition can be affected by a number of different variables. Like the biological processes previously mentioned, body temperature at the time of death, as well as environmental temperatures, can either accelerate or slow the rate of decomposition. Insect activity can also affect decomposition (Wagner, 2009), as well as the activity of animals (Ubelaker, 1997). Both adipocere and mummification can inhibit accurate PMI estimation due to their preservative effects; adipocere can preserve tissue for months while mummification can preserve tissue for years, leaving little evidence of the passage of time (Wagner, 2009). The application of entomology, anthropology, taphonomy, and botany to PMI estimation has been shown to be accurate, but can be lacking in precision. Their findings provide a good approximation of time of death, but the range of time may be too wide to be of use in some investigations.

The analysis of gastric contents is another tool that has been shown to be highly unreliable. Research has shown that gastric emptying can vary widely not only from meal to meal or from person to person but also from day to day in the same person. Stress can also greatly influence gastric emptying, with some decedents having stomachs full of undigested food consumed before experiencing trauma that resulted in hospital stays of several days before dying (DiMaio & Dana, 2007).

Of the methods described thus far, vitreous humor analysis holds the most promise. The method is simple and allows for a simple calculation based on potassium levels (Jashnani, et al., 2010). However, even this method is not completely reliable in terms of accuracy and precision. The rate of potassium concentrations increasing are affected not only by time but also the overall rate of decomposition of the body. The result is that conditions that can accelerate or decelerate decomposition can also increase or decrease potassium levels (DiMaio & Dana, 2007).

CONCLUSIONS

A common thread running through the various biological factors that can influence the estimation of the postmortem interval is, in a sense, unreliability. Methods that have been touted as accurate were found to be highly variable and unable to establish a precise time of death with any kind of scientific certainty. There is no single marker that can be used to accurately determine the time of death (McFeely, 1991).

However, none of these factors should be used in isolation. Medicolegal death investigations are multidisciplinary in nature, not just in terms of scientific disciplines but also in terms of investigative methodologies. A careful investigator will document evidence and conduct a thorough assessment of the body in order to gather as much information as possible. In addition to the biological factors discussed, other types of evidence are valuable to the death investigator. The use of witness interviews can be used to determine when the decedent was last known to be alive. Reconstruction of the events leading up to the decedent's death at the scene can also provide clues as to the time of death. What is required in a thorough death investigation is a careful, deliberate, multidisciplinary approach that will consider all of the evidence, utilizing the skills and knowledge of specialists when needed. By considering all of the available evidence, in context, it is possible in most cases to determine a PMI of sufficient accuracy to assist in medicolegal death investigations.

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Interfaith Dialogues: A Method to Promote Peace in Southern Thailand

Anna Yacovone

Abstract

An interfaith dialogue can be loosely defined as a discussion among people from different religious backgrounds who work together in order to achieve a common objective. The appeal behind this peace-building tactic is that such dialogues can be flexible in terms of purpose and implementation. In addition, because conflicts are often complex and have multiple influencing factors, interfaith dialogues are useful because they provide a multidimensional outlook. One conflict I learned extensively about while studying abroad at Thammasat University in Bangkok, Thailand is occurring in the country's southern provinces. Although religious discord may have been a catalyst in this conflict, other political, socioeconomic and cultural factors also play a significant role. Unfortunately, because of the media's portrayal, many believe the problem stems from differences between the Thai Buddhists and Malay Muslims in this region. However, the origins of this conflict delve much deeper and even date back to when part of the Pattani Kingdom, a former state of Malaysia, was annexed under Thai rule. As a result, harsh assimilation laws have been passed in order for the Malay people to become Thai, thus causing friction that has lasted over a century. Though Southern Thailand has seen cycles of civil unrest and instability, the last decade has experienced the worst acts of violence since the country gained five of the Pattani states.

This paper will explore more thoroughly interfaith dialogues and discuss how such a tactic can be applied to the situation in Southern Thailand. Along with providing a brief historical overview of interfaith dialogues, there will also be a discussion on a mock interfaith dialogue I hosted in an academic setting at Thammasat University. Afterwards, this paper will look at the presence of interfaith dialogues in Thailand since this country's seemingly tolerant outlook juxtaposes with the reality of what is occurring in the southern provinces. Lastly, this paper will address the historical progression of this conflict and then provide nine recommendations if an interfaith dialogue is held in regards to this crisis.

INTRODUCTION

Over the past century, the world has seen what Gerhold Becker (2006) calls a resurfacing of religion. This powerful shift has challenged what many political theorists have hypothesized about a modern and democratic state requiring secularism (Becker, 2006). Although most countries in the West prefer to divide religion and politics in order to protect individuals' rights, religion continues to play a major role in many countries' governments that strive to be modern and democratic states. One evident example would include several countries in the Middle East that fuse government with religion. However, whether a country is considered secular or has an imposed state religion, religion's influence may be unprecedented because, as many argue, it ultimately satisfies humanity's need for a divine purpose (Becker, 2006). Whether this purpose is fulfilled, religious and cultural differences have nonetheless caused clashes for thousands of years. Unfortunately, such conflicts have also hallmarked the twentieth and twenty-first centuries, from the perpetual conflict in the Middle East to what this paper will analyze: the conflict in the southern provinces of Thailand.

Fortunately, a promising and increasingly popular method to help combat clashes and ease tensions is the concept of interfaith dialogues. Interfaith—or the coming together of people from various religious backgrounds-officially began with the Parliament of the World's Religions in 1893. This paper will, however, examine how interfaith dialogue serves more as an umbrella term for any and all discussions related to bridging religious and cultural gaps and instilling harmony. This analysis will also provide a more detailed definition of interfaith dialogues and include a brief historical background. Next, the purpose of interfaith dialogues will be discussed, along with a summary of the various types. This paper will then further cite an example of an informal and small-scaled version of an interfaith dialogue hosted by the researcher in an academic classroom. Following this will be a discussion on how interfaith dialogues can still be used as a tool in solving conflicts, despite some limitations. Next, there will be a historical overview on the present conflict in Thailand's southern provinces in order to provide necessary background for this analysis's proposal. Lastly, the overall current role interfaith dialogues play in Thailand will be included, followed by nine recommendations on using interfaith dialogues for Thailand's southern provinces experiencing the conflict.

DEFINITION AND PURPOSE OF INTERFAITH DIALOGUES

The definition of an interfaith dialogue is a discussion among people from various religious backgrounds who work together in order to achieve a common objective (Bagir, 2007; Brodeur, 2005; Garfinkel, 2004; Maluleem, 2005). Because religious ideology among groups of people can differ substantially, interfaith dialogues are implemented in order to create a safe haven for open, thoughtful and stimulating conversation among groups of people who, in other circumstances, may disagree or not show respect (Bagir, 2007; Brodeur, 2005; Garfinkel, 2004; Maluleem, 2005). In essence, interfaith dialogues strive peacefully to advance relationships and interactions with people from different religious

groups, and thus foster a coexisting society that does not tolerate prejudice (Bagir, 2007; Brodeur, 2005; Garfinkel, 2004; Maluleem, 2005). Interfaith dialogues achieve this by hosting a free-flowing exchange of ideas in a supportive setting. Consequently, they can reduce misunderstandings, break stereotypes, and, as Bagir (2007) cites, "rehumanize" parties involved in complex and volatile disputes.

VARIOUS TYPES, STRUCTURES, AND OBJECTIVES OF INTERFAITH DIALOGUES

The phrase *interfaith dialogue* is more of an umbrella term because there are many ways to carry out a dialogue, and reasons for holding one can vary (Bagir, 2007; Garfinkel, 2004). For example, they can include formal panels, workshops, or conferences held by, or composed of, government or religious leaders (Bagir, 2007; Garfinkel, 2004; Maluleem, 2005). Conversely, it can even include informal meetings with religious group members, non-religious group members, and civilians of any social or economic status. The number present at a dialogue can be as few as two people having a conversation. Interfaith dialogues can even take place in an academic setting, such as hosting one at a university in a classroom or public forum.

The purpose and content of the dialogue varies as well. For some dialogues, the objective is to focus on secular issues typically political or social in nature, such as healthcare or education (Bagir, 2007; Brodeur, 2005; Garfinkel, 2004). There have been dialogues in the past focused on broad topics, such as peace-building in particular regions of the world, and on specific issues, such as HIV/Aids awareness or environmental issues like global warming.

Interfaith dialogues are used for a variety of issues chiefly because their collaborative nature provides a multidimensional outlook on major world issues (Bagir, 2007; Garfinkel, 2004). This analysis focuses on utilizing interfaith dialogues in order to tackle a complex conflict with a variety of factors that are social, political, and religious in nature.

HISTORICAL BACKGROUND OF INTERFAITH DIALOGUES

Although there has always been interreligious dialogue throughout the ages, the most official interfaith dialogue on a global scale and in modern times was during the World Columbian Exposition in 1893 set in Chicago, Illinois (Brodeur, 2005; Seagar, 1993). During this exposition—which commemorated Columbus's discovery of the Americas in 1492— several organized parliaments covered different topics (Seagar, 1993). The most famous was the Parliament of Religions, in which delegates from various religions—though most were only from different Christian denominations—met to deliver papers and hold panels on the time's current religious issues (Seager, 1993). Admittedly, by today's standards this conference would be considered heavily biased with very few representatives from religions hailing from the East and absolutely no representation of Islam (Seagar, 1993). However, this event in terms of interfaith dialogue on a global scale is still considered by many religious scholars as a monumental achievement hallmarking the turn of the twentieth century (Brodeur, 2005; Seager, 1993).

During the 1970s and 1980s, according to Bagir (2007), there were increased numbers of interfaith dialogues. However, these dialogues were initially imposed by governments in order to influence religious leaders into agreeing upon political agendas, like family planning (Bargir, 2007). Then in the 1990s, a shift occurred in which the majority of interfaith dialogues were organized by nongovernmental agencies (Bagir, 2007). Interestingly enough, as the world saw a rise to interfaith dialogues, religious conflicts increased (Bagir, 2007).

Another historical moment for interfaith dialogues was the second meeting of the World's Parliament (Brodeur, 2005, Young, 2005). Again, it took place in Chicago and was held in order to hold a global panel of interfaith discussions as well as pay tribute to the centennial of the first parliament (Brodeur, 2005; Young, 2005). In contrast to the previous parliament, the 1993 assmebly produced a document called "A Global Ethic," which highlights major themes various religious officials agreed were pertinent in terms of religion's role in modern society (Young, 2005). Such themes included self-accountability, absolute disregard for violence as a problem-solving tactic, selflessness, equality, and many more. (Young, 2005).

These revolutionary moments have acted as catalysts for several other major and more religiously inclusive World Parliament meetings, some of which were held in locations such as Cape Town, South Africa in 1999 or Barcelona, Spain in 2004 (Young, 2005). According to Brodeur (2005), the technology revolution has also played a systematic and integral part to the rise of interfaith dialogues hosted by nonprofit organizations. Because of the "network culture" that has been linked to the information systems on the internet, organizations in modern society can communicate faster and coordinate more interfaith movements (Brodeur, 2005).

A SMALL-SCALED EXAMPLE OF AN INTERFAITH DIALOGUE

The researcher of this report held a mock interfaith dialogue in April, 2011 in order to further educate students at Thammasat University about not only the current conflict in Thailand's southern provinces, but also the concept of interfaith dialogues. The setting for this dialogue was a classroom, and the course was entitled "Islam in Thailand," taught by Dr. Jaran Maluleem. The researcher proposed that by hosting her own simulated dialogue, she could not only teach others about the purpose and benefits of interfaith but also gain personal insight and experience.

The setup of this dialogue was to analyze two other major religions, Christianity and Buddhism, in the context of an academic class, which was mainly studying the religion Islam. The dialogue was divided into three parts: first, an overview of defining religion and outlining the importance and implications of religions; second, a summary of Christianity and Buddhism; third, a discussion on interfaith dialogues and how they can be applied to the southern provinces of Thailand.

Part I of the Mock Interfaith Dialogue

In order to explain why it is critical to study religions before analyzing conflicts associating with religious discord, the researcher gave a broad definition of religion. The definition she gave was consistent with that of Young (2005), who states that religion is loosely and collectively defined as providing people with a purpose and rationale for the present life and an account for the afterlife, or next phase. It typically includes general guidelines for behavior and can be related to the actuality and presence of angels, demons, spirits, or even spiritual ancestors (Hopfe & Woodward, 2007; Young, 2005). Next, the researcher discussed how there are different methods of studying religion, such as examining religions historically, socially, analytically, etc., followed by a discussion on why people are religious. As mentioned earlier, the researcher discussed how religion satisfies mankind's needs (Hopfe & Woodward, 2007; Young, 2005). To elaborate, religion provides a sense of "ultimacy" in which individuals' psychological needs for identity and purpose are met since religion gives them a reason that transcends him or her to the next phase after this present life (Young, 2005). Additionally, religion fulfills basic social needs in which strong relationships and groups are formed, thus granting an added layer of belongingness (Hopfe & Woodward, 2007; Young, 2005).

The next topic in the mock-dialogue was a more in-depth review of why religion should be studied. The researcher's reasons included the strong influence religion has over social, economic, political and even artistic spheres, all of which overlap and consequently complicate any and almost all conflicts associated with religious discordance (Hopfe & Woodward, 2007; Young, 2005). Aside from religions having an overwhelming impact on the world, the researcher also stated how religion is important for individual growth (Hopfe & Woodward, 2007; Young, 2005).

Next, the way in which religions perceive themselves and one another was addressed in order to give a perspective on how Islam, Christianity, and Buddhism relate. The first definition that was discussed was *exclusivism*, which is when member of a religious group ultimately views themselves as the only religion accurate and worthwhile to follow (Bishop, 1969; Young, 2005; Yusuf, 2003). On the other hand, *inclusivism* is where an individual believes that either there is an absolute truth amongst the religions that has yet to be formed or that in essence, all religions in the end adhere to one purpose (Bishop, 1969; Young, 2005; Yusuf, 2003). Lastly, *pluralism* is the concept of acknowledging that though religions may differ, respecting one another is key to establishing a peaceful and cooperative society (Bishop, 1969; Young, 2005; Yusuf, 2003).

Part II of the Mock Interfaith Dialogue

The second part of the presentation included a historical overview of Christianity and Buddhism as well as a general summary of both religions' basic principles. This included discussing how Christianity focuses on the birth, life, and death of Jesus of Nazareth and how this religion is an extension of Judaism, yet for Christians, Jesus of Nazareth is the prophesized messiah and the ultimate sacrifice to God for humanity's sins (Hopfe &

Woodward, 2007; Young, 2005). In this discussion, there was mention of the major beliefs of Christianity. However, because there are over 34,000 denominations, the researcher emphasized how Christianity is difficult historically to analyze, especially given the time limit of this particular dialogue (Young, 2005).

Next, the major tenets of Buddhism were summarized, along with a historical overview of its founder, Prince Siddhartha. The researcher mentioned the Four Noble truths, the difference between the two branches—Theravada and Mahayana—and the significance of the Eightfold Path (Hopfe & Woodward, 2007; Young, 2005).

Part III of the Mock Interfaith Dialogue

The third portion of the mock dialogue included what was mentioned earlier in this analysis: the definition, purpose, and background behind interfaith dialogues. Lastly, the researcher gave recommendations for Thailand when implementing interfaith dialogues, those of which will be discussed later in this analysis.

Demographics and Feedback

The audience of those at the mock dialogue included six exchange students studying abroad at Thammasat University—three of which were from California in the United States, two from Japan and one from China. The other audience members present were three local Thai students, along with the professor of the class, Dr. Jaran Maluleem. Oral feedback from the class included compliments and a growing interest in interfaith dialogues. Two students in particular noted that they had never heard of this type of conflict-solving strategy before but appreciated how it strives for tolerance and religious pluralism.

Conclusion of the Mock Interfaith Dialogue

One objective of this small-scale version of an interfaith dialogue was to demonstrate how complex and arduous religions can be, much like the conflicts that involve religious differences. The mock dialogue demonstrated this by discussing two major religions, Buddhism and Christianity, and how there are many different ways to analyze religions. This dialogue, for example, mainly examined these religions' historical backgrounds. Another objective was to educate the class about how there are many types of interfaith dialogues. One such type the researcher tried to demonstrate was an informal method—but in an academic setting. Acknowledging that there are many types of interfaith dialogues is important because a dialogue's context and setting can affect what is being discussed, who is guiding the dialogue, the participants' comfort level and the participants' willingness openly to join in the discussion. If any of these components are negatively affected, then an interfaith dialogue will most likely not yield a successful outcome.

INTERFAITH DIALOGUES' LIMITATIONS

Though interfaith dialogues serve as a peaceful means for solving conflicts, there are still three major limitations this analysis will address. First, despite popular belief, interfaith

dialogues cannot instantaneously resolve conflicts or function as a panacea (Bagir, 2007). As many social and political theorists will explain, most conflicts, including the one in Thailand's southern provinces, are multidimensional and often times deal with more than a simple religious disagreement. Because religion, culture and politics heavily intertwine with one another, using interfaith dialogue as a way to handle only the religious aspect of the conflict will not lead to long term success (Bagir, 2007). Interfaith dialogue can instead be utilized as a public tool to start engaging people in discussions and inspiring change, especially at a grassroots level (Bagir, 2007; Brodeur, 2005).

The next limitation of interfaith dialogue stems from the first. One major barrier that interfaith dialogues cannot directly change is the political structures or governmental policies that can oftentimes sustain conflicts (Bagir, 2007). Though interfaith dialogues can undoubtedly ignite social movements or bring about grassroots organization within a society, they do not typically encourage political leaders to direct a structural change (Bagir, 2007).

Lastly, one limitation that must not go unnoted is interfaith dialogues' difficulty—or perhaps inability—to measure success. Though interfaith dialogues are capable of empowering people, there has been little concrete evidence to suggest they are infallible or an absolute impetus for change or a resolution for modern conflicts (Bagir, 2007). However, as Bagir (2007) suggests, perhaps the lack of regularity of interfaith dialogues, along with other factors, may be the root cause as to why this type of peace-building method has not been widely acclaimed or cited as a standard problem-solving strategy. Factors such as a lack of regularity will be discussed further in the *Recommendations* section of this analysis.

ROLE OF INTERFAITH DIALOGUES IN THAILAND

Internationally

Because Thailand has a seemingly pluralist society that tolerates all religions, the country has been active in hosting countless interfaith dialogues. Thailand participates annually in the Asia-Europe Meeting's (ASEM) Interfaith Dialogue, and in 2008, the nation even co-hosted the fourth annual meeting (Asia, 2008). To show further support of interfaith dialogues and religious tolerance, Bangkok hosted ASEM's Interfaith Cultural Youth Camp in February, 2009 (Asia, 2009).

The allure of Thailand possessing an overall pluralist society has even drawn other countries to host interfaith dialogues in order to hash out their own political conflicts. For example, religious officials from India and Pakistan met in October, 2010 in Bangkok to host an interfaith dialogue discussing peace-building strategies in that particular region (Interfaith, 2010).1 Another example is when in 2010, a Japanese, Buddhist-based nonprofit organization Soka Gakkai International (SGI) also hosted its interfaith dialogue in Bangkok (Soka, 2010). The purpose of this nonprofit is to build stronger connections

¹ See Figure 1.

with Buddhists across the world, and according to their website, the dialogue included thirty members representing Christianity or Buddhism and concentrated on issues such as the responsibility religion has in light of the current economic situation happening globally (Soka, 2010).



Figure 1. Indian and Pakistani religious representatives at an interfaith dialogue discussing peace-building tactics ("Interfaith," 2010).

Nationally

Within Thailand, the presence of interfaith dialogues is varied and can be seen on a public or private scale. Though it is difficult accurately to ascertain when interfaith dialogues launched in Thailand, they at least began to increase in the 1990s with the rise of nongovernmental organizations increasing (Bagir, 2007; Brodeur, 2005).

These dialogues hosted by NGOs, such as the Thousand Stars Foundation or the International Network of Engaged Buddhists, are considered to be the most common type of interfaith dialogue in Thailand (Sukrung, 2010). As with the nature of interfaith dialogues, these types cover an array of topics. For instance, in 2006, leaders representing Buddhism, Islam and Christianity met in Bangkok in response to the political upheaval and protests against Thailand's former Prime Minister, Thaksin Shinawatra (UCA News, 2006).

Another example of Thailand hosting different types of dialogue occurred in 2009 when religious leaders from Burma, Thailand and Sri Lanka met in Bangkok to talk about and promote more peaceful strategies in this particular area of the world (Sopaka, 2009)2.

² See Figure 2.



Figure 2. Religious leaders from Myanmar, Sri Lanka and Thailand meeting in Thailand to discuss religious tolerance and practical methods to strive for peace in the surround region (Sopaka, 2009).

Interfaith dialogues occur even on a private scale in Thailand, during which churches, mosques, and temples regularly schedule meetings with the religious community in order to sustain peace within Thailand's pluralist society. For example, the president of Bangkok's Foundation of Islamic Centre of Thailand, Dr. Pakorn Priyakorn, stresses the importance of interfaith dialogues and claims "it is an absolute must" (P. Priyakorn, personal communication, April 22, 2010).

Though these examples may indicate that interfaith dialogue is a successful method for reducing conflicts and building peaceful societies, there is still room for improvement. According to the *Bangkok Post*, the public and those not regularly affiliated with religious organizations have little access to these dialogues, and the media does not assertively report their presence (Sukrung, 2010).

HISTORICAL BACKGROUND OF THAILAND'S SOUTHERN PROVINCES

Before one can address resolution building methods in the South of Thailand, it is important first to explain how the current conflict began and how it has progressed. On a surface level, the conflict is thought to be a religious clash between the Malay Muslims and the Thai Buddhists (Bajunid, 2006; Becker, 2006; Yusuf, 2006). However, that notion is premature and does not address several other critical factors that must be considered. The conflict in the South is one social, political, ethnic, linguistic, cultural, and religious in nature (Bajunid, 2006; Becker, 2006; Yusuf, 2006). Although the media produces the view that the conflict surrounds only two religious groups, it ultimately comes down to pressure placed on an ethnic minority, past assimilation policies imposed by the Thai government, and a long history between Thailand and Malaysia's borders (Bajunid, 2006; Becker, 2006; Yusuf, 2006).



Figure 3. Map of Thailand's Southern provinces. Before the Anglo-Siamese Treaty, the Kingdom of Pattani consisted of Satun, Songkhla, Pattani (the capital at the time), Yala, Narathiwat, Perus, Kedah, Perak, Kelantan, and Trengganu.

To explain further, in 1909, Thailand signed a treaty with Great Britain called the Anglo-Siamese Treaty (Yusuf, 2006). This agreement allowed Thailand to control five new Malaysian provinces that were once under the Pattani Kingdom: Yala, Pattani, Narathiwat, Songkhla, and Satun (Yusuf, 2006)3. Since this critical point of redefining demarcation lines between countries, and thus affecting cultural groups and ethnicities, there have been countless uprisings over the past century from the ethnic Malays against the Thai government (Bajunid, 2006). The revolts increased during the 1930s and 1940s when the Thai government, headed by General Luang Pibulsonggram and Field Marshall Sarit Thanarat, tried to enact strict assimilation laws that infringed upon the ethnically Malay-Muslim identity (Bajunid, 2006; Yusuf, 2006). Such laws included unfair and apparent targeting tactics, such as switching the language of the religious school-pondoks-from Malay or Arabic to Thai (Bajunid, 2006), which resulted in unrest. However, the Thai evolution towards a democratic state in the 1970s and 1980s, produced general calm (Bajunid, 2006; Yusuf, 2006). Unfortunately, when former Prime Minister Thaksin Shinawatra came to power, tensions began to resurge at the turn of the twenty-first century due to implementing laws that again targeted the Malay-Muslim ethnicity (Bajunid, 2006; Yusuf, 2006).

The zenith of unrest was during 2004, which included the Krue Se Mosque and Takbai events (Bajunid, 2006; Becker, 2006; Yusuf, 2006). The Thai government subsequently initiated the National Reconciliation Commission in 2005 to investigate these incidents, yet unfortunately, the report remains futile and few of the suggestions made have been considered (Yusuf, 2006). Additionally, with the recent political outbreak in 2006, the Thai

³ See Figure 3.

government remained distracted from properly addressing how to solve the uprisings and violence. Because of the Thai government's enacted martial law and strong presence of military power in the South, tensions still remain strong between the insurgents and the opposing side. According to Omar Bajunid (2006), since 2004, there have been "over 3,000 violent events" and countless tragic deaths related to the conflict in Southern Thailand.

Lastly, it is important to note that the nature of this conflict is highly complex and consists of years of governmental policies and political turmoil, and the account here is merely a brief historical description. The main concept to underscore is that the issue lies within the people's ethnicity in addition to their religion. Several factors of the Malay-Muslim identity challenge the Thai nation, and these factors primarily include the people's language and religion (Bajunid, 2006; Yusuf, 2006). The language is first a challenge because most of the citizens in the South are ethnically Malay and in turn speak Malay, not Thai (Bajunid, 2006; Yusuf, 2006). Consequently, this ethnicity cannot assimilate fully or effortlessly into Thai society, which is considered to be united by the Thai language. Next, the Islamic religion factor, as mentioned earlier, can at times indirectly challenge the constitutional-democratic Thai state. For example, because the insurgents practice Islam, their allegiance to political leaders is a sensitive matter since their allegiance is always first toward Allah. Being asked to alter certain modes of their belief system in order for the ethnic Malays to assimilate into Thai society almost always causes tension (Bajunid, 2006; Yusuf, 2006). Nevertheless, the key concept to focus on is the "ethno-linguistic" feature of this conflict, and not just the religious aspect.

RECOMMENDATIONS FOR THAILAND'S SOUTHERN PROVINCES

According to Becker (2003), in order to practice fairness within a society and thus keep the peace, the ruling powers are required to give the public a *voice*. Interfaith dialogues can achieve this necessity because they simply grant individuals the option to speak their opinion in a safe and nurturing forum of free-thinking discussion. In turn, interfaith dialogues can empower individuals, shape movements, and create the change that people in Southern Thailand want to see (Bagir, 2007; Garfinkel, 2004). However, in order for interfaith dialogues to work, especially in the context of Thailand's southern provinces, this analysis suggests nine specific recommendations that will be addressed below.⁴

Recommendation One

First, when considering who should be present at an interfaith dialogue that addresses the crisis in the South, the answer is simple: *everyone* (Bagir, 2007). Although religious leaders and government officials are typically the ones present, it would be beneficial to include a vast range of participants because this situation includes an array of people

⁴It is important to acknowledge that although interfaith dialogues are naturally associated with solving religious conflicts, as previously mentioned, in this instance, where using interfaith dialogues would be a tool to reduce conflict in the South, the situation is entirely religious in nature. As mentioned previously, this conflict is politically, socially, and religiously rooted. Therefore, interfaith dialogues would be used to address all factors, not just the face-value "Buddhism vs. Muslim" aspect.

spanning generations. This includes everyone from all socioeconomic backgrounds and, as Bagir (2007) suggests, those with all types of jobs, such as the fishermen, police, and others. This recommendation is critical because it provides a voice not only to those in power presiding over the decisions on the matter; this recommendation hints that those directly affected by and included in the conflict must be involved.

Recommendation Two

Building on the first recommendation, the ideal location for hosting an interfaith dialogue would not be in Thailand's political capital, Bangkok. Given the significant distance from the South, in order to include all of those affected by the conflict, it would be logical to host it in a central location. Again, the objective is to make sure all parties are equally given an opportunity to speak of their grievances, build relationships, and reduce tension.

Recommendation Three

A substantial number of those present at an interfaith dialogue should be from the South. Again, it is a matter of providing opportunities to build peace with the parties that are feuding. Therefore, not having a considerable number would be futile. Along with this, there should be an even number of ethnic Thais and Malays in order to keep representation balanced. However, it is important to note that there should undoubtedly be representatives from the national Thai government so that those parties, too, can learn from firsthand accounts about the conflict and determine what political measures need to be considered.

Recommendation Four.

When hosting an interfaith dialogue, each party needs to have a clear objective of what it would like to accomplish (Garfinkel, 2004). Without outlining a clear purpose for each meeting, there is the risk of not effectively addressing major concerns or issues at hand as well as instilling confusion if each member is not comfortably on the same page (Garfinkel, 2004).

Recommendation Five

This recommendation calls for each party to possess a deep and most sincere level of honesty (Maluleem, 2005). If any member has ulterior motives or deceptive plans at an interfaith dialogue, there is a great possibility for one party to instill more distrust, suspicion, negativity, and animosity. This may cause a greater divide between those feuding in the South, which is the antithetical purpose of an interfaith dialogue. The aim is to move forward through peaceful means and not regress.

Recommendation Six

Because the subject matter that would be addressed at these particular interfaith dialogues would be sensitive in nature, it is crucial for each member to possess strong levels of maturity. Each member should be able to handle hard facts and criticism so that they may learn and grow from the interfaith dialogues (Maluleem, 2005).

Recommendation Seven

Since one of the intentions of an interfaith dialogue is, Bagir (2007) states, to "rehumanize" individuals, it is critical for each participant to be able to express empathy. Both sides in the conflict of Southern Thailand have lost friends and family members in gruesome ways. Therefore, as Bagir (2007) suggests, members should not only concentrate on the differences but also—most importantly—on the similarities. By trying to envision the other point of view, members of opposing sides may even build friendships based on the fact that both parties have endured major losses.

Recommendation Eight

Though it takes careful planning to host an interfaith dialogue that consists of a large number and vast range of people, dialogues should still be held consistently (Bagir, 2007). The goal is to build meaningful relationships, which can only be done over time and by continuously peeling back layers. The more often dialogues are held, the more people can tend to new relationships, educate others, and thus instill progress.

Recommendation Nine

As with any organization, after each meeting there should be an evaluation of the progress that has been made or a prospective given on what needs to improve for the next dialogue (Garfinkel, 2004). Though it is difficult to measure the direct success or outcome of interfaith dialogues, there are still ways to gauge whether participants felt the dialogue was positive and worthwhile. Religious groups or neutral parties, such as nongovernmental organizations focused on human rights protection, could distribute brief surveys or even conduct interviews in order to attain qualitative feedback. Whichever way deems fit, it is crucial to see that progress is being made and that the people involved are regularly given a say in the decision making processes.

CONCLUSION

As with all conflicts, there are never quick or simple solutions. The path towards a peaceful resolution requires time, energy, patience, and cooperation. Along this path, there are methods that unconditionally discourage violence and endorse only peace and civil discussion. One such popular approach is called interfaith dialogues. Although this paper addresses how interfaith dialogues have some limitations, as long as these dialogues are

carried out justly and adhere to the recommendations suggested in this analysis, they can provide those involved in a conflict with a public voice. As for the conflict in Thailand's southern provinces, this is an issue layered with over a century's worth of disputes, brutality, and injustice. However, though interfaith dialogues cannot structurally change many of the politically organized factors associated with this conflict, they can at least use the power of discussion to implement social and civic change. As Becker (2006) states:

"[T]he democratic state can only expect loyalty to its institutions when citizens have good reason to believe that their participation in public debate defining society's fundamental principles is possible and encouraged" (p. 264).

Interfaith dialogues can then satisfy this necessity by allowing people from all corners of the conflict to come together in the middle and work towards ending the violence and instilling peace in the southern region of Thailand.

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History Day at Middle Tennessee State University

Matthew Hibdon

Abstract

Middle Tennessee State University has educated thousands of people since its founding in 1911. In addition to its focus on academic courses for collegiate students, the University has sponsored several programs that educate people throughout Murfreesboro and the surrounding communities. There is a rich history of history competitions on MTSU's campus that dates back to 1971. In 1974, National History Day was founded. Middle Tennessee State University has a long history with this competition from its beginnings in Tennessee up until the present day. This essay investigates the University's commitment to supporting history education programs since the 1970s

The National History Day contest at Middle Tennessee State University has affected many students' lives since its creation in 1974. National History Day is an educational competition in which students create historical projects based upon the contest theme, which changes annually. Students compete in two divisions that are judged separately at all levels of competition. The Junior Division is for sixth through eighth graders, and the Senior Division is for ninth through twelfth graders. The students are then divided as to whether their project is an individual project or a group project of two to five students. The eight categories in which students can compete include: "paper (individual only), individual exhibit, group exhibit, individual performance, group performance, individual documentary, group documentary, [and] website (individual and group combined)." Entries in every category other than papers must include three copies of the title page, process paper, and annotated bibliography to give to the judges. These basic rules serve as the structure of the competition. With the impact National History Day has had on so many students, one question comes to mind: How did it get started?

National History Day is much more than a simple history contest and has a history all its own. Dr. Cathy Gorn, Executive Director of National History Day, has many years of experience with the program because of her time spent as a graduate student at Case Western Reserve University in Cleveland, Ohio. Gorn explains the creation of this educational phenomenon in an interview with journalist Stephen Goode. As Gorn noted, "Basically, it was a group of historians sitting at lunch one day, lamenting the devalued nature of the humanities in general and of history in particular. . . . They decided that the students could write a paper or do a tabletop exhibit on a subject from history, and they had 129 kids in the Cleveland area participate in the first year." The leader of this group of pioneering educators was David Van Tassel, who later served as Gorn's mentor and dissertation advisor.³ The first year's contest that Gorn referred to happened on May 11, 1974 at the Western Reserve Historical Society and Case Western Reserve University and focused on the topic of "Ohio and the Promise of the American Revolution." 4 Van Tassel had perfect timing by starting the contest a few years before America's Bicentennial Celebration in 1976. The growing interest in the country's history at this time and the allure of a new history contest surely contributed greatly to the success of History Day.

The program continued to grow and finally caught its first big break in 1979. The History Day Program was "incorporated into a nonprofit organization under the name National History Day, Inc." The event that signified National History Day's major success happened the following year. In 1980, nineteen states participated in the first national

¹ National History Day, Inc., Contest Rule Book Revised 2009/2010 (Clarksville, TN: Jostens, 2008), 6-9.

² Stephen Goode, "Gorn Helps Make History Come Alive," *Insight on the News*, (October 15, 2002): 1-3.

³ Kathy Gorn, "A Tribute to a Founding Father: David Van Tassel and National History Day," *History Cooperative* (February 2001): 4.

⁴ Kathy Gorn, "Building Interest in Studying History," OAH Magazine (April 1985): 14.

⁵ David D. Van Tassel, *Encyclopedia of Cleveland History*, s.v. "National History Day, Inc."

contest that was held at Georgetown University in Washington, D.C.⁶ This increase in participation continued, and the contest had to be moved to its current home. The national contest is now held at the University of Maryland at College Park every year in June.⁷ On June 15-18, 1983, more than fourteen hundred participants gathered for the national contest.⁸ The large number of participants in the national contest only reflected a portion of the students who were competing across the nation by the mid-1980s. In 1984, participation skyrocketed nationwide with one hundred and fifty thousand students from 43 states competing in the contest.⁹ The growth the contest had in its first ten years is mind-boggling and clearly showed that National History Day was there to stay.

During its existence, National History Day, Inc. has only had three different executive directors. The first Executive Director, Dr. Lois Scharf, served from 1979 to 1992, Dr. Gordon McKinney served from 1992-1995, and Dr. Cathy Gorn, the present executive director, has served since 1995. 10 Sponsorship for the contest has grown over the years and now includes two major sponsors, Jostens and the History Channel. 11 Several presidential libraries became district or state sponsors for National History Day in the 1990s, such as the Eisenhower Library, the Johnson Library, and the Truman Museum and Library. 12 Sponsorships like these greatly benefited the program and allowed it to continue to grow. In 2000, tragedy struck at the heart of National History Day when its founder, David Van Tassel, passed away. That year's national contest happened not long after his death and an astounding 2,112 students from all fifty states competed.¹³ If this participation boost was not tribute enough to Van Tassel, the number of students who competed the next year definitely was. According to an article by Michael Simpson and Steven S. Lapham, "In the 2000-2001 school year, more than 700,000 students and 40,000 teachers participated in the contest at the district, state, or national level."14 History competitions like this are vital to students' success in studying and comprehending history. National History Day's continued growth and longevity over the years are testament to the great importance of the program.

Van Tassel's brilliant idea in 1974 has grown into a wonderful program that reaches many students each year; however, he was not the first person in the 1970s to organize a

⁶ Ibid.

⁷ National History Day, Inc., Contest Rule Book Revised 2009/2010 (Clarksville, TN: Jostens, 2008), 4.

⁸ Lois Scharf and Pamela Zoslov, "National History Day: A Learning Experience for Students and Teachers," The History Teacher (November 1983): 89.

⁹ David Wallace Adams and Marvin Pasch, "The Past as Experience: A Qualitative Assessment of National History Day," *The History Teacher* (1987): 179.

¹⁰ David D. Van Tassel, Encyclopedia of Cleveland History, s.v. "National History Day, Inc."

¹¹ National History Day, Inc., Contest Rule Book Revised 2009/2010 (Clarksville, TN: Jostens, 2008), 27.

¹² Lee Ann Potter, "Education Programs in the Presidential Libraries: A Report from the Field," *The Public Historian* (2006): 134-135.

¹³ David D. Van Tassel, Encyclopedia of Cleveland History, s.v. "Van Tassel, David D."

¹⁴ Michael Simpson and Steven S. Lapham, "NHD National History Day," *Social Education* (September 2001): 320.

history competition for students. In fact, one such contest happened at Middle Tennessee State University in Murfreesboro, Tennessee. The *Tennessee Blue Book 1973–1974* provided facts about Middle Tennessee State University from that year and noted that, "The campus serves as the site for Volunteer Girls State, the Aerospace Workshop, the Summer Institute for Teachers of United States History, the National Science and Mathematics Institute, and a variety of professional workshops, conferences, symposiums, and athletic tournaments." Although this list includes a mention of a program for history teachers, it does not include a campus event that was started a few years earlier by the Middle Tennessee State University History Department. According to Dr. Fred Colvin, in the late 1960s, Dr. James Huhta contacted local schools about promoting the study of history and created the Tennessee Congress of American History Teachers. The purpose of this organization was to "create a type of contest to recognize achievements of good history students in local high schools and provide opportunities for teachers themselves to further their own knowledge and expertise through various activities." ¹¹⁶

One of those "various activities" was the creation of the History Department's own competition through a history test. In 1971, Dr. Colvin and Dr. Robert Jones developed the test that covered American history. It was a multiple-choice test consisting of about 100 questions and included an essay portion for the students to complete. The test was revised every three to four years, and eventually, a second test about Western Civilization was added. The contest was held the week after final exams at Middle Tennessee State University each spring while the participating schools were still in session. Students would pre-register for the contest and check-in that morning. They then went to Room 221 of the Ned McWherter Learning Resource Center, where the test and essay were administered at 10:00 and lasted until 12:00. While the students were testing, teachers were treated to educational workshops taught by members of the History Department. Because of time constraints and the large number of participants, the students' essays were not graded unless it was to break a tie on the multiple choice test. At 2 p.m., everyone met for the awards ceremony. Awards, in the form of certificates and plaques, were given to high-scoring individuals and groups of students.¹⁷

As Dr. Colvin said of the contest, "This provided the University—our department—a way to reach out to regional high schools." The contest became fairly competitive among several schools including Warren County, Coffee County, Tullahoma, McGavok, Franklin County, Franklin High School, Riverdale High School, Lincoln County, and Bradley County. Several private schools entered the competition including Webb School, Memphis University School, Baylor, Saint Cecilia, and McCallie. 18 The contest grew in popularity,

¹⁵ Joe C. Carr, "Tennessee Blue Book 1973-1974," ed. Rita A. Whitfield, 1974.

¹⁶ Fred Colvin, interview by author, Murfreesboro, TN, February 25, 2010.

¹⁷ Ibid; According to Dr. Haskell Greer, a teacher from Warren County, over time, two versions of each test were created, one for Advanced Placement students and one for regular students (Haskell Greer, interview by author, McMinnville, Tennessee, March 24, 2010).

¹⁸ Fred Colvin, interview by author, Murfreesboro, TN, February 25, 2010.

and 276 students from 21 area high schools competed in 1989.¹⁹ Unfortunately, in the mid-1990s, Dr. Jones moved to an administrative job with Student Affairs, and Dr. Colvin decided to take a hiatus from the contest in the false hopes that someone would take his place. Although the contest served as a good recruiting device for the History Department over the years, it came to an end.²⁰ Even though the History Department's History Competition was short lived, it made way for the emergence of a new National History Day competition at Middle Tennessee State University.

Although Middle Tennessee State University's real success with National History Day occurred within the past decade, the school's involvement with the contest goes back to 1979. When Tennessee students first competed in National History Day, Dr. Robert Jones was the Editor of Tennessee Historical Quarterly. In the Spring 1981 edition of Quarterly, Jones wrote about National History day on the editor's page. He said that in 1980, approximately 450 students competed in district competitions across Tennessee. The district winners then competed in the state contest on a designated history day. Those winners competed in at the first national National History Day contest in Washington, D.C. with 594 other students. In an even more impressive feat, three of those Tennessee students placed first in the national contest that year. Jones speculated that in 1981, Tennessee could have as many as 750 students compete in seven district contests. He also wrote, "Realizing the value of this program in fostering an interest in history in our young men and women, the Tennessee Historical Commission lent its financial support to the endeavor last year and has increased its commitment this year. Governor Lamar Alexander has given his endorsement, designating the date of the state competition, May 9, as History Day and proclaiming that a 'careful and thoughtful examination of our history' provides 'invaluable guidance' in the 'development of a strong and prosperous future for our state."21

Dr. Jim Huhta and Dr. Ron Messier–both from Middle Tennessee State University—were the first state directors for Tennessee History Day. They established the regional and state contests about which Dr. Jones wrote in the *Tennessee Historical Quarterly*. Dr. Jerry Brookshire was asked to become the state director for 1980-1981. He recalled his experiences as state director in an e-mail. Brookshire wrote:

Basically, I managed by taking over an existing well-run organization. At that stage, we had an off-campus grant (probably from the national History Day) of approximately ten thousand dollars. Most of it was spent on the regions and their contests, some on the state contest held at MTSU, and a little left over on chartering a bus to take some of the state winners to the national contest held in Washington, D.C.... I remember trying and failing to obtain outside funding for Tennessee History Day for the next year. During my period as state director, the key people were

¹⁹ "History Competition," MTSU History Department Newsletter, 1989.

²⁰ Fred Colvin, interview by author, Murfreesboro, TN, February 25, 2010.

²¹ Robert B. Jones, "The Editor's Page," Tennessee Historical Quarterly 40, no. 1 (Spring 1981): 2.

the regional directors or co-directors.... Some were able to get modest outside funding for their regional contests.

Brookshire was only state director for one year. He stepped down due to time constraints and lack of assigned help from department staff and student workers. The position was then given to Dr. David Rowe. Rowe only held the position for a short time because outside funds for the contest were depleting.²²

With such success, support, and recognition in National History Day's first two years in Tennessee, the next chapter of the contest's history was quite shocking. Dr. Janann Sherman was the former State Coordinator for Tennessee History Day. In an e-mail, Sherman wrote:

The U[niversity] of M[emphis] sponsored the first West Tennessee district competition in 1980. Two years later, after the grant ran out, MTSU dropped History Day and the district system, ostensibly established under the purview of MTSU with the assistance of that grant, collapsed. The U[niversity] of M[emphis] picked up Tennessee History Day rather than let it disappear altogether. For the next 20 years, the only History Day in Tennessee was the state competition hosted by the University of Memphis. In 1999, I took over as coordinator and [was] determined to build a truly state-wide History Day system. The districts were established and completed in time for the 2002 contest.²³

Sherman stated in another e-mail that while the state contest was held at the University of Memphis before the redevelopment of the districts, that it only involved local Memphis students.²⁴ With such dramatic changes within the first few years of Tennessee History Day's existence, the almost twenty-year stint in Memphis provided stability for the contest.

In addition to the competition she continued in Memphis, Sherman ultimately helped create three other district competitions within the state in Chattanooga, Knoxville, and Murfreesboro. Britt Brantley, former Executive Director of the Chattanooga Regional History Museum, explained to Rebecca Conard in an e-mail that before hosting the Regional Competition in Chattanooga for National History Day, the museum just had a history fair that mostly consisted of second through fourth graders competing. The first Chattanooga Regional History Day was held at the Chattanooga Regional History Center in 2002. East Tennessee History Day had its first competition on March 15, 2002, at the East Tennessee History Center with eighty-seven students competing that day. Lisa Oakley was in charge of organizing the event and wrote in the East Tennessee History

²² Jerry Brookshire, e-mail message to author, May 2, 2010.

²³ Janann Sherman, e-mail message to author, April 16, 2010.

²⁴ Janann Sherman, e-mail message to author, March 26, 2010.

²⁵ Britt Brantley, e-mail message to Rebecca Conard, February 26. 2003.

²⁶ Rebecca Conard, "MTSU Public Service Grant: Project No. 230240, Final Report: National History Day, MTSU Competition," June 5, 2003: 2.

Day Dispatch, "In 2003, the East Tennessee Historical Society entered into a partnership with the University of Tennessee's Department of History to co-sponsor East Tennessee History Day." From 2002 to 2009, a total of 1,606 students took part in East Tennessee History Day.²⁷

The other person that Sherman recruited to her History Day cause was Dr. Rebecca Conard at Middle Tennessee State University. Conard had previous experience as a judge at National History Day at Wichita State University. On February 5, 2001, Sherman sent a letter to Conard asking her to join the Tennessee History Day Advisory Committee. Being on this committee got Conard involved with the contest in Tennessee, and later that spring, she was at a cocktail party where she was introduced to Dr. Cathy Gorn. Fortunately for Conard, there was a school district in Middle Tennessee that had already been gearing up to compete at the state contest in 2001. According to an interview with Sherman filmed at the 2001 State Contest, there were 21 schools at the contest that year. Thanks to the efforts of curriculum specialist Judy Butler and an assistant principle, Tracy Lamply, Williamson County Schools got involved in National History Day, and the contest no longer included just Memphis students. Their labors proved fruitful, and almost 300 students competed in the county level contest in 2001.

With the success of Williamson County Schools' first competition in 2001, Dr. Conard sought to bring the contest to Middle Tennessee State University the following year. Williamson County Schools was willing to contribute \$2,000 to the contest that year, and Dr. Conard asked for \$1,500 from a MTSU Public Service Grant on January 24, 2002. Rosemary W. Owens sent an on-campus memo to Dr. Conard on February 22, 2002, which stated that the Public Service Committee approved \$840.00 for the contest with the restriction that a formal evaluation must be done. History Day was held at the Keathley University Center on March 8, 2002. Thirty-eight judges and about 300 students were present for the contest. The students brought 119 total entries in the categories with 81 exhibits, 18 documentaries, ten performances, and ten papers. The total cost of the event was \$4,500, which was covered by Williamson County Schools, the MTSU Public Service Committee, the MTSU History Department, and the Office of the

²⁷ William E. Hardy and Lisa N. Oakley, East Tennessee History Day Dispatch (Summer 2009): 7.

²⁸Rebecca Conard, interview by author, Murfreesboro, TN, March 26, 2010.; On September 3, 2009, the Wichita State University History Department posted this announcement on their website: "Due to budget cuts at the state level, the Department of History regretfully announces that there will be no History Day at WSU in 2010" (Robert M. Owens, "History Day 2010," (September 3, 2009)).

²⁹ Janann Sherman, letter to Dr. Rebecca Conard, February 5, 2001.

³⁰ Rebecca Conard, interview by author, Murfreesboro, TN, March 26, 2010.

^{31 &}quot;History Day Saturday, March 3, 2001, The University of Memphis Student Center," VHS. 2001.

³² Rebecca Conard, "Public Service Grant Application Middle Tennessee State University": 2.

³³ Rebecca Conard, "Public Service Grant Application Middle Tennessee State University": 3.

³⁴ Rosemary W. Owens, on-campus memo to Dr. Rebecca Conard, February, 22, 2002.

Dean of the MTSU College of Liberal Arts. The contest was well-received on campus, and Dr. Sidney A. McPhee, Middle Tennessee State University President, even attended the awards ceremony.³⁵

Dr. Conard thought that by having Middle Tennessee State University host the regional competition, high-achieving students would be more exposed to the University and all it could offer to them.³⁶ In an effort to establish Middle Tennessee State University as home to the regional competition, the History Department and the dean of the College of Liberal Arts gave History Day a budget.³⁷ This budget came from what Dr. Conard called Dr. Thad Smith's "major and timely contribution" to History Day. He went to the dean, Dr. McDaniel, and asked that he set aside a budget for the contest. The dean agreed to give annually \$6,000 from his discretionary funds. 38 In addition to this budget, the regional contest also received aid from the Teaching American History Grant. The grant sponsored teacher workshops until the fall of 2005 for "schools in the Cumberland River Valley Consortium (Bedford, Cannon, Coffee, Marshall, Maury, and Warren counties)."39 Also because of the partnership with Teaching American History, Perky Beisel was assigned to help with History Day at Middle Tennessee State University. Beisel was the Project Assistant from Teaching American History and provided much needed assistance for the contest. 40 With the dedicated budget and help, the contest continued to grow and was spared the fate of the contest that was at Middle Tennessee State University in the early 1980s.

On March 21, 2003, the first MTSU Regional History Day Competition was held. Twelve teachers came to the contest and brought with them 90 students, 82 of whom participated and 8 who were just there to observe. Unfortunately, snow caused the event to be postponed so approximately thirty students withdrew. Although the first regional contest experienced a decline in student participation, it was acceptable because it included students from more than just one county. Twenty-four judges judged the entries that came from Maury County Schools, Metro Davidson County Schools, Rutherford County Schools, Warren County Schools, and Williamson County Schools.⁴¹ By the next year, the contest grew tremendously in popularity. The second annual competition occurred on March 5,

³⁵ Rebecca Conard, "MTSU Public Service Grant: Project No. 230240, Final Report: National History Day, MTSU Competition," June 5, 2003: 1-2.

³⁶ Rebecca Conard, "Public Service Grant Application Middle Tennessee State University": 2.

³⁷ Rebecca Conard, "MTSU Public Service Grant: Project No. 230240, Final Report: National History Day, MTSU Competition," June 5, 2003: 2.

³⁸ Rebecca Conard, interview by author, Murfreesboro, TN, March 26, 2010.

³⁹Rebecca Conard, "MTSU Public Service Grant: Project No. 230240, Final Report: National History Day, MTSU Competition," June 5, 2003: 2.; Note that two of the Cumberland River Valley Consortium school systems (Coffee and Warren) were also two systems that participated in the MTSU History Department's old History Competition.

⁴⁰ Rebecca Conard, interview by author, Murfreesboro, TN, March 26, 2010.

 $^{^{\}rm 41}$ Rebecca Conard, "MTSU Public Service Grant: Project No. 230240, Final Report: National History Day, MTSU Competition," June 5, 2003: 2.

2004. It attracted 283 students with 119 entries, 17 teachers, 38 judges, and 14 volunteers. ⁴² Middle Tennessee State University has continued to host the Middle Tennessee Regional History Day, and numerous regional winners have gone onto the state and national contests. In 2008, the state competition gained a new sponsor, the Tennessee Historical Society. The Tennessee Historical Society hosted the event with financial support from the Tennessee General Assembly. ⁴³ When the state contest finally moved from the University of Memphis to Nashville, Tennessee in 2009, 230 students competed. ⁴⁴

As National History Day grows in popularity in Tennessee and throughout the nation, it is important to stay proactive in seeking funding and new ways to help the program survive. All supporters of the program should be as bold as Dr. Cathy Gorn when asking for help. On April 2, 2009, she spoke to the members of the Tennessee State Senate and said, "In the race for math and science education, history education has been left behind, and when we are talking about the future of democracy, we can't allow that any longer. History Day is filling the gap, and I hope you will help us do that." Although National History Day was not the first history competition even at Middle Tennessee State University, it has had a positive and lasting impression on the lives of thousands of students.

⁴² Judy Butler and Susan Kuner Ed.D., "MTSU Regional History Day Competition March 5, 2004 Evaluation Report," (2004): 3.

⁴³ Carroll Van West, ed, "News from the THS: Tennessee Students Compete for Honors at National History Day Contest," *Tennessee Historical Quarterly* 68, no. 1 (Spring 2009): 108.

⁴⁴ William E. Hardy and Lisa N. Oakley, East Tennessee History Day Dispatch (Summer 2009): 2.

⁴⁵ William E. Hardy and Lisa N. Oakley, East Tennessee History Day Dispatch (Summer 2009): 11.

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Augustine's Confessions: Symbolism in Autobiography

Mike Smith

Abstract

Some scholars have criticized Augustine's Confessions for lacking structure. In this paper scenes from Augustine's life depicted in Confessions are analyzed allegorically in order better to understand what his intention may have been as an author. Augustine was a talented writer and it is worth considering that he was aware that Confessions may have had less impact had it been written in a more straightforward autobiographical style.

In Confessions, the narrator describes his secular journey towards a spiritual life, told from the point of view of a middle-aged Augustine. In his recollections, Augustine describes his past, having formerly embraced scholarly pursuits while mocking Christianity—which starkly contrasts his situation at the time of publication, when he was living as a Catholic bishop devoted to theology. Henry Chadwick discusses Augustine's view of "the acquisition of mental skills" as toil worse than that of a manual laborer (69). At the same time, Peter Brown suggests that Augustine regarded his past "as a training for his present career" (162). Brown also discusses the appropriateness of Augustine's travels as metaphors for his spiritual journey (38). This dualistic view of his life before his conversion to Christianity presents the idea that Augustine selected—and perhaps modified—aspects of his autobiography for literary effect.

Book II presents one of the most memorable scenes in *Confessions*, in which Augustine recounts an episode from his youth when he, with a group of friends, stole pears from a tree. He tells us that he did not steal the pears out of a desire for the pears themselves, as he had access to better pears at home and threw most of the stolen pears to pigs, but that he did so simply for the thrill of doing something he knew he should not. Later, Augustine writes that the motivation for the theft was a desire to commit the crime with a group—a need for companionship (34). James O'Donnell suggests that the analogy of comparing the theft of the pears with the fruit eaten by Adam in the Garden of Eden is intended by Augustine, to some degree (88). While Augustine would argue against the doctrine of an "age of accountability," as he believed all people to be born into sin, Augustine's age at the time of the crime—around sixteen years old—coincides with passages in which his father makes reference to Augustine reaching sexual maturity, suggesting that the pear tree incident signals Augustine's entry into adulthood and the onset of his own manifestation of original sin (26).

Augustine also details his time with the Manicheans in *Confessions*. This passage was certainly included in response to contemporary critics accusing him of maintaining some Manichean doctrines in his personal beliefs and Christian writings (Wetzel 52). One would imagine that, in light of these attacks, Augustine would have preferred to minimize his discussion of his knowledge of Manichean beliefs and rituals, yet he demonstrates the same frankness and openness here as he does in the rest of his work. Augustine discusses the practices of the Hearers and the Elect. In Augustine's account, the Hearers were responsible for picking fruit for the Elect, who were prohibited from doing so themselves. In doing so, the digestive processes of the Elect would permit bits of the divine to be freed from the fruit. This is a fairly specific description of a Manichean practice, which may be cause for consideration as to why Augustine would have included it. Rather than avoiding Manicheism, he discusses its mythology in detail—perhaps for literary effect.

If one accepts that Augustine employed a literary aspect in his writings, one may conclude that his intent was twofold. By speaking scornfully of the Manicheans, Augustine distanced himself from them, but this description of these practices is open to interpretation as symbolism. Consistent with his earlier use of the pear as a symbol for original sin, in

this scenario, one could interpret the events as the diet of the Elect consisting primarily of sin, gathered for them by their followers. This seems to be a staunch denunciation of the Manicheans as heretics who—by denying responsibility for sin—choose instead to gorge themselves with it.

The final mention of fruit comes during the climactic moments beneath the fig tree at the garden in Milan. This fig tree is thought by many to represent allegorically the Garden of Eden's Tree of Life—in contrast to the aforementioned pear tree's possible representation of the Tree of Knowledge of Good and Evil (Ferrari 240). This dual imagery creates a circuitous effect, reminding the reader of Augustine's beginnings at the pear tree and his journey back, and it further supports the notion of his use of symbolism and literary techniques, opening the door for the consideration of potential symbolism surrounding other events in his life.

In 372, Augustine's unnamed concubine bore him a son, Adeodatus. The Latin meaning of this name is "gift from God," which potentially holds significance. Brown summarizes Augustine's feelings about the boy by describing the awe which he felt regarding his son's intelligence as well as his sentiment following his son's death that he could take credit for no part of him but the sin that created him(61). It is possible that Augustine left the mother of his son unnamed because of the shame he felt in consorting with her, but the possibility also remains that he believed that naming her may have appeared to be an effort to share the blame for their shared lust. His son played little part in Augustine's biography, other than sharing in conversations Augustine had with his peers and having been baptized along with Augustine and Alypius. One could speculate that Adeodatus appears in *Confessions* only to symbolize the way in which Augustine felt trapped by his sexual desires. The boy and his mother travelled with Augustine from Carthage to Rome, and then to Milan–just as the burden of lust that Augustine came to recognize in Africa remained with him until his conversion in Milan.

Shortly after arriving in Milan, Augustine dismissed the woman in order to pursue an arranged marriage, which he hoped would help him to achieve an appointment to public office. The boy stayed in Milan with his father. If viewing Augustine's life from a literary standpoint, his decision to discuss these details may suggest that although he has rid himself of the object of his lust, his urges remain, immediately finding a new mistress; furthermore, the consequence of his sin is still present—Adeodatus. In describing his love for his son, Augustine could be speaking in the same vein in which he does when discussing how his secular life has been a gift from God, preparing him for his ascetic life. When discussing the spiritual issues preceding his conversion in Milan with his friends Alypius and Nebridius, Augustine often notes that his son is present. This may represent that Augustine is weighed down not only by his continuing physical lusts, but also by the awareness of his past transgressions, which pose an obstacle for him when he tries to achieve the level of purity that he believes to be a prerequisite for his conversion.

In 390-within three years of the baptism Augustine shared with his son and friend-Adeodatus died. The death of his son may have seemed significant to Augustine not only

in the way it would be significant to any father, but also as a representation of how he had begun shedding the artifacts of his secular life. Adeodatus's age in 390 would have been nearly eighteen—close to the age at which Augustine and his mother conceived him. Augustine may have seen the death of his son as a representation of the death of his own, former self. This idea brings us back to the argument that Augustine felt that his secular years acted as training for his life in the church.

If Augustine used both fruit and his son as metaphors for his own spiritual journey, it is possible that his actual physical journey served as an analogy in this same fashion. Augustine was born in 354 in Thagaste to Patricius—a pagan—and Monica—a Catholic. Already, we see a choice laid out before him. Thagaste itself may hold symbolism, as well, given that citizens of the European regions viewed northern Africa as remote, backwards, and unsophisticated—as an empire might view a remote colony (Brown 24). These views suggest a physical distance from the Italian cities of wealth, scholarship, and philosophy. By corollary, this simpler region might be more amenable to the ascetic life Augustine would eventually adopt. Thagaste as the scene of the pear tree theft and the death of a close childhood friend whose baptism he mocks can be seen to represent his origins. The events that led Augustine to leave Thagaste might be viewed as the debased triggers which launched his sinful life.

Augustine's mother was a virtuous Catholic woman, a point that Augustine acknowledges throughout the work. A recurring theme in *Confessions* is Monica's desire to see her son converted and baptized. Augustine himself begged for this baptism at an early age when he fell sick, though Monica hesitated as she feared that if he were to live through the illness that the baptism would be for nothing, as the sins of adolescence and later life would be inevitable. If Augustine's mother represents piety and the Catholic Church to him, this attitude regarding baptism–although common at the time–may be seen as foreshadowing his secular lifestyle.

Augustine left Thagaste, his birthplace and home of his mother, to travel to Carthage in order to study and, eventually, to teach rhetoric. The students here were wild and undisciplined, vandalizing the campus at which Augustine taught. He might have seen some of himself in this unrestrained youth. He described his ambitions in this regard to have been fuelled primarily by greed and a desire for recognition. His research brought him to read Cicero's *Hortensius*, which instilled in him a desire to study rhetoric. Augustine says that he "wanted to distinguish [him]self as an orator for a damnable and conceited purpose, namely delight in human vanity" (38). These ambitions and studies would plot the course of his secular life until his conversion.

This city is also where he met the mother of his son and where Adeodatus was born. This union represents not a commitment to the woman but a commitment to his lustful urges. The benefit of her companionship is only described by Augustine as having been an outlet for his carnal desires. Augustine would cultivate this vice throughout his travels. Similarly, Adeodatus and his mother accompanied Augustine in these same travels to Rome and Milan, as previously mentioned.

While in Carthage, Augustine also developed an interest in theater, which he might later believe to epitomize the path away from truth. He said that his favorite indulgence was tragedy, and that the sadder a production could make him feel, the more he loved it. He confesses that he loved suffering and sought out opportunities for suffering in his own life. He was "glad to be in bondage, tied with troublesome chains, and with the result that [he] was flogged with the red-hot iron rods of jealousy, suspicion, fear, anger, and contention" (35). He describes this in contrast to an inner longing to seek the truth, which fits with his eventual theories of predestination, in that as a sinner, he was free only to sin (Wetzel 55).

Additionally, Carthage served as the scene of Augustine's introduction and conversion to the Manichean faith. When Monica heard about his conversion, she told Augustine that he was no longer welcome in her home, until a later vision prompted her to reconcile with her son. The pursuit of Manichean studies represents Augustine's embarkation into a lifestyle that would pull him away from the truth he will eventually find in the Catholic Church, as it also initially caused him to be pulled away from the Catholic faith of his mother. In seeking truth and understanding, Augustine also began to study astrology around this time, a practice he would later denounce. These false spiritual pursuits not only represent a lack of movement towards God but also a movement away from the Catholic Church.

The sum of his time in Carthage, where he spent nine years, ignited the interests that drove him to strive for empty goals and to sate material and physical desires. In this way, Augustine changes from the young boy begging his mother for baptismal rites to a young man interested only in the fulfillment of earthly desires and ambitions. At this point, Augustine's frustration with his Carthaginian students led him to leave for Rome. He did not tell his mother, but, following the death of his father, she found out and followed him, still anxious to aid his spiritual health. The secrecy surrounding his journey suggests not only a lack of willingness to accept the Catholic faith but also a willful escape from it.

In Rome, Augustine hoped to find more civilized students, but he had difficulty collecting the fees for his classes. His secular pursuits were not providing him with an adequate means to support himself—a parallel to the lack of provision for his spiritual well-being. Additionally, shortly after arriving in Rome, he fell ill, mirroring the spiritual sickness he would soon feel as a result of the Roman climate. Augustine personally linked the illness that befell him in Rome with what he perceived as a desertion of Monica (Brown 69). He felt disappointed by the manners of the Romans and the way in which his students avoided paying him. Rome came to symbolize the less virtuous aspects of his profession. The application of skill as a rhetor in Rome was primarily to win cases in a court of law, with no care paid to whether one was espousing fact or fiction. In this way, Augustine describes in *Confessions* that he feels that he is not only guilty of dishonesty through his own actions but also through aiding others to perpetrate it. "Overcome by greed [him]self, [he] used to sell the eloquence that would overcome an opponent" (53).

Spiritually, Augustine had all but abandoned his interest in Manicheism by this point, but he had not yet replaced it with anything better. Socially, he had attracted the attention of Symmachus, prefect of Rome and prominent pagan; he was also the cousin of

Ambrose, who would be central to Augustine's future conversion. Symmachus eventually helped Augustine to secure a prestigious teaching position in Milan. In this way, Rome marked a milestone in the life of Augustine. At this time, he was in the middle of drifting away from his Manichean faith as well as his profession as a simple professor, as the new appointment in Milan would come with many of the responsibilities and benefits of a public office. It is clear, in retrospect, that Augustine would have recognized the irony in being helped to the position from which he eventually would find his way to Christianity through the inadvertent aid of a pagan, namely Symmachus (Brown 70). After Augustine had left for Milan, Monica arrived in Rome to discover that her son was already gone, and she continued on to Milan after him.

In Milan, Augustine had the dubious honor of preparing a panegyric publicly to praise the emperor, Valentinian II. This opportunity represented his success in his profession and the promise of future rewards, such as social connections that would further his career ambitions. Despite these reasons for happiness, Augustine found himself embroiled in inner turmoil, troubled by the knowledge that his "mendacity would win the good opinion of people who knew it to be untrue." Augustine identifies an episode in which he encountered a beggar in the street, through which was "made...conscious of [his] misery." He questioned how much happiness the grandeur of public office could bring him compared to the simple pleasures enjoyed by a drunken man offering well-wishes to passersby. He lamented to his friends that "what [the beggar] had gained with a few coins, obtained by begging... is the cheerfulness of temporal felicity [which Augustine] was going about to reach by painfully twisted and roundabout ways" (97). As the pear tree incident marked Augustine's descent into sin, the internal struggle brought about by the brush with the beggar denotes his departure from secular ambitions.

Augustine eventually left the Manichean faith and began to associate with the Academics. While he spent some time dabbling in their skepticism, he also pursued Neo-Platonism, the principles of which would ease his transition into Christianity. These Neo-Platonic texts described many of the tenets of Christianity, except for the death of Christ (122). During his time in Milan, he came to know Ambrose, the Bishop of Milan. Augustine was initially drawn to Ambrose because of his skill as an orator; however, Ambrose would become instrumental in assisting Augustine to understand the Old Testament in an allegorical sense. Augustine's acceptance of Christianity hinging on the use of allegory and symbolism suggests that the importance placed on these tools might have led to his own adoption of them in his own writings. Augustine speaks earlier in Confessions-while he is pursuing scholarly understanding of the truth-of his envy of the man who can blindly accept the Faith. He comes to justify faith, comfort and acceptance in the absence of knowledge, in saying "I realized how unmoveably sure I was about the identity of my parents from whom I came, which I could not known unless I believed what I had heard" (95). Monica also had arrived in Milan by this time and had been similarly moved by Ambrose, suggesting that, symbolically, the teachings and interpretations of Ambrose did not differ from Monica's own, in essence, confirming the idea of the universality of the Catholic Church. Monica's

devotion to Ambrose also mirrors Augustine's own admiration of the man. "She loved that man as an angel of God" (91). Additionally, these two characters may have been contrasted in order to draw attention to Ambrose's more scholarly and sophisticated understanding and interpretation of faith and Scripture and Monica's humbler, blinder type of devotion. To place both of these characters together in harmony represents the unification of Augustine's secular and spiritual desires.

As Augustine became drawn into the Christian faith, he began to reject the secular aspects of his life. Although he longed to resign from his academic post, Augustine felt that he had to continue until he had an excuse to leave, fearing he might draw undue attention to himself. Augustine continued to occupy this office until his conversion, leaving at that time because of what he considered to be fortunately timed health problems, "pleased that [his] indisposition was a genuine excuse" (157). In this way his physical health declined as he improved his spiritual health. He also continued to grapple with his carnal urges, trying to cleanse himself so that he might be worthy of converting to his new faith. It is not until the garden scene beneath the fig tree that Augustine came to the realization that he did not need to achieve perfection prior to pursuing his faith; in contrast, he could pursue perfection through his faith. Both Adeodatus and Monica passed away within a few years of his baptism by Ambrose, but the deaths are recounted in close proximity to Augustine's baptism in the text of Confessions, which may support the argument for Adeodatus as a symbol of Augustine's own youth. Monica initially stated that she would like to be buried with Patricius, furthering her Christian devotion to her marriage. On her deathbed, however, she tells Augustine that she is satisfied with her life, having seen his conversion, telling him, "Bury my body anywhere you like. Let no anxiety about that disturb you. I have only one request to make of you, that you remember me at the altar of the Lord, wherever you may be" (173). Monica's remains are interred in Ostia.

Augustine, too, returned to Africa, taking a religious post in Hippo, where he eventually became bishop. Hippo is geographically close to Thagaste within one hundred kilometers which may have caused Augustine to consider the two places—or the region of his birth as a whole—to represent the same values. At this point, his travels have brought him full circle, back to the place of his birth, a much-changed man. The chance exists that Augustine saw this evolution himself, recognizing the allegorical significance of his own journeys. While he was moving away from Christianity and then back towards it spiritually, he was moving toward his secular goals and then away from them physically. This contrast fits with the duality between mind and body, which Augustine discusses in his doctrine.

In retrospect, the journey to Carthage and the time Augustine spent there represent the largest lapses in spirituality for Augustine, as it was during this period that he delved into Manicheism and astrology. He also took a concubine and fathered a child. After this, he travelled to Rome to advance his career and to pursue acclaim for his skill in rhetoric. When he arrived in Rome, however, he found it to be less than he expected, representing the dead-end path of secular goals. At the same time, he continued to associate with the Manicheans—though he soon began to distance himself from them. Augustine may have

used this account of his time in Rome in *Confessions* to foreshadow his change of heart in Milan, where he began to pursue Christianity and attempted to end his secular career. With his baptism and conversion, Augustine had finally reached the goal of spiritual fulfillment that had nagged him all along. The return to Africa symbolizes a return to simpler times for Augustine, as his childhood in Thagaste was one in which he accepted Christian faith through his mother. Additionally, if Africa is to be seen as the Augustine's "origin," his return to this area may represent the Neo-Platonic belief that the soul strives to return to its source to achieve unity.

Augustine was a brilliant and complicated man, though *Confessions* draws criticism from some scholars for its lack of structure (McMahon 2). Perhaps what critics view as a haphazard string of anecdotes interspersed with prayer is an effort to bring the symbolic aspects of his life into focus, using them as a literary tool rather than the convoluted ramblings of a man in the rapture of devotion. Augustine was very well educated, and the allegorical interpretations, which were introduced to him by Ambrose, clearly had an effect upon him. For these reasons, it should be considered that Augustine may have attempted to incorporate this same type of allegory when describing his own past.

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Dam Dissent: Protest Methods and Results in India's Narmada River Valley

Lindsay Gates

Abstract

The Narmada River, India's fifth largest, runs west through the middle of the subcontinent emptying into the Arabian Sea. The river is not only important economically for fishing and transport, but it has long been valued as sacred to Hindus of the nation. Along the banks of the river live peasant farmers and adivasi, forest dwellers who still live in tribes and obtain their livelihood from the rich forests growing along the Narmada. In 1979, the Indian government under the leadership of Prime Minister Indira Gandhi, finalized plans to build a series of dams along the Narmada. Studies projected that these dams would provide greater irrigation for parched farmlands, hydroelectric power, and increased amounts of drinking water. The largest dam, the Sardar Sarovar, became a point of contention. The people dwelling in the areas joined with grassroots organizations to fight the dam and "save the Narmada." They used non-violent protest methods, court legislation, and international opinion. Their protests in the Narmada resulted in landmark studies on dams and their effects on individuals and societies and how the international community discussed and viewed large dam projects

The Narmada River, India's fifth largest, flows for over 800 miles through the middle of the country before emptying into the Arabian Sea (figure 2). The residents of the Narmada River Valley have historically been farmers and adivasi. Adivasi is the term for forest dwellers or people who subsist on the natural products of India's lush forest areas. The farmers of the region generally own small farms on lands traditionally held. Some make a subsistence living while others have grown into a prosperous middle class. In 1979, the central Indian government and the state governments of Gujarat, Madhya Pradesh (MP), and Maharashtra formulated a plan for a series of dams along the Narmada River. The largest of these dams, the Sardar Sarovar, gained international notoriety beginning in the 1980s as Narmada Valley Residents and non-governmental organizations (NGOs) worked to halt construction of the dam. They contested the right of the government to displace local residents in the name of the "greater good." Local residents used non-violent protests, the court system, and international opinion in an attempt to stop the construction of the Sardar Sarovar dam.

It took decades for a dam on the Narmada to go from a concept to a planned reality. The British had planned irrigation works on the Narmada as early as 1901. The first British Irrigation Committee had recommended a barrage, a small dam, at the town of Bharuch at the mouth of the Narmada River.2 The British did not act on the recommendation of its Irrigation Committee, and the Narmada remained un-dammed. The first technical studies along the Narmada, conducted by the British in the 1940s, found sixteen sites conducive to hydroelectric dams. ³ But by the end of the 1940s, Britain had to switch focus from colonial growth to rebuilding her mainland following the devastation of World War II. Once India gained independence, Prime Minister Jawaharial Nehru personally promoted large dam projects, claiming they would be the the new temples of modern India. The new Indian government considered a dam on the Narmada, but the three states that would be affected by the dam-Gujarat, Madhya Pradesh (MP), and Maharashtra-could not agree on how they would divide the costs and benefits of a large dam. This deadlock lasted from 1961 to 1969. In 1969, Prime Minister Indira Gandhi established the Narmada Water Disputes Tribunal (NWDT) to settle the dispute.⁴ It took this tribunal until 1979, a full decade, to reach an agreement ratified by all three states.

In this agreement, the NWDT defined several key terms related to the building of the dam. Though they may seem obvious or unnecessary, the definition of these terms decided who would be entitled to compensation due to removal. The three most important terms were *land*, *oustee*, and *family*, and they were defined as follows:

¹ Nguyen Thi Dieu, "The State versus Indigenous Peoples: The Impact of Hydraulic Projects on Indigenous Peoples of Asia," *Journal of World History* 7 (Spring 1996): 114.

² Friends of the Narmada, *The Sardar Sarovar: A Brief Introduction*. http://www.narmada.org/nvdp.dams/index. html (accessed August 21, 2011).

³ John R. Wood, "India's Narmada River Dams: *Sardar Sarovar* under Siege," Asian Survey 33 (October 1993): 972.

⁴ Friends of the Narmada, The Sardar Sarovar.

- (1): "Land" The expression *land* shall have the same meaning as defined in the Land Acquisition Act, 1894 (thereinafter referred to as the Act) which states "the expression 'land' includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth."
- (2): "Oustee" An *oustee* shall mean any person who since at least one year prior to the date of publication of the notification under Section 4 of the Act, has been ordinarily residing or cultivating land or carrying on any trade, occupation, or calling or working for gain in the area likely to be submerged permanently or temporarily.
- (3): "Family" (i) A *family* shall include husband, wife and minor children and other persons dependent on the head of the family, e.g., widowed mother. (ii) Every major son will be treated as a separate family.⁵

The Tribunal's definition of land meant that residents without titles to their land would still be eligible for compensation if the dam would displace them. The term *oustee* further defined who was entitled to land compensation by establishing the amount of time a person had to live on the land in question to be eligible for benefits. This was a broad definition that covered a variety of work conducted on the land. The definition of *family* established what constituted a household and specified that major sons, the firstborn sons, would also receive their own property. Though this may seem uncontroversial, there is no specification for female land owners or land operators who do not have a male head of household. Though it was uncommon for a woman to own or operate her own land, it was not impossible, and the terms of the Tribunal's ruling made it difficult for women to obtain land rights.⁶

The NWDT also established how expenses would be shared among the three states. The Tribunal declared that the state of Gujarat would pay the bulk of resettlement expenses for MP and Maharashtra. The planned dam project would divert a large portion of the Narmada River from the states of MP and Maharashtra into Gujarat. One of the objectives of the dam planners was to provide better irrigation for agriculture in Gujarat. Though many of the irrigation benefits would be gained by Gujarat, most of the displacement would take place in MP and to a lesser extent Maharashtra. Of the 245 villages that the dam would submerge or partially submerge, 193 were in MP, 33 in Maharashtra, and 19 in Gujarat. Because of this imbalance, the NWDT ordered the state of Gujarat to pay the bulk of resettlement expenses for MP and Maharashtra.

⁵ Final Order and Decision of the Tribunal. (N.p.: n.p, 1979). http://nca.gov.in/forms_pdf/nwdt_finalorder.pdf (accessed June 7, 2011).

⁶World Commission on Dams, *Dams and Development: A New Framework for Decision Making* (London: Earthscan Publications, 2000), 115.

⁷ Ahmad, Afroz. "The Narmada Water Resource Project, India: Implementing Sustainable Development," Ambio 28 (August 1999): 400.

Those displaced by the dam waters had the option of moving to Gujarat and receiving irrigable lands and a house site, or they could be rehabilitated in their home state; this was a groundbreaking ruling, different from many dam resettlement procedures not only in developing countries but also developed. It established, at least theoretically, that those displaced by the dam were entitled to "land for land." The land given to the oustees by the states was to be comparable to the land they were losing, and the residents had to be able to make a living as they had on their previous lands. Gujarat was also responsible for providing cash money to the families for rehabilitation costs and grant-in-aid. These moneys could total as high as Rs. 1200 (roughly \$30 USD) for each family according to the Tribunal's statement. This ruling was the equivalent of an unfunded mandate. It charged the states with the task of finding places and moneys to compensate those to be affected by the dam. While the central government placed this aspect of dam building on the states, the central government worked on bureaucratic issues and finding funding for the project.

Dam building requires extensive examination of the lands to be flooded, the possible problems arising from a large dam, and the extent of the environmental impacts. The World Bank demands that a country undertake these environmental examinations internally before they agree financially to support a project. In 1983, the Indian government filed for clearance from their Department of Environment to build the Narmada dam. This filing necessitated the Department of Environment investigate the dam, the effects of the dam, and make an impartial ruling on its viability. India's Department of Environment performs many functions similar to the EPA in the United States. On this occasion, before the Indian government received internal clearance, the World Bank in March of 1985 approved the project and guaranteed World Bank support and funding for the project.¹⁰

While the central and state governments were beginning the dam building work, small, unorganized protests were beginning among the residents of the Narmada Valley. One of the earliest grassroots activist groups in the Narmada Valley was the Arch Vahini. Established in the early 1980s, members worked in primary health activities in the Mangrol village of Gujarat. Their main goal in these activities was to promote awareness to lessen death and disease from avoidable causes and to improve quality of life among the rural people of Gujarat. Members of the Arch Vahini have seen poor resettlement practices during and after the building of another Gujarat dam, the Ukai. Particularly the adivasi (tribals) of the regions have been negatively impacted due to a lack of understanding of their rights and how to demand them in court. The goal of the Arch Vahini for the Narmada residents was to begin resettlement work before construction of the dam and ensure that the residents obtained adequate resettlement lands.

In many ways, The Arch Vahini group divided the Narmada struggle into two phases. The first was from 1980-1987 and involved a protracted battle for a fair Rehabilitation

⁸ Wood, "India's Narmada River Dams," 974-75.

⁹ Ibid

Agricultural Operations Department, Project Completion Report- Narmada River Development (Gujarat) Sardar Sarovar Dam and Power Project (N.p.: World Bank, 1995), xviii.

and Resettlement (R&R) policy for the affected tribals of the project. ¹¹ The Arch Vahini protested the inadequate agricultural lands given to many of the oustees, their inability to live on those lands, and the small sum given to them for their submerged lands. They argued that this was not in accordance with the Tribunal's ruling. There were added difficulties because many of those displaced had no title to their lands and were considered encroachers, thus not entitling them to compensation. This was also not in accordance with the Tribunal's ruling, which demanded only that individuals work or use the land for a year or more. Without titles, however, it was difficult to prove use of land in a court of law. Through court appeals, protests, and demonstrations by the soon-to-be-displaced, the Government of Gujarat finally changed their award policy to provide a minimum of five acres for all categories of families. ¹² The second phase from 1988-1997 involved overseeing proper implementation of the promises made by the Government.

Gujarat's policies are particularly liberal and have been fairly well implemented; resettlement in Maharashtra and MP has been more contentious. Individuals who choose to remain in their home states of Maharashtra or MP have the right to do so. Gujarat is responsible, due to the terms of the Tribunal, to pay for rehabilitation of those who do not want to migrate to Gujarat. The states, Maharashtra and MP, pay for the resettlement and Gujarat repays those states. This requires the states to have available funds for relocation upfront. Due to the higher amount of people displaced in MP, this amounts to considerable expenditures and could explain some of the difficulties this state has had with their resettlement policies. Maharashtra, despite having relatively few oustees, is not as wealthy as the state of Gujarat, which could account for some of their difficulty in relocation. Another problem with resettlement has been the growing number of people the dam will displace. When the government first planned the dam in 1979 the displacement of project affected families was estimated to be 6,147. The current estimate (as of 2001) is 41,000.13 This massive change in the amount of displaced persons makes relocation and rehabilitation (R&R) an ever-changing variable and changes the amount of funds and lands needed by each state. Despite these difficulties, Gujarat continues to have the most attractive and well-implemented relocation policies.

The World Bank posited that the discrepancies in relocation policies and implementation were due to the different functions of the Non-Governmental Organizations (NGOs) of the states. According to the World Bank, "In Gujarat, nongovernmental organizations have been usefully involved in the R&R program, but in the other two states, confrontation persists between project authorities and local NGOs." They also remark, "Madhya Pradesh's rehabilitation grant to landless families and adult sons is less attractive than those of the

¹¹ Arch: Action Research in Community Health and Development. *Resettlement and Rehabilitation of the Narmada Dam Oustees*. http://archvahini.org/about/history-of-arch/resettlement-and-rehabilitation-of-thenarmada-dam-oustees (accessed September 15, 2011.) See also Ashok Swain, "Democratic Consolidation? Environmental Movements in India," Asian Survey 31 (September 1997): 825.

¹² Arch, Resettlement and Rehabilitation.

¹³ Phillippe Cullet, "Human Rights and Displacement: The Indian Supreme Court Decision on Sardar Sarovar in International Perspective," *International and Comparative Law Quarterly* 50 (October 2001): 974.

other states, and its capacity to implement the R&R program is weaker." ¹⁴ This does not explain why more people do not avail themselves of Gujarat's more attractive offer. It may be due to tradition; many families have lived on their lands for centuries and want to be rehabilitated as closely to their traditional lands as possible. Many individuals may not be aware of the differing opportunities provided by each state or may not be fully aware of their rights of relocation. The individuals in Gujarat may be more aware of their rights than individuals in the other states. This, according to the World Bank, is largely due to the different work performed by the NGOs. If the Maharashtra and MP NGOs focused on relocation from their inceptions rather than protesting the dam as whole, the people of those states would have better relocation policies and better policing of their implementation.

NGOs in the Narmada Valley have taken a variety of forms and not all of the NGOs and their work cannot be covered in this paper; there is one NGO in the Narmada Valley, the Narmada Bachao Andolan (NBA), that has gained more national and international interest and provides a case study of the more the radicalized work of NGOs in the Valley. The work of the NBA is in sharp contrast to that of the Arch Vahini. As pointed out by the World Bank, the methods of the Arch Vahini have involved working with the authorities as much as possible. They are not protesting the dam, and their only protest activities were to enforce proper R&R. Unlike the Arch Vahini, NBA has protested the dam in its entirety. Their protests were not confined to the national arena but encompassed the international arena, seeking to turn the tide of public opinion against the project and the Indian government for its strong stance in favor of the dam. The protests of the NBA centered on the Sardar Sarovar dam, one of the largest concrete gravity dams in the world with a current planned height of 163 meters (approx. 534 feet) and length of 1210 meters (approx. 3,969 feet). Its location is near Navagam, Gujarat, and it is here the NBA took their stand.

Unlike the Arch Vahini and any number of NGOs in the Narmada Valley, NBA came to be associated with one person— its leader, Madha Patkar. Patkar was born in 1954 in Mumbai, Maharashtra. Patkar's views were, in many ways, shaped by her parents; her father was a freedom fighter, and her mother was part of the organization "Swadar," designed to aid suffering women. Her father's work as a freedom fighter gave her an example of the hard work needed to effect change. Her mother's work apparently gave Patkar an interest in social work and the ills affecting her society. She earned her M.A. in social work from Tata Institute of Social Sciences. She worked first in the slums of Bombay before coming to work in rural areas. As her work consumed more of her time, she had to choose between her marriage and her work. In 1983, she divorced her husband and, in an interview conducted by journalist Jacques Leslie, she claimed she was "married to her work." She first came to the Narmada Valley in 1985 to conduct a study of dam displacement and how it affected

¹⁴ Independent Evaluation Group, *Learning from Narmada*, http://lnweb90.worldbank.org/oed/oeddoclib.nsf/Doc (accessed August 5, 2011).

¹⁵ Veethi: The Face of India, *Medha Patkar Profile*, http://www.veethi.com/people/medha_patkar-profile-16-38. html (accessed October 3, 2011).

¹⁶ Jacques Leslie, *Deep Water: The Epic Struggles over Dams, Displaced People, and the Environment* (New York: Picador, 2005), 37.

the individuals displaced and relocated. As she worked among the people of the Narmada, she lost her desire merely to study and recount the difficulties of dam relocation and rehabilitation. She decided to take an active role in the Valley and help the people protest the dam rather than negotiate relocation. Her name became synonymous with the NBA and the struggle against the Sardar Sarovar.

The NBA was actually the conglomeration of several NGOs. Before the formation of the NBA, Patkar first founded the Narmada Dharangrast Samiti (Committee for Narmada Dam-Affected People).¹⁷ In Maharashtra, villagers formed the Narmada Ghati Dharangrastha Samiti (translation unknown) to protest the building of the dam. The people and activists of MP and Maharashtra tried to work against the dam builders and anyone associated with them rather than working in cooperation as in Gujarat.¹⁸ By 1988, the Narmada Dharangrast Samiti and their allies, including but not limited to Narmada Ghati Dharangrastha Samiti, announced their total, non-violent resistance to the dam.¹⁹ The Narmada Dharangrast Samiti grew to include those soon to be affected by the damenvironmentalists, human rights leaders, religious leaders, and adivasi. It also included individuals evicted as early as the 1960s before the dam project was agreed upon by the states. In preparation for the dam project, the government built a town for the dam workers and those who would work on ancillary canal networks. Farmers in the area had been displaced, but because their displacement occurred before the Tribunal's award to displaced families, they had never been compensated for their lost land and livelihood.²⁰ In 1989, the Narmada Dharangrast Samiti and the Narmada Ghati Dharangrastha Samiti joined together to form the Narmada Bachao Andolan (Save the Narmada Movement).21

Even before the final formation of the NBA, Patkar was working vigorously outside of India to raise awareness and censure of the Sardar Sarovar dam project. She traveled to Washington, D.C. in 1987 and 1989 seeking allies in the fight against the dam. She testified at a congressional subcommittee meeting hearing on World Bank performance. Her speech apparently garnered some support for her cause, prompting some Congress members to write to the World Bank requesting that it suspend their support of the project. While in the U.S., Patkar also gained the backing of the Environmental Defense Fund (EDF). The EDF is a non-profit environmental advocacy group that attempts to mitigate environmental destruction and degradation. The EDF attempted to bring the Narmada case to the attention of the World Bank in an effort to keep the World

¹⁷ McCully, "A History of the Narmada Bachao Andolan."

¹⁸ Smita Narula, "The Story of Narmada Bachao Andolan: Human Rights in the Global Economy and the Struggle Against the World Bank," *New York University Public Law and Legal Theory Working Papers*, 106 (December 2007): 358.

¹⁹ Denis Goulet, "Global Governance, Dam Conflicts, and Participation," *Human Rights Quarterly* 27 (August 2005): 884.

²⁰ Cullet, "Human Rights and Displacement," 974.

²¹ Narula, "The Story of Narmada Bachao Andolan," 358.

²² McCully, "A History of the Narmada Bachao Andolan."

Bank from monetarily supporting the Narmada project. Lori Udall of the EDF agreed with Patkar's stance and disagreed with the Sardar Sarovar. She helped to organize an international network of activists in North America, Europe, Japan, and Australia that would communicate with one another and organize dam resistance within their respective countries.²³ Though many activists throughout the world joined in censure of the Sardar Sarovar and large dam projects in general, it did not noticeably detract from large dam support, nor did it halt funding to the Sardar Sarovar project.

In an effort to halt international funding to the Narmada Valley Project, Patkar met with World Bank executives in 1989; though she did not succeed in halting funding of the project at the time, she did present a new aspect of the Narmada Valley dam project that would have lasting effects. Patkar attempted to show the members of the World Bank the destruction that would result from the dam, whereas government reports generally show the positive aspects of large development plans. One director commented, "When I hear what NGOs say about this project and then what the operations staff say . . . it sounds like they are talking about two different projects." This has been one of the problems within the dam debate. The results have very positive effects for a variety of people. Through Patkar, the NBA attempted to show the negative side of development by presenting the plight of real people that are more than just numbers on a page.

Patkar's work against the Sardar Sarovar did not end with her World Bank meeting or her successes in the United Sates as she continued to seek supporters and actively oppose international funding for the dam. In 1990, Patkar and the NBA organized a symposium in Tokyo in order to sway public opinion in Japan away from the Sardar Sarovar project. The symposium consisted of Indian NGOs, Japanese NGOs, academics, and members of government, receiving national press coverage. Activists also met privately with government officials. The Japanese government had actively supported the building of the Sardar Sarovar. They had agreed to lend 200 million to the government for the dam's turbines, provided the turbines came from a Japanese manufacturer. The NBA was successful here as in the U.S., and following the symposium, the Japanese government rescinded its offer of financial support for the dam. This was the first time a Japanese aid loan had been withdrawn due to environmental and human rights reasons.²⁵

While the NBA had considerable success in the international arena, it was still actively protesting dam building within the Narmada Valley. Utilizing Gandhian non-violence tactics, Patkar and NBA launched a series of eye-catching, government-irritating, journalist-attracting protests in the Valley they hoped to save. In this way, they hoped to rally national sentiment against the dam project, which would cause more people to put more pressure on the government to cease dam building plans along the Narmada.

Over the years, the NBA staged hundreds of protests in the Narmada Valley, neighboring states, and even the capitol of Delhi. It would be tedious and nearly impossible

²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

to relate them all, but many of the protests resembled one another in tactics and goals and relating just a few of them presents a fairly clear picture of dam protests in India. One such protest was termed the "Long March" by protesters. On December 25, 1990, the NBA staged a march from the Narmada Valley in the heart of MP to the proposed dam sight 150 miles away in Gujarat. This time, their goal was not to end the dam permanently but to force the government to suspend the dam project pending an independent-rather than a government-review of the dam's goals and effects. 26 This was not only a stall tactic designed to give the NBA more time to launch more permanent injunctions against the dam, it also gave the NBA a short-term, unifying aim. The march, however, never made it to the dam site. At the shared border between MP and Gujarat, the protesters found police and a pro-dam, counter-rally blocking the road into the state. This was a rare confrontationan intranational border incident is uncommon, particularly in democratic India.²⁷ The members of the NBA tried many methods to end the counter-rally and march to the dam site. Some sat and stayed, hoping the pro-dam activists would grow tired of the protest and leave. Others repeatedly attempted to cross the state line linking arms and walking. When met by Gujarati police, they would react only with passive resistance, only to be forced back across the MP border. Still others, Patkar included, lay down on mattresses along the Gujarati border and threatened a hunger fast until the government agreed to an independent review of the dam project. The fast lasted three weeks; Patkar's kidneys began to fail, and at the advice of doctors and the urging of other activists, the fast ended. Neither the Gujarat officials nor the Indian government had given into any of the NBA's demands.

Despite the intractability experienced by the NBA in India, their protests, their networking, and their indefatigable stance gained them support, or at least acknowledgement from the international community. Facing pressure from activists groups in the United States, Japan, Australia and other nations, the World Bank decided to commission an independent review of the project. This was the World Bank's response to a number of criticisms of the World Bank's involvement with the Sardar Sarovar project. Due largely to the work of Patkar and the NBA, many in the international community questioned the World Bank's oversight of human rights during the project, how far they ensured R&R for the residents, and the viability of the dam as a whole. This independent review was the first time in the Bank's forty-five year history that it had asked outsiders to evaluate one of its projects. The final report came out in 1992.

In June of 1992, Bradford Morse and Thomas R. Berger submitted the results of their unprecedented *Report of the Independent Review* of the Sardar Sarovar; it included a number of criticisms of the Bank and India's commitment to human rights and welfare. The study found, "The Bank and India failed to carry out adequate assessment of human impacts." ²⁹

²⁶ Cullet, "Human Rights and Displacement," 975.

²⁷ Leslie, Deep Water, 50.

²⁸ Ibid.

²⁹ Bradford Morse and Thomas R. Berger, "Sardar Sarovar: Report of the Independent Review," in *The Sardar Sarovar Dam Project: Selected Documents*, ed. Cullet, 345.

These included several distinct oversights. There was a failure on the part of the states to include those displaced by canal and irrigation projects as "oustees" with entitlement to R&R. This left a significant number of Indian residents-numbering in the thousandswithout land, homes, or work. Also, R&R and displacement appraisals, under Bank policy, should have been established before the Bank entered into the loan agreement in 1985. A problem that continued to plague resettlement was that encroachers-those without clear title to their lands-and their sons were not slated for adequate R&R. Once again, this left a significant portion of the population homeless and jobless because of a clear method to prove ownership. While Gujarat had improved its R&R policies considerably, they were not retroactive to include those displaced in 1960-61 to make way for dam construction and construction crews. Additionally, MP and Maharashtra had not improved their R&R policies, and at least 60% of tribal oustees engaged in cultivation in MP; Maharashtra still would not receive adequate compensation. The Review also showed that the numbers of those affected by the dam were much higher than originally estimated. For example, in 1979, the estimated number of displaced families in Maharashtra was 450. By 1988, the estimated figure was 2000; when the report was released in 1992, the estimate was at 3000.30 The costs of rehabilitating this growing number of displaced people had not been adequately factored into the cost-benefit analysis that showed a dam's viability.

The Review also denounced environmental planning for the Sardar Sarovar, mentioning a number of oversights that needed to be rectified before the dam project continued. The Review stated, "The history of the environmental aspects of the Sardar Sarovar is a history of non-compliance."31 The review mentioned several specific breaches of the World Bank's environmental policies. In 1983, India's Ministry of Environment and Forests did not give environmental clearance for the dam. According to the Bank's own statutes, they would not commit funds to a project until that country received internal approval from its own environmental department. However, in 1985, before India received internal consent, the Bank approved funds for the project. In 1987, the Indian Ministry of Environment and Forests gave the plan clearance with the understanding that "instead of environmental impact studies being done before approval of the Projects, there were to be done . . . concurrently with construction-an approach that we believe undermines the very basis for environmental planning."32 Another aspect of Bank protocol demanded that the Indian government create an environmental "work plan" by December 1985. The Bank later extended this date to 1989. According to the Review, this work plan was still unavailable in 1992.33 The Review also found "significant discrepancies" that indicated the dam would not perform as indicated; their report indicated that quality of forests in the regions would decline. This would result in more loss of livelihood, particularly for adivasi who depended on the forests for survival. The report also stated that downstream ecological implications

³⁰ Ibid., 332-39.

³¹ Ibid., 341.

³² Ibid.

³³ Ibid.

had not been considered, meaning that the results of the dam had only been considered at the dam sight, and changes in flora and fauna downstream of the dam had not been factored. And while the government and the World Bank had factored in provision of drinking water as a benefit, they could find no plans for providing drinking water. Waterlogging and salinity would also be problematic; too much water in certain growing areas and too much salt in the soil could severely inhibit farmers' ability to grow traditional crops. Finally, the threat of malaria due to the stagnant water inherent in a dam project would be considerable.³⁴ All of these stated criticisms are fairly ubiquitous in dam projects, and many times planners still reason that the benefits outweigh the costs. Bradford and Morse's criticisms are not that these consequences may happen, but that they had been insufficiently considered with little to no effort to mitigate these negative effects.

The report criticized a significant portion of the Bank and Indian government's actions and recommended a reevaluation of the project. It stated:

[The Review] was critical of the Bank's and the Borrower's performance, especially with respect to R&R and environmental planning. The IR (Independent Review) pointed out that the Bank had not followed its own guidelines, and recommended that the Bank 'step back' from the project rather than continue with financing of its planned implementation.³⁵

The report accused India and the World Bank of wanting to "get on with the job" 36 and said that the Bank's actions suggested that the demands of engineering carry far more weight in the Bank than the needs of the people to be affected or of the environment. The Bank's incremental strategy . . . strengthen[s] this impression. Readiness to bear with noncompliance thereafter confirms it. 37

The World Bank admitted in its Sardar Sarovar report that there had, indeed, been difficulties in planning and management. "In brief, the Bank did not follow its own R&R guidelines (OMS 2.33 of 1980 and OMS 2.34 of 1982) designed to ensure appropriate treatment of landed and landless PAFs." Due to this report, the World Bank requested that India halt construction of the dam until they could properly evaluate relocation and rehabilitation and ways to reduce environmental.

The reaction of the Indian government to the *Review* admitted to no such difficulties and verged on hostility. Mr. Madhav Chitale, Secretary of the Ministry of Water Resources wrote to Mr. Heinz Vergin of the World Bank, "At the outset, I must mention the IR have clearly overstepped their Terms of Reference and have commented on several issues which were not within their jurisdiction." Chitale found it unfortunate that "distorted versions of environmental and rehabilitation scenarios have appeared in the report." 38

³⁴ Ibid., 348-49.

³⁵ Agricultural Operations Department, *Project Completion Report*, 1. The World Bank conducts a completion report when a fiscal relationship ends even if the recipient nation cancels a loan.

³⁶ Morse, "Sardar Sarovar," 349.

³⁷ Ibid., 351.

³⁸ Mr. Chitale, "Letter from Mr. Chitale, Secretary, Ministry of Water Resources to Mr. Vergin, World Bank Concerning the Morse Report, 1992," in *The Sardar Sarovar Dam Project*, ed. Cullet, 353-54.

Chitale reaffirmed India's commitment to R&R in accordance with the NWDT. His final point in the letter guaranteed that the Narmada Development Projects would indeed bring development—"the basic human right of individuals . . . There is, therefore, no question of any violation of the human rights when such projects are undertaken or implemented." Government indignation in India did not end there. The Government of Gujarat defended R&R and planning of the Sardar Sarovar project, emphasizing their cooperation with the authors of the report and their expectation of a "constructive review." However, they found the report "highly disappointing." They claimed the report failed to refer to the applicable tables that showed adequate water supply upon dam completion. They were also indignant that, in their opinion, the reviewers had ignored India's leading social science organizations' detailed reports of tribals and their socio-economic structures. They accused reviewers of imposing colonial and British views of the "noble savage" on tribal people. They denounced the *Independent Review* as "intellectual bankruptcy parading as arrogance." as a "intellectual bankruptcy parading as arrogance."

In response to the IR, the government of India conducted its own review of the Sardar Sarovar released in 1994. Though it did find some problems with the project and recommended stepping up environmental research, the report saw no reason to cease building the Sardar Sarovar. ⁴² India did not agree with the World Bank or the *Independent Review* to the advisability of "stepping back" from the Sardar Sarovar project. Gujarat officials stated that World Bank aid represented only 10% of the total cost of Sardar Sarovar, and that if it were withdrawn, construction would continue. ⁴³ The central Indian Government took this view, and in March 1993, the GOI (Government of India) decided to cancel the balance of its loan for the project but reaffirmed its commitment to sound environmental and R&R practices. ⁴⁴ With this decision, there was little recourse outside of marshaling internal opinion and the courts to halt construction of the dam.

Despite the Indian government's decision to remove their project from World Bank oversight, the NBA was still active in the international arena trying to raise awareness on big dams and their detrimental effects to people and the environment. They attended two conferences in 1997. The first, in Brazil, was the first international conference against big dams; the second was not an anti-dam conference but rather a multi-lateral conference organized by the World Bank that included businesses, NGOs, and dam builders. From this conference came the decision to organize the World Commission on Dams (WCD). The Commission included anti-dam and pro-dam members, and despite the bias individuals might bring, their joint goal was to undertake a massive research operation around the world

³⁹ Ibid., 355.

⁴⁰ The idea of the "noble savage" comes from British and American views that sentimentalized the lifestyle of native peoples and sought to preserve their lifestyles rather than assimilate them into the dominant culture.

⁴¹ Government of Gujarat, "Comment on the Report of the Independent Review Session on Sardar Sarovar Project, August 1992 (extracts)," in *The Sardar Sarovar Dam Project*, ed. Cullet, 356-357.

⁴² "Report of the Five Member Group, 1994," in *The Sardar Sarovar Dam Project*, ed. Cullet, 357-72.

⁴³ Wood, "India's Narmada River Dams," 975.

⁴⁴ Agricultural Operations Department, Project Completion Report, Narmada River Development, xix.

and report—with as little bias as possible—the actual results of such dams. The Commission selected Medha Patkar, leader of Narmada Bachao Andolan, to be a Commissioner. This Commission owed its inception in part to the international furor created by the protests to the Sardar Sarovar dam project. This was part of the legacy left by the Narmada Valley anti-dam activists.

Despite growing NBA success in raising awareness internationally, the fight in their own country with their own government was progressing slowly at best and sometimes not progressing at all. Various individuals had launched petitions against states, attempting redress for poor R&R and violations to civil and constitutional rights. For this purpose, the government established a Grievance Redressal Authority, the sole purpose of which was to hear cases by oustees and future oustees and to decide their claims. While the NBA had succeeded in forcing the government to hear and acknowledge the indigenous people of the Narmada to a certain extent, they had failed in their ultimate goal—to stop the damming of the Narmada River.

With the withdrawal of the Indian government from World Bank involvement, the fight narrowed to the NBA, the states, and the government of India. While still pursuing the protest activities that had garnered so much international support, in 1994, having exhausted all other options without halting construction of the dam, the NBA turned to the court system. They launched a writ petition with the Supreme Court government of India. The NBA's lawyers used three novel legal arguments—one, that the project was unconstitutional; two, that it violated the equal protection clause of the Indian Constitution; and three, that the government had infringed on their right to reside and settle in any part of India. They also charged that the dam was a threat to the environment. They once again demanded a comprehensive review that the government would acknowledge and by which it would abide.

This time, the NBA had support from within the government as Madhya Pradesh began battling with Gujarat and the central government over the proposed height of the dam. Neither the NBA nor MP wanted the dam height raised as it would displace more people and submerge more land in MP. The dam height had been set at eighty meters, but the dam planners were considering new plans for a higher dam. The new Chief Minister of Madhya Pradesh petitioned, on behalf of the state, that the Sardar height not be raised to avoid high displacement rates in the state and to save more land from inundation.⁴⁷ In 1995, the government agreed to maintain the Sarovar Height at eighty meters for the time being.⁴⁸ However, in 1999, the government reversed this interim measure and permitted

⁴⁵ Narula, "The Story of Narmada Bachao Andolan," 375.

⁴⁶ Ibid., 374.

⁴⁷ Ibid., 375.

 ⁴⁸ Supreme Court of India, "Narmada Bachao Andolan v. Union of India and Others, Writ Petition (Civil) No.
 (2) 319 of 1994, Order of 5 May 1995 (interim measures), in The Sardar Sarovar Dam Project, ed. Cullet, 127.

the dam to be raised to eighty-five meters, though it did not agree to the ninety meters requested by the state of Gujarat.⁴⁹

In 2000, the government responded with a final judgement to the 1994 NBA petition. The courts dismissed NBA's environmental concerns, claiming the NBA could have launched an environmental petition before the government gave final clearance. The NBA's failure to do so earlier showed, in the opinion of the court, that their petition was merely a stall tactic.⁵⁰ The Supreme Court did, however, provide a detailed history of the environmental clearances of the project, show early failures in planning and implementation, and illustrate current compliance with the Environmental Impact Agency of the Ministry and Environment.⁵¹ The judgement noted past failures on the part of the states adequately to rehabilitate oustees, claiming that through the new Grievance Redressal Authorities, the states were correcting their earlier shortcomings and thant the concerns of the NBA were null. The Grievance Redressal Authority's sole purpose was to hear cases by oustees and future oustees and decide their claims. The judgement finally ordered a stay of construction above the original 80 meters pending environmental clearance by a committee and rehabilitation of affected individuals.⁵² The decision added that reassessment of dam-affected people had to be made every time the dam was raised by five meters. While the NBA had succeeded in forcing the government to hear and acknowledge the indigenous people of the Narmada to a certain extent, they had failed in their ultimate goal-stopping the damming of the Narmada. Dam construction at the original height of eighty meters continued unabated.

Forced to recognize that the government would build the dam regardless of any and all protest, the NBA launched a writ petition in 2002 asking for a stay of construction until proper environmental planning was completed and until all affected people were properly rehabilitated. The NBA claimed that the State of MP was still attempting to provide cash compensation rather than land to oustees and that oustees affected by the dam at ninety meters had not been resettled in MP. Per previous government decisions, the government must halt work on the dam above ninety meters until one year after their resettlement.⁵³ In its judgement, the Supreme Court opined that:

Displacement of the tribals and other persons would not per se result in violation of their fundamental or other rights; on their rehabilitation at new locations they would be better off than what they were; at the rehabilitation sites they will have more and better

⁴⁹ Supreme Court of India, "Narmada Bachao Andolan v. Union of India and Others, Writ Petition (Civil) No 319 of 1994, Order of 18 February 1999," in *The Sardar Sarovar Dam Project*, ed. Cullet, 128-30.

⁵⁰ Grievance Redressal Authority, "Madhya Pradesh (Sardar Sarovar Project), Case No. 234 of 2004, Order of 11 September 2004," in *The Sardar Sarovar Dam Project*, ed. Cullet, 272.

⁵¹ Supreme Court of India, "*Narmada Bachao Andolan v. Union of India*, Minority Judgement of Justice S.P. Bharucha, October 2000," in *The Sardar Sarovar Dam Project*, ed. Cullet, 236-241.

⁵² Ibid., 243.

⁵³ Supreme Court of India, *Narmada Bachao Andolan- SC Verdict, January 2005*, http://narmada.aidindia.org/docs/narmadaverdict.pdf (accessed June 17, 2011), 2-3.

amenities than those they enjoyed in their hamlets; and the gradual assimilation in the mainstream of the society would lead to betterment and progress.⁵⁴

The decision did, however, note that the directions of the court had not been implemented in "letter and spirit," prompting redressal before the courts. The court once again established the duties of the states to provide for those temporarily and permanently affected and for major sons. It noted the most non-compliance with the State of Madhya Pradesh and reiterated that if oustees chose to remain in MP, the state must properly rehabilitate them before dam completion. All other requests for rehabilitation, outside of special cases, should be referred to the Grievance Redressal Authority (GRA). Reiterating the responsibility of the states to its oustees, the Supreme Court declared the applicants "disposed of." The NBA did not agree.

Though the NBA did not consider the matter "disposed of" and continued to launch protests and court appeals, the government of India showed an ultimate and unshakeable commitment to the Sardar Sarovar. Though committed, at least on paper, to proper rehabilitation of displaced peoples, no amount of displacement would cause it to reconsider the dam project. In 2006, the projected dam height stood at 121.92 meters.⁵⁶ It was the government's view that those affected by the dam-many of them adivasi-would be better able to assimilate into mainstream society. Centuries old community ties were broken as there were no guarantees from the government that it would relocate communities together.⁵⁷ And despite the stated commitment to rehabilitation, there were no studies on the state of the family upon resettlement or the lives of individual's upon rehabilitation. The World Commission on Dams (WCD) reported that displacement often leads to higher rates of alcoholism and abuse of women and children. 58 Furthermore, since land allotment and rehabilitation packages were decided by state and central governments, women rarely received land in their own right. The WCD specifically stated, "In tribal communities in India, women do not have land rights and therefore they have not been compensated for the land they have lost as users. Instead women's interests are seen as linked to the household and only men and major sons are given land."59 The Indian government, in the view of Sardar detractors, has not concerned itself with the rehabilitation of women, the societal effects of resettlement, or the lives and livelihoods of the people resettled.

The controversy surrounding the Narmada Valley project produced lasting change in dam building around the world; however, it did not stop the construction of the Sardar Sarovar dam. Residents of the three affected states worked tirelessly to promote their interests and secure their stability. NGOs like the Arch Vahini worked against

⁵⁴ Ibid., 3.

⁵⁵ Ibid., 3-21.

⁵⁶ Narmada Control Authority, "Resettlement and Rehabilitation Sub-group: Minutes of the 63rd Meeting, Item No. LXIII-2 (345), 8 March 2006," in *The Sardar Sarovar Dam Project*, ed. Cullet, 311.

⁵⁷ Supreme Court of India, Narmada Bachao Andolan-SC Verdict, 20.

⁵⁸ World Commission on Dams, Dams and Development, 115.

⁵⁹ Ibid.

the government to gain adequate rehabilitation rights for the Gujarati people and then worked with the government to see that the rights were enforced. NGOs in Maharashtra and Madhya Pradesh worked to fight the construction of the dam, seeking to hold on to traditional land, traditional practices, and centuries-old communities. When this failed, they worked to ensure proper rehabilitation of dam-affected people using international opinion, protests, and the law to attain their ends. The work of Madhya Patkar and the Narmada Bachao Andolan raised awareness of dam-building activities in the developing world and changed many views on large-scale dam projects and the expectations placed on the World Bank and governments. Their work in the international arena prompted the World Bank to reconsider its stance on the Sardar Sarovar and prompted the first-ever, large-scale investigation of dam building in the form of the World Commission on dams. No matter how much resistance they met and the number of court cases lost, those fighting the Sardar Sarovar dam never ceased to fight for what they believed to be their rights in a democratic nation.

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Safety Management Systems: The Perspective of Tennessee Airports

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Abstract

Safety Management Systems (SMS), which are a proactive, formalized approach to managing risk and enhancing safety, are not yet mandatory within the aviation industry in the United States. Two pilot SMS studies were conducted at a handful of airports nationwide by the Federal Aviation Administration (FAA), which examined the feasibility of implementing SMS at airports. Although SMS is not yet mandatory in this country, many in the industry think it will become mandatory in the near future. This research investigates via a brief, online questionnaire with two additional follow-ups, data analysis, and aggregate reporting of data, the degree to which Tennessee airports support SMS adoption. The majority of Tennessee airports responding to the survey are not too familiar with SMS; currently have a proactive safety plan in place other than SMS; support a mandatory SMS for Part 139 airports; may consider implementing an SMS if it remains voluntary; would expect some resistance from airport employees, tenants, and users if implementing an SMS; and would anticipate needing additional funding to properly develop and implement an SMS.

INTRODUCTION

"Needless deaths through accidents are a betrayal of our society."

~Worick (1975, p. 7)

Every accident results from "faulty habits and attitude" (p. 25), and everyone should know what his or her attitude is and how it can be tailored (Worick, 1975). Most people think engineering is the literal job; however, it can simply be described as way of coming up with how to create a proper system—or in our case systems safety (Rodgers, 1971). "Safety touches many areas of a man's life. There are ethical, moral, religious, aesthetic, legal, and many other considerations that involve safety," (Worick, 1975, p.1).

According to Rodgers (1971), everyone thinks that they understand the meaning of safety. However, it is not until they are asked to write a definition that they cannot do so. There are many ways one can define safety depending on the context (Rodgers, p. 3). For example, Rodgers (1971) defines safety as the "surety that the environment that personnel or items are subjected to is free from inadvertent or unexpected events which may result in injury to personnel or damage to the items exposed" (p. 2). However, Mroz (1978), defines safety as "the prevention of accidents and mitigation of personal injury or property which may result from accidents" (p.7). According to Rodgers (1971), "piloting a private airplane is considered relativity safe, to a trained pilot; but, to someone who has never taken flying lessons, it would be a very dangerous and almost certain fatal venture," (p.1).

LITERATURE REVIEW

Safety Background

Mroz (1978) claims that the system safety analysis originates from the aerospace industry (p. 19), and according to Roland and Moriarty, the earliest form of a safety concept came in 1947 from a paper that was presented to the Institute of Aeronautical Sciences entitled "Engineering for Safety." The paper states, "Safety must be designed and built into airplanes just as are performance, stability, and structural integrity. A safety group must be just as important a part of a manufacturer's organization as a stress, aerodynamics, or a weights group," (1983, p. 11).

Unlike other industries that have been around for some time, having safety as a profession is still new (Worick, 1975, p. 254). Many safety professionals who now are in the safety/accident prevention career initially planned to become certified in prevention. Years ago anyone could perform the job of accident prevention; however, today it is a more strict profession requiring that people are certified in specialty fields (Worick, 1975, p. 254). Accidents occur daily in this world. Some are fatal—such as an airplane accident—and some are non-fatal—such as a broken leg. Many accidents could have been prevented by simply implementing a Safety Management System. The leading cause of death in the United States among individuals from 1 through 38 is from preventable accidents. Preventable,

accidental deaths are the fourth leading cause of death in all age groups (Mroz, 1978, p. 1). When presented with this statistical data, it becomes clear that a safety program needs to be proactive rather than reactive; this is the primary goal of Safety Management Systems. Florio, Alles, and Stafford (1979) define safety education as the education of people to prevent accidents (p. 25). They also state that, due to using safety programs in profession, "between 1912 and 1976[,] accident fatality rates dropped by 71 percent," (Florio et al., 1979, p. 429). Their findings positively support the impact that a safety program has in the workplace, home, and community.

Rodgers (1971) states, "Safety programs have been established in the past on an after-the-fact philosophy" (p.2), meaning that previously, something major must occur for an employer to take notice that safety measures must be implemented. For example, many aviation professionals have stated that most of the minimum standards set at airports are usually the result of something that occurred at the airport. This trend is a tragedy; every person should be educated in safety, and Rodgers (1971) explains that the mass production of goods post WWII caused the entire industry "to think in terms of systems" (p. 9). As a result, workers began to see a systematic way of carrying out tasks in order to be able to mass produce those items after the war without many problems.

Pybus (1996) gives many examples of some accidents, the warning signs, and the outcomes. One such accident includes an oil rig accident in the North Sea on July 6, 1988 that resulted from leaking gas and an ignition source. The rig was engulfed by flames killing 167 people. During the investigation phase, many issues were uncovered. These issues included a lack of a proper hazard assessment, no proper permits, no written documents, and improper record-keeping of dates and times. Furthermore, employees did not receive the proper training; therefore, their safety auditing was not performed correctly, and management ignored previous incidents that occurred on the same oil rig (Pybus, pp. 7-11). Another well-publicized accident occurred on January 28, 1986:

On 28th January 1986 at 11:38 eastern standard time, the Space Shuttle *Challenger* was launched from the Kennedy Space Center. Seventy-three seconds later its flight ended in an explosive burn of hydrogen and oxygen propellants. All seven crew members died. The immediate cause of the disaster was the failure of a rubber O-ring one of the two solid fuel booster rockets, leading to a leak of fuel, which ignited. The flame deflected on to the surface of the external liquid hydrogen/liquid oxygen shuttle propellant tank, causing failure of the tank structure and escaping liquid fuels ignited explosively, and the shuttle assembly was destroyed. With this space-age technology, how was it that a simple o-ring failed with such disastrous consequences? The Presidential Commission of enquiry unearthed significant underlying causes (p. 11).

After a thorough investigation of the Space Shuttle Challenger accident, there proved to be four main causes of the accident. The first cause was due to improper design of the

O-ring. It was too sensitive for the environmental conditions in which it would be utilized. At the time of the launch, the temperature was thirty-nine degrees. According to NASA policy, the temperature was not supposed to be lower than fifty-two degrees. Interestingly, the design of the *Challenger's* rocket booster was rated fourth out of all its other competitors (Pybus, 1996, p. 12).

The second cause of the accident stemmed from the fact that no person who conducted a hazard assessment objected to its questionable yet faulty design. Furthermore, employees tended to ignore the problems. As time elapsed through the investigation phase, NASA and the seal manufacturer decided to stick by their initial design choice rather than go back and redesign it in order to avoid more inherent costs on the project. There were also gaps in communications—which is the third cause of the accident—between the people who were conducting the launch and senior management.

The fourth cause was due to the high-profile level of the project, the demands of meetings deadlines, and "stretched" resources while "fundamental principles [were] overridden," (Pybus, 1996, p. 13). Throughout the entire process, there was evidence against the launching of the space shuttle, but the determination to launch was even greater at the cost of seven lives (Pybus, 1996, p. 13). Nevertheless, another tragic event occurred due to cost cutting and an improper Safety Management System (Pybus, 1996, p. 12). Those seven people lost their lives in an event that was supposed to mark the highlight of their lives, but because no one objected to the defective design in the O-ring, they died as the world was watching. Pybus (1996) said, "It was the replacement of a safety-driven culture by a performance-driven culture" (p. 13).

SAFETY MANAGEMENT SYSTEMS

"Let's [f] ace it, safety costs money, doesn't it? It brings extra bureaucracy and slows things down, doesn't it? All that red tape; all those constraints on getting with the real job. Safety. Not a good fit with the modern business image of risk taking, cost cutting and entrepreneurial spirit, is it?"

~Pybus (1996, p. 1)

"In November of 2005, International Civil Aviation Organization (ICAO) amended Annex 14, Volume 1 (Aerodrome Design and Operations) to require member states to have certified international airports establish an SMS," (FAA, 2007). To introduce this new system, the FAA created Advisory Circulars to inform aviation personnel of the information, sponsoring guidance and pilot studies. The Federal Aviation Administration released an Advisory Circular on February 28, 2007 entitled "Introduction to Safety management Systems (SMS) for Airport Operator" (FAA, 2007) However, before the final rule implementation in 2010, they wanted to obtain the opinion of the public and make sure they did not have repetition between 14 CFR Part 139—which is the Certification of Airports—and the new program (SMS). In addition, they planned to implement,

training, oversight from the FAA and many other factors (FAA, 2010). "The application of systematic, proactive, and well defined safety program (as is inherent in a SMS) allows an organization producing a product or service to strike a realistic and efficient balance safety and production."

SMS OVERVIEW

SMS Pilot Studies

Two projects have been funded to help further guide the implementation of SMS. The FAA used these pilot studies to determine the costs and time involved with SMS implementation, as well as to develop models for future airports SMS projects (Federal Aviation Administration, n.d). Funding for this project came from AIP planning grant funds; however, airports must meet certain eligibility requirements. The first pilot study results showed that the initial set up for an SMS is covered under AIP grants while the second pilot study uncovered dissimilar valuable findings (Federal Aviation Administration, n.d). All the airports were in need of a Safety Management System, all had a safety program in place but not SMS, and 14 CFR Part 139 did not fully cover what SMS did; additional studies needed to be completed, perhaps using smaller airports.

The Transportation Research Board's Airport Cooperative Research Program (ACRP) funded ACRP Volume 1: Safety Management Systems Overview. It is said that aviation safety had been reactive rather than proactive, and usually human factors are the cause of most accidents. "There will always be hazards and risks in the airport environment. Proactive management is needed to identify and control these safety issues before they lead to mishaps" (Transportation Research Board, 2007, p. X). The report says that "SMS provides a systemic, explicit, and comprehensive process for managing risks," and the "FAA projections anticipate 1.4 million additional domestic takeoffs and landings each year from 2007 until 2020" (Transportation Research Board, 2007, p. 1).

Safety Management Systems have four key principles that include management commitment to safety, proactive identification of hazards, actions taken to manage risks, and evaluation of safety actions. SMS should be something that all employees receive from top management to bottom airfield crew with everyone having a proactive approach (Transportation Research Board, 2007, p. 2).

SMS should not be burdensome to the average employee and is not intended to formulate extra steps in day-to-day activities. It is something that should come as second nature without the employees realizing it. Airport management may be wondering how airports and their employees will benefit from having an SMS. First, SMS will allow the analysis of airport accidents and injuries and provide solutions as they are approaching. Appendix 1, courtesy of *Prather Airport Solutions*, presents the gap analysis and SMS manual and implementation plan. Next, the cost will be significantly lower if one can recognize the early signs of incidents and accidents and have good company morale with strong communication from top management to each department down to each individual person (Transportation Research Board, 2007, p. 3). Other benefits include a track record of good

safety, learning from mistakes, and overall improving practice (Transportation Research Board, 2007, p. 4).

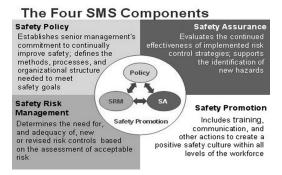


Figure: 1 SMS Components (Federal Aviation Administration, 2009).

Safety Policy

There are four distinct pillars or components that make up Safety Management Systems, as shown in Figure: 1. They include: Safety Policy, Safety Risk Management, Safety Assurance, and Safety Promotion (Transportation Research Board, 2009, p. 9). The first pillar is the Safety Policy, and it consists of the policy statement, organizational structure, and the procedures (Transportation Research Board, 2007, p. 6). The FAA states that an effective SMS defines the organization's overall approach to managing safety (FAA, 2007). The policy explains an organization's vision and its commitment to safety (FAA, 2007).

The first element of the Safety Policy pillar is the policy statement, which should include a statement of the company's dedication to implementing the process, to properly monitoring safety performance, to addressing the issue of employees having fear for reporting certain issues as well as appropriate behavior toward safety, to establishing and evaluating goals, and to dedicating the resources needed (Transportation Research Board, 2007, p. 6). The policy explains an organization's vision and its commitment to safety (p. 7).

The organizational structure represents the second element of the Safety Policy. The precise organizational structure will depend upon the size of the airport. Larger airports may have a more defined structure full of many different parts for each department—such as accounting, human resources, or leasing office—while smaller, general aviation airports may only have an SMS Director/Manager who supervises the implementation and ensures the successful implementation.

The third and final element of the Safety Policy involves the procedures. This document spells out the proper procedures that need to occur and benefit the overall safety of the airport. In any case, when the procedures are changed, such changes must be properly communicated to all those who will encounter them (Transportation Research Board, 2009, p. 6).

Safety Risk Management

Safety Risk Management (SRM) is the second pillar. Although it is impossible to eliminate all risks, SRM techniques will enable risks to be reduced through the consistency of its three elements—hazard identification, risk assessment, and risk mitigation and tracking. (Transportation Research Board, 2007, p. 8). Safety Risk Management is defined in the Advisory Circular 150/5200-37 as:

a formal process within the SMS composed of describing the system, identifying the hazards, assessing the risk, analyzing the risk, and controlling the risk. The SRM process is embedded in the operational system [and] is not a separate/distinct process (FAA, 2007).

The first element and first step is hazard identification (Transportation Research Board, 2007, p. 8). A hazard is defined by the FAA as:

"any existing or potential condition that can lead to injury, illness, or death to people; damage to or loss of a system, equipment, or property; or damage to the environment. A hazard is a condition that is a prerequisite to an accident or incident" (FAA, 2007).

One must first take a hard look at what hazards the airport faces and what must be implemented in order to identify what may happen (Transportation Research Board, 2007, p. 8). Once the hazard has been identified, a risk assessment must be conducted, which is the second element under Safety Risk Management. The risk assessment addresses the seriousness of the consequences and the likelihood of it happening again.

Severity Likelihood	No Safety Effect	Minor	Major	Hazardous	Catastrophic		
Frequent							
Probable							
Remote							
Extremely Remote							
Extremely Improbable							
HIGH RISK MEDIUM RISK							
Remote			M RISK				

Figure: 2 Risk Management Matrix (Federal Aviation Administration, 2007)

The Risk Management Matrix, as shown in Figure: 2, is often used to measure incident severity (Transportation Research Board, 2007, p. 9). The last element is risk mitigation

and tracking. When the hazard is mitigated, it should be fully examined to determine what was the specific cause of the hazard. This can be done through a system that allows one to "counteract any risks to safe operation." Once a system is in place for mitigating risk, it must then be under constant monitoring to make certain that the risk mitigations currently in place continue to operate as needed (Transportation Research Board, 2007, p. 10).

Safety Assurance

Safety Assurance is the third pillar of Safety Management Systems and also functions as a morale booster (Transportation Research Board, 2007, p. 10). Safety Assurance is the "process [of] management functions that systematically provide[s] confidence that organizational products/services meet or exceed safety requirements" (FAA, 2007). Safety Assurance consists of three elements—internal audits, external audits, and corrective action. First, internal audits should be both formal and informal—done by each department—and should be conducted regularly while taking into consideration the effects that program will have both immediately and in the future. The second element is external audits, which are conducted in the same manner as internal audits but with one exception—they must be carried out by an independent agency. Corrective action is the third element, carrying consequences to those who are not following proper safety procedures set forth and ensuring that hazards are resolved (Transportation Research Board, 2007, p. 10).

Safety Promotion

Safety Promotion represents the fourth pillar (Transportation Research Board, 2009, p.10), functioning as "a combination of safety culture, training, and data sharing activities that supports the implementation and operation of an SMS in an organization (FAA, 2007). Safety Promotion consists of culture, training and communication. SMS should not only be the priority of management but also all employees. The culture should be positive and should be integrated into all everyday activities (Transportation Research Board, 2009, p. 10). Training is the second element of Safety Promotion; it is crucial to provide proper training on policies and procedures to all airport employees. Proper training enables the airport to demonstrate the responsibility that each member of the team brings (Transportation Research Board, 2007, p. 7).

The final element is communication, which is the key in any successful situation. Written communication should not be the only form of communication; employees must also see that top management is doing all they can to fulfill these new obligations and set the example. The communication process allows for growth in seeing what went wrong, how issues can be fixed, and what lesson each member of the team can take away to ensure that the lessons learned will not reoccur (Transportation Research Board, 2007, p. 8).

Research has proven that SMS is needed with the aviation industry. On July 5, 2000, an Air France Concorde flying from Paris to JFK crashed after takeoff from Charles de Gaulle International Airport. A Continental DC-10 departing before the Air France Concorde lost a 16-inch strip of metal, which caused the Concorde to run over it, puncturing a tire and rupturing a fuel tank, killing 113 people. So far, we know that previous incidents could

have been prevented had the proper internal audit (which falls under the SMS pillar Safety Assurance) been completed (Transportation Research Board, 2007, p. 17). Outside the United States, there have been several airports that have successfully implemented Safety Management Systems by using three different approaches of implementation.

SMS IMPLEMENTATION

There are three approaches to implementing SMS. These approaches are the Evolutionary Style, the Phased Methodology Approach, and Fast Track Adoption. The first approach, the Evolutionary Style, takes several years to complete and gradually creates the safety culture. The next, the Phased Methodology Approach, gives the airport milestones to implement and gives organizations a more structured way that is faster to implement. The last approach to implementing SMS is the Fast track Adoption, which is a rapid implementation that does not allow for adjustment; this method can be hard on employees and cause a negative safety culture with much resistance (Transportation Research Board, 2007, p. 23). Appendix 2 gives details on each step to implementing an SMS entails.

Airports outside the United States

In 2007, interviews were conducted with the Civil Aviation Authority (CAA), which discussed the process that certain airports had to go through in order to implement a successful SMS. In January 2007 at Calgary International Airport, Mr. Paul Van den Eynden, who is the Director of Safety Management Systems, was interviewed, stating that since SMS has been implemented, culture and awareness at the airport both have risen, including a "drop of more than 70 percent in incidents, accidents and near misses between 2001 (134) and 2006 (34 as of the end of November 2006)" (CAASD, n.d, p.4). Some lessons that Calgary International Airport has learned during the process include implementation in stages as opposed to all at once, and "the true value of safety is demonstrated by its absence."

In January 2007, Graeme Gamble at Cardiff International Airport was interviewed regarding its SMS—which was developed over a number of years using the Evolutionary Approach since implementing SMS, Cardiff International Airport has seen some changes, including a decrease in runway incursions, regular auditing, proper documentation, and a monthly meeting where minutes are documented and a meeting agenda are provided; however, Cardiff International Airports says "there is still more work to do" (CAASD, n.d, pp. 7–8).

Furthermore, William Fullerton shed some light on the implantation of SMS at Jorge Chavez International Airport (JCIA) in the December/January 2008 issue. In 2001, JCLA's management was taken over by LAP officials. They worked to instill "safety as a core value" and make it just as important as maintaining sales. The objectives that LAP set forth has proven to be successful, because their SMS has moved from a reactive to proactive approach with statistical information showing that incident rates have lowered from higher than 0.42 per 1,000 operations index in 2005 to meeting their goal of 0.38 in 2007. They are very proud of themselves and owe their success to the commitment to SMS and safety (Fullerton, 2008, p. 43). Part of their success is due to having an Airport

Safety Committee (ASC), which "holds bimonthly meetings, reviews safety statistic, hosts joint training sessions, conducts joint inspections, and makes explicit recommendations for coordinated practices in ramp operations that enhance the safety of all operators." On top of that, the ASC regularly holds a round table to discuss the goals and plan of action for the following year. The ASC's subcommittee also works with other airport committees, such as the Wildlife Hazard committee and Facilitation committee (Fullerton, 2008).

Jorge Chavez International Airport (JCIA) wanted to create a phenomenal safety culture that everyone would embrace and work hard to achieve but also recognized that it would not happen overnight; it would take some time to establish this. Airport authorities did so by first developing their human resources department, examining job descriptions, and providing proper training to ensure that their employees understand what hazards to look for and know the extent of their reporting duties consist of. Furthermore, they rewarded their employees. After taking care of human resources, JCIA turned to operations. They recognized the need for an appropriate reporting system that was active and easily accessible, thus developing a database that housed all of the proper information (Fullerton, 2008, p. 44). Part of the safety culture is establishing, maintaining, and following through with the proper sanctions as a result of a violation. JCIA used "the ICAO risk management framework" for their risk management (Fullerton, 2008, p. 45). As a part of JCIA's Safety Assurance, they have strict enforcement of the whole SMS process from the requirements to the failures. In addition to the traditional enforcement, they follow through with ICAO's standards, which are to have an internal and external audit performed annually (Fullerton, 2008, p. 46).

Airports within the United States

Airports in the United States are currently working on proactive SMS plans. One is San Antonio International Airport. At the American Association of Airport Executive Annual Conference in May 2010, John Chase (SMS Manager for San Antonio) spoke of his interpretation of SMS, his plan, and how it worked. First, San Antonio International Airport currently has a SMS program manual. John Chase used the FAA's definition to define terms, uses voting and non-voting members on his board, and is very open to receiving feedback from everyone, including the public. Furthermore, San Antonio puts more focus on the airport's SMS but also wants to see a proactive SMS in other aspects of the airport, such as ATC and airline. He hopes to implement SMS into Air Traffic Control in four to five years and believe that it will affect the airport. Moreover, San Antonio believes that a "one size fits all" take on SMS does not work. They strongly believe that SMS is sizeable (Chase, personal communication, May 16, 2010).

After implementing their version of SMS, there still are many unanswered questions. For example, will the FAA have regulated safety-reporting software, or will it be up to the individual states or airports themselves? Where does the accountability really lie? What makes the issue "that bad" before it makes it to Washington? How is the fining going to work, and who is regulating it—the authority, airport or the FAA? Regardless of the many

unanswered questions, one thing is certain—San Antonio has a solid, proactive SMS in place. They currently plant safety issues and hold walks to see if their staff can actively seek out the safety issues or hazards. Staff members who find the most safety issues or a certain number receive awards and prizes such as Chili's gift cards. Nonetheless, San Antonio is building a safety culture around willing staff dedication and participation, and that is exactly the kind of SMS that should be in place (Chase, personal communication, May 16, 2010).

Another proactive SMS currently in place is at Seattle-Tacoma International Airport (SEA-TAC). Safety has always been a focal point for SEA-TAC, so when the airport discovered Safety Management Systems and the possibility of participating in a pilot study conducted by the FAA, it wanted to take part in it. Having successfully taken part in the Phase I Pilot study, they were optimistic about their participation in the Phase II Follow-on Study. During Phase II the airport welcomed the help of their consultant, Landry Consulting, to aid in the process with making 70 percent of all the work being completed on site in order to guarantee proper testing from findings in Phase I, learning to tweak and incorporate it to the environment. Upon completion of Phase II, SEA-TAC and its consultants were surprised to learn that what they predicted from the gap analysis conducted was completely opposite of their findings (Coates, 2010, p. 38). However, this discrepancy led them to learn a great deal, such as the fact that the SMS should be integrated throughout the airport–from administration to the ground–that people should become involved early, and that "one size does not fit all."

Nevertheless, they did discover that having an SMS "if implemented correctly, can leverage, build upon, and enhance the safety of the entire airfield" (Coates, 2010, p. 39). Furthermore, SEA-TAC has an automated system implemented for the regulation of Part139 and also has safety programs addressing communications routes (Landry, Landry Consultants, 2009). With two pilot studies behind them, what is next for SEA-TAC? SEA-TAC has decided fully to implement SMS because they "strongly believe in the strength and effectiveness of SMS." The airport also has a greater safety culture environment with an increasing number of staff showing interest by attending meetings. The staff has integrated SMS terms more often and is looking forward to having a full SMS (Coates, 2010).

Benefits of SMS

As an airport manager, one may ask what SMS will *do* for the airport. SMS allows the anticipation of accidents and provides a way to manage risk situations, thus allowing the airport fully to analyze the occurrence of accidents and learn ways to adapt. The TRB states, "the SMS approach reduces losses, improves productivity, and is generally good for business" (Transportation Research Board, 2009, p. 7).

STATEMENT OF THE PROBLEM

"Safety is not a vague concept. It is who we are and what we do" (CAASD, n.d.), yet after two SMS pilot studies carried out by the FAA, many questions still remain: What lessons were really learned from the pilot studies? What was the underlying purpose?

What are the perspective of the airports regarding SMS? Regardless of many unanswered questions, SMS clearly has it benefits. Additionally, in an effort to determine the degree of support for SMS among Tennessee airports, a research project was carried out during the summer of 2010. Tennessee airport managers were chosen to complete the brief online survey. The researcher's close proximity was the deciding factor for choosing which airports to survey. Research questions to be analyzed in this study include:

To what extent are airports familiar with SMS?

What type of SMS is currently in place at the airport?

If SMS remains voluntary, would airports still consider implementing SMS?

Would airports need additional funding to properly develop and implement SMS?

METHODOLOGY

According to Tennessee Department of Transportation—Aeronautics Division (TDOT Aeronautics) in the state of Tennessee, there are currently 75 public-use airports; however, some of those airports did not have an email address. Therefore, a paper survey was sent out on June 14, 2010 to twelve airports, and the electronic survey sent June 17, 2010 to fifty-eight airports coincided with airports receiving the online survey. This was done on two different dates, allowing the paper survey time to be received by the airports. On June 24, 2010, the first follow-up email was sent to the forty-nine non-respondent airports. On July 1, 2010 the second follow-up was performed via telephone. A total of forty-seven airports were called to request their participation. After conversations with some of the airport mangers, eight of them requested the survey be resent, which was done. On July 14, 2010 the survey was closed, and there were no additional paper surveys received. The results of the survey include a total of 68 emails, including 27 responses and 41 non-responsive managers. When the initial electronic responses were sent out, 7 of the surveys bounced, and 0 opted out of the survey. Of the 12 mailed surveys, 4 paper surveys were mailed back, leaving 8 surveys not mailed back. The final response rate was 38.6%.

FINDINGS/DISCUSSION

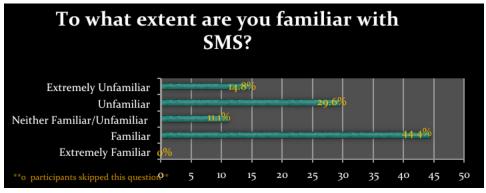


Figure: 3 Familiar to SMS

On July 14, 2010, the survey was complete with the following findings. To begin the survey, referring to Figure 3, airport managers where asked how familiar where they with SMS. 44.4% of surveyed airport managers said that they were familiar with SMS, with a surprising 44.4% stating that they were either unfamiliar or extremely unfamiliar. 11.1% said that they were neither familiar nor unfamiliar with SMS, while zero participants skipped this question.



Figure: 4 Current SMS

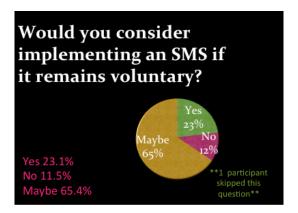


Figure: 5 Voluntary SMS

As Figure 4 illustrates, when asked which safety plan was currently in place at the airport, 53.8% of managers said there was a Proactive plan other than SMS, 23.1% said their plan was Reactive other than SMS, and 3.8% said that SMS was the safety plan. 19.2% had another form of SMS in place, and one airport manager skipped this question. As Figure 5 demonstrates, if SMS remained voluntary, 23.1% said that they would consider

implementing SMS, leaving 11.5% saying *no* and 65.4% saying *maybe*. One participant skipped this question.

How Supportive Would You Be for a Mandatory SMS for:							
** 1 participant skipped this question**	High Resistance	Some Resistance	No Resistance				
Airport Employees	0% (0)	52% (13)	48 (12)				
Tenants	30.8% (8)	57.7% (15)	11.5% (3)				
Users	19.2% (5)	69.2% (18)	11.5% (3)				

Figure: 6 Support Mandatory SMS

As shown in Figure 6, the overall consensus was that managers where neither supportive nor unsupportive for SMS between the classes of certificated airports.

If SMS were implemented at your airport. What degree of resistance would you expect from:						
** 1 participant skipped this question**	High Resistance	Some Resistance	No Resistance			
Airport Employees	0% (0)	52% (13)	48 (12)			
Tenants	30.8% (8)	57.7% (15)	11.5% (3)			
Users	19.2% (5)	69.2% (18)	11.5% (3)			

Figure: 7 Resistances with SMS

The results shown in Figure 7 would not hold any high resistance from the Airport employees if SMS were implemented; however, 52% said there would be some resistance, and 48% said no resistance. While the majority of tenants would show some resistance at 57.7%, 69.2% of users would show some resistance. One airport manager skipped this question.



Figure 8: In need of Funding

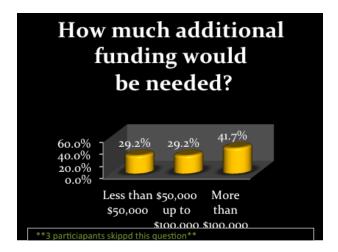


Figure: 9 Funding Needed

With development and implementation of new programs, the cost must be considered, as shown in Figure 8. When asked if airports would need additional funding properly to develop and implement and SMS, 96.2% of airport managers said that they would need additional funding, and 3.8% said they would not need any additional funding. Referring to Figure 9, of the airport managers who answered *yes* to needing additional funding properly to develop and implement SMS, 29.2% said they would need less than \$50,000, 29.2% needed \$50,000 to up to \$100,000 and 41.7% needed more than \$100,000; three airports managers skipped this question.

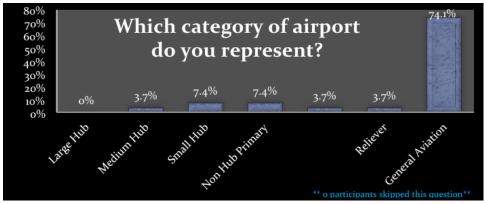


Figure: 10 Demographics-category of airport

In order better to understand the size airport size of survey respondents, as represented in Figure 10, a question asked which category of airport they represented. 74.1% were *general aviation*, 22.2% were neither a *medium/small hub* nor a *non-hub primary/non-primary commercial*. 3.7% were *reliever's airports*.

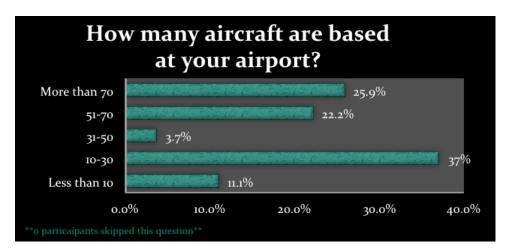


Figure: 11 Demographics-based aircraft

Of the 27 airports that completed the questionnaire, as shown in Figure 11, 11.1% stated they have less than 10 aircrafts based at their airport, 37% had between 10 and 30 aircrafts, about 25.9% had between 31 and 70, and 25.9% had more than 70 aircraft based at their airport.

The last question on the survey was an open-ended question allowing airport managers share any feedback. Four airport managers responded to this question. The following are their thoughts:

- 1. "Already has an ER plan, other plans for certain situations. SMS not necessary for GA airports. 139 does need a unique standard across the board–diff in all areas of the country. FAA is not happy until everyone else is not happy!"— General Aviation Airport–extremely unfamiliar with SMS
- 2. "SMS is a very good idea, but the operating cost of implementing the plan, annual maintenance/record keeping and liability is a concern".— Small Hub Airport—neither familiar or unfamiliar with SMS
- 3. "I feel that SMS is extremely important to airports, regardless of the category. I think it should be mandatory at all airports with some exceptions made for airports in different categories."— General Aviation Airport–familiar with SMS
- 4. "We have developed guidelines for a safe and efficient airport that my employees must read and initial upon initial training and periodically thereafter. I would be reluctant to support mandatory implementation without more specific knowledge on the requirement. Government mandates always cost more money and are normally policed by personnel with general knowledge of a program but little practical experience. Most of us don't like to be told how to do our jobs by folks who don't know, or have never done our jobs. I cannot be here at all times, and cannot personally ensure a safe operation at this airport except by establishing local procedures for my assistant managers and line personnel. Whatever system is mandated, or not, each airport must establish and execute their own safety program."— General Aviation Airport—unfamiliar with SMS

The majority of Tennessee airports responding to the survey are not too familiar with SMS, currently using a proactive safety plan other than SMS; supporting a mandatory SMS for Part 139 airports; may consider implementing an SMS if it remains voluntary; would expect some resistance from airport employees, tenants, and users if implementing an SMS; and would anticipate needing additional funding to properly develop and implement an SMS.

CONCLUSION

"Although aviation is among the safest modes of transportation in the world today, accidents still happen" (Stolzer et al., 2008). As air transportation demands rise, so does the need for a formalized safety plan. System safety has eventually evolved from an unregulated system to a regulated system approach. Safety has moved from technical issues that needed to be fixed to human performance issues and presently the proactive approach SMS. SMS has a bright future full of jobs, community building within airports, and prevention of accidents that could have occurred if SMS had not been adopted. According an article in *Airport Magazine*, "compliance with regulations doesn't mean it's an effective SMS; SMS is about people, processes, and relations" (Coates, 2010, p. 39). Research in other industries, as well as other countries, have proven SMS to be successful. Clearly, SMS and the safety benefits it provides is not only beneficial for Tennessee airports but for airports nationwide and the entire aviation industry; "if compliance guaranteed safety, then we would only need one rule: Don't crash. Obviously, it takes a lot more than that" (FAA, 2008).

APPENDIX 1

Courtesy of Prather Airport Solutions, Murfreesboro, TN

Work Management Summary

Clearly, developing a Safety Management System is a complex process. The RFQ for this project lists nine main requirements and three deliverables that the selected consultant would be responsible for completing. However, as stated in the RFQ, these requirements are not all-inclusive. Therefore, in determining what tasks will be completed by our firm for this project, and relying upon our expertise in developing Safety Management Systems, we have referred to the Statement of Work for the 2nd FAA SMS Airport Pilot Study. As a result, if selected for this project, our firm will complete a detailed Gap Analysis, as well as an SMS Manual & Implementation Plan, containing no less than 21 distinct components.

1. Gap Analysis

- 1.1 Review of current airport safety management practices, including safety plans and practices of tenants and operators at the airport
- 1.2 Review of current safety-specific airport documents, including Airport Certification Manual, Memorandums of Understanding/Memorandums of Agreements, Safety During Construction Plans, Surface Movement Guidance and Control System Plans, Airport Emergency Plans, and any quality management and/or risk management program
- 1.3 To be conducted utilizing the unique Gap Analysis Form (Appendix E) developed by Prather Airport Solutions, Inc. utilizing guidance from TP 14343E and the 2nd FAA SMS Airport Pilot Study Statement of Work

2. SMS Manual & Implementation Plan

- 2.1 Written safety policy statement and description of how it is communicated to airport employees
- 2.2 Identification and description of the airport safety goals
- 2.3 A plan for employee SMS indoctrination and training, including an outline of proposed curriculum and resources required
- 2.4 Documented process to identify training requirements for systems safety
- 2.5 Plan to validate training effectiveness and the process to gain training feedback, including usable metrics
- 2.6 Defined process to communicate safety policies and objectives throughout the organization, including examples of how information will be communicated and processes for follow-up
- 2.7 Plan and description for employee non-punitive reporting systems, both existing and new

- 2.8 Organizational chart identifying the names and safety responsibilities of all key personnel, including top management, safety manager, department heads/managers, and established safety committees and chairpersons
- 2.9 Description of the safety risk management (SRM) process, including application of "The Five Phases of SRM," as discussed in FAA AC 150/5200-37
- 2.10 Guidance on the use of SRM and trend analysis
- 2.11 Defined process for documenting the results of SRM to include a description of how documents will be stored
- 2.12 Description of how top management will follow-up on SRM to ensure safety mitigation strategies are appropriate
- 2.13 Description of the airport quality management and/or risk management program (if currently existing) and its integration into the airport SMS
- 2.14 Description of a plan to integrate apron safety management into the airport SMS, including a description of current apron safety management practices and an explanation of how current apron safety management practices meet the intent of SMS
- 2.15 Detailed method to document self-auditing processes and their findings, to include use of airport self-inspection process to address system safety
- 2.16 Detailed method to document self-inspection reviews, analysis, and findings
- 2.17 Description or plan to integrate the tailored SMS program into the overall operation of the airport
- 2.18 Documented plan for training and education, safety communication, competency, and continuous improvement processes
- 2.19 Procedures to promote safety awareness and participation in non-punitive reporting systems
- 2.20 Process to document and review lessons learned from within the organization
- 2.21 Schedule for implementation and anticipated associated costs

APPENDIX 2

Courtesy of Prather Airport Solutions, Murfreesboro, TN

Preliminary Work Plan

Based on our experience, to effectively produce a Safety Management System that is usable by the Airport and supported by all levels of staff and tenants, certain tasks must take place. In essence, implementing an effective Safety Management System involves much more than simply writing a Safety Manual. It requires a concerted effort by the consultant and Airport Management to bring about real change in the organization. Without this effort, any attempts to implement an SMS will be met with resistance and will enjoy little success (if not complete defeat).

True, there is wide variation in methods and approaches to developing and implementing an SMS. ICAO, Transport Canada, and FAA offer guidance on this, although there appears to be no "one best way." Prather Airport Solutions, Inc., based on past experience and in studying the extensive guidance on this issue, has developed the following Work Plan:

- Step 1: Meet with Airport staff to agree upon a Work Plan and Schedule
- Step 2: Conduct <u>Safety Culture Survey</u> of a sample of Airport employees and management
- Step 3: Develop Senior Management Commitment to Safety
- Step 4: Determine Safety Manager and members of the SMS Committee
- Step 5: Conduct Gap Analysis
- Step 6: Revise Work Plan based on gaps identified
- Step 7: Develop the SMS Manual
- Step 8: Develop the <u>Implementation Plan</u>
- Step 9: Offer follow-on services to client in the form of Training, SRM, and On-line Non-Punitive Reporting System

Step 1: Work Plan and Schedule

This step involves the consultant meeting with the client to agree upon the scope of the project, develop a Work Plan to meet the client's needs, and develop a schedule which is mutually beneficial.

Step 2: Safety Culture Survey

To determine the current safety culture of the organization, a sample of organization employees and management will be asked to complete a Safety Culture Survey (adopted from Transport Canada). These results will be analyzed and shared with management.

Step 3: Senior Management Commitment to Safety

Prather Airport Solutions, Inc. will develop a draft Senior Management Commitment to Safety and in consultation with senior management, the written commitment will be revised and signed by Senior Management. This will then be distributed to organization employees so that, early in the process, they will understand the importance of safety and support the move toward a fully functioning SMS.

Step 4: Safety Manager and Members of the SMS Committee

The importance of this step cannot be overstated. It is very important for one individual to have responsibility for managing the Safety Management System and be involved in this process from the beginning. Additionally, by appointing members of the SMS Committee at this early stage, input can be sought for the development of the SMS Manual and Implementation Plan, thereby engendering support.

Step 5: Gap Analysis

Due to our knowledge of SMS criteria and the requirements for an effective SMS Program, Prather Airport Solutions, Inc. has designed a unique Gap Analysis Form. This Gap Analysis Form guides the firm in conducting a Gap Analysis for the client, considering both FAA requirements and Transport Canada guidance.

This Gap Analysis involves comparing the 21 components of the SMS Manual and Implementation Plan to existing systems at the airport. Each gap analysis question is designed for a "yes" or "no" response. "Yes" responses indicate that the airport already meets the criteria for that particular SMS component. A "No" answer indicates that a gap exists between the stated criteria and the airport's policies, procedures, or processes. If the response is "Yes", the next column of the gap analysis form can be used to indicate where (in company documentation) the requirement is addressed. If the response is "No", the same column can be used to indicate how and/or where the policy, procedure, or process will be further developed o bring the airport into compliance with the requirement.

Step 6: Revise Work Plan

Clearly, once the gaps are identified, the firm and the client will have a much better understanding of areas where additional work is needed. As a result, it is prudent to meet again and revise the Work Plan from this step forward.

Step 7: SMS Manual

At this step, the information gathered thus far, as well as knowledge of the components of the SMS Manual, are utilized to develop the SMS Manual. The firm has developed an SMS Framework (Appendix F) to guide this effort. At this stage, all of the resources of the firm are committed to producing this deliverable to the client.

Step 8: Implementation Plan

This final phase involves the development of an Implementation Plan for the client. As previously stated, the SMS Manual is only one aspect of a fully functioning Safety Management System. After the Manual is produced, the respective components must be implemented over time. It is important for the client to note that this is not accomplished overnight. To assist with this, phases of implementation have been developed. Appendix G contains these Phases of Implementation

Step 9: Offer Follow-on Services

Lastly, once the project is completed, Prather Airport Solutions, Inc. always offers additional services to the client to allow the easy realization of a fully functioning SMS. For instance, our firm can host an on-line, confidential reporting system for the non-punitive reporting of safety concerns, as well as training programs, awareness materials, and independent safety audits.

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The Pedagogy of Progressive Hip Hop

Brian Criswell

Abstract

The purpose of this paper is to consider music as a means of educating people about the broad, sociological concept of social inequality as it relates to class, examining how lyrics might shape one's views regarding this paradigm. Music is a medium of active engagement that reaches the masses and encourages critical thought among listeners, regardless of their interest in sociological concepts. I would argue that ignorance of the issues surrounding social inequality and society's at-large acceptance of a false consciousness serves to perpetuate the status quo and keeps individuals from becoming informed consumers of sociological thought. Through music people can become not only informed but also empowered to engage in active change against the structures limiting them. Progressive Hip-Hop, in particular, tends to focus on a sociological definition of inequalities and the road to overcoming these injustices. By analyzing the lyrics of two progressive hip hop artists—Blue Scholars and Common Market—I will illustrate how one sub-genre of music can be used to reach multiple audiences (at various levels of social class) and encourage knowledge dissemination while paving a course to action.

The study of music and lyrics is in no way new to the discipline of sociology; however, the vast research to date regarding rap and hip hop emphasizes Critical Race Theory and approaches rap music as a genre that exists within and for the African-American community. Ignoring the artists and listeners who are not of African-American descent who identify with the messages of social injustices that are a part of rap music, the current scholarship fails to be all-inclusive in rap music's legitimate use as a pedagogical tool. Concerning the sub-genre often referred to as progressive hip hop and/or conscious rap, the themes reverberated throughout the lyrics are issues of social inequality to which subordinate class members of all races and ethnicities can relate. Specific themes expressed in the lyrical content of progressive rappers will be visited below. Furthermore, I would posit that the lyrics in some conscious rap explore important current events and provide the foundation for a discourse that may be otherwise overlooked.

The youth who came up in the post-industrial society of the late 1970's and 1980's experienced high levels of neglect and isolation. As a response to these circumstances, hip hop music and what is known as hip hop culture developed (Pulido, 2009). This post-industrial shift resulted in higher value being placed on careers requiring a college degree and increasingly lower value on traditional, "blue collar" positions, such as factory and manufacturing jobs. The resulting growth of individuals who were forced from the middle and lower-middle classes into the lower class is a theme often repeated in the lyricism of conscious rappers (e.g. the rich getting richer at the expense of the poor). Important aspects of hip hop music-from its origins through today-include identification with the plight of the lower class as well as grass roots involvement as part of its major tenets (Bennett, 1999). Many conscious rappers/progressive hip hop artists are actively involved in their communities through such endeavors as youth music programs and political activism.

THEORETICAL FRAMEWORK

Critical Race Theory

Although I criticize the heavy use of Critical Race Theory (CRT) in the academic study of rap music due to its narrow focus on African-American artists and communities, it would be irresponsible not to recognize the value it provides to this area of academic inquiry. A major theme in CRT is that of the counter narrative. According to Pulido, "counter narratives are stories told by people of color who are submerged in a racially hierarchical society" (2009). These stories are prevalent in the wider context of rap music as a whole but are told from a more critical, almost academic, approach in progressive hip hop. The widely-held beliefs and "stories" that are contained within a majority-ruled master narrative are often challenged by the counter narratives of subordinate groups. This master narrative tends to give priority to the idea that America functions as a meritocracy and all people are given an equal chance at success in life. Rather than acknowledge the systematic forms of oppression (and specifically racism) that occur in the U.S., these widely accepted views "accept social arrangements as a result of the superior intellect and abilities of Whites" (Pulido, 2009).

Freire's Pedagogy of the Oppressed

The fact that hip hop as an academic field of inquiry has been historically marginalized ... speaks volumes to just how 'mis-educated' our society has become ... [I]t suggests that Paulo Friere's critical pedagogy is now more relevant than ever as a method for eradicating racialized opportunity gaps in achievement and for creating educational spaces that ameliorate the life and death issues that many of our youth face on a daily basis (Akom, 2009).

According to Freire (1970), oppression is a system where both oppressors and oppressed are locked into their respective roles by the forces created by that oppression. Because the oppressed—once in a position to do so—tend to only reverse the roles and maintain the existence of oppression, it is important to note that the oppressed must use their new position to join with the oppressors rather than against them. In the status quo, education is practiced in such a way that students are alienated as if they were the oppressed. The system is set up in a manner that encourages teachers to act as—or at least on behalf of—the oppressors to maintain this status quo and hinder real learning by both the teacher and students (Freire, 1970). Because the counter narratives mentioned above are not given their proper place in the curriculum, rap music has become the text of those who identify with its stories. Keeping in the Freirian tradition, progressive hip hop artists seek to overcome historical injustices and discover a society in which equality is truly realized.

The absence of counter narratives in traditional education leaves progressive hip hop artists like those already mentioned with the job of educating their "students" about these seldom-heard stories. The problem-posing methodology employed by Freire (1970) offers youth the opportunity actively to participate in what he calls "critical praxis." Becoming engaged with social issues encountered in their everyday lives, these young people are taught to move beyond victimization and "confront unjust social and economic conditions" (Akom, 2009). Opportunities to engage in this "critical praxis" are readily available through the grassroots efforts of such progressive hip hop groups as those reviewed here. It is through such outreach that Freire's vision can be carried out. Blue Scholars frontman, Geologic states, "We are all involved in some community work of some kind, and we have different fronts on which we do ideological battles—race, class, the environment" (Mudede, 2006).

Critical Hip Hop Pedagogy

Critical Hip Hop Pedagogy (CHHP) "combines aspects of youth participatory action research (YPAR), Freirian pedagogy, and CRT to challenge racism and other intersections of social difference in order to prepare young people to be prospective teachers inside and outside of urban and suburban schools" (Akom, 2009). YPAR involves five steps, including planning, taking action, observing, evaluating, and critical reflection. CHHP both borrows from, and expands upon, CRT. Akom (2009), who introduced CHHP, explains his approach as follows:

Critical Hip Hop Pedagogy attempts to address deep-rooted ideologies to social inequalities by creating a space in teacher education courses for prospective teachers to re-examine their knowledge of hip hop as it intersects with race, class, gender, and sexual orientation while analyzing and theorizing to what extent hip hop can be used as a tool for social justice in teacher education and beyond.

In a course on CHHP co-taught by Akom at San Francisco State University, two main goals were identified: collaboration between hip hop artists who utilize their art form as a vehicle to explore social justice themes while articulating the demands for social justice, and development of a counter-hegemonic public sphere for students to explore norms about race, class, gender, culture, language, and the availability of institutional resources and privilege inside and outside of schools.

HIP HOP AS A TOOL

Hip Hop Uses

"The growing literature within and outside the academy suggests the presence of a hip hop generation in which youth are utilizing hip hop as a counter discourse in response to the subordination African American and Latina/o youth encounter in their daily lives" (Pulido, 2009). While Pulido still relates hip hop to race and the African-American and Latina/o communities, I believe this emergence of a "hip hop generation" crosses boundaries of race, as evinced by the wide acceptance of rap music in popular culture. It is not my intent to discount the uses of hip hop in race pedagogy; rather, I suggest the current academic study of hip hop as a tool for understanding racial inequality can be extended to other areas of social inequality, specifically social class. It has been suggested that hip hop can be described as a way for the oppressed to "resist and challenge the social ideologies that caused and maintained their subordinate position" (Land and Stovall, 2009). It seems that including class struggle in the academic study of hip hop music would be common sense, yet the large body of scholarship to date concentrates on CRT and largely ignores other areas of inequality that can be addressed through hip hop music. Researchers in sociology and other disciplines can combine the lyrical content of progressive hip hop with various social contexts-applying these lessons to both groups and individuals-in the study of identity construction and action (Roy and Dowd, 2010).

Hip Hop as Pedagogy

As mentioned above, hip hop as a genre has been widely accepted into popular culture. This popular culture, especially music, helps individuals to construct and understand various perspectives regarding inequality and can be used to mobilize efforts to overcome these inequalities (Steinberg, 2004). Land and Stovall (2009) have argued that this wide acceptance of hip hop into popular culture—along with the undertones present in the lyrics (political, social justice and action)—should lead us to consider hip hop and its uses in the

field of education. At the start of this paper, I suggested that hip hop could be used to educate not just its intended audience but reach across boundaries and provide a counter discourse for unintended audiences outside of the subordinate group(s) whose stories are being told. Given the absence of a voice these subordinate groups have in the traditional educational system, progressive hip hop may be the only way some become familiar with these counter narratives.

MUSIC ANALYSIS

Artist introduction

While the current academic work regarding hip hop holds great value concerning inequalities based on race, I argue that progressive hip hop can be a pedagogical tool in educating students and teachers about inequalities based on social class, as well. George Quibuyen (a.k.a. Geologic) is the Filipino emcee from the hip hop duo Blue Scholars. Ryan Abeo (a.k.a. RA Scion), hailing from Louisville, Kentucky, is the white frontman for the duo Common Market. The groups' shared DJ is trained jazz pianist and Iranian-American Alexei Saba Mohajerjasbi (a.k.a. Sabzi). The diverse backgrounds of these individuals help to illustrate how hip hop can transcend racial boundaries and educate persons from all races about social inequalities based on social class. According to Sabzi, "the purpose of our music is to be socially relevant to our communities" (Mudede, 2006).

Lyrical Themes

The research supporting my claim that hip hop pedagogy can be used as an educational tool regarding social class is based upon a lyrical analysis of the artists Blue Scholars and Common Market. Upon examining their music, I established six major themes repeated throughout the lyrics of both artists. Although this list is not all-inclusive, these are the themes most common and most relevant to the academic study of inequalities based on social class:

- 1. Hardships: those obstacles faced by members of a subordinate class
- 2. Encouragement: to engage in action and/or activism
- 3. Social Theory: reflections of shared experiences lived by members of a subordinate class
- 4. Inequalities: class struggle, wealth distribution and structures that maintain the status quo
- 5. Political Messages: church and state, education, knowledge dissemination, and military
- 6. Social Protest: steps to be taken through activism and/or violent protest

Examples of Themes

Hardships

From "No Rest for the Weary" by Blue Scholars:

You better move, hold your head high, soldier it ain't over yet

That's why we call it a struggle, you're supposed to sweat.

From "Second Chapter" by Blue Scholars:

Now it's the turnin of the page to the second chapter

A tragedy and comedy so cue the blood and the laughter

To survivors of economic and natural disasters

Livin for the right here and not the hereafter.

From "Bonanza" by Common Market:

The difference in victory and failure is where your mind's at.

Encouragement

From "Opening Salvo" by Blue Scholars:

Now this here's for those who choose fights

Whose fruits might never not ripen until after their life

It's not right how they martyr our leaders and target our children

Disrespect our sisters then wonder why we militant.

From "Life and Debt" by Blue Scholars:

Mom's tryin to tell us not to protest instead

Pray for peace but that ain't the nature of the beast

So lady grab a bullhorn and take it to the street

Yelling power to the people

El pueblo unito jamas sera vencido (the people united will never be defeated)

Til the wealth is spread equal

You twenty-first century Gabriela Silang

Fierce like Lorena with a rifle in her arms.

From "Gol' Dust" by Common Market:

And what's a legacy worth next to mined metal

Measure me first, depression? It's better we work

For change, not for pennies, if anything the commodity

Traded is us for flakes of gold dust.

From "Every last One" by Common Market:

It's our intent to re-implement modesty

Demandin self-respect to be the market's hottest commodity

Regulate the wealth and decimate extreme poverty

And educate the kids with every dollar from the lottery.

Social Theory

From "North by Northwest" by Blue Scholars:

And they say desegregation was a big step forward

But integration only covered up a rotten core

The surface might've changed but the cauldron is still hot

Now we more politically correct with less real talk.

From "Re-Fresh" by Common Market:

Share thought with the downtrodden, intent

To tap into the wealth of knowledge

My people gain upon the avenue.

Inequalities

From "Black Patch War" by Common Market:

I plead ignorance to business affairs beyond the field but on the real

What we're dealin with here's extraordinarily-heavy handed

Look where your property landed

Now come play monopoly with vigilantes and bandits.

From "Black Patch War" by Common Market:

All I'm askin is a fair market at the auction

I put my work on the block, give me my portion.

From "Gol' Dust" by Common Market:

We crush the precious metal to dust for distribution
All you gotta do is breathe to receive the restitution
Under pressure we become both gems and grown men
It's like a jungle sometimes, wonder why I was thrown in
When my instincts seem to do more harm than good
It's difficult to defend against steel armed with wood
Maybe I was never meant to be a champion

I'm standin downstream pannin for ambition to hand in.

From "Nina Sing" by Common Market:

Famished on a barren land of AIDS and malaria

One percent could fix it with a tenth of their inheritance

Freedom buried in the treasure chest of the nefarious.

Political

From "Life and Debt" by Blue Scholars:

Bills are usually late, interest accumulates at a usury rate

Collection agency waits from paycheck to next one

Budget like a noose, workin while we sing the proletariat blues

On 501-C3 community plantations, non-profit sector propped up

To kill the movement for the changes in production relations.

From "Blink" by Blue Scholars:

They said talk is cheap, but war is expensive

I speak cause it's free and these words are my weapons

Don't think for a second that I will not question

US foreign policy, imperial aggression

Inventing war for the quenching of the thirst for the oil

But money don't trickle down to workers who toil

You see blood trickles down from the wounds to the soil

And broken antennas with aluminum foil, be

Standin on televisions transmitting propaganda of millionaire senators

And your so-called commander-in-chief

I'm telling you the man is a thief

In his hands he holds a plan to ban your freedom of speech.

From "Loyalty" by Blue Scholars:

Why they call themselves right, but then act so wrong

Dollar sign challenge while the unemployment line long

No call for the blue collar getting low ball

It's a long climb just to get to petit bourgeois.

From "Every Last One" by Common Market:

Exponentially increase the delegates

We politic with activists not asses and elephants

Rectify and edify a new central intelligence

Based upon dissemination of knowledge and evidence.

Social Protest

From "Cornerstone" by Blue Scholars:

And your brain's just a cage with a mind locked inside it unless

Knowledge itself gives proper perspective

To see how the politicians keep the dollars protected

My namesake is not confined to scholarly methods to reach the mass

Never preach the way they teach in class

Sleep walkin, half-dead spirits leavin fast

If you never had your ass beat, bro

You can't speak about non-violent protest and other such mythology

Watch how the quantity leaps into quality

Deep beyond the reaches of your Babylon economy

I speak solemnly, I seek equality

My people celebrate life despite poverty.

From "Gol' Dust" by Common Market:

This battle hymn of the republic will knock for all my soldiers

The block, that's where we focus and plot to overthrow this

Echelon, send a message to stop takin our vote, this has got to be a joke

Cause it's not what we were told.

From "Black Patch War" by Common Market:

To fifth-Third, send word of another bank bombin

Ranks mobbing, over the hill on horseback

Surround the storehouse, four corners and torch that

Been in the poorhouse before and I don't want that.

DISCUSSION & CONCLUSION

Messages of hardships, such as those referenced above in "No Rest for the Weary" can be used to illustrate the structural inequalities that both cause and maintain one's place within a subordinate class. The phrase, "The people united will never be defeated" has been placed under the theme "encouragement." Counter narratives such as the one presented here serve not only as encouragement to subordinate class members but also allow those stories to be told to a much wider audience. "Life and Debt" (Blue Scholars), in particular, names two women leaders, Gabriella Silang and Lorena Barros, and their contributions to class struggle, indicating this genre's use in the study of gender inequalities, as well. Social Theory in the style of Charles Lemert, can be seen in Common Market's "Re-Fresh" when Scion mentions the "wealth of knowledge" subordinate class members gain from the street.

In the song "Nina Sing" by Common Market, the very idea of freedom is called into question when Scion talks about the debilitating diseases in the United States and other poorer nations that are largely ignored by those with enough wealth and power to do something about it. Political counter narratives are presented more often than other themes and provide an alternative interpretation of political issues; in "Blink," Geologic raps about millionaire senators speaking to masses of subordinate class members through their outdated televisions still operated with external antennas complete with aluminum foil just to get reception. Finally, themes of social protest—such as that heard in "Cornerstone" by Blue Scholars—give a depiction of violent protest and attempt to explain why such efforts are both undertaken and necessary in the struggle for equality.

Very few of the lyrics above are limited to race alone; instead, they present a calling to subordinate class members from all racial/ethnic backgrounds to join together and take a pro-active position against the structures that cause and maintain their place in the subordinate class. Drawing upon CRT, the pedagogy of Paulo Freire, and CHHP, I suggest the development of a new pedagogy that seeks to use hip hop as a means of educating people from all walks of life by exposing them to the progressive lyricism of emcees from all racial backgrounds. This pedagogy would aim to educate "students" about social inequalities as they relate to class struggle and would recognize that the lower class is comprised of people from all racial and ethnic backgrounds. Relying on the similarities shared by all people in this subordinate class to bring them together for a common mission, it is my vision that such pedagogy would help others to overcome their fear of those who are different and allow them to construct strong bonds that cut across racial boundaries and prejudice.

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