

distinctions

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DISTINCTIONS

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EDITOR'S COLUMN

Getting Better

This issue of *Distinctions* is dedicated to victims of anti-LGBTQI¹ violence, not just recently in the United States, but around the world. I just reviewed a book of literary criticism for an Indian social history journal about three gay writers who lived under the rules of the Labouchere Amendment, which criminalized homosexuality in Britain from 1885 to 1967. These writers – Edward Carpenter, E. M. Forster, and Christopher Isherwood – had to contend with the potentially severe reprisals for being openly gay, and one could easily argue that such a situation might've been even more destructive for individuals who were lesbian or transgender. Countries from Bhutan to Zimbabwe, from Trinidad to Singapore, have seen and continue to see governmental enforcement of laws targeting people who are perceived to violate heteronormative rules and who contravene perceived protocols of gender and sexual roles.

Recently in the United States, where the law is rather different, we also have seen several incidents of anti-LGBT violence, sparking among other shows of support Dan Savage's It Gets Better Project, through which people from Margaret Cho to Barack Obama have posted videos reaching out to LGBT teens who may not be able to imagine what life would be like if they were openly gay.² At the event organized earlier this semester by Kingsborough's Alliance for Queer Understanding and Awareness (AQUA) in response to the recent violence, I was deeply moved and inspired by the personal stories of faculty and staff, such as Professor Nanin and Dean Dalpes, who endured tremendous discrimination and yet remain profoundly humane individuals.

I had decided on this dedication before I saw Roma Jade's illustration, which graces this issue's cover, and, at the risk of sounding incredibly corny, I liked the metaphor of holding one's head high. Not only does it get better, but, by standing up against such discrimination, we all get better.

I hope you enjoy this issue of *Distinctions*.

Robert Cowan
Assistant Professor of English

¹ Lesbian, Gay, Bisexual, Transgender, Questioning, Intersex.

² <http://www.itgetsbetterproject.com/>

<http://www.whitehouse.gov/blog/2010/10/21/president-obama-it-gets-better>.

MICHAEL CALASSO

The Ethics of Journalism: Examining the American Media¹

“The public have an insatiable curiosity to know everything. Except what is worth knowing. Journalism, conscious of this, and having tradesmen-like habits, supplies their demands.” - Oscar Wilde

In this excerpt, famed writer and poet Oscar Wilde expresses his thoughts on the nature of journalism and the relationship the profession has to its audience. Always the keen observer, having been a prominent aesthete, Wilde is attempting to show us that there is a latent function of journalism that isn't in our best interest. The function, as Wilde puts it, is the dissemination of information according to the particular wants of the consumer. Much like merchants in a market place, the press delivers goods that are demanded. Journalism is a profession that comes with a great responsibility: providing critical information to the masses. Dispersion of critical information is not merely a vocational duty but an ethical one. For a journalist to deliver information in its totality and without bias is to offer their readers the opportunity to formulate their own opinions, and make decisions based on truth. Given the magnitude of this responsibility, one would conclude that if this ethical task were to be neglected, it could be detrimental to the people who count on the information. People could be gravely misled or remain completely ignorant of moral imperatives. Nazi propaganda in Germany during the reign of Hitler is one particular example of the spreading of information that misled an entire nation, influencing the population to persecute the Jews. Even though the propaganda in Germany was very influential it was scientifically incorrect and of dubious origin. It is plausible to assume that if the Germans sought the validity of the information they were receiving there could have been a different history being taught in colleges today. The responsibility to validate the truth of information is arguably just as much an ethical responsibility as a journalist's responsibility to provide information in its totality, objectively. This paper will examine to what extent objectivity has been practiced in the American media and its patronage from colonial days until present day.

I. Defining the Principle of Objectivity

“The true and the approximately true are apprehended by the same faculty; it may also be noted that men have a sufficient natural instinct for what is true, usually do arrive at what is true.” - Aristotle

In effect, ethical standards are tools that ethicists use to calculate the morality of a particular subject. This case study seeks to measure moral responsibility. So, it is most important to make clear what ethical standard journalism in the American media and its patronage are to be measured by. If one intends to measure with an apparatus that is flimsy and fickle it would provide them with no viable results. In turn,

¹ Completed under the mentorship of Professor Beth Preminger for MCM 30: Mass Media.

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if one used a principle that is axiomatically sound, we will be afforded with results that are constant and viable. Therefore, I propose a principle of objectivity for journalism predicated on this moral axiom: we function best as reactionary agents when we function with respect to what is true and total. Since journalists are in the business of providing information, most of which is essential, dealing with human interests, the interests are best sought after when all variables are accounted for. Here the provided axiom begs another question: what do interests mean? Could it refer to an individual's personal ambitions or wants? This is possible, but since we are defining an ethic of journalism and its consumers, we are obliged to satisfy the inquiry. Let's suppose that this is the meaning. Further more let's suppose that there is a person whose ambitions is to hurt someone and they use provided information to accomplish their goal. This is unethical in a utilitarian sense, for it does not provide the greatest happiness to all involved. It is also deemed unethical because it violates our sense of human solidarity. If interests were defined as such the moral axiom would be unsound because it isn't universally true. To make this a universally true one would have to incorporate another truth. Since it is true that all of us, excluding the ill, have a sense of human solidarity and in terms of the greater picture, it is our innate sense and need for solidarity that drives our morality. Solidarity between individuals is also evident in lower species. Taking into consideration this fact, our previous definition falls dead at the feet of reason and we are required to adopt human solidarity as the definition of interests.

If we are going to now apply this principle that requires all to tell and seek the truth, out of respect for human solidarity, to journalists and their patrons, we find the former with the obligation to tell the truth and provide all with as much information as possible, and the latter with an obligation to seek and verify the claims of the journalist, or else they will be committing a great moral transgression. Hence, the principle of objectivity requires all involved in the seeking of information to remain true and diligent.

II. Historical Analysis: Colonial Period to Present Day

“The past is always a rebuke to the present” - Robert Penn Warren

To measure as accurately as possible to what extent objectivity has been practiced in the American media and its patronage, it is imperative to search the past as well as the present. Even though America's now two hundred and thirty-four year history is relatively short compared to the history of other countries, it could take a lifetime to comprehensively analyze every historical detail. So, in the interest of time and my own mental health (I have chosen three particular time frames to examine.) First, the period from 1690-1783, which saw the rise of newspapers, journalists and readership in early America. The second period will be the turn of the nineteenth century to the twentieth century, roughly from 1890-1915. During this time span the steam powered printing press was in full swing, manufacturing mediums to disseminate news all over the country, likewise consumption of the media was growing as well. The third and final period, from 1970-2010, saw the birth of new mediums of dissemination as well as new trends in consumption of media.

Prior to the colonial press, newspapers had been published in Spain, England, Germany and a number of other European countries during the early 17th century. Printers like William Caxton (c.1422-1492), had been making good use of Johannes Gutenberg's (c.1398-1469) invention of movable type.²

During the early part of the 17th century English immigrants were settling in Massachusetts and Virginia and the Dutch were settling in New York. For the next 80 years, colonial journalism grew from obscurity to prominence. Briefly after the settlers set up colonies in Massachusetts and Virginia, America developed its first printing press offices during the last 1630's. Though there were a great number of books published at this time, the colonies did not produce their own newspaper until the 18th century. Before the 18th century there were hardly any newspapers, for example: there was a very short lived first

² Hanson 177.

publication of *Publick Occurrences both Foreign and Domestic* in 1690. The publication was canceled because it ran afoul of the Massachusetts licensing act. Interestingly enough, there were many factors for this delay in newspaper publishing and readership, one the colonists were preoccupied with surviving in this new land. Colonists also had already been receiving news from the mother country and they lacked the kind of industry that would have created the demand for advertising. Demand for advertising and its strong monetary appeal will play a big role in what we will be looking into here.

By the turn of the century, commerce had increased substantially. As a matter of fact the commerce increased so much so that the colonies accounted for 36% of British imports and 37% of their exports.³ This would have provided them with a substantial amount of money and capabilities to produce newspapers on a massive scale. The colonies had established post masters and post offices that had access to information and took interest in spreading it, which was important given the political atmosphere of the time. The publisher of the first colonial press was postmaster John Campbell, *Boston New-letter* debuted on April 24, 1704. Campell did not make a substantial profit from the paper, which rarely circulated more than 300 copies. Despite this and many failures for newspaper publishers in the early colonies there was one particular success story, one of a man by the name of Benjamin Franklin, whose *Pennsylvania Gazette* was the best newspaper in the American colonies. Franklin's paper was the widest distributed and the widest read in the colonies. Since Franklin had the most read and most developed newspaper of the time. Given his political affiliations, we have to ask what the content of his paper was. As we know not too much later there was a revolution in these colonies, and as William Bernach once said "All of us who professionally use the media are the shapers of society."

The content that was featured in these newspapers offered a sharp contrast to those published before. Originally the papers that were published in early American society were dull and lackluster. Offering little information, colonial newspapers only consisted of about four pages that contained stories about the government and foreign affairs, the weather, and disasters such as fires and diseases. They hardly had any controversial or "stirring" converge of any kind. This was because of strong government control; let us remember that the first amendment didn't appear until 1776. Meanwhile, in the colonies, journalists had to be content with their overbearing British government. This changed when James Franklin, Benjamin's brother, established the *New England Courant* in 1721 which was the first newspaper to supply its readers with what they liked and what they needed, rather than with information controlled by officials. Other newspapers followed suit, providing political information that was quite biased. Franklin challenged religious and political authorities, setting a precedent for journalists to come. Despite its beginnings and governmental restrictions, the colonial press rose to a position of respect and even influence by the middle of the 18th century, helped along by the political turmoil that was to culminate in the American Revolution. Needless to say a respected propaganda force had an influence on the society it served and helped move the revolution. It is important to note that the society that was being served by this medium responded accordingly. As the political atmosphere of the time was changing, more and more the colonies moved toward the prospect of breaking with the crown. With the publishing of Thomas Paine's *Common Sense*, the 1/3 of the minority that made up the second Continental Congress, who sought independence, now became the majority, and the revolution took place.⁴

Here we can begin our ethical examination. The principle of objectivity requires the journalists of the early colonies to be as truthful and objective as possible. It also asks the patronage of this medium to examine what they were receiving and act accordingly. Colonists were in search of freedom, though preoccupied with survival there is a record of them making an effort to become aware of what was happening in their societal sphere: the colonists would read by candle light every night, and sneak papers into church. They did what they could by following political changes, acting in the Boston Tea Party and

³ Paine 5.

⁴ Bagdikian 3.

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joining the forces to stop the British from curtailing their freedoms. Any ethicist would consider their efforts genuine, and commend them for their diligence. To the providers of the information I couldn't be so kind. When the first newspaper publications took place in the colonies only a small group was interested in objectivity. The other publications were slanted to their own political agenda, which led to violence between political groups.¹ Between the loyalists and the liberal political publishers there isn't much to say to commend their ethical efforts. They were self-interested, politically motivated hustlers. Even Benjamin Franklin and his older brother James were known for their own brand of yellow journalism⁵. Following the trends in publishing of their day these two brothers published politically oriented material. Though this material was very popular and in a way helped move people toward the revolution, we must remember that objectivity is what we are looking for. Just because something serves a purpose doesn't make it ethical, let alone true. Imagine if there was a more objective style to publishing in the colonies: violence between political groups could have been reduced and colonists would have been able to understand the political challenges they faced with the crown through an unbiased lens. Let's remember that before Thomas Paine published *Common Sense* in 1776, which was a picture of objectivity, hardly anyone wanted to break with the crown. And after his publication almost everyone in the colonies wanted to disband from the mother country. Though everything that is true is not always as exciting as what isn't, it certainly is more useful.

As the American Revolution broke the colonies free from the shackles of the crown so too did the industrial revolution free us from the time consuming and costly means by which we conducted previous newspaper production and journalistic work. The next portion of time that we will examine is during the turn of the twentieth century. This new period of steam powered paper printing was called the penny press era. The papers were independent as opposed to the papers that were featured during the eighteenth century, who were owned by political parties and influenced greatly by their agenda. In 1830 Benjamin Day started the *New York Sun* which initiated the movement of news reporting which promoted a more egalitarian, genuinely objective reporting style. It seemed that this period was full of papers more interested in the people acquiring information about the world they lived in than what political agenda a specific group was interested in promoting. The concept of "news" was invented by the penny press. The political aspect of this development is very important to emphasize. Here we have the changing of the social consciousness as well as the economic and political atmosphere, industry. The penny press provided the information that made democracy work. As the work force in this new America and more and more people were purchasing items with cash, the economy grew and the penny press gave the market a means to advertise themselves. In turn, this made the news papers grow as well.

Throughout out this period, true objectivity was being used, to inform the growing democracy of a new world that they were creating. This style of reporting continued into the twentieth century and so did the political atmosphere as well. During the presidency of Theodore Roosevelt (1901-1909), when every city had roughly five or more competing newspapers with a broad range of politics, center, left, and right, Theodore Roosevelt, with the support of several prominent periodicals and newspapers, initiated an historic conservation of natural resources and dismantled huge interlocked corporate conglomerates, then called trusts. The industrial revolution gave birth to these large corporate entities. The control of trusts in writing laws, bribing officials, and damaging social welfare had been exposed month after month by some of the country's leading journalists and authors. Lincoln Steffens, Owen Wisner, Ida Tarbell, Louis Brandeis, Upton Sinclair and many other investigators wrote articles about the corruption. Joseph Pulitzer, William Randolph Hearst and E. W. Scripps continued to publish these articles that exposed the "muck and mire" of the political and industrial atmosphere. The principle of objectivity was very much apart of the social awareness of the time. This pivotal period, that confronted and regulated the growing democracy, met its end when J.P. Morgan and John D. Rockefeller decided to buy Harper's and Atlantic, along with many high paying financiers who were looking to plug their Wall Street agenda.

⁵ Yellow Journalism is a type of journalism that presents little or no legitimate well-researched news and instead uses eye-catching headlines to sell more newspapers.

This second period saw the most triumphant and fearless objectivity. The work of the “muckrakers” showed what democracy was. At its core the political ideology of democracy is the freedom of ideas, the intellectual exchange and the ability to choose different beliefs. While examining this particular period, one can only stand in awe, appreciating the work of the journalists during the turn of the twentieth century. I would have to judge in favor of both the parties involved.

The final period which is important to examine seems to be the most disheartening of all that I have mentioned. In Ben H. Bagdikian’s book *The New Media Monopoly* a picture is painted of how five major corporations have control of a great deal of information that we receive as a nation. The “Big 5” companies are the Walt Disney Co., Rupert Murdoch’s News Corporation, Viacom, Bertelsmann and Time Warner. Bagdikian writes, “No imperial ruler in past history has multiple media channels that included television and satellite channels that can permeate entire societies with controlled sights and sounds. The leaders of the “Big Five” are not Hitlers and Stalins. They are American and foreign entrepreneurs whose corporate empires control every means by which the population learns of its society. And like any close knit hierarchy, they find ways to cooperate so that all five can work together to expand their power that has become a major force in shaping contemporary American life.” He goes on to cite how Rush Limbaugh, a part of Murdoch’s News Corporation, has outright lied and misled his audience. Let’s remember an interesting fact about Rush Limbaugh’s show; it averages 20 million listeners show as opposed to CNN or MSNBC who will have collectively a little more than 3 million audience members a show¹. Another interesting fact that has been brought up in this piece of literature is that the political spectrum has shifted greatly. From the 1980s to the present day, we have seen as the far right wing of American politics finds itself in the center and the left wing pushed far out into the periphery. When we take into account the history of this country, and the influence that mass mediums have on our culture and society, this monopoly is a frightening reality.

We receive a certain amount of information a day, information that we don’t know is reliable. And given the habits of the corporations that control the media, Americans shouldn’t expect it to be. But the most startling of all: nobody seems to notice, and nobody seems to care. But why should the American public care? Why should Americans care that they only get information from a select few places? Why should we care if we rank 19th in literacy compared to other countries? Let us keep in mind that Americans are one, if not the most advanced countries on the planet. This also has an implication in terms of ideas and information that people receive they are all coming from one place, that doesn’t require you to read and find out information for yourself. The people who control this mass media are a part of the “Big five.” The principle of objectivity has disappeared, and if it exists, it has taken the place of the liars and deceivers in obscurity.

III. Proposed Solutions

The only place that is worth looking for a solution to the tremendous problems that we face with this twenty first century media monopoly is the past. The halls of history tend to offer the best comparisons and solutions to present day obstacles and I feel there is no difference with this one. The early twentieth century saw major movements in social and political spheres toward true objectivity. Theodore Roosevelt’s dismantling of trusts in corporations was given aid by newspapers exposing the ways of corporations to the masses. This political movement gave way to a journalistic movement that gave way to a social movement. To get rid of these unwanted entities we have to have the cooperation of legislation and society. To get these two to work together, given the social mind set now, is a near impossible feat, especially during the age of globalization. There is a tidal wave of technology and commerce that is sweeping up societies and opening up market places for the “Big five”. The more these entities grow, the more independent journalists and media companies shrink.

It is evident in history that large entities can be toppled by smaller, or rather, less powerful entities. Revolutions have happened; our very own American revolution gave birth to a beautiful country and Americans in the 21st century too can give birth to something even more beautiful. All of these

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historical movements that destroyed a metaphorical goliath became possible because everyone took action and changed their fate. But in every case of revolution and uprising there is a catalyst. The influence of the educational system in America is paramount, reaching thousands of individuals a day, just like the American media. If professors were to mobilize an educational movement, one that would influence the political sphere to change the legislation, we could have what we saw during the Roosevelt's presidency. Just as laws were set in place to dismantle trusts during the early 20th century, laws can be passed to assure objectivity in journalism.

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NAVILA ABBAS

Mechanisms of Copper-Based Oxidoreductases¹

Abstract

“Mechanisms of Copper Based Oxidoreductases” is a research project designed to thoroughly study the way oxidoreductases are able to oxidize and reduce the substrate on which they react. Laccase is a multicopper oxidoreductase that has a center composed of metal (copper) ions. In order to understand the role of these copper ions, we use specific chemical apparatus also known as Electron Paramagnetic Resonance (EPR) and Circular Dichroism (CD) which allow us to observe the phenomenon that takes place. Through EPR, we come to know that the T-3 (two paired copper atoms) and T-2 (one copper atom also known as normal copper) paired together are the most active sites in the reaction. The T-3 and T-2 site are responsible for binding the oxygen during the reaction, and thus are able to reduce the substrate and oxidize it at the same time. A particular type of fungal laccase which is a white rot fungal laccase known as *Lentinus (Panus) tigrinus* was the main laccase species which was studied to try to understand the mechanisms of laccases and their ability to oxidize and reduce at the same time without having an effect on their substrate.

Laccase (multicopper oxidases, a type of enzymes with metal center) are of particular interest because they have been examined as the cathode in enzymatic biofuel cells. Laccases are some of the few oxidoreductases commercialized as industrial catalysts. These enzymes can be used for textile dyeing/textile finishing, wine cork making, teeth whitening, and many other industrial, environmental, diagnostic, and synthetic uses.

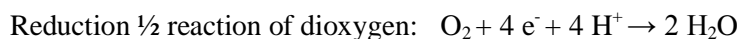
Oxidoreductases are members of a class of enzymes, commonly known as dehydrogenases or oxidases that catalyze the removal of hydrogen atoms and electrons from the compounds on which they act. Oxidoreductases participate in a redox reaction where one compound is reduced and another is oxidized.² These enzymes usually consist of multicopper centers, as copper is a key cofactor in a diverse array of biological oxidation-reduction reactions. There are three spectroscopically different copper (Cu) centers found in multicopper oxidases: type 1 (T1) or blue copper, type 2 (T2) or normal copper and type 3 (T3) or coupled binuclear copper centers. Currently well characterized multicopper oxidases are laccase (Lc), ascorbate oxidase (AO), and ceruloplasmin (Cp).

¹ Completed under the mentorship of Professor Patrick Lloyd for CHM 11: General Chemistry I.

² Encyclopedia Britannica, <http://www.britannica.com/EBchecked/topic/436732/oxidoreductase> (Accessed on 04-15-10).

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Laccase is the simplest of the multicopper oxidases, with one of each type on Cu center for a total of four Cu atoms. In laccase, the T1 site accepts electrons from the substrate. The T3 is a binuclear site of two coupled Cu atoms. The T2 and T3 copper, together form a trinuclear copper cluster site that binds oxygen. This center distinguishes laccase from the coupled binuclear copper proteins (such as tyrosinase) which are not able to produce water from dioxygen. The T-2 and T-3 catalyze the coupling between the four one-electron oxidations of a broad range of substrates with the four-electron reductions of dioxygen to water.



Laccase is found in two forms; plant laccase and fungal laccases. Fungal Laccases are mostly studied because of their three important properties: pigment formation, lignin degradation and detoxification. Pigment formation is the broadest role for certain fungal laccase. This is the reason why fungal laccases are studied, to find possible usage in the field of dyeing or discoloration during recycling.³ One particular type of fungal Laccase obtained from a white-rot fungus (*Lentinus (Panus) tigrinus* or *LtL*) is frequently studied.

According to spectroscopic studies, the *LtL* was found to have an asymmetric unit containing two laccase molecules (A and B). (Figure 1). The progressive reduction of the copper ions centers (obtained by the long-term exposure of the crystals to the high-intensity X-ray synchrotron beam radiation under an atmosphere with no oxygen and high pH) detected two intermediates in the molecular oxygen reduction pathway: the "peroxide" and the "native" intermediates, which were previously only hypothesized through spectroscopic, kinetic and molecular mechanics studies. The electron-density maps reveal a bridge between the peroxide ion and between the two T3 coppers in molecule B, resulting in two-electrons reduction, whereas in molecule A an oxygen ion (O^{2-}) was bridging the three coppers of the T2/T3 cluster together with an hydroxide ion (OH^-), externally bridging the two T3 copper ions, resulting in the four-electrons reduction of molecular oxygen. This was the first structure of a multicopper oxidase which allowed the detection of the two intermediates involved in the molecular oxygen reduction and splitting.

The structure of *LtL* does not show any unusual feature at the T1 active site of the enzyme where the reducing substrate binds and transfers electrons to the T1 copper. There are two solvent channels that provide access to the trinuclear copper cluster which are located in the center of the protein structure. The first channel points towards the two T3 copper ions on one side of the T2/T3 cluster allowing the molecular oxygen to bind to it whereas the second channel points towards the T2 copper ion on the other side of the cluster which permits the water molecules produced in the O_2 reduction to move to the solvent. In the catalytic process, the electrons acquired by the T1 copper from the reducing substrates are then transferred to the T2/T3 cluster through an intramolecular electron transfer pathway starting from the T1 copper ligand (Cysteine-Cys452) and subsequently splitting between (Histidine- His451 and His453) which bind to the T3(a) and T3(b) copper ions respectively.

Multicopper oxidases are easily reduced by addition of substrates or artificial reductants. However, under aerobic conditions their kinetics are complex and difficult to interpret. Therefore the common strategy for the study of their catalytic mechanism has been to first analyze the anaerobic (without oxygen) reduction steps of the oxidase, followed by the aerobic (with oxygen) stages with the reduced enzyme. followed oxygen reaction stages with the reduced enzyme.⁴

³ Harald Claus. Laccases: structure, reactions, distribution. *Micron* 35 (2004), 93-96. http://www.sciencedirect.com.kbcc.ezproxy.cuny.edu:2048/science?_ob=MIimg&_imagekey=B6T9N-49XX1X1J3&_cdi=5119&_user=2920792&_pii=S0968432803001616&_orig=search&_coverDate=02%2F29%2F2004&_sk=999649998&view=c&wchp=dGLzVlz-zSkWb&md5=125dcc88ccc94d034894671fea7bf5c5&ie=/sdarticle.pdf

⁴ Solomon, Edward I., Sundarum, Uma M., Machonkin, Timothy E. Multicopper oxidases and oxygenases. *Chemistry Review*. 1996, 96, 2563-2605. <http://pubs.acs.org/doi/abs/10.1021/cr950046o>.

An alternative method has recently been discovered to study the reduction of metalloproteins, the exposure of crystals to a high-intensity X-ray synchrotron beam. In fact, in several instances, it has been observed that synchrotron radiation can yield the partial or total reduction of the metal ions depending on the particular metalloprotein studied, according to the amount of acquired radiation. This strategy, applied to multicopper oxidases, allows us to observe the progressive reduction of molecular oxygen and monitor the nature of the intermediate states. Up to date no structural studies have allowed us to distinguish the different intermediates mainly because the intermediate states are generally short living and difficult to trap unless more catalytic steps are carried out. Furthermore, it is well known that the activity of laccases is withdrawn at high pH values due to the formation of a strong complex ion which holds back the transformation of reduced oxygen to water molecules.

Formation of complex ion due to high pH: $\text{Cu} + \text{OH}^- \rightarrow \text{Cu-OH}^-$

Due to the complex ion, $\text{O}^{2-} + 2\text{H}^+ \rightarrow \text{H}_2\text{O}$ does not occur.

According to the electron-density maps from *LtL*, there are two different T2/T3 cluster-dioxygen arrangements in the two laccase molecules (A and B) present into the asymmetric unit, possibly corresponding to two different reduction states of the oxygen molecule along the reduction pathway. In both molecules, the T2 copper center is coordinated to His64, His397 and one OH⁻ ligand whereas the T3 copper centers are coordinated to 3 histidine ligands each (His111, His399, and His451 for T3 (a), His66, His109, and His453 for T3(b)).⁵

The Two Electrons Reduction Intermediate

A very recently computed method comprising of X-ray absorption fine structure (EXAFS) and integrated quantum mechanical and molecular mechanics has revealed that a peroxide ion is produced as a result of two electron oxygen reduction. The peroxide ion becomes an intermediate between the T2 and T3 coppers (Figure 2). Previous kinetic and spectroscopic studies describe the four-electron reduced laccase as the species that binds dioxygen at the T3 copper pair and then generates the first intermediate in dioxygen splitting: two electrons are transferred to O₂ from the T3 copper centers producing peroxide intermediate.⁶

The Four Electrons Reduction Intermediate

In *LtL* the T3(a) and T3(b) copper ions are not symmetrically arranged with the oxygen intermediates in both molecules A and B. It has been recently observed that the asymmetric binding of the hydroxide ion is actually the bridging of the T3 copper ions. This was explained by observing a reduced oxidation state for T2 and T3(b) copper ions, caused by automatic reduction due to exposure to high source of X-ray radiation. This asymmetry plays an important role in the dioxygen splitting. It has been noted that the T3(a) copper is closer to the T1 site than the T3(b) copper (Figure 3). Scientists have been able to detect both the peroxide and the native intermediates resulting from the two- and four-electrons molecular oxygen reduction respectively.⁷

⁵ Ibid.

⁶ Marta Ferraroni, Nina M. Myasoedova, Vadim Schmatchenko, Alexey A Leontievsku, Ludmila A Golovleve, Andrea Scozzafava and Fabrizio Briganti. Crystal structure of a blue laccase from *Lentinus tigrinus*: evidences for intermediates in the molecular oxygen reductive splitting by multicopper oxidases. *BMC Structural Biology* 2007,7:60. <http://www.biomedcentral.com/1472-6807/7/60>.

⁷ Ibid.

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The structural characterization of these new intermediates in the reduction of O₂ to H₂O in the multicopper oxidases provides a more detailed explanation of the mechanism. Once reduced, the enzyme reacts with molecular oxygen to produce a peroxide intermediate. The peroxide bridges only the T3 copper pair and doesn't connect the reduced T2 copper to the peroxide. This peroxide intermediate is reduced again, thus oxidizing the T2 and the distant T1 centers to produce the "native" intermediate. Since it is known that at high pH, a strong Cu-OH⁻ complex ion is formed, the O²⁻ + 2H⁺ → H₂O reaction occurs at the trinuclear copper site. Also at low pH, the kinetic data shows that the rate of reduction of the enzyme is so slow and it doesn't affect the overall catalytic rate. On the other hand, the "native" intermediate is reduced rapidly by the substrate and thus it indicates that it is active in the catalysis.⁸

The complete mechanism of the Laccase enzyme can be seen in Figure 4. In the center is the native intermediate which is the substrate that reduces the T1 site. From there, an electron is transferred to the trinuclear cluster. There are two possible mechanisms that can explain the reduction of the trinuclear reduction:

A: The T1 and T2 copper sites act together and reduce the T3 pair

B: Each copper in the trinuclear cluster is reduced by the electron transfer from the T1 site. In this situation, the T3 site does not accept two electrons.

On the left side of the image, the native intermediate slowly decays and forms a fully oxidized form. In this form, the T1 site can still be fully reduced by the substrate, but the electron takes too long to transfer to the trinuclear site and thus this electron transfer is irrelevant to the catalytic nature of the enzyme.⁹

Laccases are studied mainly because they are the most 'eco-friendly' enzymes which react with the air and only produce water as a byproduct. As of right now, the main technological applications of laccases are in the textile, dye or printing industries: in processes related to discoloration of dyes and in the pulp and paper industries, and the delignification of wood, particularly during the bleaching process.¹⁰ Laccases have also been researched in the field of medicine to act as cathodes in enzymatic biofuel cells. They can be paired with electron mediators to facilitate electron transfer to a solid electrode wire.¹¹ Other uses of laccase include wine cork making, teeth whitening, and many industrial, environmental, diagnostic, and synthetic uses. Laccases have also been studied as alternatives for chemical oxidation with

⁸ Ibid.

⁹ Solomon, Edward I., Sundarum, Uma M., Machonkin, Timothy E. Multicopper oxidases and oxygenases. *Chemistry Review*. 1996, 96, 2563-2605. <http://pubs.acs.org/doi/abs/10.1021/cr950046o>.

¹⁰ Wheeldon, I.R., Gallaway, J.W., Calabrese Barton, S., and Banta, S. (2008) Bioelectrocatalytic hydrogels from electron-conducting metallopolypeptides coassembled with bifunctional enzymatic building blocks. *Proc Natl Acad Sci U S A*. 2008 Oct 7;105:40, 15275-80 <http://www.ncbi.nlm.nih.gov/pubmed/18824691> (Accessed on 04-24-10).

¹¹ Ibid. As well as, Adinarayana Kunamneni, Antonio Ballesteros, Francisco J. Plou and Miguel Alcalde. Fungal laccase – a versatile enzyme for biotechnological applications. *Communicating Current Research and Educational Topics and Trends in Applied Microbiology* 2007.1, 233-245. <http://www.formatex.org/microbio/pdf/Pages233-245.pdf>.

substrates. Their main use can be the synthesis of antibiotics which will be very useful in the biomedical field.¹²

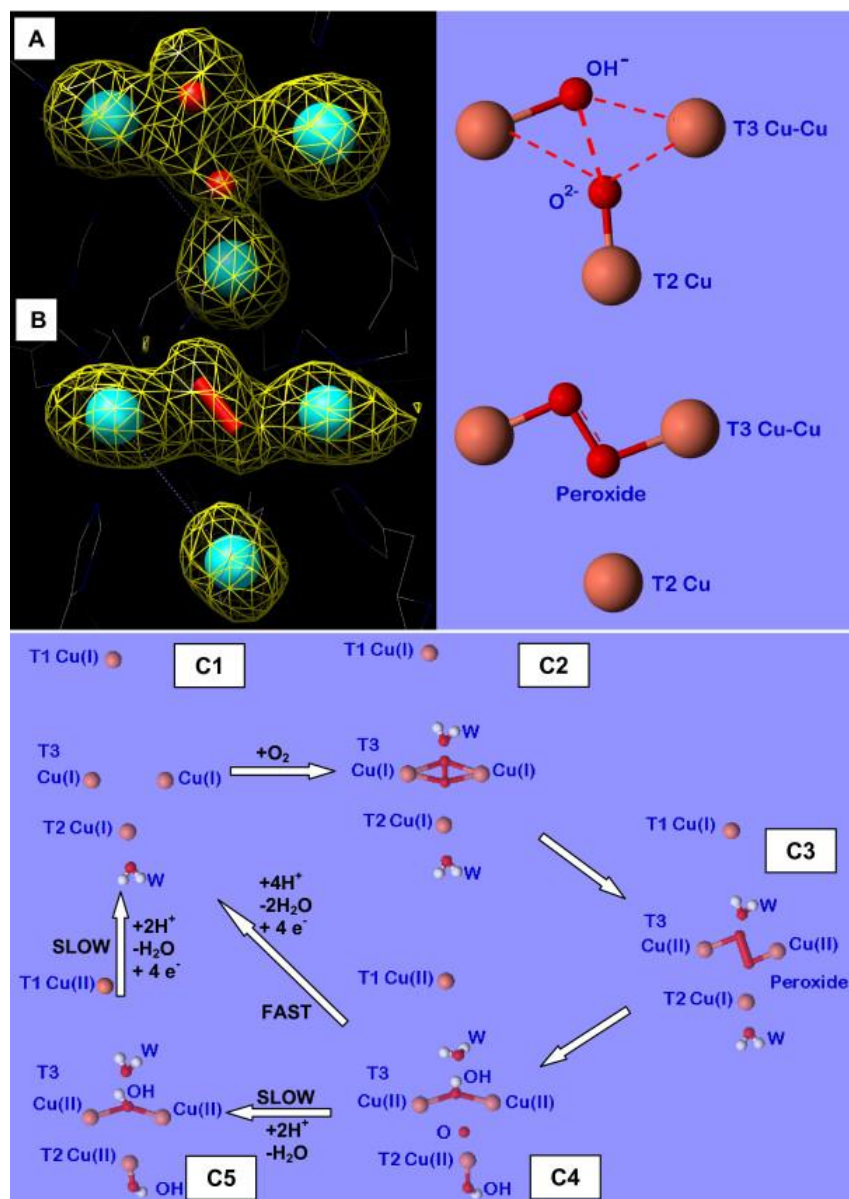


FIGURE 1

Schematic representation of the laccase structure. (Taken from Crystal structure of a blue laccase from *Lentinus tigrinus*: evidences for intermediates in the molecular oxygen reductive splitting by multicopper oxidases by Marta Ferraroni, Nina M Myasoedova Vadim Schmatchenko,

¹² Adinarayana Kunamneni, Susana Camarero, Carlos García-Burgos, Francisco J Plou, Antonio Ballesteros and Miguel Alcalde. Engineering and Applications of fungal laccases for organic synthesis. *Microbial Cell Factories* 2008, 7:32. <http://www.microbialcellfactories.com/content/7/1/32>.

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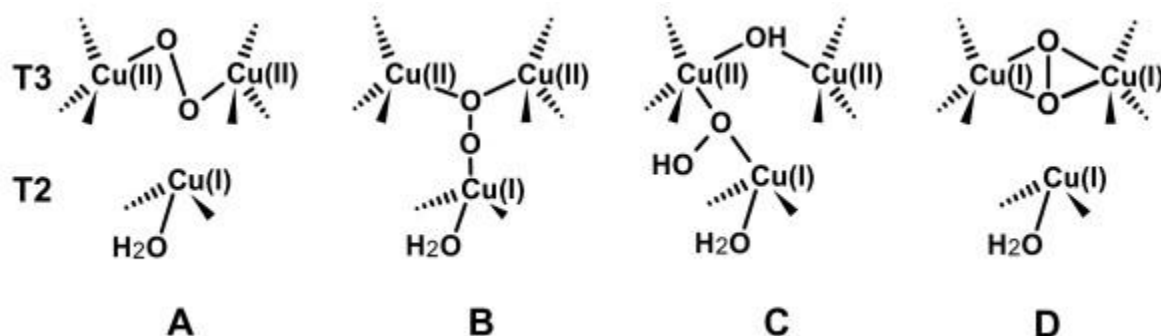


FIGURE 2

The two electron reduction in the trinuclear T-2 and T-3 site with the reduced dioxygen (peroxide). (Taken from Crystal structure of a blue laccase from *Lentinus tigrinus*: evidences for intermediates in the molecular oxygen reductive splitting by multicopper oxidases by Marta Ferraroni, Nina M Myasoedova, Vadim Schmatchenko, Alexey A Leontievsky, Ludmila A Golovleva, Andrea Scozzafava and Fabrizio Briganti., *BMC Structural Biology* 2007, **7**:60., <http://www.biomedcentral.com/1472-6807/7/60>)

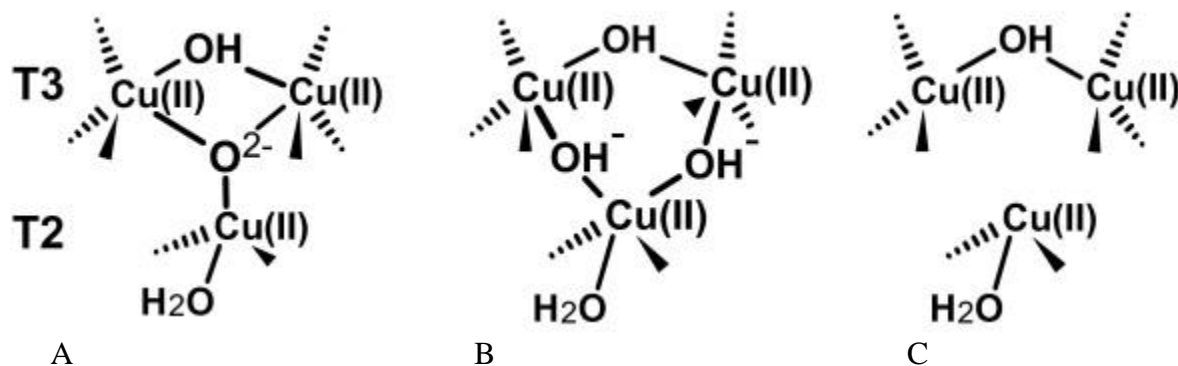
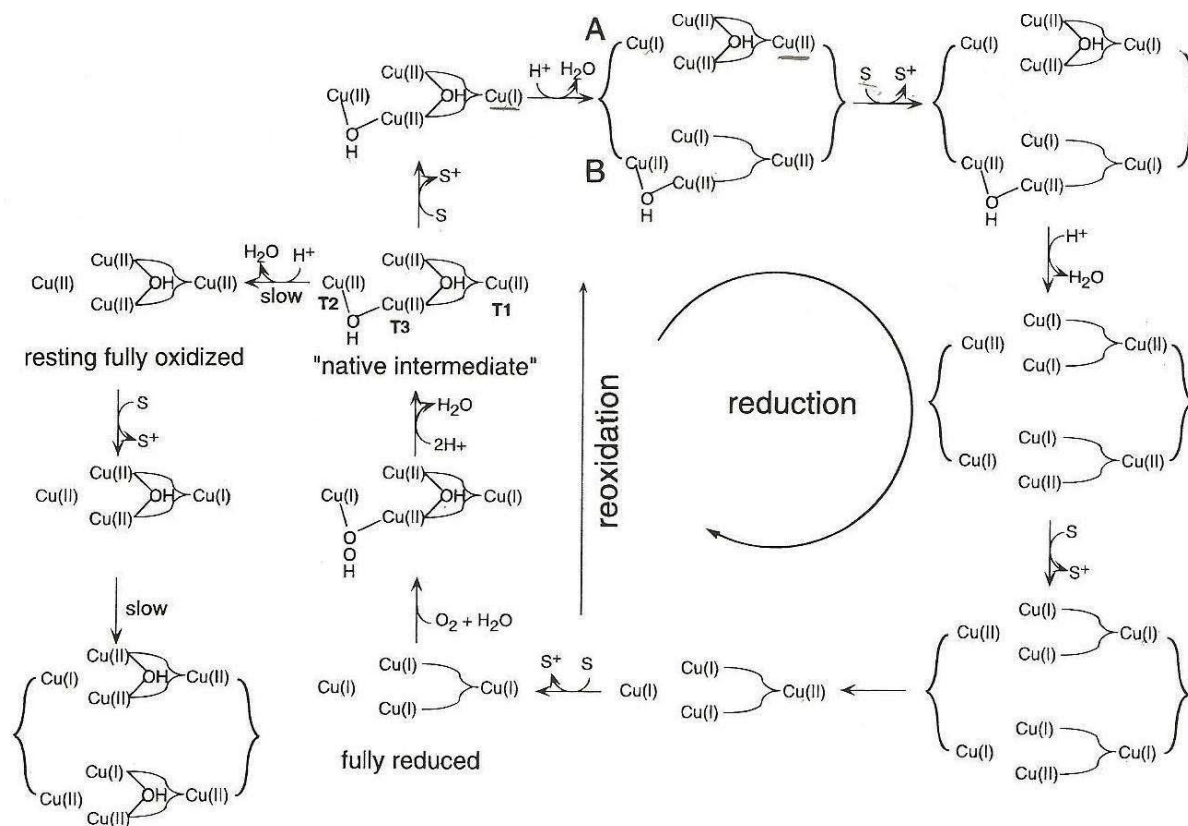


FIGURE 3

Four electron reduction by the dioxygen in the trinuclear T-2 and T-3 site. A and B show four oxygen reduction and C shows the enzyme in resting state. (Taken from Crystal structure of a blue laccase from *Lentinus tigrinus*: evidences for intermediates in the molecular oxygen reductive splitting by multicopper oxidases by Marta Ferraroni, Nina M Myasoedova, Vadim Schmatchenko, Alexey A Leontievsky, Ludmila A Golovleva, Andrea Scozzafava and Fabrizio Briganti., *BMC Structural Biology* 2007, **7**:60., <http://www.biomedcentral.com/1472-6807/7/60>)

**FIGURE 4**

The catalytic cycle of Lc, showing the proposed mechanisms for the reduction and reoxidation of the copper sites. (Taken from Chemistry Review, Department of Chemistry, Stanford University by Solomon, Edward I., Sundaram, Uma M., Machonkin, Timothy E. *Chemistry Review*, Department of Chemistry, Stanford University. November 7, 1996.

[http://pubs.acs.org/doi/abs/10.1021/cr950046o.](http://pubs.acs.org/doi/abs/10.1021/cr950046o)

CHRISTIAN CHAMBERLAIN

The Blind Knight¹

What if one morning you woke up and you could not see? How about if suddenly you were thrown into being an individual living in darkness? My hope is that this paper will bring some awareness and understanding of legal blindness. I will explore the complex issues of my disability: the challenges I've had to face and overcome in everyday life. I've been made to feel like a "second-class citizen," but I need to be seen as a productive, independent, and free human being. I need to be seen as an equal human being in spite of my optical atrophy.

In "Facts and Figures on Americans with Vision Loss," The American Foundation for the Blind states that more than 20 million Americans report experiencing significant vision loss,(approximately 6.2 million). Americans who have vision loss and are 25 years of age and over, have to confront numerous obstacles in everyday life. Four and a half million have less than a high school diploma, 6 million have a high school diploma or GED, 5.4 million have some college education, 3.6 million have a bachelor's degree or higher. Approximately 5.7 million people with vision loss in the U.S. have a family income of less than \$20,000. Approximately 1.3 million Americans are legally blind. Approximately 5, 626 legally blind children use Braille as their primary reading medium. Approximately 109, 000 people with vision loss in the U.S. use long canes to get around. Approximately 1, 500 graduate from a dog-guide user program.

As an individual with a visual impairment I have had some negative experiences, but also have positive ones. I would like to offer my testimony so that people who have disabilities might relate and hopefully overcome and achieve their dreams, wishes, and goals. People who do not suffer from this disorder could have more understanding, compassionate behavior, and willingness to help to improve the condition of people affected. I suffer from Optic Nerve Atrophy (ONA), which is a permanent visual impairment caused by damage to the optic nerve.

When I was in the second grade I encountered a teacher who taught current events. One day he wrote some information on the black-board and I was unable to see it. I requested that the teacher dictate the information to me so that I could write it down but he refused to help me. The teacher said, "You are blind and dumb and you will not graduate from high school or graduate from college." My confidence and self-esteem quickly took a nose dive. Somehow his words managed to kill a little piece of my faith in teachers. As a result of this event, I had to leave this school because I was not getting the necessary tools and support that I needed to succeed.

When I hear people's hurtful comment about me I get very angry. Unfortunately, I have to deal with these types of situations. I do not have to be constantly reminded of my impairments. It gets annoying and eventually I feel depressed. As result of all these situations I feel threatened and provoked.

These negative experiences eventually brought me to an all time low. My current events teacher in second grade nearly destroyed my confidence by stating that he couldn't accommodate my needs for my disability.

¹ Completed under the mentorship of Professor M.G. Hernandez.

I wanted to regain trust in my teachers. It took me a long time to trust educators again. Eventually, I was taught how to be an independent person. For example: I was taught how to manage my schedule and when to do my school work. By sticking to a tough routine they taught me how to be a more confident person. However, if I did not stick to the plan, then I would have an infraction, which could lead to a penalty such as early bedtime. Even certain privileges would be taken away, such as watching TV or calling home. Such instances happened but I made sure they did not happen again by following orders. It feels good when you follow orders to the letter so that people can say that you are more of the type that follows through, instead of the being a troublesome type.

The second area that I explored is learning to be a student, which makes one more aware of what is priority one and what the secondary objectives are. For example, if I have a test on a certain day I would prepare by studying for it well in advance. I would go for tutoring where I get the necessary support to deal with my assignments. If I were not dedicated, I would not have come this far academically and be so close to graduating from college

Between the years of 1996 to 1999 there was a situation that could have affected visually impaired students. Albany wanted to cut funds called the 4201, which supports students that have multiple disabilities. During this time, I decided to get involved in trying to prevent the funding from being terminated. According to the Constitution, people are entitled to have a quality education no matter what color or disability they have. They need to be treated with dignity and I took action to prevent this from happening. Information packets were circulating to the general public on this matter. The public needs to be aware of what is going on with this specific subject, as well as what our politicians are using our tax dollars for. A petition took place. This would show that people were concerned about what was happening. The reaction that I got was that the public was not pleased because they wanted to cut off funding from students that needed the extra support through school. As a result, Albany decided not to proceed with its agenda. The New York Institute for Special Education is still active.

Students that have a disability should feel welcome and not feel like they are second-class citizens. If they are feeling like that, this means that someone or something is bothering them. They should say something to a teacher or even child care worker if they feel neglected or discriminated against. Speaking up empowers the student.

On the political side there have been three bills that support people that have disabilities: "The Rehabilitation Act," "The Individual with Disabilities Education Act" and "The American Disability Act."

The first piece of legislation bill: "Rehabilitation Act" of 1973, which resulted in the creation of a nationwide network of independent living centers, was created from the disability movement. This act created a network of living facilities and it also advocated and supported for people that have many disabilities. Another part of the Rehabilitation act has a section entitled 504, which prohibits discrimination against people who have a disability. It also gives disabled people the same equal rights as other groups of people.

The second piece of legislation: "Individual with Disabilities Education Act of 1975," provides people, who have impairments, with a quality education because of the disability rights movement of the 1960s to secure rights for people who have been damaged by discrimination. People who have disabilities watched and participated in this movement, they created new tactics so that they can be a part of society.

The second goal of this act is to have parents and students as well as educators on the same page, because the student needs an Individualized Education Plan that gives a student extra services for support. There are a number of reasons why a student may need more assistance, (development delay and learning disability). These services would stay in place until the student reaches 21 or graduates from high school.

The third: "American Disability Act" of 1990, which has a clear goal: To provide a free, appropriate, public education for children with disabilities. Among other mandates, IDEA requires input from parents and a disabled student in establishing Individualized Education Plans (IEP). Early intervention programs were made available to the families of children diagnosed with developmental problems. Students with disabilities were entitled to services until they graduated from high school or reached their 21st birthday.

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Centers have been devoted to help disabled people, assist them in addressing complex issues, and achieve physical independence. Mobility training is essential for safe travel. Rehabilitation training to learn everyday life skills include: cleaning, shopping, personal hygiene, grooming, money management, mediation management and assistive technology training, and appropriate accommodation, (CCTV, adaptive equipment, and optical aids, among other things also) Vocational Rehabilitation Counselors assess, train and review possible careers paths. Vision teachers deal also with the psychological and sociological obstacles to enhance their student's self-esteem and self-confidence by participating in a variety of recreational activities, while providing a unique environment to hone socialization skills (*Helen Keller Services for the Blind* 7).

I wanted to excel, feel unrestrained, not a victim. For that, a new spiritual journey began for me. People who have been converting their disabilities and turned them around as a gift to all of us became my role models: These people inspired me to strive to overcome my disability and to inspire others to do the same.

With the help of government agencies, such as The Commission for the Blind, and my CBVH counselor Tod Cohen and the disabilities acts that have been implemented, people with disabilities have made progress.

Many of my dreams have come true and I sincerely hope that other disabled people will and my continue to make progress in their lives in regards to achieve their best vocational goals. I hope that with this paper I have instilled awareness and zeal to pursue the path to freedom and success.

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LAINGA TONG

Extra-Pair Paternity in Birds: Studying Variations among Populations with the Genetic-Diversity Hypothesis¹

Abstract

Extra-pair paternity is highly variable in birds between species and between populations of the same species. In intra-specific level, the genetic diversity hypothesis suggests that females seek extra-pair copulation to increase the genetic diversity of their broods so that females are more likely to seek extra-pair copulation when there is more genetic variation among males. It has been proposed that island populations have a lower genetic variation than their mainland counterparts. Here I made a comparison analysis of the frequency of EPP in island populations and their mainland counterparts. The result showed that the frequency of EPP was consistently lower in island populations. The result suggested: (1) island populations characterized by low frequency of EPP, (2) the frequency of EPP and genetic variation may have positive correlation in intra-specific variation, (3) the frequency of EPP should be depend on the percentage of broods showing at least one extra-pair young.

Introduction

Copulation with an individual other than its social-pair bonded mate, often resulting in extra-pair paternity (EPP), is documented in a wide range of bird species (Westneat et al. 1990). According to

¹ Completed under the mentorship of Professor Mohamed Lakrim for BIO 14: General Biology II.

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previous studies, there are intra- and inter- specific variations in the frequency of EPP among bird species (Westneat and Stewart, 2003). For example, in the Superb Fairy wren (*Malurus cyaneus*), over 60% of offspring were extra-pair (Dunn and Cockburn, 1999) whereas, only 8.9% were extra-pair offspring in the Galápagos Hawk (*Buteo galapagoensis*, Faaborg et al. 1995). The reasons for these remarkable variations are still being studied. Current research focuses on the evolutionary significance of EPP through examining costs and benefits of EPP for females and males (Charmantier and Blondel, 2003). Females play a largely active role in EPP by accepting or rejecting extra-pair copulation or by actively seeking it (Westneat et al. 1990). Since females play a control role in extra-pair paternity, the variations in benefits and costs to females is likely the main factor of the variations of extra-pair paternity. Although there are some proposed explanations that females may gain direct benefits from extra-pair males, most research studies focus on the genetic benefits to females (Ockendon et al. 2009).

A female can get the genetic benefit from extra pair copulation only if the extra pair copulation results in extra-pair fertilization. For extra- pair copulation to result in extra-pair fertilization, it must occur during the female's fertile period. Most male birds lack an external sex organ to be inserted into the female to place the sperm deeply and securely inside her body (Caceci, 2008). It increases the possibility of being cuckolded as the control role is taken by females. During mating, a male moves the opening of his cloaca close to a female's, then the sperm is transferred from the male to the female, which is known as a cloacal kiss (Caceci, 2008). The sperm is stored in the sperm host glands of female which can store sperm from an hour to weeks, depending on the species of bird. At this period, if the female sneaks away from her social paired male and has extra-copulation with other males, her sperm host glands will have sperm from different males that she has copulated with. When an egg is formed, sperm is released to travel up to fertilize the egg and can result in EPP (Caceci, 2008).

One of the main explanations for the variations of EPP is the genetic diversity hypothesis (Brown, 1997). This hypothesis states that a female benefits from EPP through increasing the genetic diversity of her brood. A female may gain the genetic benefits in two ways. First, increased heterozygosity in her offspring probably can reduce the expression of recessive lethal or deleterious alleles and therefore reduces the chances of having recessively inherited disorders in her brood (Brown, 1997). Second, increased genetic diversity of her brood is an insurance against an unpredictable environment. If alien diseases or parasites emerge, genetic diversity of offspring may increase the chances that at least some offspring will survive (Westneat et al. 1990).

This hypothesis is supported by many recent studies. Some studies have shown that females are more likely to have extra-pair copulation with genetically dissimilar males (Masters et al, 2003; Fossøy et al. 2008) or tend to seek extra-pair copulation when their social mates are genetically similar to them (Slagsvold et al. 2001; Eimes et al. 2005; Tarvin et al. 2005). It is also found that cuckolded males were less genetic variable (Otter et al, 2001). Furthermore, extra-pair young have been found to have a higher

heterozygosity than within-pair offspring (Rubenstein, 2007; Foerster et al. 2003; Whittingham et al. 2006).

Petrie and Lipsitch (1994) suggested that females will be more likely to seek EPP if there are high heritable variations among the males' genetic quality. It is assumed that females may suffer costs from having extra-pair copulation. For example, social-pair males may respond to their females' involvement in extra pair copulation by reducing his care to the brood. Also, it may increase the chances of being exposed directly to parasites or disease carried by males. There is also an increased risk of predation (Westneat et al. 1990). If there is only a little variation among males in a population, the genes from the additional mates will only be slightly different than her social pair while the females have to pay the same costs. Therefore, based on the genetic diversity hypothesis, it can be predicted that populations with greater genetic variations have a higher frequency of EPP (Petrie and Kempenaers, 1998). The positive correlation between EPP and genetic variations was supported by a comparative study of sister pairs of species and populations of the same species (Petrie et al., 1998). This study suggested that genetic variations may be an explanation for the variations of EPP.

Comparing island populations to their mainland counterparts of the same species was suggested as a way to examine the role of genetic variations in explaining frequency in EPP (Petrie and Kempenaers, 1998). Recent studies showed that the frequency of genetic variations in island populations was significantly lower on average than in mainland populations in mammals, birds, plants, insects and arachnids (Frankham, 1997). Island populations tend to have reduced genetic variations because of a combination of founder effects, inbreeding, genetic drift, and low rates of dispersal (Griffith et al. 1999). Griffin (2000) and Møller (2001) did comparative studies that compiled data on frequency of EPP in mainland and island populations from previous research papers. The results of those papers both showed that island populations do exhibit lower frequency of EPP than mainland populations.

In this paper, I reviewed the prediction of Petrie and Kempenaers (1998) that the island population has lower frequency of EPP than the mainland population of the same species. From published papers, I compared the frequency of EPP between island and mainland populations. The main objective is to find whether there are differences in the frequency of EPP between island and mainland populations that will conform to the genetic diversity hypothesis.

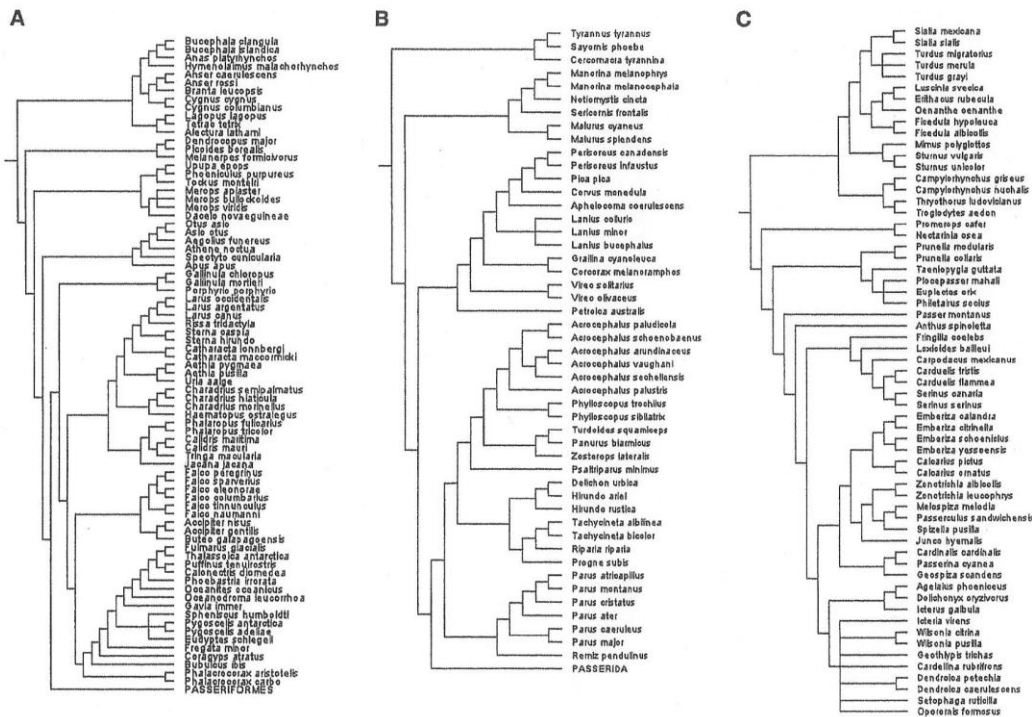


Figure 1 (see Methods for sources)

Methods

I have reviewed data sets of the frequency of EPP from 20 studies. I selected studies that tested the frequency of EPP in island populations and in mainland populations of the same species. Where there were no available studies for the same species, I found studies of a closely related species to the chosen island populations, based on their shared phylogenetic history (Møller and Spottiswoode, 2002). The phylogenetic information is shown in Figure 1. 11 pairs from 20 studies are included in the data set.

The data from each study are presented in this paper: names of the species, whether it is island or mainland population, percentage of broods with at least one extra-pair young (EPY) and percentage of EPP among all offspring. All data and sources are reported in Appendix A.

For populations which were studied for more than one breeding season and have different frequency of EPP each breeding season, I took the mean level of each breeding season.

In Griffin's and Møller's comparative studies (in 2000 and 2001, respectively), the frequency of EPP depended on the percentage of extra-pair young among all offspring. I used a different way to determine the frequency of EPP. In my paper, the frequency of EPP depended on the percentage of broods that had at least one extra-pair young. However, the data of the percentage of extra-pair young among all offspring in all the reviewed research studies are still included in order to find whether the

result will be different or not by using individual broods as units and individual extra-pair young as units of analysis.

The hypothesis can be tested in two ways. First, I compare the mean level of EPP between the mainland populations and the island populations. Second, I compare the frequency of EPP individually between each island population and its mainland counterparts.

Results

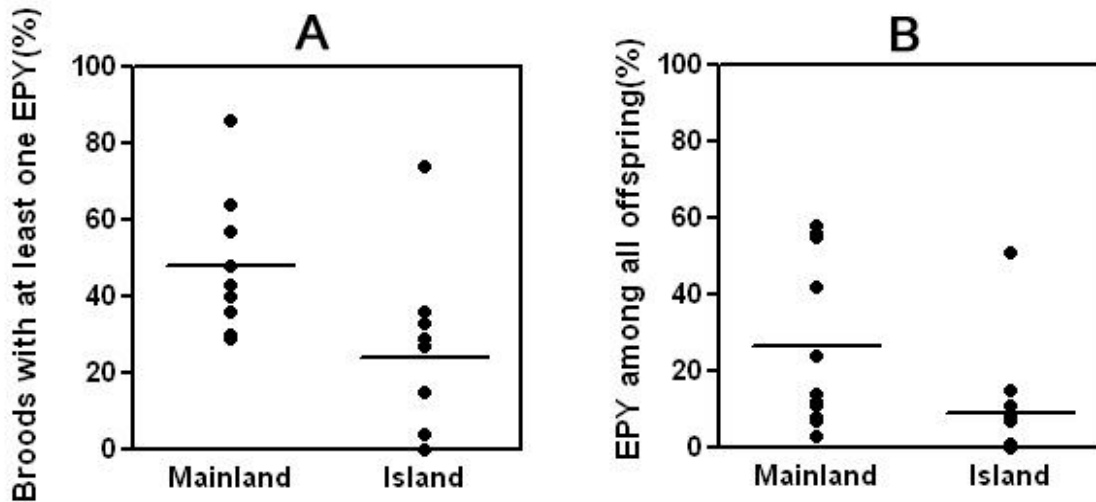


Figure 2 The level of extra-pair paternity (EPP) in mainland and island populations with the mean level
 (a) The percentage of broods with at least one extra-pair young (EPY)
 (b) The percentage of extra-pair young (EPY) among all offspring

The mean level of broods with at least one extra-pair young in island population was lower than in mainland population. There was 48.1 % of broods with at least one EPY in mainland populations, which was more than the 24.2% broods with at least one EPY in island populations (Figure 2a).

The mean level of extra-pair young among all offspring in island populations was lower than in mainland populations. There was 22.4% EPY among all offspring in mainland populations, which was more than the 9.18% EPY among all offspring in island populations (Figure 2b).

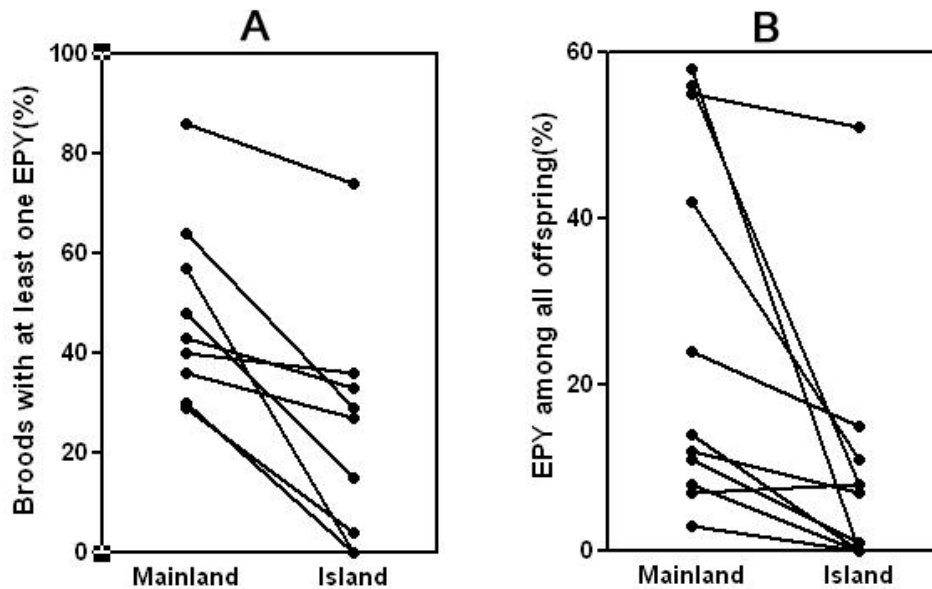


Figure 3 Pairing comparison of the level of EPP in island and mainland populations
 (a) The percentage of broods with at least one extra-pair young (EPY)
 (b) The percentage of extra-pair young (EPY) among all offspring

The pairing comparison between island populations and the matched mainland populations confirmed the above results. In all of the 9 pairs, the island populations had a lower percentage of broods with at least one extra-pair young (Figure 3a).

In 10 of the 11 pairs, the island population had a lower percentage of extra pair young among all offspring (Figure 3b). The pairs that did not conform to the overall correlation are *Parus major*s.

Discussion

In the findings, the frequency of EPP was consistently lower in island populations than in mainland populations. This supported the prediction proposed by Petrie and Kempenaers (1998), based on the genetic diversity hypothesis.

According to the genetic diversity hypothesis, EPP is driven by the female trying to enhance the genetic diversity of their offspring. Therefore, a lower frequency of EPP is expected in island populations because lower levels of genetic diversity in island populations reduce the genetic benefits of EPP to females.

Although the comparison analysis of this paper showed that the island populations exhibited a lower frequency of EPP than mainland populations, it does not provide the main reason of this pattern. The principle behind the comparison of island populations with mainland populations is the assumption that the island populations have lower genetic variations. However, this paper did not test whether island populations have lower genetic variations; it only compared the frequency

of EPP in island populations with mainland populations. It is possible that the assumption is wrong and those islands populations may have lower frequency of EPP but with the same or higher genetic variations as mainland populations.

The evidence of lower genetic variations in island populations has been confirmed in other species. Frankham (1997) found that island populations of mammals, birds, insects, arachnids and plants have 29% less genetic variations than their mainland counterparts. The result was consistent with a pairing comparison study of EPP in pairs of island and mainland populations of birds. The study showed that EPP was consistently lower in island populations which also had lower genetic variations (Møller, 2001).

However, some studies showed that island populations with a lower frequency of EPP do not have significantly lower genetic variations. For example, house sparrows on the island of Lundy in England exhibited a lower frequency of EPP than all the other house sparrow populations that have been studied (Griffith et al, 1999). However, the level of genetic variations of the island population was found to be no different to their mainland counterpart. There is also another study showing that a low level of EPP in island population may not be associated with a low level of genetic variation. In one study, fifty adult house sparrows from a mainland population were introduced to an island population that resulted in an increased level of genetic variations in the island population (Ockendon et al, 2009). If females want to increase the genetic diversity of their offspring, the island females should seek extra-pair copulation with foreign males. After the introduction, there was an immediate increase in the frequency of EPP in the island population, but most of the birds that were involved in extra-pair copulation were island males. The result was contrary to the expectation based on the genetic diversity hypothesis.

It can be concluded that comparing the frequency of EPP in island and mainland populations of the same species may not be the best way to test the genetic diversity hypothesis. Island and mainland populations not only differ in their genetic variations, but also differ in a number of other ways. For example, in a constrained island environment, the costs of EPP (e.g. the loss of male help in rearing offspring) for females are higher and not worth paying (Griffith, 2000). Moreover, it was proposed that EPP should be lower in populations where females can assess the genetic variation of males over a long period. Females in an island population perhaps have a good opportunity to judge the males, resulting in lower level of EPP (Griffith, 2000). Therefore, there are other explanations of low frequency of EPP in island populations.

According to the genetic diversity hypothesis, low frequency of EPP can also be predicted for a population that has recently gone through a bottleneck (Petrie and Kempenaers, 1998). I suggest an experiment to test the genetic diversity hypothesis. First, we choose a small population of birds and create a bottleneck event to reduce its genetic variations (e.g. take half of the individuals left) for the population and collect data of frequency of EPP before and after the

bottleneck event. If the population has an immediate decrease in the frequency of EPP after the bottleneck event, it will support the genetic diversity hypothesis. Then, we re-introduce the genetic variations of the population to the original condition (e.g. send those removed individuals back to the population). If the frequency of EPP increased after the re-introducing, it will support the genetic diversity hypothesis strongly that low frequency of EPP in a population may associated with a low level of genetic variation. Moreover, comparing the frequency of EPP between different breeding seasons in one population is better than comparing the frequency of EPP between island and mainland populations. As I discussed above, beside low genetic variations, there are other variables may be attributed to the lower frequency of EPP in island populations. Comparing the frequency of EPP between different breeding seasons (one before a bottleneck event and one after a bottleneck event) in one population can eliminate these other variables so that any change in the genetic variations can be attributed to the change in the frequency of EPP.

According to the comparison analysis of this paper, the only pair that did not conform to the overall correlation is *Parus major*. The island population of *Parus major* had a lower percentage of broods with at least one extra-pair young but it had a higher percentage of extra pair young among all offspring. This incompatible result is due to a different way to determine the frequency of EPP, using individual broods as units and using extra-pair young as units of analysis. A female can control the storage of the sperm in her sperm host glands. She can have different sperm from different males in the sperm host glands if she had extra-pair copulation. However, she cannot control whether the social-pair male or extra-pair male's sperm wins the sperm competition when she releases the sperm from the sperm host glands to fertilize the egg. Therefore, females cannot control the number of extra-pair young in her brood. If EPP is driven by females trying to gain benefits to their offspring and females cannot control the number of extra-pair young in their broods, the frequency of EPP should depend on how many females are involved in extra-pair copulation that result in extra-pair fertilization, not the number of extra pair offspring the population has. Therefore, I suggest that individual broods be used as units of analysis if the costs and benefits of EPP for females are to be examined in further studies.

Appendix A

Species	Status	%Broods with EPP	% EPY	References
<i>Accipiter gentilis</i>	m		3%	Gavin et al. (1998)
<i>Buteo galapagoensis</i>	i	0%	0%	Faaborg et al. (1995)
<i>Emberiza schoeniclus</i>	m	86%	55%	Dixon et al. (1994)

	i	74%	51%	Bouwman et al.(2006)
<i>Ficedula hypoleuca</i>	m	43%	24%	Gelter and Tegelstro'm (1992)
<i>Ficedula albicollis</i>	i	33%	15%	Sheldon and Ellegrent (1999)
<i>Passerina Cyanea</i>	m	48%	56%	Westneat et al. (1990)
<i>Geospiza scandens</i>	i	15%	8%	Petren et al. (1999)
<i>Carpodacus mexicanus</i>	m		8%	Hill et al. (1994)
<i>Loxioides bailleui</i>	i	0%	0%	Fleischer et al. (1994)
<i>Luscinia svecica</i>	m	64%	42%	Questiau et al. (1999)
<i>Oenanthe oenanthe</i>	i	29%	11%	Currie et al. (1998)
<i>Passer domesticus</i>	m	29%	11%	Griffith et al. (1999)
	i	4%	1%	Griffith et al. (1999)
<i>Parus caeruleus</i>	m	40%	12%	Leech et al. (2001)
	i	36%	7%	Krokene et al. (1998)
<i>Parus major</i>	m	36%	7%	Lubjuhn et al. (1999)
	i	27%	8%	Krokene et al. (1998)
<i>Vireo olivaceus</i>	m	57%	58%	Morton et al. (1998)
<i>Petroica australis</i>	i	0%	0%	Ardern et al. (1997)
<i>Panurus biarmicus</i>	m	30%	14%	Hoi and Hoi-Leitner(1997)
<i>Zosterops lateralis</i>	i	0%	0%	Robertson et al. (2001)

Status: m= mainland population, i= island population; %Broods with EPP: percentage of broods with at least one extra-pair young (EPY); % EPY: percentage of extra-pair young (EPY) among all offspring.

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YOSEF RIVKIN

The Pharisaic-Sadducean Chasm: An In-Depth Look at Two Jewish Sects from the Late Second Temple Period¹

Abstract

Since this paper hasn't been choked with many requirements and restrictions, I've used some artistic license in preparing it, and have written it through the eyes of a fictional character based upon Yosef, son of Matisyahu, born in 37 or 38 CE; known to the modern world as the first Jewish historian, and by his Greek name Josephus. Here, a teenage Yosef is witness to a fictional open debate between the Sadducees and the Pharisees. Using this method, the paper will attempt to explore known Sadducean philosophy—with little attention to later Hellenist infiltrative influence on them. Care has been taken to distinguish the Sadducees from the Boethusians, the Karaites, and the Minim, despite rabbinic commentaries terming them all under the umbrella name “Sadducees”. History landed on the side of the Pharisees, so how we see their opponents may be colored by how they remember them to be. Nevertheless, this paper will quote the available Sadducean ideological and legal statements that are available from primary and secondary sources, and allow the reader to construct his/her own pattern of their position.

I stand within the temple's inner courtyard, but everything looks different. The altar's perpetual fire has been doused; its now cold ashes have not been cleaned for what looks like weeks. There is a smoky fog everywhere. It seems to emanate from all around the temple complex. Men, women and children run screaming past me towards the inner sanctuary. (This part of the dream was always strange to me once I awoke, since the inner courtyard is barred to all but on-duty *Kohanim*².) The smell of burning wood and flesh invades my nostrils, together with smoke. I can see bodies and blood everywhere. My wife is somewhere here, too; I don't know where. (Once awake, I remember I have no wife.) I look for what everyone is running from. It is a massive fire. Its heat is intense; it blisters and burns my face, and it consumes the very stone of the temple walls. It now notices me. It takes the form of an eagle, and swoops at incredible speed directly to where I stand. I turn and run toward the inner sanctuary like the people around me. But I can't get in because the sanctuary's door way is blocked by a crouched lion, also of fire, roaring angrily and... and painfully? There is no way to pass; there is no air to breathe. Hope is gone. The approaching fire eagle behind me now seems more inviting to me, more befitting me. The collective heat from both in front and behind me is suffocating... At this point I always wake up, shivering and sweating as if in the grip of a strong fever.

¹ Completed under the mentorship of Professor Miriam Cohen for *History 67: Jewish History Post Bible*.

² Members of the priestly caste. 'Priestly' by dint of being patrilineally descended from the biblical Aaron, brother of Moses.

I gasped awake. I was safe. I was in my bed, at home in Jerusalem. A bird—I think it was a crested lark, but it was still too dark to be sure—chirped outside my window. Through it, I could see the first light of the day slowly shooing away night's darkness. Though I was fully awake now, the dream that jostled me was still uncomfortably retained by my mind. I don't usually remember my dreams, but this was a recurring nightmare. My father always became nervous when I told him about this dream. He advised me to immerse myself in my schooling to help rid myself of interfering thoughts that might cause the dreams. Thankfully, my parents were not home now to see my troubled face.

Pushing away these troublesome thoughts, I washed my hands and face with my water-bowl nearby. I then prepared to start my day. I donned my clothes, then my *tefilin*. I left my empty house, and began walking north to the nearest city square.

I lived in the wealthy south-west neighborhood of Jerusalem, and so most homes in this community had multiple rooms, (and, for some reason, red roofs³). As a member of the very first and most prestigious of the twenty four watches of *Kohanim*, and a descendant of Hasmonean royalty through my mother (Josephus, *Autobiography of Flavius Josephus*, c. 99 CE), I would probably be appointed to a prestigious position to serve in the temple once I came of age at twenty (Talmud, Chullin, p. 24b).

My mother persistently reminded me how fortunate my destiny was: I was born and raised by a privileged family to live a privileged life. Though my mother's father was a Sadducee and thus didn't believe in destiny (believing it to impede freewill), she herself was not Sadducee, as most daughters of Sadducees followed Pharisaic law (Mishnah, Niddah, c. 200 CE, p. 4:2: Minority opinion of R' Yose). Born into semi-nobility, I was in the uncommon position to choose my own future rather than have it forced upon me by necessity and life-circumstance. If I so chose, my lineage would enable me to succeed among the Sadducees, where status was ascribed from birth; or if I decided, my mind would enable me to succeed among the Pharisees, where status was achieved through shrewdness and charisma. My careful attention to detail and strong motivation to succeed insured success in any sect I chose. That is, of course, if I truly had free choice in the matter. While both my father and mother assured me that my future was entirely mine to decide upon, I had heard of greater philosophical ideas at play here. The Sadducees believed in free choice, with no fate whatsoever, and no divine intervention to speak of, the Essenes believed only in destiny, without free choice to speak of, and the Pharisees believed that both were at play, but in separate instances (Josephus, *Antiquities XIII*, c. 94 CE, pp. 171-3).

Today, my father had discussed with me earlier, I was going to choose which of the three main Jewish sects would first educate me about how to think, live and teach. I was interested in both the Pharisees and Sadducees, and today they were both scheduled to engage in open debate to win over the hearts and minds of this community's populace. This was a unique occasion, since their dispute was intimate and long, beginning over two centuries earlier. The Sadducees were mostly drawn from the cultured, wealthy and privileged upper class, and I had many relatives among them who would no doubt help propel me to the top of their society; but the Pharisees represented the country's majority—the middle and lower class. I, being of Hasmonean descent, could potentially enjoy even more popularity than any of the other Pharisees, since even they concededly allowed Hasmonean retention of both kingship and the high-priesthood due to the latter's popularity (Schiffman, 2003). I knew I would eventually need to study with both sects to achieve lasting greatness in this country—whose constituency was constituted mostly of these two groups—but today's debate would help me decide which of their philosophies would be first to enter and influence my mind.

Then there was the third group: the Essenes. They weren't nearly as politicized as the first two groups, and so weren't as important or appealing to me. Their members chose an ascetic and mysterious lifestyle within their socialist collectives, cloistered within exclusive enclaves among the hillsides and in

³ This may or may not have actually been true. A replica of Jerusalem during the time of Josephus can be viewed at the Israel Museum in Jerusalem, as well as at their website: http://www.imj.org.il/panavision/model_pre_3eng.html, which, though more convenient, is less inspiring and informative. There the homes of the upper class neighborhood are portrayed with red roofs.

the wilderness outside the cities, only entering what they considered to be materialistic and impure municipalities on rare occasion to conduct business or to recruit qualifying children from others. The majority of their order neglected wedlock,⁴ and relied on recruitment for perpetuating and growing as a group. They selected other people's children while they were still pliable and fit for learning, recruiting them to be of their kindred and forming them according to their own manners. (Josephus, *The Wars of the Jews*, c. 75 CE, p. II 120) Though the recruiters always intrigued and mystified me when they visited Jerusalem, sweating ritualistically as they did in their flowing and bright white robes, still, their ascetic, spiritual, and socialistic lifestyle held little appeal to me. I, whose teachers always distinguished for good memory and ease in learning (Gottheil & Krauss), knew that only achievement sets a man ahead of his peers, yielding success, social recognition and admiration. There was no room for individual achievement among the humble lifestyle and community of the Essenes, and so I could never see myself settling among them for long. Who could bear to live out his days with no distinction, with no outstanding honor from his colleagues despite his significant contribution to them?

By now the sun had fully risen in the sky, its intensity forcing me to hood my eyes. High in the cloudless sky, a small falcon soared, requesting from its Creator the day's meal with a prayer-service used by and known only to birds-of-prey. Opposite the sun, at the far-east side of the city, the temple, crouching majestically, still towered among the buildings around it, greeting the sun both with a perfectly vertical plume of smoke from the day's first *Tamid* sacrificial-offering, and with a menorah affixed above its main sanctuary's door that glistened in the sun like a golden diadem-amulet. (Mishnah, *Yoma*, c. 200 CE, p. 3:10) Even the Antonia fortress, six hundred feet farther northwest, once a palace for the Hasmonean kings, seemed an eyesore beside the temple. Indeed, the fortress was no longer a contender for symbolizing beauty in this city, nor was it used for royalty anymore. Herod, the violent, perpetually paranoid dictator, had renamed and transformed it over a century earlier into a fortress,⁵ and now the building was used by the Romans as a military garrison and for governance. The Romans never allowed these two components of their influence to part far from each other.

I arrived at the square. On Mondays and Thursdays, it was a hectic, bustling place of commerce, but today the Pharisaic-Sadducean debate seemed to be the only event of attraction. A small battalion of Roman troops stood off to the side. They stood casually—if uncomfortably—in the Jerusalem heat, carrying their usual full complement of battle gear and armor. I joined a large crowd of spectators that had already gathered around two distinctive groups of men who stood on elevated platform, and who had a mediator situated between them. The mediator appeared dignified, dressed plainly but respectably, and looked oddly comfortable—even aloof—despite the obvious tension emanating from the two groups on either side of him.

The first group, who were recognizably the Sadducees, included some of my distant relatives and were clearly dressed to impress. They wore clothes similar to their temple service uniforms. This seemed to me a subtle exhibition of their spiritual and social ranking as priests. Their leader was a tall thin man with intelligent, piercing eyes. He didn't seem like the type of person who made mistakes or who minced words, and no one ever told him he was talking too much.

Opposite them, the Pharisees were dressed far more plainly, perhaps to demonstrate subtly that their society was open, accessible, transparent, and accountable to the masses. Although their leaders were not elected by the citizens, as the Greeks innovated with their senators, a Pharisaic leader's status was the product more of his individual achievement and charisma than the ascribed-status society of his opponents.

⁴ “There is another order of Essenes who agree with the rest as to their way of life, customs, and laws, but differ from them in the point of marriage, thinking that by not marrying they cut off the principal part of human life which is the prospect of succession. Indeed, if all men should be of the same opinion, the whole race of mankind would die out.” (Josephus, *The Wars of the Jews* II 160-161)

⁵ 35 BCE

The leader of the Pharisees was a portly man of medium height. He seemed to be more friendly, sociable and worldly than his Sadducean counterpart. He also appeared more in his element than his opponent, as if the market place and those who frequented it were his kind of people. As I watched him, I gradually recognized him as Yochanan ben Zakai, a famous leader.⁶ Apparently, the Pharisees saw this as an important debate to win—no doubt due to this city being *Jerusalem*, and this particular community being a *wealthy* one—both factors to attract and enjoy Sadducean influence.

Another difference between the two groups that I noticed immediately, even before any of them opened their mouths to the crowd, was that while the Pharisees spoke friendly and harmoniously to one another, and seemed to respect the public; the Sadducees seemed wild and discordant toward each other, as if they were suspicious strangers of one another rather than members of the same party, and they appeared oblivious to the crowd around them, as if they weren't there, or weren't worth their consideration. (Josephus, *The Wars of the Jews*, c. 75 CE, p. II 8:14)

Presently, the moderator began: "I am pleased that this debate was able to be organized for the public. The large turnout indicates a strong degree of interest. As you know, these groups have been at each other's throats for centuries. The conflict is not just verbal, but cultural, religious, and political. Dialogue stimulates growth and development, and so I hope this talk can lead to a greater understanding and level of tolerance for one another. We will focus on the groups' traditional and legal differences and see where the conversation takes us. Let us begin with questions to the delegates."

The moderator turned to the Pharisee delegates: "Why are you called Pharisees?"

Yochanan responded: "The Hebrew word *parash* means "separate". We are called this because we adhere to the laws of purity and of tithing. Strict adherence to these laws forces us to separate ourselves from un-tithed or spiritually impure objects, food and people."⁷

The moderator turned to the Sadducees: "Don't you too adhere to the biblical laws of impurity?"

"We believe," the tall Sadducee started. I was taken aback by how quietly he spoke, there was a whisper in his voice and it was barely audible to me. Still, somehow everyone in the crowd around me seemed able to hear him. He continued: "that the laws of ritual impurity apply only to the *Kohanim* and only during their temple service. It is only the book of Leviticus—aptly named "the law for priests"—which pays significant word-space in teaching these laws, and so it is only logical to assume that they apply exclusively to *Kohanim*. Consequentially, neither object nor person—even our wives during menstruation—can be ritually impure to us on a practical, daily basis, since they are not with us during our service in the temple." (Mishnah, Niddah, c. 200 CE, p. Niddah 4:2)

"Why are you called Sadducees?" the moderator asked quickly, moving along. I could tell the moderator was attempting to be even, not dwelling too long on any one matter for the debate to degrade into a heated exchange of ad hominem attacks.

"We are named after Zadok, the first high-priest in Solomon's temple. The priestly caste of Zadok was the source for all the first temple's high-priests. When Jason,⁸ Menelaus,⁹ and then the Hasmoneans¹⁰ usurped the high-priesthood from our ancestors, our family divided into three groups. Our

⁶ See Mishnah Yadayim 4:5, as well as Talmud Menachos 65a, and Baba Basra 115b: Rabbi Yochanan ben Zakai was active in debating and opposing the Sadducees during this time.

⁷ Other suggestions offered as the reason for their name: "They opposed the dominant priestly class, the emerging Hasmonean dynasty and its political-military policies, those who were lax in the observance, and those overly enamored with Hellenistic influences—or some combination of the above." (Levine)

⁸ In 175 BCE.

⁹ In 173 BCE.

¹⁰ In 164 BCE. Or 152 BCE (Schiffman 162).

group was the only one to stay here in Jerusalem. We formed an alliance with the Hasmonean ruling power and became an integral part of that society for the next two centuries. Our pragmatism proved decisive: by working closely with the Hasmonean rulers, we even succeeded in ousting our rivals, the Pharisees, from all positions of power toward the end of the reign of John Hyrcanus.”¹¹ (Levine, 1999)

“We object,” interrupted Yochanan, “You cannot claim the holy high-priests of Solomon’s temple as your own ideological progenitors. This gives your cause undeserved validity and prominence. You are none other than students of Zadok and Boethus, who in turn were disciples of the holy Antigonus of Sokho.”¹² When they communicated his oft repeated saying, “be as slaves who serve their master not for the sake of reward”(Mishnah, Avos, c. 200 CE, p. 1:3) to their students, their students concluded that there must be no reward payment whatsoever, so they mistakenly reasoned, “is it possible that a servant work all day without obtaining his due reward in the evening?” The students therefore turned to heresy and are called, after their founders, Sadducees and Boethusians.”(Mishnah, Avos, c. 200 CE, p. 1:11; see commentaries.)

“You are mistaken,” responded the lead Sadducee remarkably placidly, ‘remarkably’, since his colleagues were now seething at this offense to their beginnings. “We Sadducees are not Boethusians. We don’t agree with their 364 day so called “solar” calendar. You Pharisees lump together all groups that disagree with you (Kohler), often confusing them with us. You are, however, right about our non-belief in future reward or retribution. Souls die with their bodies.(Josephus, Antiquities XVIII, c. 94 CE, p. 1:4) Future reward and punishment are just like fate: there is no such thing. Man’s actions are in his own power, and we ourselves are the causes of what is good, and receive what is evil from our own folly.(Josephus, Antiquities XIII, c. 94 CE, p. 5:9) God leaves the earth to be run by men, except for the exceptions of His interventions recorded in the Torah. We don’t believe in angels, or any unseen or non-provable forces for that matter, save for the Almighty.

The Pharisee leader, who had sensed the anger of the opposing camp for his conflicting view of their origins, now sought to respond with anger of his own, but the moderator sensed this, and cut him off before he could say anything.

“What is your belief regarding the Torah’s divinity?” The moderator asked the Sadducees.

“The Torah of Moses is divine. But all other laws and regulations are man-made and thus religiously non-authoritative. These non-biblical laws and regulations were of an ad hoc nature and carry no imperative for later generations. For us, all laws and regulations, aside from the Torah, merely have the status of decrees, valid for specific times and places, and no more.”(Josephus, Antiquities XIII, c. 94 CE, p. 10:6)

“Pharisees? Your response?” The moderator asked.

“While some rabbinic ordinances are only pertinent to a specific time and place, these are only the regulations that were initially instituted as a means toward the goal of protecting the primary, biblical restriction (Maimonides, 1170-1180).¹³ But otherwise, our sect’s Oral Law is the authentic amplification

¹¹ (C. 110 B.C.E.)

¹² C. 300-250 BCE (Ginzberg).

¹³ Cf. (Harris): The 18th-century philosopher Moshe Chaim “Luzzatto... notes that the passage claiming that a court cannot overturn the verdict of another court unless it is greater than it in knowledge and number is not to be found in the Tosefta.” Rather this law was “innovated by Our Holy Rabbi [Judah the Prince [c. late 2nd century CE, compiler of the Mishnah]] (for reasons known to him), and until his time every court had prevailed in its generation to declare pure or impure, to prohibit or permit, according to what they in their wisdom judge. And no court regarded itself as inferior to the courts that preceded it. Yet, Our Holy Rabbi decided (for reasons known to him) for all subsequent courts, without allowing them to annul his verdict and that of his court, unless they have the support of one of the sages who preceded him, or unless the court was greater than his in wisdom and number, and in this Our Holy Rabbi was successful... and indeed, all the distinctions between the Mishnah and the Tosefta in this matter derive from the fact that the Mishnah of Our Holy Rabbi binds with iron chains all subsequent courts, while the Tosefta upholds the

of the Written Law of Moses. As such, the Written and Oral laws stand side by side, and one is incomplete without the other. Although Moses' Written Law remains the ultimate authority—that is: the text which provides both the basis for the Oral Law, and the parameters within which the Oral Law can evolve and develop—still, the Oral Law provides the interpretation and application of the Written Law. Its validity draws from the fact that it, too, was given at Sinai; we believe God gave the Jews not only the Five Books of Moses but the Oral tradition as well.”(Levine, 1999)

The moderator now said: “Now that we’ve heard the philosophical differences between these two parties, I will now request that each group *respectfully*, and I can’t emphasize that word enough, ask each other about their legal disagreements. I will allow each group time to level all their inquiries and accusations—though I suspect there will be more of the latter than the former—and when they are done I will give the other group a chance to respond.

The Sadducee leader stepped forward. There was a confident gleam in his eyes, he clearly had prepared well for this portion of the debate.

“We complain against you, Pharisees, for you say that the Holy Scriptures defile the hands,¹⁴ while the non-Jewish and secular philosophical writings of Homer do not defile the hands.”

“Is this strangeness foreign to you, then?” Rabbi Yochanan ben Zakai asked innocently, “Both Pharisees and Sadducees agree on even stranger absurdities: we both consider a donkey’s bones to be pure, but the bones of Yochanan the high priest to be impure! How can animal bones not carry defilement when those of the purest of people are considered to defile?¹⁵”

I couldn’t believe my ears. Was the staunch defender of the Pharisees drawing comparisons to the Sadducees? He was reversing the Sadducee’s question back to him, but in the process deriding Pharisaic opinion also!

The Sadducee leader narrowed his eyes suspiciously at this strange turn. “We deem them impure only because we love them; so that no one make the bones of his mother, his father, or of Yochanan the high priest into spoons!”

Rabbi Yochanan retorted quickly: “So too, regarding the Holy Scriptures, We deem them impure only because we love them. Whereas books of secular wisdom, like the works of Homer, which are not beloved, do not defile the hands.” (Mishnah, Yadayim, c. 200 CE, p. 4:6)

It took me a minute to process this. Ben Zakai’s casually raised ‘innocent’ question was in fact a captious trap! One that the Sadducee leader—his face already red—immediately realized he had sprung clumsily. It now seemed to dawn on him fully that Rabbi Yochanan’s witty tongue and comfortable confidence was a fatal advantage over him—one that no amount of book study or mental preparation could enable him to match.

Surprisingly soon, though, he regained his composure and continued to the next grievance, even while his ears were still bright red from Ben Zakkai’s rebuttal. Now, however, his voice lost some of its

authority of a court to issue a verdict which it regards as good and proper, according to the place and time.” (Luzzatto, Mechkarei, 1,1, p. 172.)”

¹⁴ It was required for priests to wash their hands after contact with those Holy Scriptures considered part of the biblical canon. (Berrin) By declaring them “impure”, and subsequently requiring one who handles them to wash his hands afterward, the Pharisees insured that they would be handled with distinctive respect. Furthermore, rendering these scrolls “impure” insured that they wouldn’t be stored together with the *terumah* produce (*terumah* is the tithed produce that is Biblically mandated to be allocated for the *Kohen*) in the granary and damaged by rodents. (Talmud, Shabbas 14b)

¹⁵ (Berrin)

aggressiveness, and he seemed to be reciting a script: “We complain against you, Pharisees, for you declare the liquid stream that is being poured from a pure vessel to an impure vessel to be pure.”¹⁶

Rabbi Yochanan countered: “Your view is equally preposterous, since you contend that an aqueduct which flows from a cemetery is pure.”¹⁷ (Mishnah, Yadayim, c. 200 CE, p. 4:7)

Waiting some time for his rebuttal to settle, Ben Zakkai continued: “Sadducean law is illogical and hypocritical. They miserly regard no ethic worthy of observance unless what the exact letter of the law enjoins them; they think it virtuous to dispute with those teachers of philosophy whom they frequent. Thankfully their beliefs have little adherents, it’s only prevalent among those still of the greatest wealth and lineage. But they are able to do almost nothing themselves; for when they become magistrates, as they are unwillingly—undoubtedly because of their selfishness and unconcern for others— forced sometimes to be, they addict themselves to the notions of the Pharisees, because the multitude would not otherwise bear them.” (Josephus, Antiquities VII 10:6; XVIII 1:4) He finished: “And to think one day the English word ‘Pharisee’ will be synonymous with ‘hypocrite’...”

A laugh rippled through the audience in response to this last retort. The disruption elicited an interjection from the moderator: “Speak only the facts please, Ben Zakkai, leave your personal attacks to yourself.” But, looking at him, I noticed his mouth’s corners were still tensed from an earlier smile. He, like the audience clearly enjoyed Rabbi Yochanan’s shtick.

The Sadducee glanced at his peers. What could he do? Should he continue? The debate wasn’t over, and yet this portion would clearly be decided in favor of the Pharisees! And not for their arguments—rather just because of Ben Zakkai’s people skills!

“Saying we imitate your brand of justice is pretentious. Your court justice is anything but true justice. You rule a man obligated to pay damages for what his animal damages, yet rule him exempt for what his slave or maid damages. Let me ask you: which of these two forms of possessions should a man be obligated to insure acts ethically, who must a man ensure performs the *mitzvos*: his dangerous beast, or his sentient servant?”

“Sentience is precisely the key here,” Yochanan replied patiently, “but not how your argument uses it. An owner is not obligated to pay for his servant’s damages because, if he would be, the servant would then be able to blackmail him whenever the former wished by destroying another’s property, leaving the bill for his owner to pay; whereas a beast can never plan so maliciously. Therefore, one is liable for his animal, but not for his slave or maidservant. (Mishnah, Yadayim, c. 200 CE, p. 4:7). You see, this is a practical matter, not an ethical one. Justice only prevails when laws don’t allow for exploitative loopholes.”

“Is that so?” the Sadducee pressed on, “And what sort of justice is served in the case of false *zomemim* witnesses¹⁸? We only mete out the death penalty if their testimony actually has their victim killed. You, however, only execute them if their victim has *not* yet been killed! If he has already been killed, you set them scot-free! (Mishnah, Makos, c. 200 CE, p. 1:6)

“True,” Rabbi Yochanan said after thinking a moment, “we only kill them if their victim has not yet been executed. But a careful reading of this law’s source bids this. Scripture states (Deuteronomy

¹⁶ The Pharisees maintained that a liquid stream being poured from a pure vessel into an impure one did not connect the two vessels so as to render the upper one impure. The Sadducees, however, saw the stream as conducting the impurity upwards from the lower vessel to the upper and rendering it impure. (Berrin)

¹⁷ The Sadducean reason for this: the purity of the outside destination of the water travels *up* the stream, rendering the entire aqueduct pure despite its impure source.

¹⁸ *Zomemim* witnesses are a pair who testify that a person murdered another in their presence, and therefore deserves the death penalty as a murderer. But then another pair of witnesses testifies that the first pair was with them *elsewhere* during the alleged murder. The Torah (Deuteronomy 19:19) mandates that the first pair suffer what they conspired for the target who they attempted to frame—execution.

19:19): “you shall do to him as he *plotted* to do to his brother”, ‘plotted’ indicates that their plan to have their victim killed has *not yet* been successfully accomplished. Then and only then must they be executed.”

“But it states just two verses later (Deut. 19:21): “life for life.”. Doesn’t this imply that their conspiracy has already had him killed?”

“No, “life for life” teaches another facet of this case’s law: that the *zomemim* witnesses are only executed for their conspiracy if they are busted as false *after* their testimony has already resulted in the court sentencing their victim to death, but not before then. (Talmud, Makos, p. 5b)

Boredom was setting in. While the earlier philosophical dialogue of broad theology was exciting and mind-opening, the current discussion of differences in interpreting textual minutiae was hairsplitting—though strangely it was argued with as much excitement by the debaters as the earlier topic.

My stomach complained—I hadn’t thought of eating my morning bread before coming here. In any case, I had enough to mull over and was ready to leave. The walk home would be slow as I would uneasily digest this conversation. For now, confusion and doubt replaced many heretofore granted assumptions.

As I weaved my way out of the crowd, I looked again at the Sadducees, who were now objecting to the Pharisaic custom of dating their bills of divorce (supposedly considered holy because of Moses’ name written thereon) by the non-Jewish ruler’s year as king. (Mishnah, Yadayim, c. 200 CE, p. 4:8) How long would they last? How long could they? Did they expect any measure of eternity to imbue a culture so closely bound to class status? This land was a Roman province, and ultimately, it bowed to Rome’s whims. No one’s societal position was secure. Even within the holy temple, the high priesthood—highest symbol of spirituality—was the property of the highest bidder to the Roman authority. Even this holiest building was administrated and thus subject to selfish greedy mortals. Sadducees seemed to approach their ever-changing world by antiquating their tradition, leaving it rigid, unchanging, and so very prone to abuse. How could they all so foolishly believe that they could juggle an impulsively hedonistic lifestyle with tradition, and yet still successfully maintain both in their lives?

As I left the square, I watched the Pharisees, now boasting how they kept all *kohanim* from obeying Sadducean opinions of how to perform the temple services. (Mishnah, Parah 3:7, Yoma) How could they so comfortably negate the Sadducean claim of historical validity? What evidence did *they* have that the Sadducees—mostly *Kohanim* and thus teachers of God’s will by birth—had no historical antecedent? They used rational logic—more a relic left by the Greeks than of traditional Jewish faith—so carefully and completely in their study and analysis of the Torah, but their maxims relied on unquestionable facts that in fact deserved to be questioned...

The ambiguity of history bothered me. Both sides claimed to be our forefathers ideological heirs, that theirs was the authentic, pristine tradition, unfazed by time’s passing. Why weren’t there any history books that could verify somebody’s story, somebody’s interpretation of the law?

While the decision of which school of thought I would study from was still something I had time to make up my mind about, one thought repeatedly turned over in it: where are the history books for fact-finding? Where are the Jewish historians?

The second temple was destroyed in 70 CE. Over the subsequent century, the Sadducean movement disappeared.

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ABA LLESHI

Domestic Violence New York: Impact on Victims, Especially Students¹

Abstract

Domestic violence is the physical or psychological abuse of one person by another individual related to him or her intimately or through marriage for the ultimate purpose to control. It includes sexual abuse, physical restraint, stalking, death threats, keeping the partner away from friends and family etc. According to statistics there were 1,218 women murdered by their intimate partners in 1999. There are generally many more female victims than male victims; statistics show that the rate of female versus male victims in 1000 persons of age 12 or older are 4.3 and 0.8, respectively.

This paper seeks to identify the provisions taken in New York to deter domestic violence. Its purpose is to inform the readers of the support that the state of New York gives to the victims. There are many hotlines available to individuals experiencing domestic violence. For instance there city and state hotlines accessible 24 hours as well as 911 emergency phone service. There are domestic violence prevention officers and counselors who provide information, protection, and counseling to the victims at local police departments, colleges, high schools and other public organizations. Counselors, domestic violence prevention officers, and the New York City's websites, like www.nyscadv.org and others, present safety tips and safety plans for the victims. There are also Domestic Violence Programs that offer shelter, advocates, counseling, support groups, educational services etc. for the victims and their children. These services help the victims to cope and guide them to a better, safer life.

Domestic violence is a prevalent phenomenon that is becoming a global issue. The term refers to the physical, psychological or emotional abuse of an individual by a relative or intimate partner. It can include mental and emotional abuse. Also, it can raise physical assaults, stalking and sexual abuse. Studies show that females are often the victims. According to the Bureau of Justice Statistics 552,000 females were victims of violence by an intimate partner while 101,000 were men in 2008. See Figure 1.

There are many factors that make domestic violence so common, especially the fact that the perpetrator is male most of the times. One factor that makes males vulnerable of domestic violence is the patriarchal system (Anderson, 1997). The male figure in the society is expected to act violently or aggressively and not to express feelings and emotions in any other ways. Four scholars studied the role of cultural masculinity and the difference that its perception has in

¹ Completed under the mentorship of Professor Barnaby for Pol. 63: Introduction to Criminal Justice

violent and nonviolent men. In their article "Relationship Dynamics, Emotion State, and Domestic Violence: A Stress and Masculinities Perspective," they argue that the cultural image of men as being aggressively acceptable is tightly related to the cause of domestic violence committed by men (Umberson *et al.*, 2003). Cultural dynamics often prepare and teach men to suppress their feelings and emotions and that being aggressive is acceptable. In the study that the scholars conducted, they learned that men who expressed their emotions and communicated with their partners were nonviolent, whereas men who suppressed their emotions and did not speak about them tended to be violent.

In addition, the cultural conditioning that men are supposed to achieve higher positions of status than women plays a significant role in domestic violence. According to Anderson, "Within U.S culture, it is considered natural and normal for a woman to have lower income and occupational prestige than her male partner, but a man's lower relative status is considered deviant" (658). So in families where the woman has a higher socioeconomic status than the man, aggressive behavior is more prevalent. First, men's masculinity would be challenged so they would have to find other means to dominate and control. Second, as stated above, it is culturally approved that men show their masculinity best when behaving aggressively. Therefore, men are more vulnerable to violating their partners.

According to psychologists, males' aggressiveness is more dangerous and serious than female aggression (Dutton, 2007). Although this seems to be the accepted statement, Dutton argues that in fact this is a "gender paradigm". He cites that 'longitudinal studies indicate that female violence is not "self defensive" as is stereotypically believed but, in fact, develops throughout adolescence as a form of developmental trajectory' (708). Many children, who have been exposed to violence or have been abused, often remain impaired and have poor intellectual, and social outcome (Salzinger *et al.*, 2002). Salzinger and her co-writers pointed out something very important and interesting about abusive females. They suggest that most females who experience physical or psychological abuse have a propensity to abuse their children because of the distress that they experience. Since women are most likely to take care of the children, they interact with them more. The emotional pain due to being abused, exploited, and feeling weak push some women to vent their anger on their children. By abusing their children, these women feel in control, and dominant rather than weak.

Accordingly, the impact is enormous on children who have experienced or simply been exposed to violent abuse. In the article "The Impact of Family and Community Violence on Children's Depression trajectories: Examining the Interactions of violence exposure, Family Social Support, and Gender," it is cited that over one third of intimate partner violence (IPV) cases in urban districts involved children who witnessed the abusive actions. The impact of such experiences is very dramatic. The children's exposure to violence, especially in early childhood, affects their performance in school and in society. Their socialization skills are often impaired and they often get depressed and blame themselves for the chaotic, brutal and violent situations at home. In addition, these children are often exposed to community and school violence (CSVE). Many of these children experience post traumatic stress disorder. They are often unable to function in society. The role and importance of family is unquestionable in a child's life. These children's trajectory in society is low due to the unhealthy, violent, and threatening environment. Not only do they suffer throughout their childhood, but they also experience violence later on in their lives. Furthermore, environmental conditions such as poor neighborhoods, poor education, and, of course, unhealthy family relationships hurt these children and affect their personalities. They cannot achieve their fullest potentials, and perform at the best of their abilities because

their lives have been distorted in a psychological, physical and emotional level. During their transition from childhood to adolescence and then young adulthood, many of them may choose to become violent and perform the same violent actions that they have been exposed to or experienced. "Empirical evidence indicates that exposure to violence among children and adolescents poses a risk to their optimal development," (Kennedy *et al.*, 2010). It is very important to address these issues because these children are the future generation. The crime rates of domestic violence are high, and that affects our society greatly. By offering support to the victims of domestic violence and their children, we might prevent many of these brutal crimes of abuse committed by members of our community.

Victims, most of whom are females and children, are often supported by different community or domestic violence shelter programs. The psychological and emotional impairments are the most difficult to deal with. The wounds seem to be very hard to heal. Post traumatic stress disorder (PTSD), depression, substance abuse, anxiety, etc. are common in victims. Dawn M. Johnson cites in his article that there are \$5.8 billion annually spent to cure the medical problems. The impacts of experiencing domestic violence are great and long lasting. It requires a lot of work and effort on the part of the victims and caregivers so victims can deal with their pain. Family and social support are essential in coping with abuse. Some of these conditions are chronic (such as PTSD) so the care must be constant.

It is also important to mention another factor that makes domestic violence so common. There are high levels of economic and emotional dependency. Many victims are emotionally and economically attached to their perpetrators. This attachment does not allow the victims to get out of the abusive relationship. This is another reason that domestic violence is so widespread. Victims find it difficult to leave such unhealthy relationships. As a result, the domestic violence continues.

Intimate partner violence is also common among students. According to Erin L. Nabors, the frequency is 20% and 50%. A common reason is the use of alcohol among college students. According to Hove, an individual consumes more alcohol in college than in their whole life. In addition to engaging in risky sexual behavior and other dangerous activities, they are vulnerable to violate their intimate partners. Unfortunately, there is not enough available literature regarding the issue. Thus, this requires more time to be studied.

The domestic violence phenomenon is so prevalent that it deserves a lot of attention. We are integrated species that collaborate and work together for prosperity. It is devastating to see that members of our community commit such crimes. Do we not value independence and freedom enough? Do we not approve of equality? How can someone be considered inferior and get abused in such atrocious ways? We all need to come together and fight these brutal acts. It is necessary to put an end to domestic violence. The provisions taken by the state seems to be effective but not enough. It is great that New York has its own districts, domestic violence preventive officers, and clear, determined laws and punishments about the perpetrators, but it is not enough. There are many victims and families out there, who are suffering the painful attacks of the violators. It is up to us, the rest of the society to get up and fight this trend. As Emile Durkheim has stated, crime is a social fact and it will always be around. However, we can come together to reduce the crime rate. Each one of us has the ability and the power to make a difference. Every little action we take to change this situation is essential. Gathering our forces will defeat this terrible phenomenon.

Recommendations

Cultural impacts: The idea that men show their masculinity through violence and aggressiveness, and that men are supposed to have a higher socioeconomic position than women do, plays an important role in domestic violence phenomenon. There are more men perpetrators, who abuse their intimate partners or their children, to simply control and feel empowered.

It is necessary to reconsider and analyze our cultural values and morals. It seems unjust to accept such behavior. It is wrong to condition men and women in their predominant and submissive roles. We live in a democratic society where equality is one of the most essential rights for an individual. Education plays an important role in shaping and changing a society's perception, so there would be the best starting point to change this general view of gender roles. Certain subjects, such as Sociology, Psychology, Ethics, Anthropology, etc. already address such issues of gender. Women are gaining their education and becoming more independent and that is changing the society's perception about gender roles. However, it is important to consider the fact that most domestic violent cases occur in families with a low level of education. That means that other than schools, and colleges, media would have to make a change. The media depicts the regular American family this way: the man is the breadwinner and the woman is the one who cooks and takes care of the children. That depiction influences most American families, therefore this needs to change in order to reduce the domestic violence crime rate.

College students: Domestic violence is very common among college students. Studies show that drug and alcohol abuse are the main cause for IPV in college. This is so widespread and harmful but unfortunately, it does not get the right attention.

College students hold the future of the society and it is very important to deal with their issues. There are counsels in colleges that offer support for victims but that is not enough to prevent problems. Campaigns, seminars, round tables, public gathering etc. would make a difference in raising awareness about the seriousness of the issue. Most students know that drinking and taking drugs is deviant, but they do not think about the consequences. A propaganda organized by students themselves should initiate in colleges. Having victims share their stories would give these college students a different perspective and perhaps make them rationalize. One way to deter domestic violence among college students is to provide information about domestic violence. Furthermore, they should learn about the role of the criminal justice system in cases of domestic violence. Finally, they must be made aware of the programs that support the victims.

Analysis of subgroups: Many programs are not very successful to addressing every aspect of domestic violence. Many victims require specified help that has to be taken into consideration when designing a program. The age of the victim and the severity of the abuse should be factors in analyzing these subgroups.

It is very important to consider the underlying factors that cause domestic violence. Drug abuse, economic and emotional dependency, past experiences (IPV) and CSVE etc. affect victims greatly. Specialists need to study and work on founding programs that address these issues and prevent domestic violence. For instance, studies should be done in areas with high rates of domestic violence. By studying the dynamics of these communities, they could design a specific program that addresses and fits their dynamics. For example, in a community where a lot

of children are exposed to IPV and CSVE, a program offered in their schools might make a difference by raising awareness that domestic violence is a problem and by offering them the psychological and emotional support they need. It is unfortunate and traumatic to see such a phenomenon occur, but in order to stop it, we need to learn about it in depth and approach it the right way.

Figure 1

	Total		Female		Male	
	Number	Rate	Number	Rate	Number	Rate
Overall violent crime	652,660	2.6	551,590	4.3	101,050	0.8
Rape/sexual assault	44,000	0.2	35,690	0.3 [^]	8,310	0.1 [^]
Robbery	38,820	0.2 [^]	38,820	0.3 [^]	--	--
Aggravated assault	111,530	0.4	70,550	0.5	40,970	0.3 [^]
Simple assault	458,310	1.8	406,530	3.1	51,770	0.4

Note: Victimization rates are per 1,000 persons age 12 or older. The difference in male and female intimate partner victimization rates is significant at the 95% confidence level for overall violent crime, robbery, and simple assault. There is no significant difference in the rate of male and female intimate partner victimization for aggravated assault.
[^]Based on 10 or fewer sample cases.
 --No cases were present for this category.
 Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2008.

Figure 2

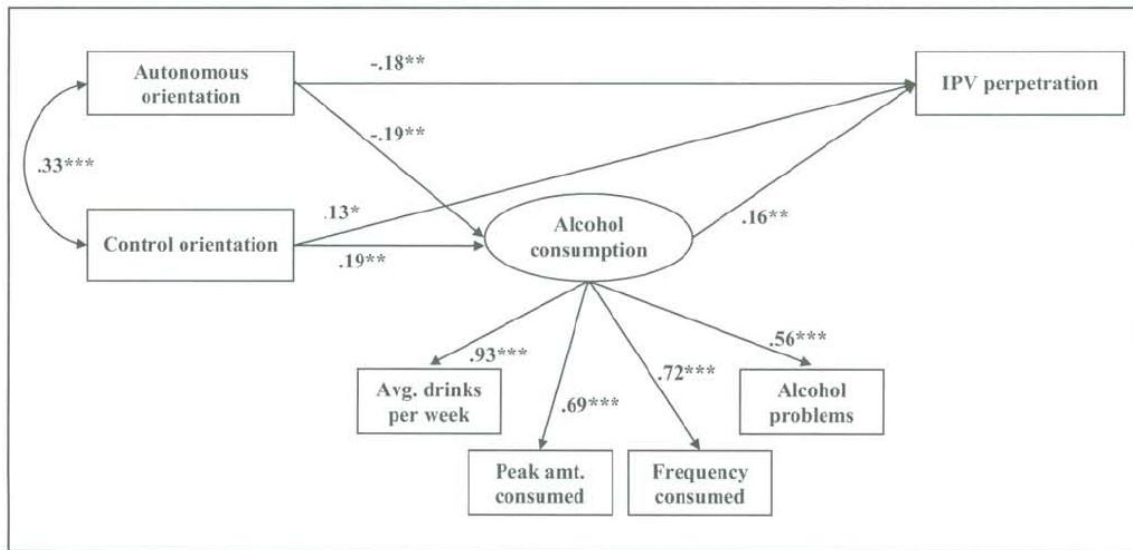


FIGURE 1. Structural path model. The betas presented are standardized. IPV = intimate partner violence; avg. = average; amt. = amount. **p* < .05; ***p* < .01; ****p* < .001.

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IRIS R. SHEBER

A Gift of Love¹

April is the month of the year that is marked for me by a religious holiday, my Mom's birthday, and my visit to the cemetery. April 17th would have been my Mother's birthday, so on that day I went out to The Old Montefiore Cemetery in Springfield Gardens, Queens. Once there, I visit and pray at the graves of those I love who have passed, starting with my Mom, as she is furthest from the entrance to the cemetery.

My name is Rachel, and I am now an adult. I live in Sheepshead Bay, Brooklyn, New York. I am the only member of my family left in New York. Others are all over the United States (those that are left).

This is a time of remembering for me. By the time I get to my grandfather's grave, all memories seem to focus not just on him, but on me growing up with him. By the time I was three years old, my grandmother, his wife, had died, so I do not remember her. We moved to Euclid Avenue to a private house within a year. Grandpa lived with us. He would let me play with his hands, while sitting by the edge of the bed. I named one hand Nicholas (the left one, I think), and the other hand I named Alexander. My brother was born while we lived at this address. The first boy born to the family. It was an exciting family time, with many changes, except for one, my Grandpa was so special to me then, and still is in my heart. We moved when Grandpa had a stroke, and we needed a first floor apartment. We found one on Pitkin Avenue (which was a lot of fun, as there were so many kids around). I remember so much about that apartment; the smells of cooking and baking, of a freshly waxed kitchen floor (with newspaper put over it when dry), so as not to scratch it up before the Sabbath – although I did not know it was the Sabbath then, only that my Mom was a terrific cleaner and house fixer-upper - everything that I thought Mom's were, she was. In this house, my brother's crib was in my parent's room, and I (the lucky duck) shared my bedroom with my Grandpa.

Mommy and Daddy would go out together after dinner sometimes, and I would have Grandpa all to myself. I just couldn't wait for my parents to leave, so that that could happen. If I had to choose when I was around five or six years old, whether I could have my Grandpa as my parent, and no other parents (although I feel ashamed today to say it now), I would have chosen him. His love was so unconditional, whereas with my parents I had to clean up, put away, et cetera. With Grandpa, I was perfect just the way I was.

When my parents went out we would sit together on the living room couch, and either he would tell me stories, or I would ask him questions and he would tell me stories. He told me of his trip to America on a big boat, and how the sharks and whales followed the ship, and jumped up. I would jump up and down, and say "really Grandpa, were you afraid", and he would say 'no', he was not afraid. He said it was a very long trip, longer then walking to Grandma's house or to CityLine – a very, very, long trip. He said he looked forward to coming to America with Grandma and his children to start a new life here. He also told me a scary story, in which he was s-o-o-o brave. In the old country, he would walk on roads through the forest sometimes, and once he heard a lady crying out in distress, and he said there were wolves in the forest. I got frightened, and asked "what happened Grandpa?", and he said not to worry, little one, that he grabbed a big stick, and jumped in and fought them off, and saved the damsel in distress.

¹ Completed under the mentorship of Professor Eben Wood for English 56.

“Did you get hurt Grandpa?” He said no. He just picked the lady up and put her in a wagon driven by horses, and took her home to her family. I was so proud and impressed by him and his daring deeds. What a wonderful Grandpa. Today, these tales, if Grandpa were female would be called *Bubbe Meises* (literally, grandma stories), and I just lapped them up. My parents could stay out however long they wanted. I was happy being at home with Grandpa, sitting on the couch with him. I in my pajamas, listening to wondrous tales of adventures in the old country until it was time to go to sleep.

To let you know how extra special he was, in the morning, on the weekend, we would have appetizing and bagels, as well as rolls with cream cheese and butter. He, being a grown-up, had coffee with his breakfast. I was not allowed coffee, but when my mother’s back was turned, he allowed me to dip my bagel in his coffee, which was really delish.

Sometimes Uncle Bender would come to visit him, and he talked so fresh to Grandpa. He laughed at me and said, “you don’t like me yelling at your Grandpa, eh?” He scared me, so I just shook my head for a little no. He played casino with my Grandpa, and visited him once in a while.

Grandpa went to *Shul* every Saturday, and holidays. Because I was little he could have me sit next to him in *Shul*. In *Shul*, the men sat separately from the women. The women sat upstairs, but I could sit with Grandpa. He also let me use his *tallis* (prayer shawl) to touch the Torah and kiss it when it went by. I felt like the luckiest girl in the world. Certainly, luckier than any of my cousins, Grandpa didn’t live with them: He lived with us. Whenever Grandpa had an extra nickel in his pocket, he would give it to me. He really loved me, too.

When I grew up I was told different stories, one by my Mom, another by my father’s mother. First, let me say, Grandpa had a head of silvery, wavy hair, and a mouth full of his own teeth. He was very handsome. In the old country, he was married to someone he loved dearly, and in childbirth, both she and what would have been their first child were lost. Overnight, my Grandpa’s hair turned silver, and stayed that way for the rest of his life. It seems it was the custom in those times, that if a wife died, and there were other marriageable sisters in the house, and the family did not want to lose the son-in-law as well as the daughter, it was not uncommon for a marriage to be arranged with a sister of the one who died, as was the case with my Grandpa. Grandma Elka was of a very different temperament than Grandpa’s first wife, but was a good woman, charity giving and hard working with a wonderful sense of humor.

They came to this country all of them Grandma, Grandpa, three Uncles, one Aunt, and born in this country, my mother. My mother was the youngest, and fourteen years apart in age from her nearest sibling. They came through Ellis Island. I was told my Grandpa was a jeweler, and had a jewelry store in Brooklyn.

A time came when my Grandpa had to be put in a home, as my mother now had three little children, and after Grandpa’s stroke it became too difficult for her to take care of him. I was devastated by her allowing this. I cried and cried, but had to accept it. I would go to visit him at the home, and I would sing Jewish songs to him, and he was happy with me there. Later on he was in the nursing part of the home as he got sick, and toward the end, he didn’t even recognize my Mom, but he did recognize me. It had to be sad for my Mom, too, as she was his youngest child, and he was very dear to her, as well.

My Grandpa’s name was Elisha, but his nieces and nephews did not call him Uncle Elisha, they called him Uncle Delicious. I was around 10 ½, maybe 11 when my darling Grandpa died. Many years later, I married and had a baby daughter, who I named Alisha Yehudit after him and my mother’s brother. He has helped me even in death, as I went to the cemetery and said prayers to him to intercede with G-d on my daughter’s behalf, and I believe he did. Although, now, of course, his name is free to be used once again. The future holds that in its trust.

I told all of this to my friend Tanya, and asked her what she thought of my story, and she said she loved it, but had to ask me “don’t you feel funny going to the cemetery and talking to a stone?”

Ah, let me tell you, Tanya. I walk along a very quiet roadway going to visit his, as well as other, graves. As of Spring, the smell of grass, trees and nature blooming is ever present. I pass by tombstones with pictures on them and beautiful sayings. I reflect. I feel the sunshine, I think of my loved ones. I think

of all the others that are in this cemetery. How they too were loved, and are remembered. Isn't this what life is all about – living in the loving memory of those that live on?

Finally, I arrive at the gate of the society that my Grandma and Grandpa were members of. My Grandpa was its first president, so his name is on one side, and grandma's is on the other side of the gate, as alongside the gate is her tombstone, "so her children would not have to search for her, when they came to visit," and she pleaded with my Grandpa to take a space on the other side of the gate, but I am told he said "*oyse gevarfta gelt*," which means in Yiddish, "thrown out money," so I walk very far back to his tombstone to visit his grave, and I laugh. What a gift, a Grandpa that was such a special love of a man.

"Rachel, you are one lucky one, but you didn't answer my question, how can you talk to a stone?"

Ah, Tanya, I don't talk to a stone, I talk to and pray for my Grandpa. Best of all, it is quiet and peaceful, and, heart to heart, Grandpa and I touch, and I talk things out with him, and tell him that I hope he and Uncle Bender are still playing casino, and that he and all his loved ones are in loving contact in paradise.

ALEXANDRA KRASNOVSKY

A Window Into the Spiritual Realm: A Brief Look at Peyote¹

“Our happiness, our moral behavior, our unity as a people, and the peace and joyfulness of our homes, are all a part of our religion and are dependent on its continuation. To pass this religion with its many forms of prayer, on to our children, is our supreme duty to our ancestors and to our own hearts and to the God whom we know. Our religion is a true religion, and it is our way of life.”

– James Wilson, *Earth Shall Weep*

People from the past and in the present hold their own personal beliefs on a higher power or higher powers. It is a fundamental part of the growing world. Very few will argue that spiritual health is not an essential part of living a good life. A large portion of what we, as people do in our lives is an attempt to develop a stronger sense of our spiritual selves, in different degrees and through different means. Essentially, the drive for harmony and balance is a part of most of us. Many people find the link to their spirituality through religion. Some may argue and say that these are two separate concepts, but this is another matter altogether. As we all know, religions vary and people believe there are many different ways of answering the questions that arise in the world. These ideas and beliefs are not always widely known, nor are they accepted. One of these is the belief and devotion to a cactus called peyote. People who know of peyote, know it as a cactus which contains an illegal psychotropic substance, or a hallucinogen. This is not so for some 250,000 Native American believers of the peyote religion. For them, peyote is a sacrament and a spirit on to itself and not merely a drug that alters their consciousness. Living life according to the inspiration of peyote and through its guidance, they find personal dignity and respect for nature and other people. The majority of people who utilize this unique substance as a sacrament are members of The Native American Church.

¹ Completed under the mentorship of Professor Beth E. King for HIS 41: Native American History.

What is Peyote?

Peyote (*Lophophora diffusa* or *Lophophora williamsii*) is a small, spineless cactus that is native to central and northern Mexico and to the Rio Grande Valley of the southwestern United States. The greenish/gray, blue/green cactus grows very close to the ground and looks like a small segmented cushion. The cushion-like segments are called podera and they surround a wooly center of tufted hairs called trichomes. Unlike other cacti, this one does not have prickly spines. Since pre-Columbian times indigenous people have used it for religious healing and in ceremonies. In preparation for its sacramental use, the top portion of the root is cut and sun-dried into “buttons”, until they are ready for consumption. The peyote can then either be taken directly by being chewed and swallowed, or by being brewed into a tea. It is taken at a ceremony specific for this purpose, and some even take it in small portions throughout the day.

This powerful cactus contains more than 40-60 alkaloids and related nitrogen containing compounds. Out of the alkaloids, mescaline is considered to be the main active ingredient. A German chemist, named Arthur Heffter discovered it in 1897. Mescaline is believed to affect the action of serotonin, one of the main neurotransmitters within the central nervous system. Serotonin helps to regulate areas in the brain that control behavior, perception, and areas of the body that regulate functions such as hunger, body temperature, sexual behavior, muscle control, and the senses. The typical peyote cactus has about 4% mescaline content, depending on its maturity. It is extremely slowgrowing. A single cactus can take more than four years to grow a dime-sized “button”, or top portion. Generally, a plant is considered mature at about 13 years of age. The older and larger ones, estimated at about 30 years old are called “Father, Grandfather Peyote, and more often Chief Peyote” and these are highly revered. It is also considered one of the oldest known sacraments. Through the process of trial and error, in which plants were determined edible or poisonous, peyote was discovered. The cactus induced “visions” in the user, or voices. The ancients found these experiences to be voices from their gods and the spiritual world.

According to archeological data, the use of peyote goes back to the time before Christ. Evidence shows the Aztecs used it 3,000 years ago. A skeleton with a beaded necklace of dried peyote buttons, found in Coahuila, Mexico is dated at a 1,000 years of age. In the Shumla Cave, in Texas dried peyote buttons are dated from 5000 b.c. The Huichol Indians of northwestern Mexico still use peyote as a sacrament. The Huichols revere Peyote as the heart, the soul, and memory of their creator, Deer Person. Interestingly, the Huichol belief in the Deer Person parallels Christianity, in the aspect that the creator, out of compassion for his people, subjects himself to the limitations of the world. In Christianity he is incarnated as a man, crucified, and resurrected to save human kind. The peyote pilgrimage may go back as far as 200 A.D. Scholars consider it the oldest sacramental use in North America. Some of the earliest documentation of peyote comes from the writings of Fray Bernardino Sahagun (1499-1590), who was a Spanish missionary that lived with and studied the Indians of Mexico. He writes that the Chichimecas and the Toltec Indians probably used peyote as early as 300 B.C. It is important to note that the newcomers to the New World were far from approving of the peyote cults, and actions were quickly undertaken to make it illegal. Although even as peyote was being outlawed in Mexico in 1720, for example, the practice was so entrenched with the people that upheld it and they continued it in secret.

In the United States, the first recorded use of peyote is 1760. By the time of the Civil War (1860-1864), Native Americans were familiar with the plant and had a strong ritual surrounding its use. Sometime around 1880 the Kiowa and Comanche tribes' ceremony drew public attention. These Plains tribes had incorporated aspects of the Mexican peyote worship, into their vision-quest ritual. Overall it is widely believed that Native Americans embraced the peyote ritual as a way to preserve cultural heritage. As their lives were being systematically diluted, new social tools were needed to cope with the suppression and loss of traditional lifestyle. Word spread of the beneficial effects of peyote on moral and its healing qualities. Its supporters held a strong belief in its overall positive impression and influence on their lives. Thus, it grew in popularity and acceptance. But, that is not to say it was accepted by all. There are many, even today, who are Native American and do not agree with the use of peyote.

The flip side to what we have been discussing thus far is that peyote is also used by some for recreational purposes, or as an illicit drug. Those people simply use it for the high it gives them. Today peyote (and even in the psychedelic era of the 1960's) is not as popular as LSD and psilocybin mushrooms, reportedly because of its awful bitter taste. Also, reports state that overdose on it has never been heard of. In its street form, peyote buttons are dried, made into a powder and pressed into pill form. The powder is commonly mixed with other substances or drugs. Mescaline is also produced synthetically in the form of mescaline sulfate. In the 1950's and 1960's peyote was legal throughout most of the United States. During the peak of the psychedelic era, dried peyote buttons were readily available by mail order catalogues. By 1970, the Comprehensive Drug Abuse Prevention and Control Act (Public Law 91-513) made mescaline, peyote, and every other hallucinogen a Schedule 1 drug, defined as having no known medical use.

The Native American Church's Legality

Before going into the history, beliefs, and ceremony of the peyote religion, it is important to note its legal standings. Beginning with the 1880's, great strides were made in lobbying congress, against laws that stated possession of peyote, even for religious purposes was illegal. One of the first vigorous advocates was a Comanche named Quannah Parker(1850's-1911), who helped bring the ceremony to members of Caddo, Cheyenne, Arapaho, Ponca, Oto, Pawnee, Osage, and other tribes. A generation later, there was Albert Hensley, a Ho-Chunk. The cause was also supported by a long line of anthropologists, beginning with James Mooney (1861-1921). Through his extensive research of the Peyote meetings, among the Kiowa, the Tarahumara, and others, he became intimately involved in the growing peyote revitalization. In 1918, after having testified on behalf of the peyotists at Congressional hearings, he advised the various Oklahoma tribes to charter in order to protect their religious freedom. Success on the federal level was reached, although numerous state laws continued to prohibit the gathering, possession, transportation, and consumption of peyote for religious purposes.

By August of 1978, Congress enacted the American Indian Religious Freedom Act, which was initially supposed to give the American Indians some of the protection other Americans receive under the First Amendment. Mentioned explicitly are the rights of Native Americans to access sacred sites and use sacred objects in their ceremonies. Unfortunately, in practice it had failed to do so. Its implementation depended on federal agencies evaluating religious practices in consultation with native religious leaders and voluntarily acting to realize

the act's objectives. The test came in 1990 when the Supreme Court was asked to decide on the constitutionality of these laws. *Smith vs. Employment Division of Oregon* (494 U.S. 872) dealt with a situation in which two employees from a drug rehabilitation center were fired for using peyote in a ceremony and denied un-employment due to the fact that there were illicit drugs involved. The case argued that the laws threatened religious freedom, which is a part of the constitution and believed to be a fundamental right. Smith also argued that there was no scientific evidence that peyote use by NAC members is harmful or addictive. Despite this, the Courts affirmed the state prohibitions, ruling that freedom of religion in this case was a "luxury" society could not afford. In short, the Court upheld Oregon's right to terminate, without compensation, even though peyote is recognized as a sacramental element in the religious services of the Native American Church. According to the majority, the state's interest in controlling drugs greatly outweighed the religious freedom of the Native American. The decision was so offensive that it inspired a wide protest by religious leaders of many faiths, as well as by scholars.

In 1991, Congress reenacted the American Indian Religious Freedom Act, supporting NAC members' use of peyote. The legislation preserves "the sacramental use of peyote by traditional Native American religious practitioners by exempting members of federally recognized Indian tribes from the state and federal provisions prohibiting peyote possession and use." These regulatory exemptions extend only to those engaged in "bona fide religious ceremonies of the Native American Church." Originally this legislation involved a racial exclusion on church membership. It was later clarified, by what is known as the bright-line rule: if one belonged to a federally recognized Native American tribe, one was exempt from federal controlled substance provisions, making peyote use and possession legal for NAC members. This, however, caused another issue: the question of what makes an individual part of a religion. What happens to the people who are not part of a registered tribe, but have Native American heritage? Isn't it part of our constitution that any person can practice the religion of their choice? Addressing this issue, the case of *US vs. Boyll*, 744 F.Supp.133 (D,N,M 1991) concluded that peyote is legal for "bone fide ceremonial" use, for members of the Native American Church, regardless of race. Through the Religious Freedom Restoration Act of 1993, federal legislation was passed to grant full protection in 1994, this required the government to demonstrate a compelling state interest to justify any measure restricting religious practices. It is also important to mention that the use of peyote is permitted by military service members on military bases, if the soldier has consent of the commanding officer. It is not permitted on military vehicles, aircrafts, or ships.

What is the Native American Church?: A Brief History

The Native American Church is a religious organization, which was officially established in 1918. It involves traditional customs, Christian beliefs, and the sacramental use of peyote. Its members seek guidance, health, higher consciousness, wisdom, and good relations with themselves and others through their reverence of peyote. The NAC finds peyote to be an entheogen, a term from the Greek meaning "God-facilitating substance." They do not consider peyote to be a hallucinogen, rather a spirit on to itself. Some even compare it to Jesus and his role as man and spirit. In turn, they believe peyote is the plant form of the spirit of higher power. There are over 250,000 members of the NAC in the United States today.

There are several theories as to how and why the NAC came to exist, and many are long and complex. However, there is one theory that is more accepted than others. According to solid archeological evidence, along with the first historically documented accounts of peyote use in the Spanish missionary records dating to the late 1600s and early 1700s Native Americans have been using peyote in religious contexts for thousands of years.. There are also records showing the presence of peyote use from several Native American tribes: (a) the Southwest: Queres, 1631; Hopi, Islet, and Taos, 1720; Pima, 1764 (b) Gulf: Coahuiletco, 1760; and (c) marginal Southern Plains: Caddo, 1709. Due to the area where peyote is indigenous, north of the Rio Grande in Texas in the southern part of the Chihuahuan desert and the Tamaulipan thorn forests in Mexico. Peyote and its use had been held by many southern plains and southwestern tribes in the United States, as well as tribes located in present day Mexico, for thousands of years.

The NAC formed through a combination of earlier indigenous ceremonies, the introduction of Christianity to the Native Americans in the 1800s, and various demographic pressures which created increased contact between the southern plains tribes and the northern Mexican tribes, who had already been using it for thousands of years. During the 1800s much of the Native American culture was under attack. Whether through the severe dislocation of entire tribes, which forced them onto reservations in the newly formed “Indian territory” of Oklahoma, or by being forced out of their traditional homelands by Euro-American colonizers, the impact was severe. (This was also the time of the “Ghost Dance”, which is considered a revivalist movement in response to dealing with suppression. The Ghost Dance involved long dances - sometimes for days - the belief that the buffalo will return, the white man will disappear, and the recently deceased who perished in battle will return). Due to these circumstances, cultural upheaval inspired the necessity to develop new social and psychological tools to cope with the suppression and loss of traditional ways. At the same time, Peyote was becoming increasingly more available due to the introduction of horses. Eventually certain indigenous rituals from the southern plains and northern Mexican tribes were incorporated into the newly imposed and supported Christian teachings as new social and psychological tools.

On the other hand, Will Roscoe from the American Indian Quarterly, states that too much emphasis has been put on the external factors, claiming that instead of seeing the emergence of the peyote religion as an exceptional occurrence, we should rather understand it as contact and exchange between cultures, and that cultural change is part of human existence. social and individual processes brought on the movement of peyotism by, the very processes by which the term was created.

The primary benefits reported by the NAC of the peyote sacrament include general health and vitality; sobriety; healing of specific ailments; mental, emotional, and psychological clarity; and an abiding sense of kinship with fellow participants. The visions and hallucinations, if they occur are believed to be byproducts of the healing process, often used in indicating areas of life where an individual needs to make changes. Looking into the earlier accounts of arguments supporting peyote, from the early 1900’s, the topic that comes up again and again is that through the use of peyote many people have been cured of drunkenness or alcoholism. Charles Lone Wolf, Kiowa Indian, argues for as the use of peyote, from The Congressional Digest : “All the peyote meetings are religious meetings, and they use that in connection with their meetings; and other Indians, they use it for medicine. I use it when I come to a problem that I cannot understand. I take enough to sharpen my mind so I can see into things that I could not begin to see with my common mind.”

The Native American Church and Its Beliefs

In most Native American cultural beliefs as well as in the NAC, people find no distinction between medicine and religion. Their belief, in relation to healing, expresses that when a disease strikes an individual, it is not only the body or some part of the body that is affected, but the whole person. Disease is the result of direct action of an imbalance within the individual, or more specifically an imbalance within the appropriate personal, social, environmental, and spiritual relationships. Therefore, Native Americans counteract these imbalances and their resultant influences by calling into action certain powers, powers to guide and assist in creating a sense of homeostasis, if you will, by the means of prayer, fasting, and sacred plants. The primary function of sacred plants by most indigenous people in North America has always been, both medicinal and religious.

The alignment of religion and medicine is so intimate that the terms representing sacred plants, the practice which goes with it, or even the supernatural beings which assist, are commonly the same word. This is also particularly true of peyote. In many tribes, the word to describe peyote is the same for medicine: “azee”(Navajo), “biisung”(Delaware), “puakit”(Comanche), “makan”(Omaha), “o-jay-bee-kee (Shawnee), “walena” (Taos), and “naw-tai-no-nee” (Kickapoo)..

Another important element to mention is the belief in the power of peyote. Clearly since people taking peyote seek a form of curing effects, in a therapeutic sense, it is vital that they experience the essence of the peyote healing them. This experience happens because of the physiological effects of the cactus. Some of the more immediate effects of peyote are mild analgesia and wakefulness. It is reasonable to say that these first effects cause an individual to feel the presence of changes occurring within them, or its power beginning to take a hold. The abatement of physical symptoms is not considered a cure, but the power of the peyote is important in curing and healing the individual in the total sense, as a total being. There are many aspects to the peyote experience which attribute to its overall power, one of which bears special mention. It's so-called phenomenological feature pertains to when a person eats peyote and after having done so, something external to them proves able to effect their thinking, feeling, perceptions, and behavior without their volition. The effects of the experience are unpredictable. An individual does not know what will happen the next time they eat it. One experience is never like any other, before or after it.

Another important aspect in the beliefs of the NAC is the high regard for “visions.” Visions are commonly a fixation of Euroamericans, who attribute them to be the main factor that classifies peyote as a hallucinogen or ones who use it as having a hallucinogenic disorder. Native Americans hold visions in high regard, for they bare great significance and have been known to provide foreknowledge and defensive powers. For people who are aspiring to be medicine men or women, they hold a special significance. Most members of the NAC claim that they do not wish to experience visions unless they result in a “revelationary experience.” Visions are considered to be a direct form of communion with the spirits or God and are welcomed. They are an integral part of their spiritual reality as well as their everyday one. Visions are an inherent part of the NAC meetings, but they are not required for meetings to have positive outcomes. NAC members claim that peyote is the spirit of God, and not a psychoactive

biochemical agent, therefore the hallucinogenic effects of peyote are not the driving force in ingesting the sacrament.

It is essential to mention the NAC's beliefs in its relationship with Christianity. The NAC claim their religion is essentially similar to Christianity, so much so that it is simply one of the innumerable variants of Christianity. Some of the common claims to support this idea are as follows: The NAC members worship the same God that the Christians do, incorporate the Trinity; use The Ten Commandments (Exodus, 20:1-7) and the Golden Rule (Matthew, 7:12, Luke, 6:31) in NAC ethics (creating the same official ethics as other variants of Christianity), use the word "church" to demonstrate that the ritual associations of the NAC members are equivalent to those of Euroamericans, and express similarities between their rituals and the ones of Euroamericans, such as: (a) both Native Americans and Euroamericans offer extensive prayers to God, (b) both have sacraments by which supernatural power is incorporated by the communicant (For Euroamericans, it is bread and wine and for the NAC it is peyote, water, and the foods of the breakfast (corn, meat, and fruit)), and (c) Some groups place the Bible on the altar and quote from it during the rite to justify peyote. One reference is cited universally: "Him that is weak in faith (i.e., the Indian who does not know God) receive ye, but not to doubtful disputations. For one believeth that he may eat all things: another, who is weak (i.e., the Indian vis-à-vis the White), eateth herbs (i.e. Peyote). Let not him that eateth (Peyote) despise him that eateth not (i.e., the non-Peyotist Christian); and let not him which eateth not judge him that eateth: for God hath received him (i.e., the Peyotist)..." (Romans, 14:1-3) Also, such quotes as the following are used: "He causeth the grass to grow for the cattle, and the herb for the service of man. (Psalms, 104.14); And God said, Behold I have given you every herb (Genesis, 1.11); For he shall grow up before him as a tender plant, and as a root out of dry ground." (Isaiah, 53.2) (P. N. Jones 416-417)

The NAC Peyote Ceremony

The peyote ceremony is an all-night ceremony that starts in the early evening and runs until the following morning. The following morning the people have a breakfast of traditional foods, such as corn, meat, and fruit. A ceremony is often called to assist in curing a sick person, although ceremonies can also give thanks for a person being cured, which assists in preventing other imbalances from occurring. Ceremonies are held to pray for loved ones who are away at school or in the military, to celebrate birthdays, holidays, baptisms, to bless and help someone with a particular problem, and to receive answers to questions, for guidance and prayer. In common practice the person who calls for the ceremony also sponsors it, by making arrangements with the quarters and officials and providing food for the thanksgiving breakfast. If the sponsor cannot afford the responsibility, others assist the person in putting it together.

During the ceremony members partake in praying, singing, drumming, quiet contemplation, and of course ingest the sacrament, peyote. There are two variations of the peyote ritual, Cross Fire (Big Moon) and Half Moon, and they are generally the same throughout the United States and Canada. Out of the two variations, Christian influences are most evident in Cross Fire. It runs differently, depending on the individual leading the ceremony, as well, but they all fall into these two variations. The ceremonial leader, the Roadman is free to run the ritual with minor differences. There are four officials altogether who preside over and assist in running the ceremony: the Roadman (also known as the Road Chief); the Chief Drummer; the

Cedarman; and the Fire Chief. NAC members emphasize and differentiate, that the Roadman is not a priest or intermediary, rather he/she is a leader of the ceremony helping to facilitate each individual's own experience. The positions are not dictated by gender.

During the ceremony specific ritual objects are used, which although uniform, vary in construction. The construction and maintenance of the objects is just as important as the skills in using them. These objects include a water drum; a drum stick; a gourd rattle; an eagle wing-bone whistle; a cluster of sage; a staff; various feathers; containers for the peyote; an altar cloth; a bucket of water; a bag of cedar incense; a bag of tobacco; corn husks or cigarette papers; and a fire stick.

The meeting takes place in a tipi or hogan (most common), which is specifically designated for the purpose of the ceremony. Often it is built prior to a meeting and then it is taken down and reassembled when it is next needed. Its entrance opens to the east. Within, a fire and a crescent-shaped altar are prepared according to custom. Before the meeting, the people all bathe. Once night begins to fall, everyone assembles in small groups outside the meeting place. Once assembled, they begin to make their way inside. The chief enters first, then the chief-drummer, the cedarman, the men, the women and children, and finally, the fire-chief. Once inside the Roadman places the "chief peyote" upon some sagebrush leaves on the altar and prays. In turn, everyone may be invited to speak of their ills and struggles, in order for prayers to be voiced on their behalf.

People may then light tobacco and exhale four puffs of smoke in the direction of the "chief peyote." Sage brush is then passed around, rubbed between the hands, sniffed and rubbed over the limbs, as well as beaten four times against the chest to purify the body. After sage is used, a sack or container of peyote is passed around. During some ceremonies a peyote paste is also passed prior to the actual buttons. A peyote tea is also part of the ceremony. Members generally take four buttons and the ingestion is often followed by nausea, coughing, and spitting, due to its bitter taste and constitution. Everyone sits as still as possible taking in the divine plant and the sacred procedure accompanied with silent prayer.

Following the eating the Roadman holds the staff and fan, shakes the rattle, and sings the Opening Song. Singing, accompanied by the drum and gourd rattle, is an essential element in the peyote meeting. The majority of the singing is in the Native American languages, but sometimes it includes English phrases. There are only four songs that must be sung at fixed intervals; the Opening Song, the Midnight Water Call, the Morning Water Call, and the Closing Song. During the rest of the ceremony people sing various songs, by their choosing, depending on who's turn it is to lead. The songs sung are highly significant to the peyotist, understood as having been given by peyote itself, a direct revelation from the spiritual realm. A song is a powerful prayer to the higher power and it also acts as a form of communication between all persons present.

At midnight the Midnight Water Call takes place, at which time the fire-chief replenishes the fire and the Midnight Song is sung, more prayers are offered and all drink water. Singing continues with renewed energy. Personal supplies of peyote can be consumed after midnight, and prayers are continued. At morning a ritual containing some elements of the Midnight Call takes place, the fire is again replenished and the altar area is cleaned. The Morning Call is sung, followed by four blasts on the bone-whistle, after which a woman, often the Roadman's wife, The Water Woman, brings in water and kneels. The water is spilled onto the ground. Breakfast

is then eaten and the Closing Song is sung, followed by more prayers and blessings. All is then dismantled and put away. The Fire-Chief leads the exit, followed by the Roadman.

Conclusion

It is difficult, if not impossible to encompass all elements of the peyote religion, its beliefs, and ceremony in a single paper. The power of its sacred presence in the lives of the ones that revere it is much deeper than can be put into words. Through looking into the subject a high regard has grown within for this unique, mysterious element of nature. It's effects on areas within human cognition that otherwise are inaccessible is truly vital in understanding how it assists those that use it and believe in it. Very few would disagree that opening a pathway to understanding and a higher sense of living within the balance to be found in life, rather than the chaos, is the correct route to take, although this is not the route for everyone. Perhaps for those who do not take what is called "the peyote road", could learn from the ones that do. Exchange of knowledge and wisdom has always been and continues to be a most essential ingredient in understanding ourselves and each other. Nature bestows upon us many gifts and it is up to us to utilize them correctly, safely, and with love in mind.

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WAKAS ABUSABE

Underprivileged Parents Foster Secure Attachments with Children: Classic Research and an Original Study¹

Abstract

The aim of this current study was to examine whether education is a significant variable that leads to the fostering of secure attachments between parents and their children. The purpose of this research is not to prove that a particular variable fosters secure attachments between parents and children, but rather to disprove current understandings that lower education levels and single parent status impedes the capacity of parents to form a secure attachment style with children. I begin by reviewing classic research studies in the field of attachment, including Ainsworth's classic "Strange Situation" study and follow with my own research study. For my study, I developed a semi-structured interview, with open-ended questions, which allowed me to discover how secure attachment styles are achieved with children whose parents lack college and/or professional degrees.

Literature Review

The name of the classic research article that I read is "Infant Mother Attachment", by Mary D. Salter Ainsworth. Ainsworth talks about a research study conducted to explore the attachment behaviors expressed by one year old children. She recorded behaviors of infants before and after periods of separation from their mother. According to Ainsworth, "the assessment procedure consists of classification according to the pattern of behavior shown in the strange situation, particularly in the episodes of reunion after separation" (Ainsworth 1979, 932).

The strange situation procedure was carried out in four steps. The first step consisted of having a child and parent together in a playroom. The second step was to have a stranger enter the room with the parent and child. Third, the parent left the infant with the stranger. This was referred to as the separation stage. During this time frame, the child and stranger were together in the same room without the parent. Next, the parent returned to the playroom, which is referred to as the reunion stage. The main focus of the experimenters was to determine the children's reactions during the separation period. In addition, the experimenters wanted to determine the reactions of the children at the point of reunion. By determining the reactions at both separation and reunion, the children were placed in separate categories, depending on how they reacted to the strange situation.

¹ Completed under the mentorship of Professor Jason Van Ora for Psychology 32: Human Growth and Development.

Based on their responses, each child was placed in one of four groups, which were labeled A, B, C, and D. “Group A babies rarely cry in the separation episodes and in the reunion episodes, avoid their mother” (Ainsworth 1979, 932). On the other hand, Group B babies rarely cried at separation and were very happy to see their parents upon reunion. According to Ainsworth, “Group C babies are intensely distressed by separation: and in the reunion episodes they are ambivalent with their mother, seeking close contact with her and yet resisting contact interaction” (Ainsworth 1979, 932). Group D babies showed a lot of confusion, and expressed contradictory behaviors. They would sometimes ignore the parent, cry at reunion, and sometimes express anger. The pattern of behaviors observed in Group D were not predictable.

I believe fostering a secure attachment is a process that begins at birth. Ainsworth states “we found that it was how the mother holds her baby rather than how much she holds him or her that affects the way in which attachment develops” (Ainsworth 1979, 934). This basically means that it is quality over quantity. It does not matter if a mother is present everyday in the child’s life, but rather how significant and meaningful her presence is when the mother and child are together.

There were two other articles that I have connected with this initial, classic piece. The first article discussed the long term effects of the British evacuations of children during WWII. The main focus of this study was to determine whether or not separations in a person’s childhood have an effect on adult attachment styles. The findings enhance Ainsworth’s. The members of the three groups discussed in this article, demonstrated similar behaviors to the groups discussed by Ainsworth. During the war, the children obviously had to be evacuated and were separated from their families and in particular their mothers. The mothers were not able to see their children often. Overall, children who saw their parents more often were less likely to be placed in the fearful or resistant category. According to Rusby and Tasker, “female respondents who received parental visits less than twice per year had significantly higher incidences in the fearful category compared to those who received visits eight times or more a year during the period of evacuation. Males in the study demonstrated a similar trend. This suggests that so long as regular parental visits are maintained the period of evacuation may have not been too critical” (Rusby, Tasker 2008, 218). These findings enhance Ainsworth’s because they illustrate the importance of not only the quality time spent with children, but regular and frequent contact between the parents and children as well.

In addition, an article by Jacinthe Emery, Daniel Paquette, and Marc Bigras moves Ainsworth’s article in a new direction. This study is about the role of adolescent motherhood and social support on children’s subsequent attachment styles. The studies showed that children of adolescent mothers were more likely to have insecure attachment lifestyles. “A meta-analysis by van Ijzendoorn et al found that more infants of adolescent mothers exhibited insecure attachment (mostly avoidant and disorganized patterns) than infants of older mothers” (Bigras, Emery, Paquette 2008, 66). The authors affirm that adolescent mothers are at higher risk of undergoing parenting stress and problems of their own. “In fact, numerous personal consequences have been associated with early motherhood. Among them are lower marital stability, higher rates of parenting stress, higher rates of depression, lower sense of self efficacy, more limited knowledge of child development, and more behavior problems” (Bigras, Emery, Paquette 2008, 66). The authors determined that the more social support an adolescent mother receives, the more likely the child is to develop a secure attachment style. In addition, the authors found that adolescent mothers with more education are more likely to have children with secure attachment styles.

My research question is as follows: How do single parents with less education, less money, and less time still be good parents in the sense of fostering secure attachments between themselves and their children? I am aware that more education is correlated with having more money. More money is correlated with having a financially secure lifestyle. While I agree that people who have a higher educational background might have better decision making and reasoning skills, I do not believe that education status is the most significant factor for fostering a secure attachment. In addition, while researchers often speak of “single parent status” as a threat to secure attachment styles, I am not convinced that single parents (even those who need to work) cannot establish secure attachment styles

with their children. Thus, my hypothesis is that single parents with a lower level of education, have less money and time, would still be able to foster secure attachments with their children. I hope to prove my hypothesis, and move the findings of Bigras, Emery, and Paquette in a new direction. I also wish to obtain any new insight of how parents may foster a secure attachment. I wish to gain insight on any other factors that may or may not lead to the fostering of a secure attachment. I want my findings to contribute something significant and original to this topic of attachment patterns.

Method

To recruit, I provided a questionnaire (see appendix A), to screen out those who did not fit the criteria. To enhance my research, I created and utilized a structured interview (see appendix B), to understand how single parents with low education levels, less money and time, foster secure attachment styles with their children. I also asked a few open ended questions to inquire about different strategies used by the parents to foster secure attachments. Therefore, I would find information that would determine that education is not an essential variable for fostering secure children. The questionnaire allowed me to locate participants with limited education levels and “single parent status.”

I needed participants to fit certain criteria for the study. The participants had to be single parents because the article by Ainsworth as well as the article by Bigras, Emery, and Paquette referred to single parents and because of my hypothesis. Also, the participants needed to have a low level of education; one or two years of college or less was acceptable. After utilizing the questionnaire, I was able to recruit two single parents. One was a single father, and the other a single mother. Certain questions were developed in order to determine whether or not the children were really securely attached to the participant, or does the participant only feel their children are securely attached to them, when they are in fact not. For example, I would ask the parent to tell me if they “feel” as if though their children are attached to them. If the participants answered “yes” or “no”, I created follow up questions to validate or disprove the answer given by the parent. The follow up questions were: Have you ever left your children with a babysitter for any type of reason such as going to work? What was the length of this separation period? How did your children react to seeing you after the period of separation? I compared the scenario of going to work, with the babysitter entering the house to Ainsworth’s strange situation. In this case, the babysitter is the stranger. I compared the scenario of the parent coming back from work to Ainsworth’s reunion stage. According to the answers that I received about the participant’s children at the separation and reunion; I was then able to determine whether the children would be considered avoidant, resistant, disorganized, or secure. I wanted to find out, if not from school, where did the participants learn effective parenting skills.

Results

According to the answers that I received during the interviews, I was able to prove my hypothesis right. I cannot say I have completely eliminated education as a variable for fostering secure attachment because of such a small and time limited research study this was. I was able to show that parents with less money, less education, and less time are still able to foster secure attachments with their children. This might be in part, because both parents were authoritative. Authoritative parents are considered to be the idealistic types of parents showing high levels of control as well as high levels of warmth to raise their children.

Interview Responses by Parents

The single father stated “I always made sure to celebrate holidays and birthdays. I made sure I tucked them into bed every night. I try to spend quality time with them, playing board games, and just simply talking to them”. The single father expressed high levels of warmth in his response. He made sure to dedicate time to his children.

The single mother stated “the most important thing I need to do as a parent is to respect my kid’s thoughts and opinions. I allow them to express their feelings and let them be themselves. I prioritize my kids over other things in life like hanging out, and going to parties I was invited to”. The single mother

expressed high levels of warmth to her children. She utilizes her own free time to bond with her children. She places her children over everything else. She does this by conversing with them, instead of threatening them. She urges her children to speak what is on their mind. She is willing to hear their opinions, and discuss the rules that she lays out for them. She respects them without crossing any boundaries between her and her children.

Both participants stated “no I did not learn any parenting skills from school. I never attended any parenting classes”. The single father stated “my mother taught me most parenting skills I know now. My mother taught me how to heat up the baby milk at the right temperature. She taught me how to change diapers properly without causing the baby to get a rash”. The single mother stated “I learned basic parenting skills taking care of my little brother when he was born. I also learned parenting skills by watching my mother take care of my younger siblings”. These answers were key to the study I conducted. These responses demonstrate that a person does not need a higher level of education in order to be a fit parent. People could learn parenting skills at home, not needing to be in a classroom setting.

Both participants answered “yes, I feel my kids are very attached to me. When I come back from work, they always hug and kiss me. They are always happy to see me”. This coincides with Ainsworth’s strange situation. As I mentioned earlier, that after the reunion stage, attached children embraced their parents and were glad to see them. The structured interview was meant to elicit responses to compare to Ainsworth’s strange situation. To further validate my research, I did not inform the participants what the questions were meant for until after the interview was finished. I wanted to eliminate any pre-existing biased responses to the interview questions.

The single mother stated “the most important thing I want to pass down to my children is religion. I want them to know who God is and I want them to appreciate their stay on earth”. The single mother expressed high levels of control. She wants her children to be religious.

The single father mentioned that “the main thing that I want to pass down to my children is self respect. Once you respect yourself, others will respect you. They must respect their elders”. The father showed high levels of control when answering my question about what is the main thing he wants to pass down to his children.

According to the parent’s answers, I determined that both parents were authoritative. The reason is they expressed high levels of warmth and control. They expressed high levels of warmth by allowing their children to express themselves, and discuss rules instead of just expecting them to be followed. The parents hugged and kissed their children. The parents made sure to spend quality time with their children. The parents expressed high levels of control when they spoke about education, religion, and respect. According to the parent’s responses, they did not tolerate any disrespect. The single mother wanted to make sure they appreciate religion. The expression that I got from the parents is they do not ask for much of their children. They are willing to negotiate certain rules, although certain rules and regulations must be followed. They are willing to discuss the importance of these rules, and why the parents feel these rules should be followed.

Conclusion

The findings in this study are important because this study moved previous studies towards a new direction. It provided insight on how parents with less education, less money and time are still able to foster secure attachments with their children. I hope this study provides low income parents with proof and confidence, that people could foster secure attachments with their children; even though they may not be able to buy the children everything they want. I hope that current and future parents recognize how significant the emotional aspect of raising a securely attached child is. Raising securely attached children takes hard work and consumes lots of time and energy. It is true that single parents with low income levels may be working more hours than others, which creates an additional barrier to secure attachment. Nonetheless, raising a securely attached child is very possible, despite education level and single parent status, as I have illustrated within the current research.

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Appendix A: Questionnaire

I am a 21 year old college student and I attend Kingsborough Community College. I am currently working on a study for a psychology class. I here present a questionnaire that I created for the sole purpose of recruiting participants. You are welcome to complete this questionnaire, if you would like to participate in this study. You will need to fill out a name, but your identity shall not be revealed. You will be asked to leave a phone number and e-mail address that I could use to contact you if chosen for the study. I will then contact you and make an appointment to meet with you at a convenient location to interview you. If for any reason you feel that you do not want to participate in this study, feel free to withdraw at any given time. So if you would please take five minutes out of your time to fill it out. THANK YOU

Gender: Male - Female

Are you a single parent? Yes - No

How long have you been a single parent?_____

How old are you?_____

How many children do you have?_____

What are the ages of your children?_____

Please mark Education Status that is most accurate for you
No High School Diploma or High School Equivalency Diploma
High School Diploma or High School Equivalency Diploma
1-2 Years of college

Earned a degree in college or institute? Please elaborate_____

Attended college but did not earn a degree

Are you currently in school? Yes No If Yes, what grade or year in college/institute_____

Do you feel that you have an adequate bond with your children?

Strongly Agree - Agree - Strongly Disagree - Disagree

Are you currently employed? Yes - No

If you answered yes to the previous question please state you're occupational status.

Do you currently collect any third party payments such as child support, family life insurance?

Telephone:_(_____)_____

Email:_____

Appendix B: Interview Questions

- Do you feel that your children are securely attached to you? If so, what do your children do to make you feel that they are attached to you?
- What do you feel you have done as a parent to create such a strong attachment?
- Have you ever taken any parenting classes?
- Did you learn how to take care of your children in school?
- Where, or from whom did you learn how to take care of your children?
- Have you ever left your children with a babysitter for any type of reason such as work?(strange situation)
- About how long were you usually gone?
- How did your children react the first time with a babysitter? (separation)
- How did your children react when you came back from work? (reunion)
- Are there any specific time periods that you made sure to spend with your kids?
- From your perspective, what do you feel is the most important thing a parent is supposed to do for their kids, in order to foster a secure attachment?
- Towards your children, would you say you have: high control, and high warmth, high control and low warmth, low control and high, or low control and low warmth?
- Do you encourage your children to question your rules? Do you want your child to just follow rules, or do you want them to understand why they are following rules?
- What is the reason you feel it is more important to explain the rules rather than just laying them out?
- What methods did you use to teach your children lessons of life?
- So for example, how would you go about teaching the how to cross a street properly?
- As a parent, what were the main things that you wanted to pass down on your children?
- Would you say that you had other supporters helping you out because you were a single parent? If yes, then how so? For ie.(financially, babysitting, while working, etc)
- Are there any questions that you would like to ask me in relevance to this interview or study?

MONA RICHARDSON

Ethiopian Food and Culture¹

This paper is on Ethiopian cuisine and the influences that affected it such as trade, religion and culture. It was Ethiopia's location on the Old Spice Route, its interaction with the ancient trading countries of Greece, Rome and Byzantium, its varied climate, rainfall and religion that helped to create Ethiopia's unique cuisine.

Ethiopian food is unique compared to other African and Middle Eastern cuisines, and is strikingly different from the cuisines of most of its closest neighbors: Saudi Arabia, Yemen, Sudan, and Egypt. The way Ethiopians blend spices and cook with them is distinctive. Even Ethiopia's base food, Injera (bread) is different. I wanted to know the reasons why. When I took Geography of Food (TAH 73), I became even more intrigued, and Professor Sally Ingraham allowed me to write about it, thus this paper. I wanted to know what influence other countries, history and trade had on Ethiopian food. What cultural aspects influenced Ethiopian food? What role did religion play? Why did they use so many spices compared to other countries?

Ethiopia is over 3000 years old. "Ardi," the oldest known human remains in the world were found in Ethiopia. "Lucy," the second oldest, but most complete and best-preserved skeleton, was also found in Ethiopia. She is 3.5 million years old. In 2000 BCE, the first known inhabitants left behind rock paintings and tools. Ethiopia has had several names over the centuries: D'Mat (8th century BCE), Cush (4th century BCE), Aksum (2nd century BCE), Ethiopia (15th century CE), Abyssinia (the western world, its name for Ethiopia). The name Ethiopia, possibly came from the Greek word, Aithiops, which means burnt face. Another possibility is from the Bible. Ethiopis was the son of Cush and grandson of Ham. The last possibility is Aethopia from the Aytob language, which means incense since Ethiopia was the source of frankincense and myrrh.¹

Ethiopia has its own special way to measure time. Ethiopians call their country, "14 months of sunshine." Their calendar year is 14 months (13 months of 30 days, with one month of 5 days). They still follow the Julian calendar while the rest of the western world is on the Gregorian calendar. Ethiopia is 7 years, 8 months behind the rest of the western world. Their 12 am is our 6 am because they feel the day really starts when the sun rises. They share this way of telling time with Kenya and Tanzania, their East-African neighbors. On the radio, announcers give both times. The Ethiopian alphabet has over 230 letters. There are 29 free-standing consonants and seven free-standing vowels. The remaining letters consist of each of the consonants, each having a vowel attached to it.

The Highlands (the original site of Ethiopia) are volcanically formed mountain ranges; they range from 10,000 feet to 5,000 feet above sea level. They stretch from over 500 miles east to west, and just under 1000 miles north to south. Ethiopia is close to the equator and the growing season is year-round.² There are several mountain ranges in the Highlands. The Simien Mountains are the fourth highest in Africa. The capital, Addis Ababa, is located in the Highlands. It is the third highest capital city in the world and it gets quite cold. Ethiopia is called, "The water reservoir of Africa." It is the source of the Blue and White Nile rivers which supply 90% of the water that flows through Sudan and Egypt via the Nile.⁴ Within a small area, there are hills and ravines that differ greatly in altitude and climate, making it

¹ Completed under the mentorship of Professor Sally Ingraham for *TAH 73: Geography of Food and Wine*.

possible for several different crops to be grown. Foodstuffs, therefore, vary greatly. There are 5 temperate zones:

1. Worch chiily: medium to low rainfall
2. Dega: cool daytime temperatures range from 32-60°F
3. Weyna dega: from 60-86°F
4. Kolla: temperatures range about 80°F
5. Bereha: hot and arid.³

There are over 10,000 Stelae (Obelisks) scattered throughout the country. They were built before Ethiopia became a Christian nation. They are thought by some historians to possibly be grave markers, memorials or a way to record history. These Stelae told the history of different battles, accomplishments, etc. of leaders in the county. Some of the Stelae were inscribed in Ge'ez (old Ethiopian language), Sabea (an old Yemeni language) and Greek, other times only in Ge'ez.⁵ It is thought that when the Ethiopians were pagans they worshiped the sun and the moon and incorporated Greeks' beliefs.⁶ When Greece was the major power in this part of the world (between 6-4 BCE) the Ethiopian upper classes, including the Royal family, spoke Greek.

According to Ethiopian legend, Ethiopic, great grandson of Noah, founded the capitol of Axum and his descendents ruled Ethiopia for 52-97 generations.⁷ Makeda, Queen of Sabea (Sheba) (the last of the Ethiopic line) had 73 ships and 520 camels that she used for trade via sea and land. In 980 BCE, she went to Israel to visit King Solomon, King of Judea, giving him spices, gold and other items. She had heard of Solomon from a trader named Tamrin. This is in the Old Testament in the Bible. She converted to Judaism, she ruled Ethiopia and part of Yemen (adjacent to the Red Sea) for 31 years. King Solomon and the Queen of Sheba had a child named Menelik (Ibn al Malik, meaning son of the king). Menelik lived in Ethiopia for several years and then decided to visit his father in Israel. He stayed for three years and learned about Judaism. When Menelik decided to return home to Ethiopia, Solomon had each Israeli tribe send 1,000 of their people with him. Each High Priest had to send their oldest son with Menelik. When Menelik became king, he followed the Law of Moses. This was the beginning of the Solomonic rule that continued until 1974. Many Ethiopians converted to Judaism. The Beta Israel (Ethiopian Jews) are thought to be the lost tribe of Israel by some Jewish scholars, because the Judaism they practiced was extremely old and the Beta Israel were not aware of modern Judaic practices. The Beta Israel have the same genetic markers as the original Jews, who resided in Israel during that time period.⁸

The Ark of the Covenant holds two stone tablets containing the Ten Commandments, which is a list of moral and religious commands given from God to Moses. An example is, "Honor your mother and your father." The Ark of the Covenant is reportedly in Axum, Ethiopia, at the Church of Our Lady Mary of Zion. It is kept under 24-hour guard. On rare occasions it is taken out and covered by decorative cloths. All of the Ethiopian Orthodox churches (over 30,000) have a copy, which they call a Tabot. The Ark of the Covenant was taken by one of the high priest's sons (who traveled with Menelik to Ethiopia) from Israel when they left.⁹ (The high priest's son was told to take a replica of the Ark, but he had a dream telling him to take the authentic Ark of the Covenant, which he did. King Solomon was angry and sent soldiers to retrieve the Ark of the Covenant, but in a dream he was told to let the Ark of the Covenant go to Ethiopia.) Is this part necessary?

Herodotus, a Greek historian who was called the "Father of History," mentioned Ethiopia in a 5th century BCE writing. Ethiopia was mentioned by Homer in the Iliad (twice) and the Odyssey (three times).¹⁰ Manni, a 3rd century CE Persian scholar said the four great kingdoms of the world were Persia, China, Rome and Ethiopia.¹¹ Ethiopia along with India, Persia and Rome was one of four countries of the world to mint coins, to make it easier for trade, but the masses still used salt.¹² Salt was also called "White Gold" because of its value to the common person. They used it to cure their food to keep it from spoiling, for trade, barter and as money. Ethiopia's coins first had a sun and moon on them. The ancient Greeks worshipped the sun and the moon, and it is possible that the Ethiopians worshipped

the sun and moon. The sun and the moon were later replaced by a cross when Ethiopia became officially a Christian nation in 337-340 CE.¹³

Ethiopia started trading with Egypt around 3500 BCE.¹⁴ Ethiopia supplied ancient Egypt (28 BCE) with many items, including myrrh and frankincense. Myrrh and frankincense were used to honor the gods and embalm the dead.¹⁵ The ancient Egyptians, Greeks and Romans sent expeditions to Ethiopia for gold, spices, frankincense, myrrh, dragon's blood or cinnabar, musk, beeswax, ivory, honey and slaves. Ethiopian Ivory was highly valued during this time period. Ethiopian elephants had larger tusks than Asian elephants. The Romans called this area "Regio Aromatica" (aromatic region). The Ethiopians also exported ivory, ostrich feathers, spices, frankincense, myrrh and slaves to the Byzantine.¹⁶ From 400 BCE until 1000 CE.¹⁷ Ethiopia was a major trading nation from the first to the seventh centuries CE. It was a major maritime power.¹⁸ The main cities were Aksum and Matara. The two main port cities were Adulis and Assab. Early Ethiopian pottery seemed to have been influenced by Greece.¹⁹ Greek and Chinese shards of pottery were found in Ethiopia (dating from 800-1400 CE from the Tang dynasty).

The Ethiopians traded with Egypt, Sudan, India, Palestine, Persia, China, Arabia, The Black Sea nations, Europe, Byzantine, Mediterranean countries, and other Africa nations.²² Ethiopian ships left for Asia using the trade winds. The Ethiopian ships would arrive in Asia in September and sell their items. In October, they sailed with the return trade winds to Ethiopia. Back home they sold the items they had picked up in the East to the Mediterraneans.²⁰ "Since time immemorial the east African trade winds have carried maritime traders backward and forward between India and the Arabian Peninsula, and the long east coast of Africa."²¹

In about 60 CE, a Greek sailor wrote a book of 28 pages, Periplus of the Erythraean Sea, a guide to trade and navigation in the Red Sea and Indian Ocean. In it, Ethiopia was described in at least four places. He described the Port of Adulis as Ethiopia's main seaport, how busy it was, what was traded, how ships and sailors were treated and where they docked. He mentioned King Zoscales (Za Hakele), who was described as a noble, powerful and wealthy man who was familiar with Greek education. King Zoscales' face was on coins minted during this time period.²³ During these times, Ethiopia controlled both sides of the Red Sea, including the eastern shore where Yemen is today. A large part of the economy of Ethiopia depended upon trade and fees collected from ships using the Red Sea. They also made money for their coffers by collecting fees from merchants conducting trade by land. Ethiopia has had direct historical and trade links to Yemen.

Around 483 CE, Emperor Justinian sent a letter to King Ellesbasas of Ethiopia wanting to create a trade route from Rome to India that would go through Ethiopia and bypass Persia. This was not successful because the Persians' navy was too strong.²⁴ From 518 CE to 641 CE, Ethiopia through its trade with Byzantium, helped to prop up the Byzantine economy. Gold was one of the main items traded. Ethiopia sent middlemen into the interior of Africa to purchase, barter or trade salt, iron and meat for nuggets of gold. The Byzantines then purchased the gold with coins.²⁵

The King of Ethiopia, in 615 CE, gave refuge to the Prophet Mohammed's family (his wife, daughter and followers) when they fled Arabia because their lives were in danger. This was when Islam was in its infancy and not popular. The ruler of Arabia asked the King of Ethiopia to return the Prophet Mohammed's family and followers. He offered him expensive gifts, and told the King they were criminals. The King of Ethiopia talked to the refugees and found out about Islam and its beliefs. The Ethiopian ruler refused to return them.²⁶ The Prophet Mohammed then said that Ethiopia was to be excluded from the Muslim Holy wars. Bilal, who was Ethiopian, was Prophet Mohammed's first muezzin (this is who calls Muslims to prayer). The largest number of Muslim followers that were not Arab were Ethiopian. The fourth holiest city in Islam is in Harar, Ethiopia.

In the seventh century CE, Islam grew and Ethiopia was isolated for several centuries because it was surrounded by Muslim countries. Ethiopia's economy began to decline, with the rise of Islam and Muslim control of the Red Sea about 640 CE. The Persians had trade routes from Persia through the Red Sea down to the Swahili coasts (where the people were Muslim) and beyond.²⁷ Later, it was the Ottoman Empire that controlled the Red Sea. As the Persians' and Ottoman Empire's wealth grew, the

Swahilis' and Ethiopian's economy declined because both countries' economic wealth came from trade and the countries' central location. They were part of the old spice route, which involved trading in spices, incense, herbs and drugs. In 702 Ethiopia invaded Jeddah, a port in what is now Saudi Arabia. The Arabs responded by destroying Adulis (Ethiopia's main port).²⁸

In 1493, the Portuguese made contact with Ethiopia. Vasco da Gama in 1498 rounded the Cape and found an all-water route to Asia. The Portuguese finding a direct route to Asia absolutely crippled the Ethiopian economy. There was no longer a reason to stop at Ethiopia on the way to Asia. In 1509 the Queen of Ethiopia sent a letter to the king of Portugal writing, "To her very dear and well-beloved brother," she proposed an alliance between the two countries. The Ottoman Empire invaded and controlled Egypt in 1517; they then launched a fleet in the Indian Ocean to counter the Portuguese fleet. In 1520-1526 and 1541 Portugal established diplomatic relations with Ethiopia, complete with an Embassy. Brazil, which was a colony of Portugal in the 1500's, had diplomatic relations and cultural exchanges with Ethiopia.²⁹

In 1531, Ethiopian Muslim Iman Ahmad Ibn Ibrahim al Ghazi (nicknamed "Gran") declared a holy war against Ethiopia. He had an agreement with the Ottoman Sultan who sent troops and also gave muskets to the Muslims, to fight the Christians. The war went on for 11 years, while the Muslims had weapons, the Christians did not, and during this war hundreds of churches, art and books were destroyed. An estimated 10% of the Ethiopians population was forced to convert to Islam. The Ethiopian king asked for help from other Christian nations. The Portuguese sent in weapons and troops, including Vasco Da Gama's son Christopher, to help Ethiopia fight the Muslims. In 1539, Christopher was captured and killed. Ahmad Ibn Ibrahim al Ghazi continued fighting using Turks, Arabs, and Albanian mercenaries. They continued fighting until 1543 when "Gran" was killed in battle. The joint Ethiopian-Portuguese force defeated the Muslims in 1543.³⁰

In the fifteenth century, Roman Catholic priests from France, Portugal and Spain went to Ethiopia, attempting to convert the Ethiopians to Catholicism. They went because of the legend of Prester John, a king in Africa or India whose kingdom was very wealthy and was surrounded by Muslim nations. This rumor started because explorers like Marco Polo talked of this kingdom.³¹ In 1177 Pope Alexander III sent a message to Prester John, but the messenger did not return.³² In 1557, Portuguese Jesuit priests set up missions in Ethiopia. They converted the Ethiopian King to Catholicism. The people rioted, the king was deposed, and the new king ordered all foreigners out, including the Jesuits. In 1646, all foreign priests were expelled again. In 1790, James Bruce, from Britain wrote a book, *Travels to Discover the Source of the Nile*. This book described life and culture in Ethiopia, and especially the royal court, in detail.³³

There was contact between the Orthodox churches of Moscow and Ethiopia. In 1674, Russia and Ethiopia tried to form an alliance. They had the same religion, both distrusted the Ottomans and the Russians thought there was wealth in Ethiopia. The alliance was not successful. Ethiopia disliked the Ottomans because Ethiopia's economy was based on trade. The Ottomans controlled all trade that passed through the Red Sea. In 1683, England and other European nations approached Ethiopia to form an alliance against the Ottoman Empire, again it was not successful, because the Ottomans were too powerful.³⁴

From 1755-1855, all foreigners were expelled and not allowed to live in Ethiopia. During this time period modern Ethiopia was formed and unified as a nation. Ethiopia continued being a trading nation during this time period. India was a big trading partner with Ethiopia, exporting textiles and spices to Ethiopia. India imported gold, musk and ivory.³⁵ India exported cotton to Ethiopia. The United States started exporting cotton to Ethiopia in the 1800's, which was considered superior to the Indian cotton.³⁶ Indian merchants moved to Ethiopia to conduct business with Ethiopia and other countries in the interior of Africa.

Ethiopia has been at the crossroads for cultural contacts, trade, food and crops for a millennium. From 1000 BCE, grains from Asia were found in Ethiopia.⁵⁶ Ethiopian food does not have a regional cuisine per-se. Regional dishes have been integrated and made part of the national cuisine. Each of the national dishes is from different nationalities in the country. Ethiopia was part of an old and modern

European spice trade route and its food reflects this. Ships went from the Indian Ocean; up the Red Sea then goods were carried over land through Egypt, to the Nile and back by ship to Turkey and the rest of Europe. The Arabs and Persians brought in different spices, but it was India that influenced Ethiopian cuisine with their spices and blends of spices. Spices were very important to the world and especially Europeans. The Europeans imported spices from Asia, using middlemen (usually Arabs). Transport costs, fees and other incidental costs made the price of spices expensive and out of the reach of the average European. Spices were kept under lock and key, with one person having a key to the spice cabinet. Once the world was able to buy spices directly from the source, the price of spices went down, so more people could purchase them.⁴⁰

Ethiopian food is a *mélange* of spices, with flavors blended with spices from several countries. They cook with Sri Lankan cinnamon; Indonesian cloves and nutmeg; Mexican capsicum; Indian cardamom; Egyptian ajwain (bishops weed), cumin and black cumin; Southeastern Asian ginger; Southern Asian-fenugreek and turmeric; southern European rue berries, the West Indian allspice; Mediterranean coriander, rosemary and thyme; European garlic; western Asian-caraway; and Basil, which is native to India and Iran. Just to name a few.⁴¹ Jinjibil (ginger) and lomi (lime) are thought to have been imported by the Portuguese in the 16th-17th century.⁴² Most spices came from Asia or other islands in Asia and Africa and then onto Adulis (a port in Ethiopia) or going to Yemen or Egypt. Ethiopia is one of the top ten countries that uses the most number of spices when cooking.⁴³

(What is the importance of Berbere?) Berbere is made of up to 20 spices. Spices and onions are added to chilies. This mixture is dried in the sun, additional spices are added, and then finely ground. Mitmita is a hotter version of berbere. Awaze is a paste of berbere, lemon and wine. Ntr Kibe is clarified butter, cooked for up to 4 hours with onions, as many as 30 spices, strained and used as a cooking oil. Ayib is cottage cheese, which is served with meals. Irgo is yogurt. Even though foreign foods and spices were introduced, they did not change Ethiopian cuisine that much.⁴⁵ The new spices and foreign foods were accepted, adapted and enhanced Ethiopian cuisine.

There are clean and unclean animals that are not allowed to be consumed. Christians and Muslims are not allowed to eat pork and any fish that eat from the bottom of the ocean. Catfish, lobster, shrimp and crab are considered unclean. Ethiopia, because of its past history and its geography, has had Judaic and Islamic influences on its society and culture.⁴⁶ Animals are slaughtered with their heads facing east. When slaughtering, Christians say, "In the name of the Father, the Son and Holy Ghost." Muslims say, "In the name of Allah the Merciful."

There are two types of stews called Wat and Alich. Wat is a dark red (its red color comes from berbere), spicy, thick stew (in my opinion, not hot and not really a stew since there is not much sauce) made with tomatoes, onions, garlic, green pepper and berbere. Tibbs Wat is made by sautéing the meat then adding it to the stew. Doro Wat is a chicken dish. Hard-boiled eggs are added to the wat while it is cooking and slits are made in the eggs so that the juices from the wat seep into the egg. A very mild version of the same dishes (without berbere) is called Alich. Kitfo is minced beef mixed with spices and ntr kibe served raw or cooked for a few seconds. The story behind kitfo is that the Christians did not want to have to light a fire so the Muslims would see their position, in order not to be attacked; they started eating the meat raw, adding spices and ntr kibe.⁴⁷ Kitfo and doro wat are the most popular meat dishes.

(One reason I think the food is good is because of the religion...Is there another way to say this?) When one thinks of Ethiopia, one must think of religion, specifically Christianity. Christianity is an integral part of life in Ethiopia. Ethiopian merchants preferred to do business in the afternoon. They said, "To church early, to market late."⁶¹ The Ethiopian Orthodox church was similar to the early Christian churches. It is part of the Oriental Orthodox family of Christians that split from the rest of the non-Orthodox Christian churches in the 5th century. There are 17,000-18,000 churches in the Ethiopian Highlands. Ge'ez was the language spoken in the Ethiopian highlands since the 1st century CE. Ge'ez is no longer widely spoken, but still written and used by the church. Twenty-percent of Amhara males are priests. Women join and become nuns especially if they have no one to take care of them when they become elderly. Some women's dresses have a border with a design sewn on the bottom. On many

dresses, a cross is found somewhere on the dress, in the center or along the side. Depending upon the item, some clothing are made of strips of cotton and sewn together. A Gabbe is a heavyweight cotton, wrap-around cape. It is needed for the cold weather in the high altitudes, such as the highlands. I can attest it is very cold in the Highlands in August and September.

Ethiopia is the second oldest Christian nation in the world. There are 30-40 references to Ethiopia in the Bible, the first being in Genesis. Ghion (Blue Nile) is mentioned in the book of Genesis in the Bible as one of the rivers of Eden.⁶² In Genesis, chapter 2, Ethiopia is referred to as, “the land of milk and honey.”⁶³ According to the Bible, Ethiopia is where the Garden of Eden was and where Adam and Eve lived. Ethiopia is mentioned 37 times in the King James Version of the Bible. Moses was married to an Ethiopian woman.

Ethiopia became a Christian nation after two brothers from Syria named Frumentius and Aedisius were shipwrecked and enslaved. Frumentius lived in King Ella Amida's court. Frumentius befriended his son, Prince Ezana. He converted King Ezana to Christianity in about 320-330 BCE. Frumentius became a Scribe, and was made the first archbishop of Ethiopia. A letter from Emperor Constantine of Rome mentions Frumentius.⁶⁴ Christianity became Ethiopia's official religion between 337-340 BCE. Coins minted during this time have a cross on them. By the end of the fourth century BCE, Ge'ez was the language used by the church instead of Greek. In the fifth century a group of nine Syrian Christian monks went to Ethiopia and translated the scriptures into Ge'ez. These priests are referred to in Ethiopian Christian history as the “Nine Saints.”⁶⁵ Each of these nine Syrian monks had several churches built throughout the Ethiopian highlands. They were canonized by the Ethiopian Orthodox church and each has their own holy day. They are Abbas (Saints) Mikael, Alef, Abba, Tsama, Aftse, Gerima Liqanos, Guba, Yemaya and Panteleon. Many churches are named after one of these Syrian monks.⁶⁶ Syrian Christian missionaries started proselytizing the word along the “the Silk Road.”⁶⁷

Ethiopian religious persons visited the Holy Land, and priests from other countries visited, taught and gave sermons in Ethiopian churches.⁶⁸ The Ethiopian Orthodox church was greatly influenced by the Old Testament, including the Book of Jubilee, which is Genesis and part of Exodus. The Kebra Negast (Book of the Glory of Kings) tells the origins of Ethiopia, including their Solomonic line.⁶⁹

There are cave churches in Ethiopia. Over 300 churches are carved out of stone. In Lalibela, there are 13 churches (that are still in use) carved from vertical cliffs, each one different (but are totally detached and separated from the rock) that were built between the ninth and thirteenth centuries. The churches are connected to each other by tunnels and passageways. All of the churches are named after buildings in Jerusalem. The largest church is called, “The Redeemer of the World.” It is 100 feet long, 70 feet wide and 36 feet high. The Church of Saint George is in the shape of a cross. With several of the churches, at certain hours the sun's rays shine directly onto the altars. The church walls have paintings of saints and religious stories on them.⁷⁰ Many churches have several paintings displayed, telling continuous Biblical stories so the population can understand them. The majority of the population is illiterate. For example, the story of the Queen of Sheba and Solomon is comprised of several panels telling their story. It looks like a cartoon strip. This style of painting has been popular for several centuries. Ethiopian art is characterized by faces with large almond-shaped eyes. It is called Naive Art by those in the west.

One story about Prince Lalibela, and the building of 11 stone churches is that his brother was jealous of him and poisoned him. Angels took Prince Lalibela to heaven and showed him what they wanted him to do when he returned to earth.⁷¹ He returned to earth and supposedly angels worked alongside humans to build the 11 churches during the late twelfth and early thirteenth centuries. “When he began to construct these churches, angels came to help him in each of the operations. There were a company of angels at work as well as a company of men, for angels joined the workers, the quarry men, the stonecutters, and the laborers. The angels worked with them by day and by themselves by night. The men would do a cubit's work during the day, but would find a further three cubits completed on the morrow. They doubted whether the angels were doing this work because they could not see them, but Lalibela knew, because the angels who understood his virtue, did not hide from him.”⁷² These churches were built by an estimated 40,000 people. The river Jordan is close by. Prince Lalibela became a king

and is considered a saint. The first documented foreign visitors to Lalibela were Portuguese explorers, Pero da Covilha (1460-1526) and Francisco Alvares (1465-1540). Lalibela possibly was built to become the New Jerusalem after Jerusalem fell to the Muslims in 1181. It was named the eighth most important historical site in the world by UNESCO.

Timkat—called Epiphany by Christians outside of Ethiopia—is when Jesus was baptized by John the Baptist. Outside of Ethiopia, it is when God appeared in human form. It is a three-day celebration and occurs twelve days after Christmas. It is celebrated all over the country, but the best place to attend this ceremony is at Lalibela. People and priests dress up and carry decorated umbrellas. The church priests take out the Tabot—a copy of the Ark of the Covenant, the laws of the Ten Commandments from Moses. The Tabot is covered in silk and only allowed to be looked upon by priests. The Tabot is taken to a tent where priests and devoted religious followers stay up the entire night and pray. In the morning, crowds gather close to a pond, which the priests have blessed, and church members make vows. The Tabot is sprinkled with water after the prayers. Those gathered around are sprinkled/splashed with holy water from the stream, lake, etc. Some of the observers go into the water. After the ceremony, the Tabot is returned to the church. The observers follow—singing, drumming, ringing bells and blowing trumpets. The people continue to celebrate and pray. The next day is a celebration dedicated to Archangel Mikael.⁷⁵

There are several days of fasting where only vegetarian meals are allowed for Orthodox Christians. Vegetarian meals are eaten most days of the year. Devout Orthodox Christians are required to fast 250 days a year. There are several Christian religious and saint days that are celebrated. The Virgin Mary has 33 days that honor her. Fasika (Easter) is observed for 55 days after Timkat. Fast of the Apostles lasts 40 days. Advent fasts are 40 days and 56 fast days for Lent. Every Wednesday, when Christ was condemned to death and every Friday, when he was crucified, they abstain from meat, poultry and dairy. They atone for their sins and obtain forgiveness from God. They are allowed one meal a day, eaten after 3 pm on fast days. Pilgrimages are also done by the devout after the days that they fast, celebrating their special saint's day. Vegetarian meals have a blend of spices.

There are many kinds of vegetarian meals, using all kinds of peas and beans—lentils, garbanzos, fava, several other vegetables, grains and fruit, especially lemons and limes. Shiro is chickpeas (ground) cooked with ginger and other spices. Timtimo is red lentils, lightly ground with herbs. Alitcha is potatoes, broccoli, carrots, garlic and spices. Hamli is spinach sautéed with garlic and spices. Ochra is okra simmered with green peppers and tomatoes. Cablo is white cabbage and green peppers. Tsebhi Hamli is collard greens and garlic. Fosolia is string beans, carrots, onions and spices. Tikil Gomen is potatoes, different vegetables, onions, garlic and spices. Miser Wat is lentils, berbere and spices. Miser Alecha is lentils cooked in a mild sauce. Kik Alecha is split peas ground and spices. Shimbra Asa is chickpea flour made into a dumpling and sautéed. Butecha is ground chickpeas with olive oil, lemon shallots and jalapenos.

Ethiopia has been called, “The land of bread and honey,” the reason being that so many different types of grains grew there—sorghum, millet, teff, barley, ensette (Abyssinian banana) and wheat, to name a few. At least 32 are indigenous. Mornings, sometimes for breakfast, Dabo bread is eaten. It's made with honey and looks like western bread. Injera (bread) is made of fermented batter. Its basic ingredient is Teff, which is indigenous to Ethiopia, and is the smallest grain in the world. It is believed it was called Teff because the word teffa in Amharic means lost. Teff was found inside of a pyramid around 3359 BC. It is highly nutritious, 15% protein, 82% complex carbohydrate, 20 times more calcium than wheat and barley, 3 times more iron than any other grain and it is also high in minerals.⁴⁸ Teff flour is ground very fine, water is added, then kept in buckets for a minimum of three days so it ferments and rises. Usually several buckets of this mixture are found in a kitchen. No yeast needs to be added. The batter is poured in a circular motion onto a flat pan called a Mitad. Cooked, it looks like a crepe (but a friend said she thought it looked like paper) with small holes on the top (which hold the sauce). Injera is so important that sometimes when Ethiopians greet each other they ask, “Have you eaten your injera today?”⁴⁹ In Sudan, they make very thin flatbread called “Kisra.” It looks a little like injera, is made with water and flour but not fermented, so there are no holes and is much thinner. Kisra is also not consumed daily. In

the other neighboring countries of Saudi Arabia, Yemen and Sudan they eat a lot of rice, only in Egypt their staple food is bread, it looks like the round Italian bread that we are used to.

Before and after one eats a meal there is a ritual for washing hands. A pitcher is brought out, with a basin and a towel. Warm water is poured over a person's right hand. The dirty water is caught in the basin. The person dries their hand with the towel and nothing else. Meals are eaten communally with the right hand, signifying bonds of loyalty and friendship. The oldest person in the house eats first.

The Ethiopian table is round and called a Mesob. It is woven of covered reeds (different designs are woven into the Mesob), and a cone-shaped top covers it. The chairs are scooped-out stools that are extremely uncomfortable for non-Ethiopians to sit on for two reasons—they do not have a back and are rather narrow.

A platter covered with injera is placed in the center of the mesob. Different dishes are placed on top of the injera, each dish in its own area, though sometimes it will be placed in two places, making it easier for the person eating to reach. Each person will get their own injera folded horizontally into quarters, placed in front of them. Pieces of injera are torn off and the food is scooped up. An Ethiopian traditional saying is, "Those who eat from the same plate will not betray each other." Another is, "A solution lies in salt and spice." They believe that when eating with companions what is said goes into the others' ears and resonates in the people's head, making them more open to others' thoughts. For Ethiopians being with friends while consuming a meal is as important as the meal itself. Conversation is non-stop, and it can take several hours to finish a meal. During a meal a friend will feed another friend; this is called "Gorsha." The bigger the size of the gorsha, the stronger the friendship. The host will feed each guest a small gorsha. One has to feed and be fed without dropping any of the food. All should go into the person's mouth. When a person has had enough to eat they will leave a small amount of food in front of their place so everyone will know they are full.⁵⁰ It is impolite to lick one's fingers after one has eaten. Ethiopians don't eat dessert, but sometimes fruit is served after a meal.

The Kaffa province is thought by Ethiopians to be where coffee originated. It is Arabica coffee, considered to be a better quality of coffee bean having a better flavor and supposedly makes a very good cup of coffee. There are different types of berries grown depending upon the region. In Harar the coffee is acidic and has a wine-like flavor. In Shoye the coffee has a fruity flavor. In Sidamo the coffee is more like a wine flavor. Coffee still grows wild in Ethiopia.⁵¹ In the second century CE, a sheep herder observed the behavior of his sheep after they ate the coffee leaves and berries. They became hyper. He ate some of the berries and he was affected. He took them to a monastery. The priests threw them into a fire to dispose of them. The smell enticed them and they chewed the berries. They found it helped keep them alert during lengthy night prayers. It became a custom to chew coffee leaves so they could stay up. What some lay people do is blend coffee grounds and butter and eat the mixture if they want to stay up.⁵²

From the sixteenth century coffee was exported to other countries, including Yemen and other parts of the Arabian Peninsula. Yemen exported Ethiopian coffee to Europe about the seventeenth century.⁵³ By the eighteenth century, Venice had over 200 coffee shops.⁵⁴

Ethiopia has an elaborate coffee ceremony, lasting for several hours. Incense is burned during the entire ceremony. A fire is started; the coffee beans are hand-roasted in a pan by shaking them on a small charcoal stove. The beans pop (like popcorn) and the pan is carried around the room so all can smell the coffee beans. The beans are ground by hand. The coffee powder is then placed into a 'Jebena' (a black pot). Boiling water is added, the grounds are allowed to settle then strained. There is a certain way to serve, including the way to pour coffee. Guests are served a very tiny cup of very strong coffee with sugar, (in the countryside salt) but no milk. The oldest person is served first to show that all the generations are connected; this is called Abol. The second time coffee is served (made with the same grounds) is called Tona. The third serving is called Baraka (blessing). 'Kolo,' a whole grain barley or popcorn, is served with the coffee. Guests are expected to have all three cups of coffee, which can take a few hours; to leave before is an insult.

In Ethiopia, when a man marries, the husband's family searches for a bride, and makes all the arrangements, including paying a dowry. The couple meet on their wedding day. This is in the

countryside, not so much in the cities. (In the cities?), when a couple gets engaged, the fiancé pays for everything, including his fiancée's dress and ring. The couple invite their family and friends for a lunch at home or they go to the park and have a picnic. Later they go to his home eat and have party. The brides are usually younger, and they do not change their surname. A child takes the father's first name as their last name. Divorce is common in Ethiopia. When parents divorce, if a child is five years old or older they are asked which parent they want to live with. Inter-cultural marriage is common for Ethiopians in and out of Ethiopia.

Weddings in Ethiopia last for almost 24 hours. All of the expenses are paid for by the groom, including the purchasing of the wedding gown and bridesmaid's dresses. The groom goes to the bride's house and picks her up. They are at the church by 6 am, with the entire bridal party, their immediate family and anyone else who were invited and want to wake up that early in the morning. One friend said that she was a bridesmaid one time and would never do it again. She said she started getting ready for the ceremony at about 3 am. Lunch is served later at the bride's home to everyone who was invited to the wedding ceremony (and uninvited). It usually lasts for three hours. The bridal party and close relatives go to the park during this time period to take photos and have a picnic of light refreshments while everyone else is eating lunch at the bride's home. At 8 pm, a dinner is served at the groom's home for two hours. At 10 pm, the dancing begins and lasts until around 2 am.

Babies are christened 40 days after their birth. The baby is taken to the church, wearing a simple outfit. Prayers are made and incense are burned by the priests. After the christening, the baby is anointed with oil, and a cord is tied around their neck to make a link with God, and they are dressed in a special Baptism dress. On that day, at home, the baby is circumcised (male and sometimes female). In some families a ceremony is done at home by the mother and grandmothers. The baby is wrapped injera so that the child will have a full and abundant life. Dinner is served at home on this day to all family and guests.

When a person dies, family, friends and neighbors come to the home. They sit outside and inside. Family, friends and neighbors literally cry as much as they can, beat their chests and wail for three days. The corpse is wrapped in a white Muslim cloth and placed inside of a casket. Forty days after the person has died family, friends and neighbors go to the deceased person's home to pray for them and eat.

Conclusion

There are so many things that influence a nation's cuisine. The culture, history, lifestyle (if the society is nomadic or sedentary), religion, trade, climate, what foodstuffs are available to them to prepare the different dishes, if there is ample wood, coal, etc. for cooking. In the book, *Ethiopian Cooking* by Tizita Ayele, she refers to what Troth Wells said, "Centuries of skill have gone into making meals that are unique to a culture or region." 76 This is so true when it comes to Ethiopia. It is a nation that is 3000 years old. I had not realized, until I did this paper how interlinked the world is, even with its limited travel methods, taking weeks or months to go from one place to another. Trade reigned supreme in Ethiopia for over 1000 years. They were a maritime power for many centuries; they traded with several countries by land and by sea. Ethiopia was at the crossroads for East and West and this is how, in my opinion, its food was tweaked over time and was enhanced. It took the best it could of other places foods and spices and merged them into their cuisine. In my opinion, two things in Ethiopia are most important: food and religion. Food is what is important to Ethiopians when they are together, when they socialize with each other, every occasion people get together to eat. Religion is what makes the society what it is. Professor Ingraham wrote on the board—Indigenous people, climate, trade, religion and invasion/conquest, expansion. I would say that is what makes Ethiopia, the society it is. They gradually incorporated other people and their culture into Ethiopia, forming a nation and in doing that, they also incorporated that society's food and made it Ethiopian food. Its neighbors, the Somalis are nomadic; they do not cook with many spices, their food is very bland and cooked very quickly. Egyptian cuisine is not highly spiced, even though Egyptian history is as long as Ethiopian. Could it be because Egypt was not directly on the "old spice route?" To get to Upper Egypt one had to enter directly from the Mediterranean Sea or the Red Sea and proceed via land until the Nile was reached. Christianity is what united the country against outsiders and also in my opinion helped the Western nations accept Ethiopia. I have to

say I have even more questions about Ethiopian food, the way it is and how it came about. This paper is a beginning not an end and I want to thank professor Ingraham for allowing me to do write it. I plan in the future to go to Ethiopia to research this topic further

Notes

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 - 70 E. Jefferson Murphy, Ibid., p 55
 - 71 Edited by Ian Jackson, Great Festivals of the World (Pilot Productions, 2001) p 98
 - 72 E. Jefferson Murphy, op.cit., p55

- 73 E. Jefferson Murphy, *op. cit.*, p57
- 74 CBC, Meskel festival lights up Ethiopia, September 27, 2007 (Online) available (cbc.ca/world/story/2007/09/27/meskel-ethiopia.html?ref=rss)
- 75 Edited by Ian Jackson, *op. cit.*, p 106
- 76 Tizita Ayele, *Ethiopian Cooking in the American Kitchen*, (Vantage Press, 1999)

Distinctions, the journal of the Honors Program of Kingsborough Community College of the City University of New York, welcomes scholarly articles and creative works that explore important issues in all aspects of humanistic endeavor, not confined to a specific academic discipline. Our editorial staff is sympathetic to a broad range of theoretical and critical approaches; however, the views expressed in articles are solely those of the authors.

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SUBMISSION GUIDELINES

General Guidelines

All manuscripts should be submitted electronically as Microsoft Word 2007 (or later) attachments to Professor Robert Cowan (robert.cowan@kbcc.cuny.edu) and include a working e-mail address and telephone number for both the student and mentor. Submissions should be in 12-point font and double-spaced throughout in a legible typeface like Times New Roman or Cambria.

Lists of Works Cited

The biggest problem with our submissions is that the citations are woefully insufficient. Articles should include a list of Works Cited and be properly referenced according to the guidelines of the Modern Language Association, American Psychological Association, or other citation system appropriate to the discipline for which they were written. Please do not give incomplete bibliographic references.

We do not publish:

- Computer science papers that consist mostly of many pages of code
- Art reviews of exhibits that are no longer running
- Class assignments that are letters to officials
- Papers that are basically biographies of famous persons
- Class journals

We are unlikely to publish:

- Papers that are hand-written, unless they include exceptionally beautifully drawn diagrams
- Overviews of topics, unless they include a summary of recent developments in the field
- Art history papers that have no illustrations of the work being discussed
- Papers by students we have already published, unless they are really much better than other related submissions for that issue
- Personal essays, unless they also make an argument about a topic

What we are looking for:

- Articles approximately 3,000-5,000 words, which may include notes, diagrams, and/or illustrations
- An argument, not just a summary of other's arguments
- In-paragraph citations that are clearly connected to the Works Cited list
- As few reference sources as possible

Deadlines

August 1 for the Fall issue and February 1 for the Spring issue.

DISTINCTIONS

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