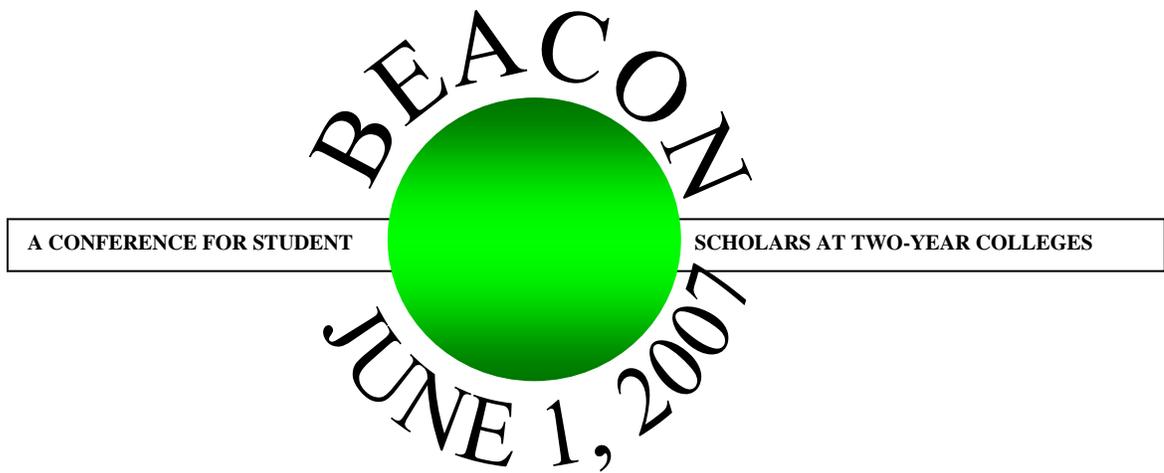


# CONFERENCE PROCEEDINGS



**15<sup>TH</sup> ANNUAL BEACON CONFERENCE**

**A CONFERENCE FOR STUDENT SCHOLARS AT TWO-YEAR COLLEGES  
FUNDED BY A COALITION OF TWO-YEAR COLLEGES**

**ROCKLAND COMMUNITY COLLEGE  
SUFFERN, NEW YORK  
JUNE 1, 2007**

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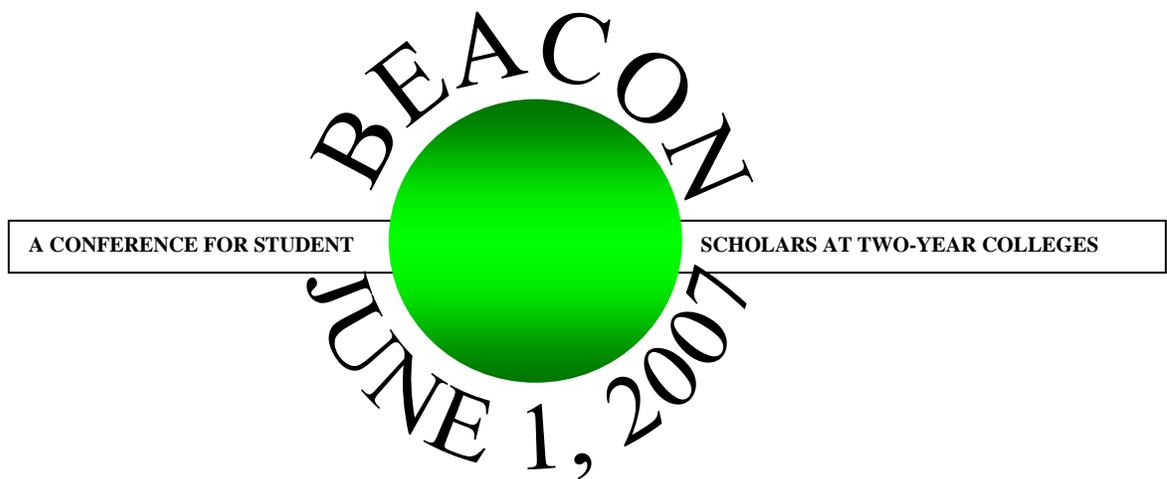
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The Beacon Conference is an annual conference that recognizes and celebrates the achievements of two-year college students in research and writing. It is sponsored by a coalition of member colleges. It creates an opportunity for faculty to mentor students as they begin their education at two-year colleges and showcases the work of outstanding students.

The conference is held each year on the first Friday in June and students present their work in a wide range of disciplines. Students work with their faculty mentors to prepare and submit papers that demonstrate outstanding scholarship and originality.

All papers submitted are evaluated and ranked by three readers and the top three papers in each category are selected for presentation at the annual conference in June. Papers not finishing in the top three, but are deemed to have merit may be selected for presentation in a poster session. Presentations are judged on originality and quality of research, written work, and oral presentation. The judge for each category chooses an outstanding presenter.

Both the outstanding presenter and the presenter's faculty mentor are recognized at the closing session of the conference and each receives \$100.00

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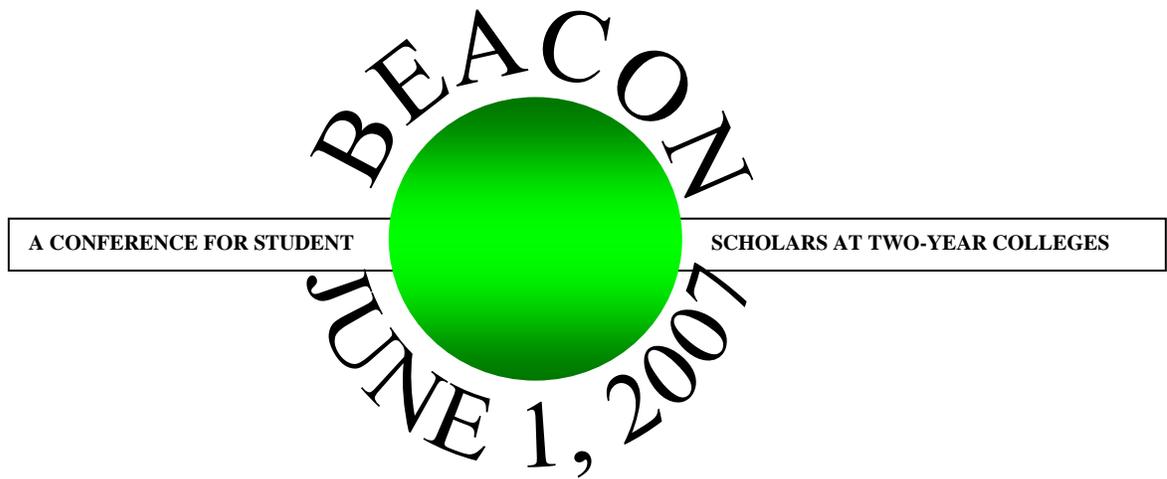
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Lori Maida, Mira Sakrajda



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Rockland Community College Student Government Association  
Rockland Community College Phi Theta Kappa Honor Society  
Rockland Community College Community Involvement Committee

We gratefully acknowledge the support of the Administration and Board of Trustees of Rockland Community College, and the assistance of our Beacon 2007 volunteers who helped make this year's conference a success.

## OVERVIEW OF PANELS

### Session I: Literature I-Shakespeare

Readers: Barbara Ann Blackburn (Erie Community College)  
Allison Carpenter (Northampton Community College)  
Ellen Pryor (Rockland Community College)

Judge: Elizabeth Wiggins (Lehigh University)

Moderator: Ellen Pryor (Rockland Community College)

Presenters: Ori Bensimhon  
“The Ancient: The General’s Id”  
Mentor: Elaine Toia  
Rockland Community College

Richard Dunn  
“William Shakespeare’s Women: A Look Inside Beatrice from Much Ado About Nothing and Cleopatra from The Tragedy Of Antony and Cleopatra”  
Mentor: Nancy Hazelton  
Rockland Community College

Joshua Roberts  
“Government and Theater: A Study of Historical Rulers and Literary Characters”  
Mentor: Nancy Hazelton  
Rockland Community College

## **Session I: Science I**

- Readers: Kenneth A. Beem (Montgomery College)  
Elyse Fuller (Rockland Community College)  
Ned Schillow (Lehigh-Carbon Community College)
- Judge: Denise M. Kay (Genomics Institute, N.Y. State Department of Health)
- Moderator: Kristopher Baker (Rockland Community College)
- Presenters: Mary A. Gomez  
“Growth Effects of Fatty Acids on Mammary and Prostate Cancer Cells”  
Mentor: Mark Condon  
Dutchess Community College
- Igor Nikolskiy  
“The Feasibility of Using Zebra Fish for the Study of Early Development  
in General Biology Laboratory Sections”  
Mentor: George Krasilovsky  
Rockland Community College
- Casey Wesley  
“PCB Pollution of the Hudson River”  
Mentor: Beth Kolp  
Dutchess Community College

### **Panel Sponsor**

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## **Session I: Gender Studies**

Readers: Rita Kranidis (Montgomery College)  
Karen Clay Rhines (Northampton Community College)  
Martha Rottman (Rockland Community College)

Judge: Colleen Clemens (Lehigh University)

Moderator: Allison Briker (Rockland Community College)

Presenters: Kathy Bui  
“Minimize Me: Eating Disorders as a Global Phenomenon”  
Mentor: Shweta Sen  
Montgomery College

Alysse Mealing  
“Acquiring Power: The Women Behind the Throne”  
Mentor: John Lawlor  
Reading Area Community College

Melissa Toscano  
“Modern Slavery: The Legacy of Exploitation”  
Mentor: Dorothy Altman  
Bergen Community College

**Session I: International and Globalization Studies**

**8:45-10:15**

**Room**

Readers: Shane Burd (Rockland Community College)  
Elizabeth Tyler Bugaighis (Northampton Community College)  
Pamela Floyd (Rockland Community College)

Judge: Steven Schneider (Manhattanville College)

Moderator: Nancy Hazelton (Rockland Community College)

Presenters: Timothy Chan  
“The Globalization of Capitalism”  
Mentor: Aram Hessami  
Montgomery College

Ezequiel Galeano  
“Lessons from the Argentinean Economic Crisis: Keeping up with  
Globalization”  
Mentor: Aram Hessami  
Montgomery College

Martha Pena  
“Winners and Losers of Globalization: Ecuador’s Oil Giants v. Indigenous  
Movements”  
Mentor: Aram Hessami  
Montgomery College

## **Session I: History**

Readers: Christina Devlin (Montgomery College)  
Kathleen Mayberry (Lehigh-Carbon Community College)  
Jeffrey J. Sadock (Bergen Community College)

Judge: Sarah Littlefield (Salve Regina University)

Moderator: David Beisel (Rockland Community College)

Presenters: Virginia Petersen  
“9/11: What Went Wrong”  
Mentor: Ray Raymond  
Ulster County Community College

Sharon Somers  
“The Collapse of Classical Maya Civilization”  
Mentor: Betty Stokes  
Westchester Community College

Jeannine Wightman  
“Democratic Ideals in Post-Revolutionary Education”  
Mentor: John Lawlor  
Reading Area Community College

### **Panel Sponsor**

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## **Session I: Social Sciences**

- Readers: David Beisel (Rockland Community College)  
Elaine Padilla (Rockland Community College)  
Mary Ann Van Benschoten (Orange County Community College)
- Judge: Laura Vetter (United States Military Academy, West Point)
- Moderator: Wilma Frank (Rockland Community College)
- Presenters: Mary Antzak  
“In the Name of God – Childhood Ritual Sexual Abuse: The Mormon  
Criminal Exploitation of Young Girls”  
Mentor: Miho Kawai  
Ulster County Community College
- Nicole Crone  
“The Will of the People: Globalization and the Formulation of 9/11 Public  
Opinion”  
Mentor: Aram Hessami  
Montgomery College
- Hilda Rizzo-Busack  
“Education and Discipline: Cultural Perspectives on Discipline as Shown  
by the Variation in Education Systems”  
Mentor: Bette Petrides  
Montgomery College

### **Panel Sponsor**

RCC Student Government Association

## Session II: Literature II – Drama and Classical Literature

Readers: Libby Bay (Rockland Community College)  
Lorraine Sturm (Erie Community College)  
Christine Szymczuk (Erie Community College)

Judge: Diana Worby (SUNY Empire State College)

Moderator: Liya Li (Rockland Community College)

Presenters: Jennifer Griffiths  
“Gender Conflicts in Antigone, Othello and A Doll’s House”  
Mentor: Mira Sakrajda  
Westchester Community College

Catherine Kelly  
“Heroes Revisited”  
Mentor: Joan Naake  
Montgomery College

Angelina Yucht  
“Oedipus Rex and Othello: A Comparison and Contrast of Two Tragic  
Heroes”  
Mentor: Elaine Toia  
Rockland Community College

## Session II: Science II

- Readers: Isabel Cadenas (Rockland Community College)  
Douglas R. Furman (Ulster County Community College)  
Beatriz Villar (Northampton Community College)
- Judge: Chi K. Nguyen (United States Military Academy, West Point)
- Moderator: Elyse Fuller (Rockland Community College)
- Presenters: Kathleen Peacock  
“Methamphetamine and Its Effects on the Human Body and Society”  
Mentor: Cyrus Macfoy  
Montgomery College
- Hannah Rice  
“Brain Damage Due to Injury”  
Mentor: Thomas Butler  
Rockland Community College
- Lindsay Schattenstein  
“An ‘Alternative’ Approach to Medicine”  
Mentor: Shweta Sen  
Montgomery College

## **Session II: Social Justice**

- Readers: Mark Altschuler (Bergen Community College)  
Lara Ellsworth (Prince George's Community College)  
Miho Kawai (Ulster County Community College)
- Judge: Charles Piltch (John Jay College of Criminal Justice)
- Moderator: Andrew Jacobs (Rockland Community College)
- Presenters: Patrick Casey  
"A Lawless Right: How the Right to Privacy Has Led Us Down the Road  
to Judicial Tyranny"  
Mentor: Richard Wilan  
Northern Virginia Community College
- Alison Drury  
"Weapon of Mass Destruction: Rape"  
Mentor: Shweta Sen  
Montgomery College
- Ivy Lynn Fox  
"Homo versus Hetero Familial: Separate but Equal"  
Mentor: Elizabeth Bodien  
Northampton Community College

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## **Session II: Business and Economics**

Readers: Matthew J. Connell (Northampton Community College)  
David Langley (Rockland Community College)  
Rachel Plaska (Lehigh-Carbon Community College)

Judge: Laura Ebert (Marist College)

Moderator: Martin Lecker (Rockland Community College)

Presenters: Christina Conte  
“Accounting Major Seeks Prestigious Position at Major Accounting Firm  
– Ethics a Must”  
Mentor: Martin Lecker  
Rockland Community College

Vincent Crodelle  
“The Tragedy of the Commons”  
Mentor: Lucia Cherciu  
Dutchess Community College

Carli McGuff  
“Click Enter: Save a Life”  
Mentor: Sharon Ward  
Montgomery College

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## Session II: Communications

Readers: Christine Armstrong (Northampton Community College)  
Allison Briker (Rockland Community College)  
Joanne Gerken (Lehigh-Carbon Community College)

Judge: Vince Begley (Mount St. Mary College)

Moderator: Robert Axelrod (Rockland Community College)

Presenters: Jacob Gagner  
“The Vampires Bite on Reality”  
Mentor: Sabrina Caine  
Erie Community College

Andrew Hurley  
“R is for Rocket: A Screenplay Adaptation of ‘R is for Rocket,’ A Short  
Story by Ray Bradbury”  
Mentor: Jane Young  
Borough of Manhattan Community College

Ryan Moore  
“Illusions of Gaia: Communication Theory in a Multiplayer Gaming  
Environment”  
Mentor: Timothy Molchany  
Northampton Community College

## **Session II: Interdisciplinary Studies**

Readers: Jack Gasper (Lehigh-Carbon Community College)  
Jill Hirt (Northampton Community College)  
Robert Pucci (Ulster County Community College)

Judge: Eileen Leonard (Vassar College)

Moderator: Peter Arvanites (Rockland Community College)

Presenters: Candace Barnes  
“Feral Children: Homo Sapiens or Homo Sapien Ferans? The Human/Animal Divide. Is There a Critical Period for Language Acquisition?”  
Mentor: Geoffrey Sadock  
Bergen Community College

George Pitman  
“The Etiology of War: An Evolutionary Approach”  
Mentor: Rashidul Alam  
Montgomery College

Josephine Ta  
“America’s Global Gag Rule: What Happened to Life, Liberty, and the Pursuit of Happiness?”  
Mentor: Shweta Sen  
Montgomery College

### **Session III: Literature III-Various Genres**

Readers: Suzanne Cleary-Langley (Rockland Community College)  
Vern L. Lindquist (Sullivan Community College)  
René Rojas (Erie Community College)

Judge: Jonathan Gates (Nyack College)

Moderator: Suzanne Cleary-Langley (Rockland Community College)

Presenters: Roxana Bartolomé  
“Pale Fire: Art as a Fragment of Reality”  
Mentor: Cliff Garner  
Rockland Community College

Chelsea Carbone  
“The Awakening Fairytale Existence and Emergence Toward Autonomy:  
Bildungsroman”  
Mentor: Sam Draper  
Rockland Community College

Ayesha Hemal Mustafa  
“Blues’ Clues”  
Mentor: Joan Naake  
Montgomery College

### **Session III: Allied Health and Nursing**

Readers: Marcia Gellin (Erie Community College)  
Ellen Spergel (Rockland Community College)  
Cindy Terry (Lehigh-Carbon Community College)

Judge: Katie Lever (Rutgers University)

Moderator: Dale Crispell (Rockland Community College)

Presenters: Catherine English  
“Health Care in Need of a Cure”  
Mentor: René Rojas  
Erie Community College

Daria Jininskaia  
“Tan-arexics and the Exploitation of the Growing Tanning Epidemic”  
Mentor: Lucia Cherciu  
Dutchess Community College

Janet Nicoletti  
“Quality of Life in the Down Syndrome Community”  
Mentor: Mira Sakrajda  
Westchester Community College

### **Session III: Psychology**

Readers: Beth Cunin (Rockland Community College)  
Tom Frangicetto (Northampton Community College)  
Rudolph T. White (Montgomery College)

Judge: Linda Bastone (Purchase College)

Moderator: Cally Kostakis (Rockland Community College)

Presenters: Amy Beckers  
“Looking at Eye Movement Desensitization and Reprocessing: Hope and Controversy”  
Mentor: Anne Maganzini  
Bergen Community College

Cathy Guptill  
“One Man’s Trash is Another Man’s Treasure: A Look at Compulsive Hoarding”  
Mentor: Karen Rhines  
Northampton Community College

Fatemeh Tavakkoli  
“Effects of a Yoga Intervention on Montgomery College Students’ Sense of Well-Being and Anxiety”  
Mentor: Diane Daniel  
Montgomery College

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### **Session III: Philosophy and Religious Studies**

Readers: Martin Lecker (Rockland Community College)  
Alfred Ruggiero ( Northampton Community College)  
Jeffrey J. Sadock (Bergen Community College)

Judge: Timmian C. Massie (Marist College)

Moderator: Maire Liberace (Rockland Community College)

Presenters: Ryan Catala  
"The Unborn Person"  
Mentor: Dwight Goodyear  
Westchester Community College

Sean Fitzgerald  
"The Influence of Preexisting Religious Tradition on the Recently Formed  
Faith of Scientology"  
Mentor: Richard Wilan  
Northern Virginia Community College

Lanette LaPorte  
"America the Not So Great"  
Mentor: J. Everett Green  
Rockland Community College

### **Session III: Arts**

Readers: Emily Harvey (Rockland Community College)  
Phyllis M. Mac Cameron (Erie Community College)  
Doug Williams (Montgomery College)

Judge: Denise Bauer (Culinary Institute of America)

Moderator: Patricia Maloney-Titland (Rockland Community College)

Presenters: Colleen Chisolm  
“Film Noir Then and Now: A Stylistic and Thematic Analysis”  
Mentor: Nancy Hazelton  
Rockland Community College

Jessica Weiner  
“The Architecture of the Bauhaus and Frank Lloyd Wright in a Post-  
Modern World”  
Mentor: Nancy Hazelton  
Rockland Community College

Andrew Ziegelstein  
“Classical and Roman Sculpture: Comparison of Influences, Designs, and  
Theories”  
Mentor: Nancy Hazelton  
Rockland Community College

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## **Poster Sessions**

### **PRESENTERS**

Sergei Alexeev

“Winston Churchill: The Menace and the Hero”

Mentor: Nancy Hazelton

Rockland Community College

Samantha Curtiss

“Schizophrenia and Its Portrayal in the Media”

Mentor: Cyd Skinner

Northampton Community College

Rebecca Danweber

“Poverty and Inequality as a Result of Social Stratification in the United States”

Mentor: Tara Bealer

Northampton Community College

Tom Herles

“From Comics to Credentials: The Rise of the Graphic Novel”

Mentor: Lucia Cherciu

Dutchess Community College

Lauren Hoxie

“When Cultures Get Animated: How World Cultures are Presented in American Animation”

Mentor Shweta Sen

Montgomery College

Ursula Málaga

“Nora Helmer and Louise Mallard: A Journey Towards Self-Awareness”

Mentor: Mira Sakrajda

Westchester Community College

Megan Myers

“Stuck in the Middle”

Mentor: David Bordelon

Ocean County Community College

Judith Ngugi

“Facing the Knife”

Mentor: Bette Petrides

Montgomery College

Phuoc Nguyen

“Breaking the Global Silence: Instruments of Voice Abuse of Prisoners:

Mentor: Aram Hessami

Montgomery College

J. Shepard Ramsay

“The Deception of the Grotesque in Visual Art”

Mentor: Nancy Hazelton

Rockland Community College

Matthew Rinaldi

“Zoology and the Immersion Conversion

Mentor: Beth Kolp

Dutchess Community College

Neelam Sharma

“Distance Education: How Far Does it Really Go?”

Mentor: Shweta Sen

Montgomery College

Celeste Wood

“Thought Processes of a Natural Disaster”

Mentor: Nancy Leech

Rockland Community College

Keiko Yanai

“Acupuncture and Analgesic Effect”

Mentor: Jaime Nieman

LaGuardia Community College

## **The Ancient: The General's Id**

### **By: Ori Bensimhon**

In the works of William Shakespeare, nothing can be taken at face value, particularly the character Iago in Othello. Iago's very nature and motives have fascinated scholars and simple audiences alike. There is a story of an actor who played Iago in the old west and was shot dead by an audience member so vehemently compelled to stop such a vile character. Iago sometimes even overshadows Othello himself in this work. Why then, is Iago not the namesake of this play? The play, Othello, follows Iago so closely because he is in fact meant to reflect a part of Othello, personified, specifically Othello's fear, and self-doubt. Iago demonstrates many characteristics of Othello; he is an exemplary strategist and orator. Iago also looks down upon Othello's racial background, something about which Othello himself has great self-doubt. In psychology, the Id is the source of desire, and the urge to act upon our impulses, without any regard for others. If one were to succumb completely to the Id, it would lead to ruin, stealing for simple desire and killing for jealousy without a second thought. When examining the play closely, one can say that Iago is Othello's Id: very emotional and apt to act upon it. By the end of the play, Othello lets Iago control most of his decisions, which leads to Othello's downfall.

As Othello's Id, personified, one expects Iago to viciously pursue whatever it is that he wants, regardless of the cost to other men, and Iago does not disappoint. In his essay, "Love's Reason in Othello," E.K. Weedin Jr. states, "He sees reason in man as one half of a scale, a half that is present to keep in equilibrium with the other half, sensuality. Compounding Iago's belief that the will, even when reason outweighs sensuality, can elect a course of conduct vicious to other men is his disagreement with the Christian

humanists' belief that man's soul is ordered in a hierarchic scale, not one of equals balancing each other" (298). In referring to the scale analogy, Weedin is pointing out Iago's Machiavellian nature. Weedin also earlier discusses Machiavelli's belief in the pursuit of self-gratification and empowerment. This is where Iago differs from Machiavelli and falls into the category of "Id": Iago's mentality resides entirely within the "sensual" part of the abovementioned scale. When Iago thirsts for Cassio's rank, it is not for power, but to make him feel "bigger," and when he is finally promoted, Iago does not halt his devious plot, but instead, proceeds so that he might satisfy sensuality. When asked by Emilia if he told Othello that Desdemona was false, Iago replies "I told him what I thought, and told no more / than what he found himself apt and true" (Oth5.2.180-81). It is interesting that he phrases it as such, because this is very much the same way people interact with their Id. The Id suggests to an individual, their base desires and reactions, while it is the job of the individual as a whole to deem those suggestions as right.

As aforementioned, one characteristic that one can find easily comparable in both Iago and Othello would be their ability to speak to the hearts and minds of men. Though both men were warriors by trade, their aptitude for diplomacy in some matters is exemplary. Othello for instance, manages to win Brabantio's favor with words, not with battle in their first encounter. He says "Were it my cue to fight, I should have known it / without a prompter" (Oth 1.2.83-84). In the next scene, he continues to impress with his ability to sway men's tempers with talking, when he speaks before the Duke. Ironically, Othello states at one point "Rude am I in my speech, / and little blessed with the soft phrase of

peace...And therefore little shall I grace my cause / in speaking for myself” (1.3.81-89). In humbling himself as such, he has placed himself in better favor with the council, and he knows this. Othello has used their hearts to sway their tempers, something Iago does frequently throughout the play. Iago however, unlike Othello, uses this to manipulate people into vicious situations; his target of choice seems to be Othello. Iago sees Othello’s insecurities and exploits them through the many conversations the two characters have throughout the play. In one such conversation, Iago states, “Though I perchance am vicious in my guess / (As I confess it is my nature’s plague / to spy into abuses, and oft my jealousy / shapes faults that are not), that your wisdom / from one that so imperfectly conceits / would take no notice, nor build yourself a trouble / out of his scattering and unsure observance” (3.3.148-154). Iago has humbled himself here, like Othello did earlier; however, Iago takes it a step further and proceeds to provide bait and provide suggestions for Othello, in order to advance his machinations (Omer and Da Verona 100).

Iago and Othello are each men gifted with silver tongue. There is a crucial difference between them, however: Othello uses his speaking ability peacefully, while Iago, being more devious, uses his ability to cause pain. Later, after Iago has convinced Othello of Cassio and Desdemona’s adulterous nature, Iago further twists the things that he says, like a knife in Othello’s heart. In her essay, “‘Dangerous Conceits Are in Their Natures Poisons’: The Language of Othello,” Catherine M. Shaw states “What Desdemona and Cassio really are may at any moment shatter the image of what Iago has made them seem in Othello’s mind. Therefore Iago subjects Othello to a further series of verbal

stimulations designed to reinforce visual responses...His vivid fantasies of actual coitus appear to throw him into verbal and then physical convulsions” (314). Here, she suggests that Iago has carefully chosen his words in order to make Othello see the scenario; however, Iago wants him to.

Another thing that Othello and Iago hold in common is something to which many pay no notice while reading the play. Iago and Othello share affection for the same woman. Iago, after thinking aloud that Othello will make a fine husband for Desdemona’s tastes, says “Now I do love her too, / Not of absolute lust (though peradventure / I stand accountant doe as great a sin), / but partly led to diet my revenge, / for that I do suspect the lusty Moor / Hath leaped into my seat” (Oth 2.1.285-290). Although he is quick to cover up what he said, Iago has stated that he has developed feelings for Desdemona. Even the excuse which he uses to cover admittance is only half there; note that his desire for Desdemona is stated to only be “partly led” by his thirst for revenge. Iago’s love of Desdemona is real, however, it is of a darker nature than Othello’s love, mirroring the characters’ relationships with one-another. In “The Humiliation of Iago,” Karl F. Zender states, “Anger at Desdemona vies with anger at Cassio and Othello as Iago’s primary motive in the remainder of Othello; and this anger, even more than Othello’s warrior-like propensity toward violence, decides Desdemona’s fate. Our long familiarity with the outcome of the play can lead us to assume that Desdemona’s death is always Othello’s objective, once he becomes convinced that his jealousy is justified. But in fact he first intends divorce, not murder...And later, whenever Othello again wavers, Iago works to rekindle and refocus his anger” (333). In this, Zender argues that Iago acts as the voice of

Othello's jealousy and rage. In all of his suggestions, Iago is voicing what Othello is thinking in the darkest corners of his mind. Eventually, Othello lets his darker nature take over as he follows Iago's whims, which are now his own.

With such a powerful dark side as Iago, one might wonder how the good in Othello would stand a chance without a human form of its own. In her essay, "Mirror of Virtue: The Role of Cassio in Othello," Eileen Z. Cohen suggests that Cassio represents that good. She further suggests that Iago's desire to usurp Cassio's position is representative of temptation and the desire to stray from virtue. Cohen says, "The temptation of Othello begins in earnest now, and Othello, with Cassio out of the way, takes on Iago's way of speaking, his very words as the 'knowledge' of Iago fills him...A pact is made between Othello and Iago, and Cassio must die. In symbolic terms, he must be dead so that Othello can kill Desdemona. Now he addresses Iago as 'my lieutenant'" (123). In this, Cohen explains that with Cassio, Othello's conscience gone, Iago is free to gain rank and take Cassio's place as Othello's dominant voice. Immediately before Iago and Othello make this pact that seals Desdemona's fate, Othello is found so engrossed by rage and his thirst for vengeance that he says, "Arise, black vengeance, from hollow hell!" (Oth 3.3.447) "Hell" is a word that Shakespeare used neither lightly, nor often. When Othello was written in the early 1600s, Hell was considered a very serious concept. This makes Othello's use of the word a point of interest, because this is not the first time "Hell" has been uttered in this play. Iago had earlier said, "Hell and night / Must bring this monstrous birth to the world's light" (1.3.394-95). The fact that both characters

evoke such a word bears great significance; greater still, when the timing of Othello's utterance is taken into consideration.

At every turn, Iago has proven to be the worst of men, specifically the worst of men, Othello. Iago lies and manipulates everyone he can to satisfy his villainous desires, but almost all of his cunning is used against Othello, the one man that Iago is most closely linked with. Othello's love and gift of language are perverted to devious ends by the selfish, base thoughts that are Iago. Cassio, Othello's better nature is also among Iago's primary targets. Cassio however, returns to Othello's side after being wounded by Iago, literally and figuratively. As his more virtuous side returns to him, Othello comes to realize the error of his ways. With this realization, Othello has defeated his desire with his virtue. Iago is defeated, much like one's desire for a particular something is defeated with an understanding of the cost, moral or otherwise. Othello suffers a terrible fate at his own hands, and kills himself in anguish. Before he dies, Othello translates that he has defeated his dark nature, Iago, into terms that are easily understood by his comrades. He says, "Where a malignant and turbaned Turk / beat a Venetian and traduced the state, / I took by th' throat the circumcised dog, / and smote him- thus!" (Oth 5.2.358-61).

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# **The Feasibility of Using Zebra Fish for the Study of Early Development in General Biology Laboratory Sections**

**By: Igor Nikolskiy**

## **Abstract:**

The prominence of zebrafish in contemporary science is well known. The present study examines the possibility of introducing this organism to students in laboratory sections of General Biology classes at a community college. Four techniques for obtaining embryos were investigated: the marble method, breeding over Petri dishes, Tank within a tank, and in vitro fertilization. The only successful one turned out to be the marble method; the flaws of other techniques are discussed. Development was observed and temperature regulation of the time of development was attempted. During development high mortality rates were found, several causes of which are discussed. Temperature manipulation was successfully attempted and a graph, allowing the estimation of time required for the development to a specific stage is constructed. It is concluded that with some improvements in technique, this lab could very well included in the curriculum of General Biology sections at community colleges.

## **Introduction:**

One of the most prominent model organisms in developmental and genetic research is the zebrafish, *Danio rerio*. This is because of two main reasons; its externally developing transparent embryo allows the study of life processes *in vivo*, and a large ~100 embryo yield is easily induced. These same advantages would likewise benefit the students in a lab classroom because they merit easy observation of vertebrate development, which in some cases may clarify the process described by textbooks. Thus,

the realistic possibility of this experiment being performed in a community college setting is assessed and possible adversities are discussed.

*Investigating Biology Lab Manual*, by Judith G. Morgan and M. Eloise Brown Carter (2005), contains the procedure for a zebrafish laboratory experiment and will therefore be used as a template. This laboratory requires six specimens to be available: zygote, cleavage, blastula, gastrula, organogenesis, and an adult. In order to examine these stages, the eggs and embryos must first be obtained, and then preserved.

The present study investigates the use of four breeding techniques, all of which depend on circadian rhythm manipulation and isolation of the eggs and embryos from the parents. Keeping the fish at fourteen hours of light and ten hours of darkness, in seventy eight to eighty-four degree water, as suggested by *The Zebrafish Book* (Westerfield, 2000), simulates their prime breeding season (Spring), in their native environment (India) (Wikipedia, 2006).

The four breeding techniques explored: breeding over marbles (Westerfield, 2000), over netted Petri dishes, tank within a tank (McGowan, n.d.), and *in vitro* fertilization (Westerfield, 2000), are all common techniques. The first three, are the easiest to perform and require far less experience than *in vitro*. However, the possibility of performing the latter technique is explored because of its single advantage, demonstrating fertilization and early development in a student laboratory setting.

After obtaining the embryos, they have to be kept alive. The survival rate of embryos developing in 10% Hank's solution (Westerfield 2000), in tap water, and in bottled water (Kirkland), is investigated. Development in 10% Hank's solution is investigated because of how common the solution is when working with zebrafish

(Westerfield, 2000), development in tap water is assessed because of its accessibility and because it is used as system water, and development in bottled water is assessed because of the need to eliminate certain chemicals that may be present.

To provide the different stages of development to the laboratory class, the most efficient technique would be retardation and acceleration of their development by means of temperature manipulation. As in most other processes, the zebrafish rate of development is accelerated with a temperature increase and slows with a temperature decrease. The accepted temperature for development is 28°C. At that temperature the embryos hatch between 48 and 72 hpf (hours post fertilization) (Kimmel et. al., 1995). Instead, embryos grown at 25°C will hatch after 96 hpf (Brown-Carter, 2005). According to the Embryos could also be placed over ice to retard development (Brown-Carter, 2005). However, when preparing for a laboratory observation a more controlled environment is required, for instance a refrigerator or water with a specific temperature.

The wealth of publications about zebrafish development and their experimental use is well known and extensive (Gerhard, 2002, Kimmel et al., 2005). This study looks at the possibility of its application in general biology laboratory sections as an investigative tool for studying developmental biology.

### **Methods:**

Whenever a new group of fish was obtained from local pet stores, they were allowed at least one week to adjust to the system conditions. The light cycle of fourteen hours of light and ten hours of darkness was applied at least three days before the desired breeding. The day before breeding, the zebrafish were fed a pinch of powdered flake food

in four portions instead of the usual two to three portions. The night before the breeding, temperature of the tank water was increased from 25°C to 28°C and the water filter was switched off. The sex ratio of seven females to five males was used based on the findings of Spence and Smith (2004, 2006). The male fish were skinnier and more yellow, while the females had protruding bellies and a silverfish tint. All of the trials were conducted in a ten gallon aquarium. Periodically new fish were used as the old ones stopped producing embryos.

#### 1. Breeding Methods:

##### a) Petri Dishes with Mesh Cover

Petri dishes were covered with cloth netting having holes of 1 mm<sup>2</sup>. Eight Petri dishes (the most that could fit into a standard 10 gallon aquarium) were placed at the bottom. Approximately 3 cm was the widest remaining gap. After three days the dishes were observed daily until the end of the week.

##### b) Glass Marbles

At night, approximately twenty minutes before the lights were turned off; the entire floor of the aquarium was lined with glass marbles. The next morning, some time after the lights came on; the parent fish were moved into a second aquarium. Using a plastic siphon, covered at one end with a piece of tygon tubing to protect it from breaking, the eggs were collected from between the marbles without taking them out. At the other end, the eggs were caught with a fine mesh filter. The embryos remained stuck to the filter until they were inverted over a watch glass with 10% Hanks solution. The marbles were then removed from the aquarium and the remaining eggs were

withdrawn with a pipette. All of the eggs were then pooled in a single watch glass and observed under the dissecting microscope; the healthy and fertilized eggs were kept, while the unfertilized or dead embryos were disposed of.

c) *In vitro* fertilization (Modified technique from *The Zebrafish Book*)

The night before the experiment, the male and female fish were separated. The morning of the experiment, before the fish tank lights came on, Tricaine anesthetic and hanks full strength solution were prepared. Then, after the lights came on, one male at a time was anesthetized, until their gill movements severely slowed. Once anesthetized, the males were placed in a slit in a sponge, to prevent their movement. Then under the dissecting microscope, forceps were used to squeeze the male slightly anterior to the anal fin. As fluid appeared, it was collected into a capillary tube and ejected into a vile with 50 micro liters of Full Strength Hank's solution (Westerfield, 2000). Afterwards, the males were placed in a separate tank. The females were then anesthetized in the same fashion as the males and squeezed on a watch glass. Female squeezing was done by applying pressure to the belly, while supporting the back. After the squeeze the females were returned to the tank and the sperm were added to the eggs, which still remained on the watch glass. The sperm were activated by adding ~1ml of water. Between trials all fish were given a month to recover.

d) Tank within tank system

An inner tank was assembled so that it would allow approximately three-quarters of an inch between the walls of the outside aquarium. This was done

so that it would be easily removed from the aquarium whenever needed. The bottom of the tank was lined with netting (1/8" diameter). The fish were kept in the inner aquarium until the night before the desired breeding, at which point the inner tank was moved into a different tank. The mentioned temperature regulation was not applied to this technique; instead the temperature was a constant 25°C.

## 2. Embryonic Development:

### a) Water Quality

After obtaining the embryos, the embryos were allowed to develop in 10% Hank's solution, system water (tap water in the tank for at least four days), and bottled water. Development was observed over the course of four days at 21°C. The trials were conducted on different days, but in the same conditions.

### b) Growth Rate Manipulation

Embryos were developed in 28°C, 21°C, 16°C, and 6°C in bottled water. Their development and mortalities were observed daily for four days. The trials were conducted over several different dates, developing at one temperature and then another.

## **Results:**

### 1. Breeding Methods:

The only successful technique for breeding was breeding over marbles. With the Petri dish method, fish were able to fit in between the dishes, despite the small gap. With the tank within a tank system, feeding the fish was difficult because as the food fell

through the bottom mesh, the fish would sometimes jump or somehow manage to get on the outside of the tank.

During *in vitro*, the females would easily produce from twenty to thirty eggs, each time that they were squeezed. Occasionally, when a female was squeezed no eggs came out without an increase in applied pressure; the resulting eggs were an unhealthy yellow color as opposed to the transparent color that they ordinarily have. When the males were squeezed, it was difficult to pinpoint the exact location to squeeze; however, when a fluid came out, it was used to attempt fertilization, though with no success. As the water was being added the procedure was observed through the microscope. After the water was added, no sperm were seen under the microscope, thus it was likely a sort of gastric or coelomic secretion.

Breeding over marbles worked with every attempt, except with overused fish (5 or more times breeding). The highest amount of embryos obtained was 104, but the average was 65. The quantitative analysis was based on seven trials, presented in Table 1. The data in the table does not include unsuccessful trials when egg collection was tried before 40 minutes or after two hours.

Developmental results were also obtained in the form of photographs from a digital microscope; see Fig. 1, Fig. 2, Fig. 3, Fig. 4, Fig. 5, and Fig. 6.

## 2. Embryonic Development:

Development in three different water qualities was observed. Mortality rates varied, but were present in every environment. Comparing system water, bottled water, and 10% Hanks solution, the highest survival rate was in bottled water, though closely followed by 10% Hank's Saline solution. Table 2 represents the collected data.

The rates of development, at different temperatures were observed. The progress of the embryos in colder temperature was assessed by comparing their stage with that of the accepted control, development at 28°C. The difference at various temperatures and their results were recorded and presented in Table 3. Fig. 7A and 6B show a graphical analysis of their development.

Table 1: Embryo Yield Statistics

Trial	1	2	3	4	5	6	7
Date	9/15/2006	10/4/2006	10/23/2006	11/23/2006	12/11/2006	12/27/2006	1/25/2007
Yield (embryos)	64	56	60	104	58	67	53
Time between lights on and collection (hrs)	1.5	1.8	1.7	1.25	1.25	1.3	1.4

Table 2: Mortality Rates at 16°C

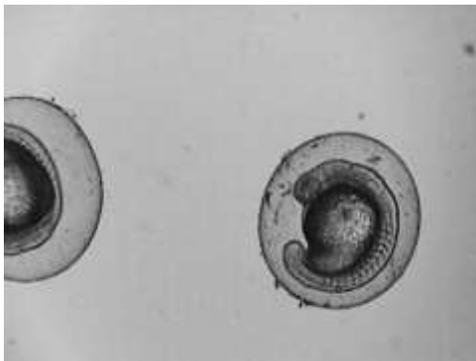
The embryos were observed for four days or until they died.

Day	System Water	Distilled Water	Hank's 10% Solution
	(living/dead)	(living/dead)	(living/dead)
1	25/0	28/0	24/0
2	13/12	20/8	18/6
3	9/16	16/12	13/11
4	7/18	15/13	12/12

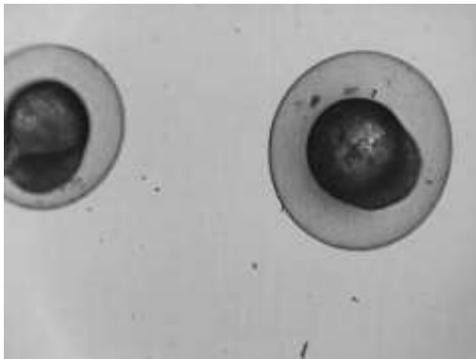
**Table 3: Rates of Development**

The data for 16, 21, 25, and 28°C is plotted on a scatter graph (Fig. 7) and shown with a best fit line. The values for 25°C were adopted from the *Investigating Biology Laboratory Manual*.

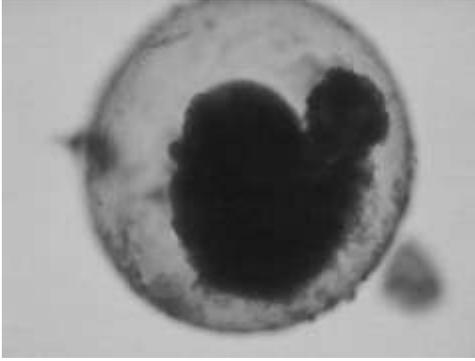
	6°C (Refrigerator)	16°C	21°C	25°C	28°C
8 cell stage	1.25	1.25	1.25	1.25	1.25
Blastula	1.25	7	6	4.35	3.33
Beginning Gastrula (50% epiboly)	1.25	11	9.3	6.85	5.25
Late Gastrula (75% epiboly)	1.25	19	16	11.75	8
Segmentation (14-19 somites)	1.25	33.5	30	21	16
Hatching	1.25	150.85	130	94	72



**Fig. 1** Two embryos developed in system water at 26 hpf at 100X  
The zebrafish have clearly defined spinal chord, with completed gastrulation and segmentation in progress.

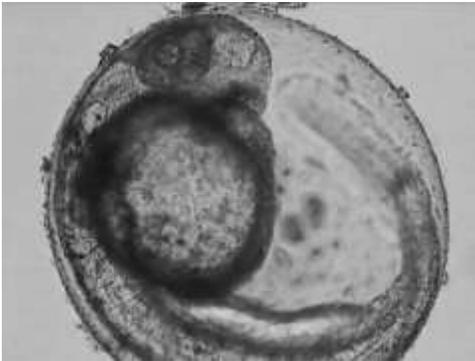


**Fig. 2** Two embryos refrigerated for 22hrs starting at the 128-cell, 24 hpf at 100X  
The domed growth could be observed, although the image is much clearer on the microscope.



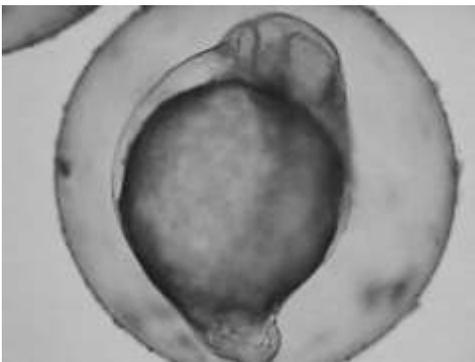
**Fig. 3** Dead Embryo after refrigeration at 450X

Under the microscope the image is lighter and more closely resembles the photos reported by Stachel (1993).



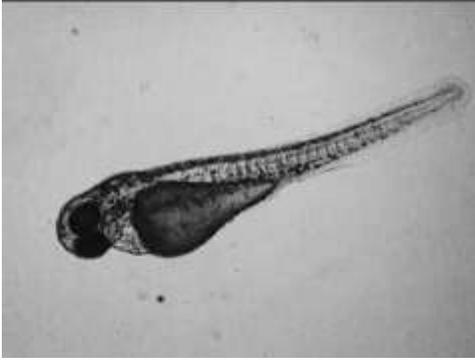
**Fig. 4** Embryo at 4 days post fertilization, grown at 21°C, seen at 450X

At this point the embryo is far into organogenesis. Under the microscope, blood flow, heart beat, and tail movements, could be observed.

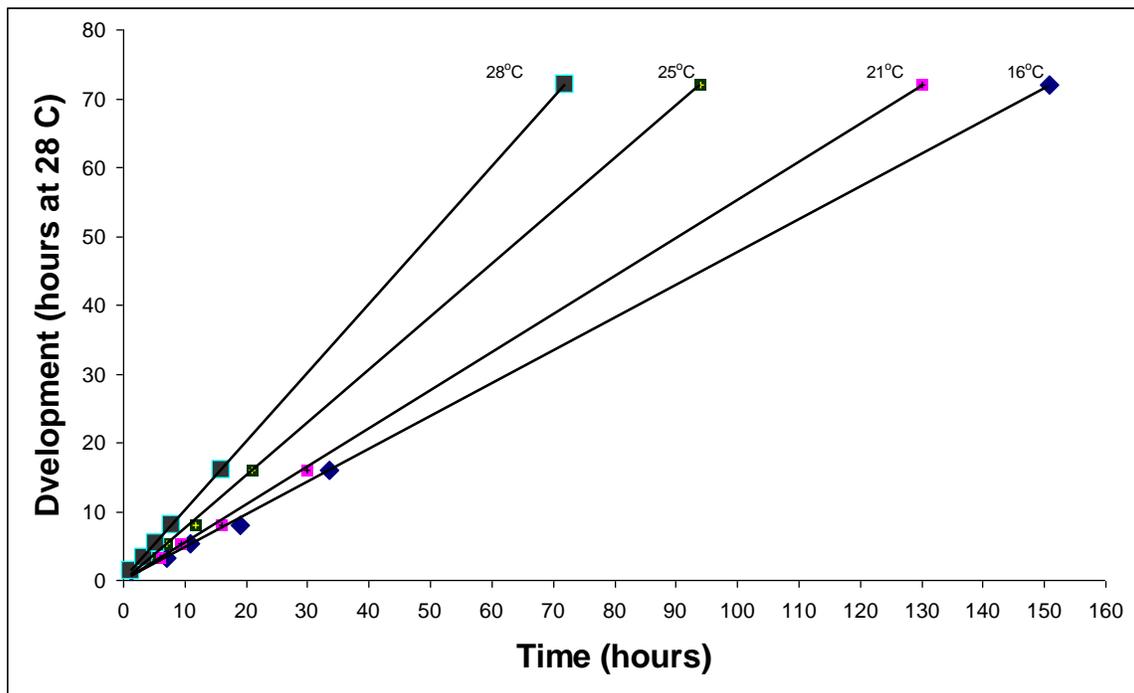


**Fig. 5** Embryo grown in 21°C for 22 hours viewed at 450X

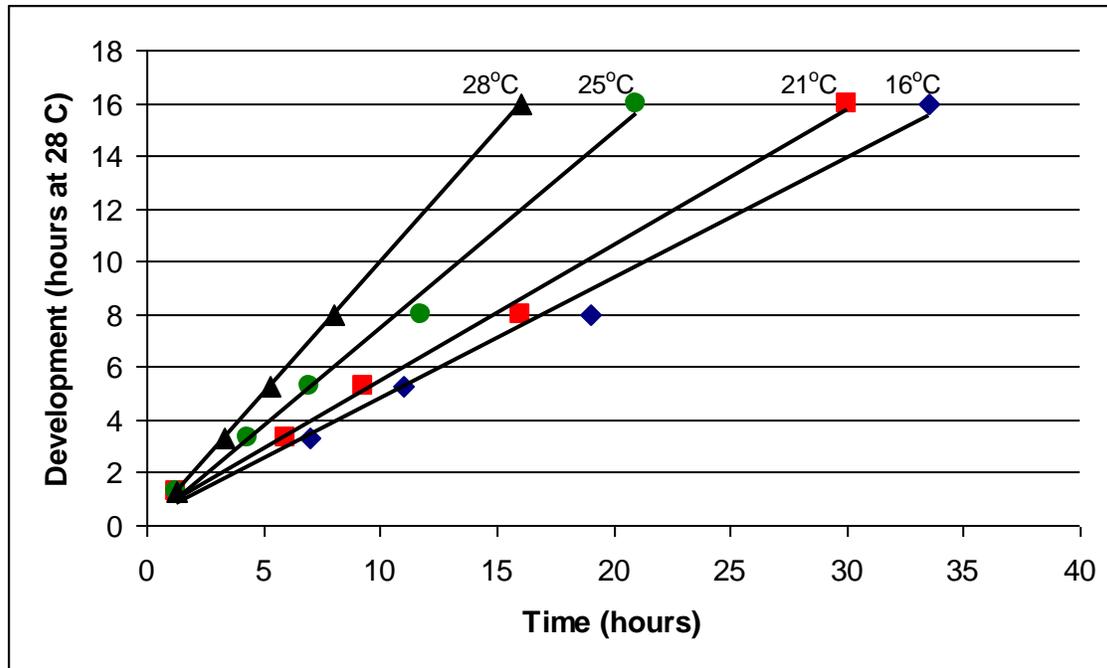
The embryo is seen from the vegetal pole during late segmentation.



**Fig. 6** A recently hatched larvae at 100X  
The embryo does not yet swim, but a heart beat and pigmentation is observable.



**Fig. 7A** Graph of stages of embryonic development at varying temperatures compared to the standard of 28.5°C.  
Development shown through hatching (70+ hours) and each bullet corresponds to an observed developmental stage (see Table 3).



**Fig. 7B** Graph of stages of embryonic development at varying temperatures compared to the standard of 28.5°C. Development shown through segmentation (16 hours) and each bullet corresponds to an observed developmental stage (see Table 3).

### Discussion:

Zebrafish develop externally in a transparent chorion that allows easy observation of their development, barring any microorganisms attached to the outside of the embryo. The various stages of their meroblastic cleavage is seen through their translucent body as the embryo rapidly divides, going from stage to stage in a matter of hours.

The main goal of this investigation was to be able to obtain a sufficient amount of embryos for a class to examine and then partially retard the development of several embryos in order to provide a diverse spectrum of developmental stages. The data attained confirms that this experiment is possible, but to make the availability of specimens more consistent, the techniques need to be improved.

### Breeding Methods:

Although the marble method was sufficiently successful in breeding zebrafish for the purpose of class laboratory observations, the flaws of other studied methods should be analyzed for possible improvements that could simplify the technique and potentially give higher yields. Since female zebrafish ovulate every 1.8 days (Darrow, 2004), an efficient means of collection of embryos could potentially yield large numbers of eggs and from their embryos, and likely ate the majority of their yield. Feeding was also complicated by this technique. As the majority of the food simply fell through the netting into the dishes, the fish might have been trained to swim in between the dishes to search for food.

*In vitro* fertilization, on the other hand, was slightly more successful because at least the female's eggs were obtained and according to *The Zebrafish Book* (Westerfield, 2000) were of good quality. The fluid secreted by the male is then questioned. Before squeezing, a cross section of a mature trout was studied (Campbell, 2005, p. 682). The cross section mapped the placement of the gonad in the male, which coincided with the suggested area of squeezing, described in *The Zebrafish Book*. (Westerfield, 2000) Squeezing the correct area under the microscope was initially difficult, though after several trials it became easier. However, microscopic examination of the fluids obtained from the males did not demonstrate any sperm, viable or nonviable.

The tank within a tank system likely did not work because when the fish were inside of the inner aquarium, they were isolated from whatever food fell through the bottom netting. The inner tank served its purpose of isolating the fish from anything underneath the tank and thus would have worked if the fish were laying embryos. However, the fish were probably malnourished they were most likely not able to produce

eggs. As previously mentioned, the food availability should be increased instead of decreased prior to gamete collection. This technique might work with a plastic bottom placed over the mesh bottom while the fish were feeding. This bottom could then be removed on the morning of gamete collection.

Given the success of the marble method a good collection time was assessed as reported in the results. It was concluded that the best time to collect the eggs is 1.3 hours after lights go on in the tank. This was examined because in several other trials, where the eggs were collected at least 2 hours after the lights went on; the embryo yield was significantly decreased. Any attempts to collect the eggs earlier than 30 minutes after the lights came on, also were not successful. When the eggs were being collected, at a time after two hours, the fish were seen poking in between the marbles, possibly as an attempt to eat the embryos. In addition, it's been observed that courtship behaviors, such as egg lay, peak at thirty minutes after the lights come on and steadily decrease (Darrow, 2004). Since sperm have a lifetime of no longer than two minutes in water (Westerfield, 2000) and are likely released before the eggs (Whitlock, 2006), a better time for egg collection might be around forty minutes after the lights come on. Forty minutes was also reported by Darrow (2004), although most zebrafish show oviposition at 30 minutes after the lights come on, others continue for at least another 10 minutes.

A better yield may also be dependent on sex ratios. Spence and Smith found that a 2 female to 1 male sex ratio when using 15 fish provides the optimal results. (2004) This is because females select their partner based on ownership of resources and behavioral and morphological traits. (Spence et al., 2004) Their results were also confirmed by a later study using genetic analysis (Spence et al., 2006). In the present trials, a sex ratio of

seven females to five males was used, which should possibly be adjusted in the future.

Embryonic Development:

A high prevalence of mortality was observed among all groups. Although sufficient amounts of embryos could still be obtained, a higher survival rate would allow for a greater number of embryos to work with and compensate for any errors in handling the fragile embryos. The high mortality rates may be attributed to the late collection times, temperature fluctuations and/or undetectable deleterious chemicals in the waters. In addition, because of the multitude of zebrafish cell lines (Sprague et al., 2006) and inbreeding among them, mortalities may have been caused by genetic incompatibility of given lines (Lawrence, n.d.). One way this conflict could play out is through the yolk, which influences axis formation (axis formation).

It has been shown that lithium could severely impact development, resulting in disfiguring changes for the embryo, ones that resemble the specimen shown in Fig. 3. The damage to the embryo occurs due to lithium inhibition of the inositol phosphates and shuts down the phosphoinositol signaling pathway, thus disturbing the signaling that occurs during the midblastula. The embryo is susceptible to lithium's influence from the 16 cell stage until the 1024 cell stage, and an only 10 minute exposure is sufficient to damage the embryo. (Stachel, 1993, Driever, 1995) Similarly, copper and zinc have been shown to cause damage to the embryo. (Dr. Bill Trevarrow personal communication, Director University of Oregon Fish Facility, January 2007)

Delayed development was successfully achieved and could potentially become very useful in a laboratory setting. The results of present temperature manipulation were coherent with Kimmel's study (1995) and expanded their 8 degree Celsius range. Kimmel reported that zebrafish could develop between 25°C and 33°C; the present analysis lowers

the boundary to 16°C. Using Fig. 7 (A and B), it is possible to estimate the temperature needed to achieve a given stage of development at a specific time.

Just as it helped the results of this study, circadian rhythm manipulation may have also contributed to the mortality rate that was observed. In zebrafish embryos, as in many other animals, it has been shown that the circadian clock could be decentralized. The first evidence of a decentralized clock was shown by Plautz and Kay (1997), as cited by Tamai (2005). They used a transgenic *Drosophila* with luciferase expression linked to the *period* gene. Any part of the *Drosophila* would glow during natural activation of this gene. When the flies' wings (or other body parts) were removed, the activity of the *period* gene continued to oscillate and the isolated structure continued to glow. In zebrafish embryos, in addition to temperature, clocks have shown to be entrained by light, even in the early stages of the embryo. Tamai, Carr, and Whitmore demonstrated, using luminescent reporter cell lines, linked to clock genes (not unlike those in *drosophila*), that the circadian rhythm dampens with time in a dark environment (2005). In addition, they showed that light flashes stimulate the same cell activity as the one during early morning. This is significant because light could be linked to transcription of genes involved in DNA repair. (Tamai et al. 2005) Though the exact mechanisms of photoreception are not yet known, the proteins CRY3 and CRY1b, TMT (teleost multiple tissue opsin), and typosomes (show responses to blue light) are all thought to, at least in part, be responsible for this feature (Lahiri et al., 2005). Also in zebrafish embryos, the G<sub>2</sub>/M checkpoint is regulated by the gene *weel kinase*, which is in turn regulated by light. (Hirayama et al., 2005) Still, other cell functions and genes could be influenced by temperature alone. (Lahiri, 2005, November)

### Classroom Presentation:

Based on these findings, one classroom presentation has been prepared. The embryos for the class were obtained three days before the experiment and grown in distilled water at 21 and 16°C. Once the embryos grown in 21°C were at 50% epiboly, several embryos were placed in to the 16°C container. On the morning of the presentation, the fish were bred once more in an effort to obtain unfertilized eggs, zygotes, early cleavage, and maybe blastula. Due to a nearly 50% occurrence of mortalities in the three day old group, instead of small groups of students observing the different stages, the different embryos were set up on several demonstration microscopes and students took turns observing the embryos. Unfortunately no unfertilized eggs were collected the morning of the laboratory observation. By the time the laboratory started, early cleavage was completed because the eggs were collected at home and by the time they were transported to school, blastula was already in progress. Again, because of the high mortality rate in the three day old group, neurulation specimens were not available. Therefore, blastula, gastrulation, and organogenesis specimens were prepared and available. In all consideration, as a first attempt to incorporate this laboratory exercise into our curriculum, it was deemed a success and students appreciated viewing the different stages of development in a living preparation. Past developmental laboratories (during the winter) have utilized sea urchin gametes with inconsistent results.

### Other possibilities:

To demonstrate more aspects of development and possible fate maps in this or other labs using zebrafish, vital dyes could be used. They could indicate cell migration or the formation of specific kinds of cells. Using a vital staining set from ScholAR

Chemistry (#9516004), staining was attempted by placing the embryos in a low concentration of different dyes as soon as the embryos were obtained. Embryos were kept in the stains for 12 and 24-hour intervals and then were observed. The only vital stain that worked was Bismark Brown on the yolk in the embryo; subsequently faint outlines of the digestive tract were able to be seen in late organogenesis. Other stains used were: Janus Green, Methylene Blue, Brilliant Cresyl Blue, Copper (II) Acetate, and Copper (II) Sulfate. The stains were used in a concentration of 12.5 microliters in 5 ml and 25 microliters in 5 ml. The results of the copper dyes trial confirm the harmfulness of copper on zebrafish. Alternatively, microinjection is possible for the purpose of indicating specific cells (Westerfield, 2000), although this technique requires more sophisticated equipment and microtechniques.

Based on other observations throughout the course of this study, possibilities for several other student studies were noted. The optimum temperature for maintaining zebrafish could be studied due to a brief observation that when the filter was turned off, the fish gathered around the heater. Similarly, a study was conducted with zebrafish assessing their preference for either a dark or a light environment (Serra, 1999), when they were not breeding. The fish swam back and forth between a dark and a light compartment and their preferred environment was established by the time they spent in each compartment. However, when the fish find a preferred environment as in the case with the temperature and the heater, they do not swim away from it. Therefore, their preferred environment includes light, one could investigate and assess different wavelengths.

Conclusion:

With a lesser occurrence of mortalities, adequate preparation for this lab could be much more feasible. Considering the suggested changes, such as the tank within a tank system plus the plastic on the bottom during feeding times, a possibly higher embryo yield may be attainable. Using the previously mentioned temperature approximation, based on Fig. 7 could in part remedy the temperature dependent mortalities and produce a greater selection of developmental stages.

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## **Minimize Me: Eating Disorders as a Global Phenomenon**

**By: Kathy Bui**

There is a simple three letter adjective that no one wants to be called. It is a word with a powerful meaning and while there may be several euphemisms for this word, the meanings behind each and every one of them are inevitably the same. It can potentially lead a child to develop low self-esteem, an adolescent to painful obsessions and an adult to pure shame. In part, this can be attributed to the ridicule that comes along with this word. The media taunts those who fit the description and praise those who have triumphed above it. Indeed, the word is fat. As gruesome as this may sound, consider what being overweight actually means.

When put into a medical context, being overweight denotes numerous health hazards such as hypertension, Type 2 diabetes, and coronary heart disease (“Overweight and Obesity”). When put into a cultural context, however, being overweight can mean failing to live up to the media’s portrayal of how thin one should be. Whether it’s cruising down the aisle at the local grocery store or flipping channels on the television, the incessant message of thinness is inescapable—fat-free, low-fat; words that manifest themselves on food products and advertisements. The message is plastered everywhere and, for some people, accepting this figure as the norm is the first step towards a long and excruciating journey in trying to attain the ideal body. While there are healthy ways of doing so, a number of individuals resort to harmful and extreme measures such as self-starvation and induced vomiting. During the 90s, the National Eating Disorders Association estimated that “In the United States, as many as 10 million females and 1 million males are fighting a life and death battle with an eating disorder such as anorexia

or bulimia” (“Statistics”). In 2003, the Alliance for Eating Disorders Awareness reports that “Eating Disorders affect up to 24 million Americans and 70 million individuals worldwide” (“Eating Disorders Statistics”). As the numbers continue to rise, the question becomes a matter of how to prevent eating disorders as well as trying to figure out what influences them.

One of the most powerful forces driving the pursuit of thinness today is, undoubtedly, the media. Technology and its advancements have facilitated the dissemination of cultural values and beliefs, creating what many fear may be the homogenization of the world. Indeed, if we look on the surface of various societies, one image thrives above the rest. Whether it’s a Mongolian woman with blonde highlights in her hair or a Japanese animation featuring characters with “light-colored hair ranging from light brown to auburn, blue or grey eyes, and ‘Western’ noses” (“American Influences”), the overwhelming presence of the western ideal of beauty is unavoidable. The young, fair-haired beauty circles the globe via television, magazines, newspapers, and the Internet, among various other sources. She is typically seen in fashion magazines dressed in the most elegant styles or out on the town attracting men wherever she goes. Her image is one reflecting wealth, prosperity and independence—values closely tied to western societies. Over the years, her figure has changed drastically; it has gotten skinnier and skinnier. Because of this, it is easily assumed that what is popularly termed as globalization may turn out to be westernization, or even Americanization; however, thinness has not always been the standard and the current obsession with being thin isn’t simply powered by western or American values alone.

The complexities associated with body image problems and eating disorders are plentiful and multifaceted. Eating disorders don't just appear overnight. Full blown eating disorders seem to have no specific cause, yet there are a variety of explanations for their occurrence. The influence of the media is undeniable, but in terms of body image and eating disorders, an individual's lifestyle and surroundings also needs to be considered. How they view their bodies and how they feed themselves is a reflection of the society in which they live.

Countries who find themselves immersed in poverty and famine typically show fewer cases of eating disorders. It has been "argued that in societies where food is plentiful the idea of slenderness is constantly imposed via the media and peer pressure; while countries where the availability of food fluctuates, plumpness is often the feminine ideal" (Shuriquie). When thinking about what the ideal entails the word beauty immediately comes to mind as the ideal figure is usually regarded with admiration and idolization. They exhibit something that most others don't. To be beautiful would, therefore, mean standing out from the rest. In countries where the majority of the population is suffering from a shortage of food, a rounder body is what many would strive for whereas in countries where food is readily available with a large percentage of the population overweight, thinness would be the ideal. This can account for why a significant number of individuals from western countries are finding themselves on the quest to be thinner as the abundance of food in their countries has increased exponentially. The bulk of these individuals is and continues to be women.

Consider the adjectives that are typically associated with men and women. Men are intelligent, strong and handsome. Their intellect and vigor are of central importance,

with little emphasis on outward appearance. On the contrary, women are lovely, pretty and cute. These traits are manifested most prominently through physical appearances.

Research shows that cases of men suffering from eating disorders are slowly on the rise, but from a historical standpoint, body image and eating disorders have long been a plague on women. There used to be a time when being a voluptuous, full-figured woman was valued in western societies. During the Renaissance period, “the ideal female body, depicted in oil paintings of the time, was full and well-rounded” (Macdonald 197). It typically indicated signs of fertility, wealth and prosperity. But as women’s roles in society changed, standards of beauty changed as well. Ideas of “Individualism, creativity and passion, were promoted” during the Romantic period (Dolan 3) and these ideas helped women to become more active participants in society. People were urged to be critical thinkers and to question the world around them. The curvaceous, voluptuous body type gradually dissipated as women were viewed as more than simple reproductive organisms.

During the eighteenth and early nineteenth centuries, a new, slimmer view of women was introduced—one that was easily disseminated to the masses due to industrialization and advanced technology. This new image came in the form of consumerism and mass production. “For centuries women had made their clothing at home to fit their own contours [but] With the shift to ready-made clothing, mass-marketed through chains of department stores, women’s fashions became more standardized” (Freedman 210). Although this provided women with faster and easier ways to adorn their bodies, it also excluded women who were unable to fit into pre-made

clothes. It became apparent that only certain body types would be able to wear these new, innovative fashions.

Industrialization brought knowledge, power, communication, and ultimately change. For some, the change was absolutely positive, but for women it wasn't so obvious. While women made a step forward in society, they took a step backwards individually. Their place in the workforce was overshadowed by glamorized depictions in the media of what women should wear and how they should look. Women who fit the mold were admired and women who didn't fit the mold became more aware of it. This eventually paved the way for the explosion of cosmetic industries and beauty products to both enhance and homogenize feminine beauty.

Markets aimed at women expanded in the twentieth century, all of which capitalized on a sophisticated, opulent image. Beauty products guaranteed a more youthful appearance through the application of makeup, creams, lotions, oils, and various other substances. The conglomerations of these products came to life through the media. Television shows such as *Leave It to Beaver* and movies such as *Tarzan* displayed beautiful, dolled up women. Whether it was baking cookies or swinging on vines through the forest, they did so most elegantly. They charmed audiences with their looks and innocence, not with their strength or intellect. Indeed, a woman could be seen in the suburbs or in the wilderness, but only with the assistance of an able bodied man could she possibly survive.

Perhaps this is one reason why overweight men aren't nearly as chastised as overweight women. Culturally, men have often been revered as the dominant gender. Providing for the family has long been considered their main priority and in order for a

man to carry out his role as the provider and the protector of the home, it is imperative that he is physically able to do so. As Virginia Woolf says, ““one cannot think well, sleep well, love well if one has not dined well”” (Wolf 197). Nevertheless, underweight men are seen as weak and often described as scrawny or fragile. They are ridiculed because they are seen as incapable of defending their female companions and their families.

Conversely, women are usually regarded as nurturers and caretakers. Domestic responsibilities are their main concern and this includes food preparation. While it is a man’s job to “bring home the bacon”, it is a woman’s job to cook it. Because of this fixation on who provides and who prepares, women are devalued because domestic housework ranks lower in comparison to providing for the family. Historically, “men receive hot meals, more protein, and the first helpings of a dish, while women eat the cooling leftovers” (Wolf 190). This places a man’s well-being at the forefront with the woman’s interests secondary to that.

With men as the head of the household, women have had to take a backseat. Not all women, however, accept their secondary positions in society. Many find ways to free themselves and, for some, this can be achieved through eating disorders. As peculiar as this may sound, psychoanalytic and sociological theorists point to the importance of women exhibiting control over their own lives. Western culture, and its individualistic nature, provides women with conflicting ideas of femininity. On one hand women are encouraged to “develop their own individual identity, opinions and needs” (Macdonald 5) while on the other hand they are expected to appear soft and feminine in order to marry and rear children. The collision of these two polarized ideologies creates an overwhelming problem for women “by flattening the feminine into beauty-without-

intelligence or intelligence-without beauty; women are allowed a mind or a body but not both” (Wolf 59). Social mores become too demanding and eating disorders, in turn, provides a woman with a means to demonstrate her power and strength because her life up until adulthood is primarily monitored by her family in which her father is typically the authoritative figure. She is taught how to act, how to speak and how to look. When she matures and becomes an adult, she is handed over to her husband by her father—a ritual that is often practiced during wedding ceremonies. For many women, the overwhelming presence of a domineering male figure is difficult to cope with. Sociologists comment that “Because western patriarchal culture offers girls few outlets for autonomy, self-starvation becomes part of their struggle for liberation” (Guisinger 747). Eating displays itself as one of the few areas of a woman’s life she is able to dictate.

In her quest for autonomy, being thin would constitute as a major ingredient, especially when we take into account the stigma associated with being overweight. “We tend to think of overweight women as having improperly indulged themselves” (Andersen 208). They are perceived as insecure and incompetent, making them more susceptible to ridicule and criticism, thereby presenting eating disorders as mechanisms for self-discipline and self-protection. To be a thin female, in a western context, is regarded as prosperous and powerful because being overweight equates to being “weak, and slovenly; to have lost control, be lazy, and have no ambition” (Hesse-Biber 11). A woman who has achieved the thin ideal is thought to have obtained the unobtainable. By virtue of being thin, she is viewed as a strong, independent and hard-working individual. And by virtue of being a woman with reproductive capabilities, she is able to marry and

bear children. In this sense, she has achieved both beauty and intelligence in the western context.

But thinness and eating disorders don't exhibit the same kind of contextual meaning for all cultures. For a long time eating disorders "were characterized as illnesses that affected only young, White, affluent women" (Cummins 553). The availability of food in a media saturated society combined with an urge for individualism and autonomy was thought to be the major reason for the development of eating disorders in western countries. Despite this popular notion, eating disorders are infiltrating non-western nations such as "Hong Kong and mainland China, South Korea, Singapore, South Africa, Nigeria, Mexico, Argentina and India" ("Etiology"). The variety of factors for why eating disorders have occurred in these countries fluctuates from one country to the next. There is no one argument that can be consistent across all playing fields. Each country has a different background and the focus here is Japan.

How are eating disorders, such as anorexia and bulimia, applicable in a country such as Japan? The thought of this seems almost impossible as we tend to view Japanese women as thin already. Nevertheless, "Anorexia, [which was] first documented in Japan in the 1960s, now afflicts an estimated one in 100 Japanese women, about the same as the United States" ("Eating disorders increase"). In 2005, Japan had a total population of 127.76 million ("Total"). At this rate, anorexia is affecting over 1.27 million people in Japan. In other words, it is affecting 1,270,000 Japanese people and this does not even include the number of women who may be suffering from bulimia. Perhaps the most perplexing question regarding Japan and eating disorders is how and why?

For hundreds of years, Japan had found itself in isolation from the rest of the world under the Tokugawa rule and was thought to be relatively safe from western influence and eating disorders. This slowly changed, however, as western nations rapidly advanced. In 1844, “King William II of Holland dispatched a letter to the shogun of Japan warning him that the quickening pace of world events made continuance of the Japanese policy of national seclusion both unwise and untenable” (Varley 235). Soon after, Japan was enthralled in a civil war and western influence was imminent. Commodore Matthew Perry of the United States eventually arrived in Japan “to inquire into the possibility of opening diplomatic and commercial relations with Japan” (Varley 235). Finally, unable to resist western forces, the Tokugawa rule ended and this marked the beginning of the modernization and industrialization process in Japan, also known as the Meiji Restoration.

The modernization process in Japan took place immediately. Many scholars were sent overseas for education in hopes that they would come back with innovative ideas to help Japan advance—most of which were inevitably western ideas. European advisors were also welcomed into governmental positions to help the Japanese move forward. Women, at this time, also had very important roles in society and that was to maintain a chaotic household. “The feminine ideal portrayed women as selfless, efficient workhorses, laboring for their family and their nation. *Ryosai kenbo*, the feminine paradigm for good wives and wise mothers, continued to hold sway, emphasizing labor and productivity over physical beauty” (Spielvogel 146). Because of this, women were to focus on household duties, not on trivial matters such as beauty. In fact, “One Meiji woman described the relative unimportance of beauty: ‘We never had time in the

morning to put on any makeup. The attitude then was that a girl who spent time in front of the mirror was no use to anyone” (Spielvogel 146). There was little room for individual fixations because the development of the nation was the main focus.

During this period, developing the nation meant adopting western ideas. Because western nations had already successfully industrialized and were in full bloom, embracing these same models were thought to help Japan advance as well. “To make up for the backwardness caused by three centuries of isolation, they took an extreme course and europeanised the country in a very short time” (Yoshida 16). Western ideas were synonymous with wealth, modernity and progress. Many welcomed western styles, including women.

One of the first adjustments affecting Japanese women was the alteration of the traditional kimono. Originally, the kimono was “a loosely fitted robe...[and] Warmth was achieved by additional layers of clothes, and also by padding the garments with raw cotton or silk” (Nakagawa 60). The style of the kimono left a woman’s body to the imagination and skin was rarely exposed as kimonos were lengthy and made from large amounts of fabric. However, “The voluminous kimonos [eventually] gave way to a slimmer style that was best suited to a ‘tubular’ body, with slim hips and small breasts” (Spielvogel 147). The importance of body shape and adornment became clear as “The bun [for women] was lowered and reduced in size to imitate a Western look, and permed curls added softness at the nape of the neck” (Spielvogel 147). While a shift in the styling of hair may seem relatively insignificant, softness at the nape of the neck closely ties to beauty theories presented by British philosopher Edmund Burke during the late eighteenth century. Burke’s description of a beautiful woman observed ““that part of a

beautiful woman where she is perhaps the most beautiful, [is] about the neck and breasts; the smoothness; the softness” (Brand 3). With the change in shape of the kimono and the accentuation of skin, the idea of natural elegance was replaced with a strong emphasis on a woman’s body and appearance.

Upper class citizens also experienced a shift in style as they started to emulate western styles by adorning western accessories alongside traditional attire. Some people starting wearing “kimonos with European shoes and bowler hats, smoked big cigars, and sang ‘Home Sweet Home’ in English on the street” (Yoshida 16). The scene in Japan was modernizing unbelievably quickly. In fact, they became the first Asian country to effectively industrialize and were soon regarded as an equal world power—on par with countries such as Great Britain and the United States.

The success, however, was short-lived. After their defeat in World War II, Japan unconditionally surrendered to the United States and again underwent numerous transformations. For women, American forces changed their entire lives. “The constitution drafted by American occupation leaders in 1946 gave Japanese women the right to vote and guaranteed them equality before the law” (Darling-Wolf 153). Traditional concepts of gender, in which the woman’s responsibilities were purely domestic, were contradicted by western ideas of autonomy, equality and prosperity. Conventional housewife magazines now featured “gossip, scandals and human interests stories, and fashion magazines, including ‘young fashion’, [and] ‘fashion for office ladies”” (Gatzen). The significance of beauty and fashion became apparent through the media’s glamorization of affluent, western women. Their clothes, their hairdos, and their bodies were enhanced through savvy advertisements and clever portrayals. Through the

media, they epitomized individuality and success—components that were idealized and attractive. The problem though is that many “of the glossy lifestyle magazines focus on expensive brand goods that the majority of their readers are not able to afford” (Assman). Japanese women were being confronted with two different images to strive for. On one hand, Japanese culture emphasized the importance of a woman’s presence in the home. On the other hand, the western ideal of beauty promoted power and independence. The difficulty lies not in choosing one over the other, but in trying to find a balance between the two.

If a woman retains her traditional role then she is considered old-fashioned. She is urged to adopt current trends and modernize. And for many people, modernizing closely ties to western civilizations because they were the first to industrialize and continue to exert a large amount of influence on the international system. Modernizing, therefore, would suggest the absorption of western culture. But if a woman in Japan were to modernize and completely adopt western values then she would be considered too western or too American, deeming her not Japanese. Faced with such a dilemma, a woman may try to find a balance between these two systems by juggling education and work with being a wife and mother. Nevertheless, if we look at the state of Japanese women today, their educational and professional opportunities remain relatively shallow and limited; thus, giving them few outlets for autonomy and equality which were promoted by the constitution over sixty years ago. Consequently, the increasing prevalence of women with eating disorders is certainly not making the situation any better.

While women in Japan have made significant climbs in the community, there still remains a large gap between the educational attainment of men and women. Longitudinal data collected by the Ministry of Internal Affairs and Communications shows that men continue to outnumber women in college and university levels, including graduate school. In 1982, of the 43,081 women surveyed, only 3.3% of them were classified as being in *College or University Including Graduate School*. In 2002, 51,715 women were surveyed and 8.4% (4,341) of them were attending a college or university (“Educational Attainment of Females”). While this is a sign of progress, the number of women in higher education continues to be much smaller than that of men. In 1982, 39,478 men were sampled and 16.2% of them were attending a college or university. In 2002, of the 47,819 men surveyed, 25.3% (12,073) of them were attending a college or university (“Educational Attainment of Males”). Within a time frame of twenty years, the percentage of men enrolled in colleges or universities experienced nearly a ten percent increase whereas women experienced a little over five percent—half that of men.

One reason for why there are fewer women continuing onto levels of higher education in Japan is because of the constant reminder that women belong in the home. “Beginning in elementary school, all girls participate in a 12-year curriculum (continuing through high school) of ‘domestic education’” (Pike “The Rise” 502). This curriculum consists of everything from food preparation to childcare and further reinforces the archetypes of men as the provider and women as the caretaker. While there is nothing wrong with stressing the importance of women at home, a problem does arise when the home fosters gender inequality.

The Ministry of Public Management, Home Affairs, Posts and Telecommunications compiled and compared data from 1986-2001 for the distribution of household chores among husbands and wives in Japan. Most recently in 2001, women, on average, completed 3.31 hours to 4.49 hours of housekeeping compared to men's contribution of only 0.09 to 0.07 hours ("Housework Sharing (1986-2001)"). A man's role in the home continues to come in the form of financial support. Because providing for the family ranks higher than domestic housework, men are regarded with much more respect. Women, too, are also respected for maintaining the household, but "At the same time as marriage and motherhood have historically offered the surest course to social stability, entitlement, and respect for most women, they have also been mechanisms of entrapment which prevent other forms of power and social legitimacy" (Pike "The Rise" 506). Routes to education are limited or discouraged through the fortification of domestic responsibilities. Women's lower levels of education, in comparison to men, make it more difficult for them to advance outside of the home.

Certainly, there are a number of women who do continue onto higher levels of education. Eventually, they are hired for well-established positions in the labor force. But today it has been recognized that women's and men's work remains dramatically polarized in Japan. For women who successfully attain college or university degrees, the likelihood of them marrying actually decreases. "Specifically, for every 100,000 yen (approximately \$1,000) increase in income, the chance of first marriage declines by 3%" (Pike "The Rise" 500). Where are women supposed to channel their sense of autonomy if their professional advancement serves more as a punishment than as a reward? Their participation in the labor force represents their struggle for independence and equality, to

gain mutual respect from their male counterparts as well as the community. At the same time, they are also trying to uphold the importance of the home by balancing familial responsibilities with work.

Despite their efforts, they are constantly being presented with barriers, especially when it comes to income. On average, women are “earning only a little over 50% of what men earn on average, the lowest ratio among G7 nations” (Pike “The Rise” 500). As much as women are trying to extend their talents into the labor force, they are continuously reminded to stay at home and to allow men to be the authoritarian figure in the home. In fact, in 1998 Japan’s Gender Equality Bureau conducted a survey and found that “61% of women in Japan today endorse the idea that ‘women are supposed to work at home and men in the labor force’” (Pike “Question” 80). While women in the majority of western countries are progressing into the workforce, a large percentage of Japanese women are internalizing the concept that women should stay at home. For some cultures, the belief that women should stay at home is not a significant problem. They may function well with a gender division of labor, but in Japan the home seems to be a breeding place for further gender inferiority, offering women few outlets to excel and stand out.

While it is true that gender equality has improved in many nations all over the world, gender equality indicators in Japan have gotten worse and worse over the years. Each year, the United Nations ranks nations on a scale titled *Gender Empowerment Measure*. They use items such as seats in parliament held by women, female legislators, senior officials and managers, female professional and technical workers, and ratio of estimated female to male earned income to measure the gender empowerment of women.

In 1999, “Japan ranked 38<sup>th</sup> on the GEM index” (Kakuchi). In 2001, Japan dropped to ranking “41<sup>st</sup> out of 70 countries” (Kakuchi). Within a timeframe of only two years, Japan’s gender empowerment measure dropped three positions, indicating that women’s participation in highly professional careers was decreasing. In 2003, Japan’s position on the GEM index dropped again, this time by three positions to 44<sup>th</sup> out of 70 countries (“23 Gender empowerment”). The most recent GEM index in 2006 reports that Japan has risen one spot to being 42<sup>nd</sup> out of 75 possible countries (“25 Gender empowerment”). While this is an improvement, it can certainly be better. For an advanced country such as Japan, routes for women to achieve professionally remain limited and shallow; thus, giving women few opportunities for individual achievement.

In addition to stifling women’s performance in the workplace and at home, women in Japan are constantly being reminded to stay cute. Termed *kawaisa*, cuteness emphasizes a youthful appearance and childlike innocence. Comparing women to children puts women into a state of further inferiority, especially when we consider the various views of children. During the Middle Ages, children were perceived as evil beings and it was a parent’s duty to eradicate the evil in them. Later on, John Locke proposed the concept of *tabula rasa*. Children were viewed as blank slates and needed to be both disciplined and educated. When taking these theories and applying them to women, it can be implied that women, too, also need to be taught and educated. Because of this “a woman [is stripped] of her intellectual, social, and sexual maturity” (Spielvogel 153). She is perceived as naïve and only through the teachings of an adult can she truly mature and develop correctly.

But who are women supposed to look to for inspiration if most other women are in similar situations as they are—one of inadequacy and inferiority? Whether it's western nations, Japan or wherever else, women everywhere are always being presented with some kind of ultimatum and forced to choose. In western countries, women are pressured to choose between beauty and intelligence, but choosing one over the other is not a simple task. If a woman chooses beauty then she is dismissed as unintelligent—she's just another pretty face. If she chooses intelligence then she would be judged as not pretty enough—she wouldn't be feminine enough. Forced into such a debacle, eating disorders may become the mediator between beauty and intelligence. It allows a woman to be beautiful because being overweight is no longer valued in western societies; thinness is. At the same time, it also allows her to be intelligent because thinness indicates someone who is hardworking, strong and independent. Eating disorders, thus, presents itself as a compromise between beauty and intelligence in the western context.

In Japan, thinness and eating disorders exhibit a much different contextual meaning. Since the creation of the constitution, women have been encouraged to pursue individual goals. The problem, though, is that these notions contradicted with traditional Japanese values of a woman's presence in the home. Because of this, a woman in Japan is forced to choose between being a traditional housewife and being a modern, independent woman. But like western women, choosing between two polarized ideologies is not easy. If a woman in Japan decides to stay at home and take care of the children then she is just another housewife and ought to go out and get a real job. But it seems that no matter how hard she tries to pursue a professional career, she is discouraged from doing so. She is told that domestic responsibilities are far more important than individual development.

Her progress and increased salary is met by a decreased likelihood of marrying. Again, she is reminded that family responsibilities outweigh individual ambitions, making thinness, beauty and eating disorders a route for possible achievement.

Certainly, she is not the only one who is caught in this dilemma. Many women struggle with trying to accommodate the demands of society. In western nations, beauty and intelligence are of major concern to women while in Japan tradition and modernity are of major concern. The problem, though, is that it's not simply a few women who are struggling to find a balance between societal demands. Most women are faced with these kinds of pressures, but because the media presents images of idealized women who seem to have mastered everything – beauty and intelligence, tradition and modernity – women are made to believe that they are the only ones struggling, that all other women are perfect.

The power of the media is unparalleled. From the time we wake up in the morning to the time we go to bed at night we are bombarded with various types of media whether it is newspapers, magazines, billboards or pop-up advertisements on the internet. Industrialized societies are saturated with media, but in terms of body image problems and eating disorders, an individual's surroundings also needs to be accounted for. The media's obsession with thinness today is obvious, but the media's influence could never amount to anything if it wasn't for the pressures from society as well.

The problem with media images is that they tend to be unrealistic and unobtainable—they contradict real life situations. Women are inundated with opposing messages, but not given the opportunity to choose because no matter what they choose the media and society will not be satisfied. Distraught and trapped, eating disorders

become a way out. It becomes a way to make everyone happy; everyone except for women.

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## **Winners and Losers of Globalization: Ecuador's Oil Giants v. Indigenous Movements**

**By: Martha Pena**

The pristine Amazon rainforest of South America, where nature has sustained a uniquely diverse ecosystem and people for centuries, is now marred by toxic waste, intimidating, armed men, and the ever-growing threat of destructive development. A region so vital to the health of our planet is being adversely affected while indigenous people in Brazil, Peru, Venezuela, Ecuador, Bolivia, and Colombia experience similar threats to their way of life, economy, health, and sacred land. Their struggle for survival is one that is confronting overwhelming forces in the context of globalization. As multinational oil companies, the nation-state and local indigenous groups crave for power, economic gain, rights, and justice, the thrust of globalization will either intensify the problem or facilitate the solution to five centuries of indigenous plight in the Amazon.

The debate between Thomas Friedman and Robert Kaplan, two reputable globalization theorists, is at the core of the precarious circumstances affecting indigenous people. Friedman argues in favor of a positive globalizing force that “enables each of us, wherever we live, to reach around the world farther, faster, deeper and cheaper than ever before” (Friedman and Kaplan). This outlook would have us assume that people may partake in the benefits of global integration. However, because globalization is not global, and integration does not occur overnight, Kaplan’s theory becomes relevant. Contrary to Friedman, Kaplan’s focus is on the complexities brought about by a shrinking world of interconnectedness that will lead to instability before reaching stability

(Friedman and Kaplan). This view may be more in sync with the inequitable system in which indigenous people currently find themselves in. As these differing views illustrate the two-faced mechanism of globalization, they will serve the analysis of the problem and solution concerning the future of the Amazon and its people in the context of an ever-globalizing world.

In order to effectively examine the problem and analyze the sustainability of the Amazon and future of its inhabitants, the scope of this analysis will concentrate on the environmental and social impact of Ecuador's oil industry and the nature of the indigenous response. Currently, the Amazon hosts a battlefield of conflicting interests between the nation state, multinational corporations, and indigenous groups negotiating land rights with multinational corporations. This battlefield is uneven because the nation state often ignores laws that protect indigenous rights in order to retain profitable partnerships with the corporations currently harnessing subsurface resources. The circumstances have generated an unprecedented reactionary wave of indigenous political resistance, confrontation as they expose the responsible parties for the devastation of what some consider a 'present day conquest'. Ultimately, this analysis begs the question- to what extent could globalization bring a turn-about in centuries of indigenous isolation towards a less marginalized society as this group gains political leverage and makes strides for other indigenous groups in the international arena?

Prior to discussing the current state of oil and indigenous affairs in Ecuador, we must examine the two primary worldviews that are foundational to the motivations of these conflicting parties of the 'battlefield'. One sees the Amazon as with gigantic economic potential. Because of the competitive global market in which multinational oil

companies operate in, countries like Ecuador, with an array of valuable resources, also compete for foreign investment and invite companies to explore petroleum reserves in the Amazon. The mindset that considers this region as a crucial profitable opportunity is part of the legacy of European conquest as non-native entities exploit the land and its people regardless of the consequences. At the base of this point of view, wealth potential may be measured by access, control, or ownership of land, which is fundamental to understanding the clash between these two views and this ongoing battle.

The second worldview is one held by the 500,000 indigenous people, descendants of some who have lived in the Ecuadorian Amazon for thousands of years and others for a little less than 500 years due to displacement by the Spanish conquest. Their view is diametrically opposed to the former as it has no room for land ownership. Describing indigenous concepts of land, Ellen Lutz writes in the *Cultural Survival Quarterly* that “land is not a commodity. It exists for collective material and spiritual benefit, and must be preserved for future generations” (Lutz). Thus, it is not as if indigenous people fail to see the economic potential of their land or do not understand the valuable resources found beneath the earth they cherish. In fact, they may find their land more valuable than the western world could understand because their survival and wellbeing depends on it just as their identity is connected to the land. Author Anamaria Varea tells of the 400 indigenous villages, their extensive knowledge of the land and environment with a thousand-year old experience in sustainable resource management. She says that “A study of the Huaorani indigenous people found that they collected more than 45 species of plants with nutritional purposes” (Varea 40). Yet this is merely one of dozens of uses

derived from the same land that is so often preyed upon by the state in cooperation with oil companies.

Despite being one of the smallest countries in South America, Ecuador is one of the richest countries in natural resources. Its revenue from exports in cacao, flowers, bananas, and shrimp was overtaken by a new source of wealth in the 1970s in the form of 'black gold'. The oil industry began to boom when Texaco discovered rich oil fields in the northern part of Ecuador's Amazon region in 1967 (Hurtig 205). Soon after Texaco's success, the national company Petroecuador seized its share of the wealth. Since then, the government has given two million hectares in oil concessions throughout the Amazonía to 12 foreign companies including the US-based ARCO, Conoco-Phillips, Texaco (now Chevron-Texaco), Burlington Resources, and Occidental as well as Repsol from Spain, Canada Grande from Canada, and Compañía General de Combustibles (CGC) from Argentina—all who seek to profit from the 4.6 billion barrels of proven oil found beneath Ecuador's Amazonía (Hurtig 205, 206). Such was the success that between 1972-1974 exports grew 474% and the income per capita rose from \$200 in 1969 to \$1,600 in 1981 (Espinoza 34). During this period, most of the profits were used for more petroleum-related development in the Amazon (35). Yet, the primary inhabitants of this region remain poor and dejected. Regardless of who is benefiting from this profitable opportunity, development will continue now that in 2003 Ecuador authorized an oil consortium to build a 300-mile oil pipeline from the Amazon, through the Andes, to the Pacific coast with complete disregard to public opposition, environmental and social effects (Amazon Watch).

The construction of this pipeline is not surprising considering the fact that forty years since the oil boom, the industry has become the number one foreign source of revenue for the economy. Yet, as we consider the industry's environmental track record, it becomes evident that Ecuador's relationship with certain oil companies is essentially an unethical and irresponsible prioritization of profits and economic relations, leaving the social welfare of indigenous people as last priority.

### **ENVIRONMENTAL IMPACT**

Note that the following account of environmental damage has a direct correlation with the social effects experienced by the region because inevitably when the ecosystem is in some way altered, those who live off the land suffer acute short-term and long-term consequences. First, consider oil's legacy in the Amazonía. The Pan American Journal of Public Health reported that between oil disasters and ordinary extraction and production, the industry has irresponsibly dumped more than 30 billion gallons of carcinogenic waste into waste pits, swamps and other vital sources of water between 1972 and 1992. As this figure is difficult to grasp, compare it with the 10.8 million gallons of oil that were accidentally spilled at the Exxon Valdez disaster. Among some of the major industrial blunders in this region include a spill in 1989 which discharged 294,000 gallons of crude oil into Ecuador's Napo River, causing it to turn black for a week. Over the years, these become common occurrences such that the government of Ecuador estimated 2 major spills per week in 2002. The toxicity levels of some of the waste pits have exceeded 1,000 times Ecuador's accepted levels (San Sebastian and Hurtig). Another study by the Center for Economic and Social Rights found that "concentrations of polynuclear aromatic hydrocarbons were 10 to 10,000 times greater than the levels recommended by

the Environmental Protection Agency” (San Sebastian & Hurtig). These hydrocarbons, which saturated the clouds from periodically burning thick crude residue, affected the rain creating a phenomenon of black rain, or as indigenous people called it- “bleeding of the skies” (Sawyer 101). However, these figures are only associated with contamination. Part of the environmental disruption and destruction is also associated with the development of boom towns, and transportation for which it is estimated that 1 million hectares of tropical forest has been deforested as there now are 500 kilometers of highways (Barrantes 236).

Looking past the quantitative measure of contamination of the land and the waterways we find a precious ecosystem that is being destroyed systematically every time trees are cut or toxic compounds are added to the environment and disrupt its natural cycles. Lured by immediate profits, governments like Ecuador often forget that the health of Amazon may be worth more than the black gold found beneath its surface. Recently, scientists confirmed the that global warming was in fact a reality, and while governments call for the reduction of greenhouse emissions, they seem to neglect the protection of highly valuable environments such as the Amazon which is considered a vital ‘lung’ of our earth, purifying the atmosphere, maintaining regional climate and hydrology.

The environmental threat posed by the oil industry in the Ecuadorian Amazon targets an array of aquatic, aerial and terrestrial species unique to the region. Ecuador’s irreplaceable biodiversity is a valuable resource that makes it number eight among the seventeen megadiverse countries of the world as it contains 60% to 70% of the world’s known species (Coloma and Ron). Although the industry affects the rainforest as a whole, single developments such as the aforementioned 300-mile pipeline would affect

11 protected areas, some of which are not located in the Amazon. One of the areas the pipeline would cut through is the Mindo Nambillo Cloudforest Reserve. This is an ecologically sensitive forest that is home to more than 450 species of birds- 46 of which are threatened by extinction- and has been called the first “Important Bird Area” of South America by Birdlife International (Rainforest Action Network).

## **SOCIAL IMPACT**

A more comprehensive understanding of the irreparable effects of the oil industry in Ecuador would have us examine the social dimension of the problem. The Huaorani and the Sarayaku are two case studies that best serve this purpose.

The Huaorani people inhabit the Yasuni National Park. This area consists of thousands of hectares that have been subdivided into blocks and ceded to Repsol, Petrobras, and Encana- companies from Spain, Brasil and Canada respectively (Misión de Verificación). Since their activities began, the lives of the Huaorani people will never be the same. A descriptive report on the social effects on the Huaorani was compiled by the Verification Mission, (Misión de Verificación al Parque Nacional Yasuní) a group of 16 anthropologists, environmentalists, professors, sociologists and ecologists from seven countries. Their findings gave evidence to a number of social disruptions that are true not only of this village but across Amazonian tribes that are in contact or in close proximity with oil companies. The Mission observed violence towards the children, hunger, a deep sadness among the people, and constant complaints against the company’s failed promises” (Misión de Verificación al Parque Nacional Yasuní 11). Their observations are fitting with anthropologists’ studies which assert that the social structure of the Huaorani has changed drastically since their contact with the company began.

The Mission gathered that Repsol began to temporarily hire indigenous men, paying them 5 times less than the salaries of official company employees. Yet, the key issue was not in the disproportionate amount of compensation but in the fact that the Huaorani were for the first time participating in monetary transactions which has not only created a dependency on the products that Repsol brings in but also in alcohol and prostitution (11).

Repsol has made promise after promise, offering education and jobs in order to gain the community's favor for development. Their offers were attractive, but rarely come through. At the hint of impending resistance, the company contracted military forces to protect their interests. These are aggressive tactics that create fear among the Huaorani as they simultaneously become dependent on the resources. As a result of their circumstances, the mission observed that families had reduced in number as they feared their safety and the future (12).

Among the worst ways in which the company has left its mark on this community is their health which is in direct relation to the company's contaminating activities and neglect. A nearby medical center confirmed the Mission of repeated cases of gastrointestinal, respiratory and skin-related illnesses among the Huaorani, including a high incidence of the sexually transmitted Hepatitis B (12). These observations are further substantiated with statistical evidence published in the Pan American Journal of Public Health by San Sebastián and Hurtig. Their collection of data over a 15-year period showed that communities living near oil fields reported an excess number of testes and leukemia cancers among indigenous men and cervix, leukemia, stomach and colon cancers among indigenous women(San Sebastián and Hurtig 2004; 4,5). In full

knowledge of these social and environmental crimes, what do oil companies have to say? Although no official statement was issued to this inquiring Mission, a candid conversation was held with a company employee Wilson Mendez, who said “the company does not care about the levels of contamination in this zone” (Misión de Verificación al Parque Nacional Yasuní 16). Shortly we will see how this apathy is no longer a realistic stance on behalf of oil companies.

Unfortunately, oil companies need not even begin to exploit oil in the blocks ceded by the government to disrupt the social harmony. This is evident in the methods of negotiation by Compañía General de Combustibles (CGC), an Argentinean oil company, with the Sarayaku people. Their struggle is a second case study to the ways in which oil giants have a social impact in the region.

Contact between CGC and the Sarayaku was first established in 1986 after the company and the government of Ecuador signed an agreement that allowed for oil exploration in Sarayaku land, or territory that is designated as Block 23. Similar to Epsol’s approach, CGC began persuading the Sarayaku off their land often with bribes, yet over and over, the Sarayaku made their opposition clear and refused to accept the bribes. This community has been adamant in their pursuit of self-determination, resisting the luring offers of development and money offered by CGC to buy them off their land.

By the year 2,000, CGC was no longer making persuasive offers. Instead, the company began its own coercive campaign employing threatening and violent tactics. Without the consent of the Sarayaku, CGC blocked access to their main river, cutting off the tribe’s primary route of transportation and communication with neighboring communities (Toala, AU presentation). Later on, as documented in their web domain

([www.sarayaku.com](http://www.sarayaku.com)), the lawyer that represented the Sarayaku was beaten and threatened with death.

Despite the threats and violence that CGC has imposed on the lives of the Sarayaku, the scheme that deserves much scrutiny is one in which both the government of Ecuador and 16 oil companies are responsible for. On July 16, 2001, an agreement was settled between the companies and Ecuador's Ministry of Defense in order "To establish, between the parties, the terms of collaborations and coordination of actions to guarantee the security of the oil installations and of the personnel that work in them" (Beltrán and Oldham). What seems like a standard contract on paper, in reality, the 'securing of oil installations' meant that the military would be brought to the table of negotiations in favor of CGC.

Since Sarayaku territory has been militarized, the community has been terrorized in numerous occasions to varying degrees. Once such incident occurred during a peaceful demonstration against the CGC. During the march, army personnel detained about 120 Sarayaku and assaulted them "with clubs and machetes, destroyed their personal belongings, and impeded their passage with the intent of preventing the March for Life and Peace" (Sarayaku News Alert, 2003). Beyond the instances of physical aggression and violation, the militarization of certain parts of the Amazon has provided for a destructive psychological dimension to this battlefield as any other type of war waged against an enemy, except in this case it involves innocent and vulnerable people. In this regard, by methods of intimidation, the oil companies have gained the upper hand with the military support of the state. Unfortunately, the state's ultimate wrongdoing is not its

military cooperation with the oil companies, but its failure to uphold its constitutional law and to enforce international laws that protect indigenous rights.

In light of the environmental and social impact experienced by the Huaorani and the Sarayaku among dozens of other tribes, it would be futile to condemn the state or the oil industry apart from the law. Thus, it is crucial to observe that Articles 84-86 of Ecuador's Constitution recognize and guarantee the human rights of all indigenous people of Ecuador. In addition to these fundamental items, Articles 86-91 assert their right to live in a healthy and ecologically balanced environment which guarantees the conservation of biodiversity and protected areas ([Republic of Ecuador](#)). Secondly, at the international level, Ecuador is signatory to the International Labor Organization (ILO) Convention 169 which urges greater participation of indigenous groups in the formulation, implementation and evaluation of plans and programs for development. Article 14 of the ILO C.169 is particularly important as it recognizes the land rights of indigenous people, requiring that states consult with the people affected by development programs (ILO). Disappointingly, the actors involved have performed to substandard levels of approval with complete disregard for the law.

## **PROBLEM ANALYSIS**

As it is important to grasp the devastating impact of the industry, this analysis is concerned with evaluating this impact in terms of the current model of globalization in which individuals, organizations, nation states, multinational corporations and transnational organizations operate in. The question still remains- will these entities continue to develop resting on Friedman's outlook of globalization or will they spiral into Kaplan's view of a volatile system of globalization? Having explored the nature of the

problem, it would seem that the state's economic policies set for the current global competitive market have created the scenario predicted by Robert Kaplan- unstable, fragile, and complex.

How so? For indigenous people, the instability lies in complex dynamics of the current economic model of neoliberalism adopted by the state of Ecuador which has exacerbated the threats against their way of live. Their experience confronting oil giants often loosing their human and constitutional rights assures them of the inequitable system they are forced to operate in. To be precise, the system is called neoliberalism. As put forth by Houghton and Bell in the Native Americas periodical, neoliberalism is an economic system that “refers to the aggressive series of free-trade economic initiatives now dominating national and global economies. It includes policies such as privatization of public resources, elimination of national industrial policies, deregulation of the private sector, and no regulations on transnational capital” (Houghton and Bell). In essence, as Holloway states, neoliberalism “promotes the market and cuts back on state activities that do not immediately favor business” (qtd. In Hristov). This particular form of government deregulation creates a governance vacuum allowing for other entities to take over traditional state activities. As evident in the previous case studies, multinational oil corporations assumed state functions in terms of military security and education. With the militarization of Sarayaku territory, CGC took on the state's role to commanded army personnel. Also, as Repsol negotiated with the Huaorani, it offered to educate them, when education is usually a function of the state. Yet these are only two of various aspects in which the state's capacity to regulate is diminished for the sake of business productivity allowing for the unchecked penetration of powerful corporations. Marcus Colchester

writes in the Multinational Monitor that “ironically, one of the most acute difficulties facing indigenous peoples in this era of change comes from the withering away of the state, not its extension.” This observation is an inherent characteristic of neoliberal economics, which supports Kaplan’s theory that the current system of globalization is unstable; unstable especially for the marginalized group that has often been coerced to yield into the interests of foreign entities.

Nevertheless, Kaplan’s realistic view does not explain the situation in its entirety and may be limited solely to an adequate analysis of the problem as it relates to globalization. Although globalization has indeed aggravated the plight of indigenous people in Ecuador’s Amazon, the same phenomenon may be able to empower this group out of social and economic periphery and into an influential national and international authority. In order to evaluate the potential of this scenario, it is essential to consider the manner in which the affected indigenous population has acted in response to the problem.

## **RESPONSE**

Both the oil companies and the state of Ecuador have encountered the indigenous response to unethical business practices resulting from neoliberal policies. Forty years since the oil boom, the companies have met relentless opposition to oil development at the local level. On the other hand, the state has been overwhelmed by the political mobilization of this marginalized group which has come to question the country’s economic, social and political structures. Ultimately, the question remains- what may be inferred about globalization through indigenous political mobilization at the local, national and international level as well as their use of a key tool that sustains global integration: technology.

## **LOCAL**

Beginning in the 1960s and 70s, indigenous political mobilization began in local villages of the Amazonia. Again, the Sarayaku's local efforts in response to CGC best exemplify this level of an organized response. Year after year, one persuasive offer after another, the Sarayaku have stood firm in their opposition. As previously mentioned, this Quichua-speaking tribe has demonstrated peacefully in public despite warnings and threats documented in their website (Sarayaku News Alert). They have established their own Congress of the Autonomous Territory of the Original Quichua People of Sarayaku which holds regular elections and voted its first female President on May 22, 2005 (Sarayaku News Alert, 2005). Since their struggle began, their success may be captured through the telling statements of Ricardo Nicolas, General Manager of CGC who told a New York Times reporter "When we did our seismic testing, we suffered kidnappings, fires, and robberies, [...] It's been seven years and we haven't been able to get started; seven years and \$10 million" (Forero).

## **NATIONAL**

The next level of political organization occurs on a national level. Indigenous movements have effectively converged in CONAIE. Combining a significant force of indigenous confederations from the coastal, Andes and Amazon regions, CONAIE stands for the umbrella Confederation of Indigenous Nationalities of Ecuador that negotiates indigenous demands with the state since its inception in 1986 (Sawyer 43). Through CONAIE, this section of society has been able to voice critical claims, creating national discourse on previously ignored issues of indigenous autonomy and rights. Major populous movements, marches and demonstrations organized by CONAIE and other

regional confederations launched an unprecedented era of indigenous political participation that peaked during the 1990s.

One of the largest marches was carried out in 1992 when approximately 2,000 Quichua, Achuar, and Shiwiar Indians marched 250 kilometers from the Amazoniá to the capital. As they passed through the Andes, they were joined by more indigenous groups, arriving to Quito thirteen days later and 5,000 strong (Sawyer 27, 28). They demanded that the state would honor their legal titles to the land and did not leave the city until they had valid papers to prove the President's statements that partially conceded their demand. Although they only obtained 55% of their demand to ancestral land, this proved to be a step in the right direction (50).

Another significant accomplishment came when in 1996, Pachakutik, an indigenous coalition, participated in the electoral process for the first time in history. Walsh explains that "the movement brought together indigenous peoples, peasants, unions, Afro-Ecuadorians, and ecologists, as well as women's citizen's and youth groups. [...] After only six weeks of campaigning, Pachakutik won seventy-five posts, including eight congressional seats, ten mayor's offices, and eleven provincial councilor seats"(Walsh).

By the turn of the century, CONAIE was a solid political force with a clear agenda that opposed neoliberal policies and showed its discontent with the current administration by leading a revolt nationwide that overthrew Jamil Mahuad in 1999 (Hristov). With the following administration of Lucio Gutierrez, CONAIE's president, Antonio Vargas was appointed the new Minister of Social Welfare (Lucero). Although CONAIE later came to oppose Gutierrez and support his ousting, this mere appointment

may have been an indication that indigenous leaders were now considered fit for public office in representation of the population at-large.

## **INTERNATIONAL**

Predictably, CONAIE's influence flowed beyond Ecuador due to the transnational nature of its core issues. As neoliberal policies affected other indigenous groups across Latin America, CONAIE became an organization that, as Houghton and Bell explain, "has played an important leadership role in the World Social Forum and in the struggle against the FTAA [Free Trade Area of the Americas], becoming a voice for indigenous people in anti-globalization arenas and an advocate for a continental indigenous agenda" (Houghton & Bell).

Nevertheless, looking at these political developments alone may give an overly-optimistic view of the circumstances when reality indicates otherwise. In highlighting the achievements of indigenous political mobilization from the local to the international level, Colchester reminds us of challenges that cannot be overlooked. He writes, "The emergence of a globally experienced cadre of indigenous spokespersons, organized into coalitions, alliances, national organizations and networks, has strained communications, and even mutual comprehension between them and the communities they come from. Horizontal information sharing among indigenous leaders, often from different countries and regions, has not been matched by vertical sharing between leaders and the 'grassroots' (Colchester 4). Although it is important to acknowledge any hindrances to indigenous cooperation as a whole, the most important aspect of this international mobilization to concentrate on is the fact that within forty years, this vulnerable and isolated population now claims political leverage and authenticity at various levels of

political affairs. Despite challenges of communication and unity, Walsh sustains an undeniable fact which is that

No longer just servants, rural farmers, or producers of crafts, indigenous people must now be recognized as politicized actors/insurgents able to shut down the country, stand up to and speak about the *patron* in a language the boss cannot understand, and make ethnicity-based demands to a government that in modern times has not recognized indigenous difference (Walsh).

Now, as indigenous difference is not only recognized but given weight on a number of global issues such as the environment and economic policies, it may be fair to say that some aspects of globalization are working in their favor. One of these is pointed out by Houghton as he makes reference to the global network in which indigenous people now operate in. He says “At one level, the margins of their political power are expanded as they deal directly with multilateral organizations like the World Bank, the InterAmerican Development Bank” (Houghton 2001). Sure enough, much of globalization’s integration has served to further destroy the environment and the indigenous way of life, as Kaplan would point out. Yet, simultaneously, Friedman’s optimistic theory of globalization is manifested in every relationship, accord, convention, and consideration that occurs between the Sarayaku or CONAIE and transnational organizations such as the United Nations, the Organization of American States, or the International Court of Justice.

Furthermore, Friedman’s stance is substantiated considering how the indigenous movement has used technology for communication. Once again, the Sarayaku are a noteworthy case study due to their approach and success. A simple look at their web

domain [www.sarayaku.com](http://www.sarayaku.com) indicates that they have documented their struggle in detail, allowing any online visitor to become familiar with their history against the oil companies fairly quickly and find out the most recent developments. Their website can be viewed in three languages: Spanish, English and their native Quichua, as they showcase Sarayaku music, pottery, and plenty of photos. More importantly, this is the method in which the world can learn about this tribe and support them with petitions to the government or by simply visiting them and supporting their small-scale tourism industry.

Although some non-governmental organizations, such as Amazon Watch, cover the case of the Sarayaku against the CGC, the fact that this tribe is able to present their case independent of NGOs adds to their credibility as they become the primary source to which the media can go to. This collaboration with the media is priceless because when they report on the Sarayaku they become ‘watchdog’ entities with tremendous potential to bring negative publicity to the oil companies and spreading awareness.

Through their website and global networks they have been able to establish, key supporters have come on board with their campaign, including a public relations firm out of New York, offering their services pro bono (Toala). With the help of this firm as that of numerous NGOs, the Sarayaku case has been covered more than 200 times in web and print publications from Ecuador as well as England, Italy, Germany and France (Sarayaku.com). This degree of coverage has created tremendous support from environmental and human rights communities

In this manner, as indigenous people become educated, participate in the political process and interact with the international community, they are finding the means in which the system may be leveled as they fight the tenacious tactics of oil companies and

seek to hold the government accountable to the law. Through political involvement, they have experienced success, gained representation within Ecuador's government and expanded to participating in the international arena. Also, through aggressive public campaigns online with the support of a global community monitoring the situation, they have found the means in which they may be able to help themselves through the support of others.

Evidently, indigenous people living in Ecuador's Amazon are both victims and victors in the system of globalization. They are victims of the state's failure to uphold the law in their protection, leaving them to negotiate with oil companies and finding themselves in utter disadvantage in the face of the military and devastating oil contamination. At the scene of environmental and social devastation, tribes began to resist the enemy that preyed upon the resources beneath the land that was rightfully theirs. Indigenous groups began a process of political organization that has developed over 30 years and is active in the local, national and international level. They have marched and demonstrated against the government's economic policies that have drained from the Amazon leaving them in abject poverty, and their voices were loud and clear. Leading two presidential overthrows and participating in numerous international forums, this group that was formerly ignored, devalued, marginalized and trampled upon has now gained political leverage. Their status today would not have been possible without the effective use of communications technology which has helped them further their cause among international organizations. Having reached out to these organizations, indigenous groups are not alone and they no longer need to rely upon a system of government that will not favor its own but rather, they have disabled the state's power by seeking

international support where they find international laws in their favor. Ultimately, after utilizing the networks facilitated by globalization, indigenous people in Ecuador as in other countries may successfully equalize the system, holding the nation state accountable for upholding laws that enforce corporate responsibility.

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## **Democratic Ideals in Post-Revolutionary Education**

**By: Jeannine Wightman**

*“I must study Politicks and War that my sons may have liberty to study Mathematicks and Philosophy. My sons ought to study Mathematicks and Philosophy, Geography, natural History, Naval Architecture, navigation, Commerce and Agriculture, in order to give their Children a right to study Painting, Poetry, Musick, Architecture, Statuary, Tapestry and Porcelaine.”*

- *John Adams to Abigail Adams [Post 12 May, 1780]  
Adams Family Correspondence, 3:342*

The Declaration of Independence has been signed and the war has been won. The Constitution has been ratified. It's time for the nation to define what it means to be American. How will this independent nation cultivate democratic ideals and republican thinking in its culture? Education. An exploration of the post-revolutionary state and federal legislation as well as the ideology of some of the era's revolutionary minds will reveal that to Americans, education is the key to maintaining an independent republican nation.

Historically a priority for Americans, education was embedded in some of the country's earliest legislation. In 1787 “An Ordinance for the Government of the Territory of the United States, North-West of the River Ohio” clearly confirmed the importance of education and the responsibility of the government to encourage education because it is central to the “happiness of mankind” (The Northwest Ordinance, Article 3). However, the federal government did not legislate curricula or license schools so the obligation to educate America's youth fell to the states (Paige 6; Bill of Rights, 1791; Constitution of the U.S., 1787).

States needed to decide how to best establish schools. In Pennsylvania, for example, the legislature approved the purchase of land for school buildings and meetinghouses by religious communities for many years (Statutes at Large, Vol 4, Act 320, 1731). During the Revolutionary War era, however, state leaders recognized the role education played in the peace and happiness of the public. As such, state leaders in Pennsylvania reformed current practices at the University of the State of Pennsylvania to eliminate any reference to British rule and to conform to the constitution and laws of the commonwealth. Among the reasons cited for the change the freemen of Pennsylvania listed the risks of tumult, sedition and bloodshed in an improperly conducted education system (Statutes, Vol 10, Act 871, 1779).

By 1784 the Commonwealth ordained that a public school should be established in each county for the education of the state's youth and devised a plan to establish accessible schools across the state. Lawmakers sought to provide affordable education to individuals from all religious denominations in this piece of legislation. Accordingly, the curriculum was to include foreign languages, reading, writing, English, mathematics and literature. The Commonwealth's leaders acknowledged that funding was scarce having just participated in a long and expensive war. Legislators did not want to put the burden of public instruction on the people so they looked for opportunities where the land and buildings were already established. This being the case, Pennsylvania's first public school, The Public School at Germantown, was established (Statutes, Vol 11, Act 1109, 1784).

A series of schools opened throughout the Commonwealth. Reading Academy appears to be the first public school established in Berks County, Pennsylvania (Statutes

Vol 13, Act 1338, 1788). Each time the state approved the creation of a new school, as was the case when Reading Academy opened, the written statute expounds upon the blessings of education on mankind and the importance education plays in a prosperous and peaceful community – when properly conducted. Many revolutionary minds debated just what dictated the *proper conduct* of the education system.

The earliest Americans borrowed ideas from other countries and cultures when establishing schools. Often a church sponsored these institutions whose main purpose was to teach children to read the Bible (Grove 5). Even before the Northwest Land Ordinance, scholars like Thomas Jefferson recognized the need for a universal system of education. In a speech to the Virginia Assembly in 1779 Jefferson presented a bill endorsing education as imperative to protection from tyranny (6).

In 1796 Jefferson proposed a system of education for the state of Virginia considered to be the “model of republican equality” (Raynor 1). In the proposal, Jefferson suggested educating all free children regardless of sex or social standing. “Genius and worth would thus be sought out of every walk of life,” he writes, putting an end to what he referred to as “the pseudo-aristocracy of wealth and birth in the competition for public trusts” (2). The education of the people, according to Jefferson’s proposal, is the only way to preserve freedom and happiness. The expense of his proposed system was to rest with the taxpayers. Wealthy landowners, however, were not prepared to carry the burden for the poor so the plan was not implemented (2). For the time being, instilling republican values in the lives of the youth fell to mothers across the new country.

In a letter to her husband during the Revolutionary War, Abigail Adams expressed a longing for the country to declare independence and beseeched John Adams to “Remember the Ladies” when writing the country’s new code of law (A. Adams 2). She went on to ask him not to put too much power into the hands of the country’s husbands or run the risk of a feminine revolution. Women, she declared “will not hold ourselves bound by any Laws in which we have no voice, or Representation.” Women were ready to distinguish their roles from men’s, a concept that came to be called “Republican Motherhood.”

A term conceived by historians, “Republican Motherhood,” captures the essence of the feminine spirit in the decades that followed the Revolutionary War (Eisenmann 6). It was during this period that women assumed a superior role in childrearing, specifically in terms of morality and education. As such, women were considered the natural teachers for young America. The notion of “Republican Motherhood” meant women needed to be better educated in order to properly raise children who embodied republican ideals. Thus arose the need to educate not only American males, but females too. So began a period of revolutionary reform in American education.

Catharine Beecher, an education reform activist, believed that schools were responsible for not only the intellectual growth of the student but for the moral and physical development as well. Additionally, Beecher saw the potential for women to fill the rising demand for teachers (“Schoolhouse Pioneers,” Catharine Beecher 1). Echoing the ideals of Republican Motherhood, Beecher co-founded the Hartford Female Seminary for the training and education of mothers and teachers (2). In a report summarizing her position on women in education, Beecher wrote, “It is to mothers and to teachers that the

world is to look for the character which is to be enstamped on each succeeding generation...” (qtd. in “Schoolhouse” 7) Beecher continued to push for reforms on behalf of the teaching profession throughout her life.

Perhaps the most influential revolutionary in terms of developing the new American culture was Noah Webster. In a biography written by Norman K Risjord, Webster is described as nothing if not patriotic (1). According to the author, coming of age during the Revolutionary War, Webster felt the war was not over when the fighting stopped. He argued that a nation couldn't be truly independent until it had developed a culture of its own (2).

Webster chose to plant the seeds of patriotism in the hearts and minds of American school children through his *Reader*, one of many textbooks he published (5). The biographer indicated that Webster hoped the *Reader* would be accepted as a replacement for the *Primer*, a text used since 1690 that emphasized religious themes. Webster's work sought to instill patriotism by including passages that detailed the events of the Revolution and the lives of American heroes (5). Webster released several additional texts including the *American Spelling Book* and *American Grammar*, both standardized American English creating the foundation for American culture (4).

Ultimately, Webster released the country's most widely used American English dictionary in 1828 (8). His inclusion of “American” words is considered one of his major achievements. Webster identified and labeled the new American landscape and its indigenous creatures. He also included German, French, Dutch and Indian words and American colloquialisms (11-12). Webster's dictionary set a national standard for American English.

The existence of Republican Motherhood and the development of American English invited much debate and reflection on the subject of education in America. As more children flocked to public schools, the need for reform became obvious to many scholars, among them Horace Mann and Henry Barnard. Together they would effect change in American schools.

Horace Mann, appointed secretary of the state board of education in Massachusetts, began his new job by conducting a thorough investigation of the state's schools (Lach 9). According to biographer Edward L. Lach, Jr., Mann learned that school facilities were in poor condition, students attended schools on erratic schedules, often teachers were not given any formal training, and textbooks varied on content and quality (9). As a result, Mann proposed a free, non-sectarian public school system for children of all religious and social classes ("Teaching Timeline" 5). Mann proposed the "Common School" for the purpose of "instilling a common political and social philosophy of sound republican principles" (6). In other words, Mann's Common Schools were intended to transform American youth into productive democratic citizens.

Often considered the "Father of the American Public School," Mann's ideas gained support and momentum across the United States throughout the mid 1800's (Lach 19). His proposals provided for the implementation of a six-month school year, increasing teachers' salaries, developing uniform textbooks, establishing a physical education requirement and building better schoolhouses (13). Mann, according to Lach, viewed teacher training as a priority and was also successful in opening the nation's first "normal school," a teacher training facility (11). As the popularity of the Common School increased, the need for additional Normal Schools needed to be met.

The Common School continued to function as the model for public schools throughout the United States. By the mid 1800s, it seems, an education was not only a means to republican idealism but was a function of the nation's republican democracy. In 1837 Henry Barnard was elected to the Connecticut state legislature and adopted the reform of the Common School as his cause (MacMullen 2). Barnard considered the schools "agencies of moral reform" and emphasized the social role of schools in a democracy (3). In essence, he thought that responsible government should supervise the schools and establish a standard of excellence.

Barnard was successful in bringing the subject of education into the public forum and strived to improve the quality of teacher preparation and student learning. Barnard's vocal presence on the subject of education earned him the position as head of the new national Department of Education in 1867 (14). Henry Barnard is often considered the "Nestor of American Education" (16).

Legislation and ideology aside, perhaps the best way to understand the nature of the early American schools is by visiting the remains of a one-room schoolhouse. The Freyberger School Museum at the Pennsylvania German Cultural Historic Center in Kutztown, Pennsylvania, provides a great deal of insight into the value of education in early America. Built around 1855, the schoolhouse is relatively modern in comparison to some of the first buildings ("Freyberger School"). Earlier schools, primarily log schools, were dimly lit and sparsely furnished. Children would sit on benches along the sides of the building where windows provided the only source of light. By 1855, schoolhouses like the Freyberger School were being built with brick and usually included individual desks. Students benefited from larger windows that provided additional light to work by.

Large iron stoves replaced stone fireplaces in the late 1800s and wall pictures and educational tools made an appearance as well (Grove, 35).

Parents and students needed to be dedicated to the idea of education. Students abandoned chores at home and on the farms where they were vital to the daily business of running the household to go to school (81). In the absence of public transportation, students would walk a mile or two in all kinds of weather - schools didn't close due to snowstorms or bad conditions (39). One can only imagine the hardship endured by a family in order to allow their children to secure an education. Parents lost manpower at home while students made the long, often cold and wet walks to and from school.

Teachers needed to be dedicated, too. Once hired, the teacher met with the township leaders and reviewed both instructional and janitorial duties (43). A teacher's conduct was the subject of intense scrutiny. A strict dress code was enforced and teachers were forbidden from smoking cigarettes, using alcohol or attending the pool or dance halls. In addition, female teachers were forbidden to marry or join a feminist movement (44). Perhaps the high moral standards established for teachers are reminiscent of early Puritan ideals.

Was democracy alive in the classroom? The Common School intended to instill republican values and ideals in the youth of the time and was designed to contribute productive democratic citizens to society, but there is little evidence that those values were actively practiced in classrooms. Academic learning was the focus of the early schools but discipline, rather than democracy, appears to have been the emphasis. Spanking was the primary form of discipline but punishments that required academic exercises, physical endurance or ridicule were not uncommon (66). The schoolhouse

experience was more akin to a dictatorship rather than a democracy, but, one might argue, learning cannot take place without effective discipline.

Students learned republican values through their textbooks. In the mid 1800s William H. McGuffey released a series of readers designed to help students progress through reading levels (50). These readers contained literature by great English and American authors. While Noah Webster's readers planted the seeds of patriotism, *McGuffey's Readers* contained lessons devoted to the virtues of honesty, hard work, courage and persistence in addition to passages about history and patriotism; republican values came alive in textbooks but democracy had no place for practice in the classroom (50).

Public schools continued to face challenges and undergo reforms throughout the nineteenth century. Perhaps the most substantial challenge to the country and republican values was faced during the Civil War. At the conclusion of the war, the Freedmen's Bureau was established for several purposes, among them assimilating former slaves into society as productive citizens. The Freedmen would use education as the primary catalyst to empower the country's most disadvantaged citizens ("War Department Act of March 3, 1865"). Again, the nation redefined itself through its children in the classroom.

Early on the nation's leaders recognized the important role education plays in maintaining a free and independent society. In so doing they reached out to the nation's youth and sought to instill the republican values and democratic ideals upon which the United States was founded. Scholars recognized the need to create a sense of national pride and patriotism. As a result, the education system had evolved from the stepping-stone toward republican values to a function of a republican democracy.

Schools have faced many challenges and have undergone countless reforms over the years. The public school system continues to be the source of scholarly debate today. What remains the same, however, is the need to educate American youth in a manner that guarantees the survival of republican values and prosperity in the United States.

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# **Education and Discipline: Cultural Perspectives on Discipline as Shown by the Variation in Education Systems**

**By: Hilda Rizzo-Busack**

*A Personal Introduction:*

“You are *such* an American.” This phrase greeted me on the first day I volunteered as a teacher at an international experimental education program in Innsbruck, Austria. At the time, a bad reputation plagued America because of the government’s disputed international policies. I thought this ill repute prompted the critical statement, as my fellow teachers were German, Austrian, French, and Hungarian. Rather than attributing it to my educational philosophy and methods, I believed that the statement reflected their perception of America. I was mistaken.

I found that my non-American co-workers considered my teaching methods and social interactions strange and abrupt. They perceived my high-level of involvement with student projects and strict upholding of the rules as overbearing. Other teachers handled anger, bullying, and conduct in a distinctly different way than I had learned. For example, when a male student viciously harassed a younger female student, one of the teachers quietly drew him aside. He asked the child why he was feeling uncomfortable, why he was showing his discomfort as harassment, and how the teacher could make the school better so he did not feel the need to do this. The student did not even have to see the head of program. The teacher did not punish the guilty party, make direct demands to change the student’s behavior, or reference the rules that were broken. I was astonished. Considering what he had said, it surprised me that the girl’s parents did not take action.

My surprise did not end with that incident; later, a teacher from rural South Africa joined our group. At our staff meeting, he cautiously asked us whether or not we beat

disruptive students. My German counterparts explained that we strived to teach self-discipline by allowing students to solve their own issues with our aid and never used physical or verbal punishment. The South-African teacher expressed his relief and explained that, when he was a child, his teachers had beaten him if he did not remember his work or if he was disruptive.

These extreme examples reveal how a different cultural environment challenged my American teaching standards. I had adapted my views of discipline from my experience teaching in an American school, assuming that the international norm mirrored US institutions. Working with an international education program revealed that different cultures promote varying forms of discipline based on their own social norms and culture.

*Discipline in America and a Perspective from Other Nations:*

Educational discipline in America has been a highly debated issue for quite some time. The country's culture supports a primarily competitive, "punishment and reward" education system. However, with the rising dropout rate, violence levels, and lack of respect in the primary and secondary school classrooms, many educators and parents see seriously troubling phenomena, students resist teachers' attempts to enforce discipline in the classroom. This rebellion sparks questions among policy makers, schools, and parents: Do children realize the importance of education? What did parents teach these youngsters? How can fledgling teachers learn to cope?

While violence is a serious fear after a number of school shootings, research has found a very low percentage of incidents: "The daily stress-inducing problems which confront most teachers are 'trivial but regular incidents of misbehaviour' rather than

serious offences such as violence” (Laiyee Leung and Wing-lin Lee 1). Considering this information, in addition to preparing for the “serious offenses”, the “regular incidents” that test the discipline in the American classroom also need a feasible solution.

Educators face the challenge of helping students learn, molding their classroom to fit with expected social and school norms, and forming the best learning environment for all their students. Ideally, teachers should only have to focus on transferring knowledge to their students, but from pre-school to the senior year of high school, educators must strive to organize and enforce discipline ("Controlling Inappropriate Classroom Behavior." online). Not only do they face the question of what methods are appropriate or effective, but also they have to decide “what the principles are that ought to govern the conduct of an educational situation involving children” (Clark online). Because cultures and ideologies determine what “discipline” and proper conduct are in each setting, a variety of corresponding methods have formed over time.

Exploring these culturally different discipline methods provides a perspective on what has become the standard in the American educational system. Other nations’ concerns about discipline, the cultural norms that affect its administering, student response to authority, and the parents’ relationship with the school defines a school system’s “classroom management”. Their different styles expose a range of discipline methods actively employed or cultural determined. Although school system strategies can be summarized on a national level, these finding can also be applied to specific schools and even individual classrooms. The expectation of a certain level of discipline is formed due to socially acceptable norms that work on the local level. By reviewing methods of classroom management on the national level rather than comparing the merits of being a

drill-sergeant or promoting free student-directed learning within a classroom, a multicultural perspective on discipline can be applied.

*American Indian: A Conflict of Cultural Values*

The American Indian cultural values contrast with those of the US majority population, whose standards determine discipline in public schools. The American school system is a strong supporter of behavioral reinforcement using reward and punishment, which allows teachers to recondition behaviors using a student's desire for positive outcomes and avoidance of negative ones or lack of attention. In addition, such teaching methods promote competition in the classroom, by highlighting student achievement to promote correct schoolwork, confidence, and pride.

Unfortunately, these methods are in direct opposition to American Indian social norms. This culture promotes self-regulation, community, and mastery. According to American Indian cultural beliefs, "children should strive to see other people's perspectives and come to a reasonable conclusion that is harmonious with others" (Hammond, Dupoux, and Ingalls online). In classroom work, students try to avoid conflict and work best in groups. American Indian students do not wish to compete with those in their community so as to avoid disharmony. These social norms supports learning as a private process, and "while an individual is learning, one's privacy must be respected and mistakes should not be publicized. The child will be reluctant to perform the task until he or she is certain they can perform it well" (Hammond, Dupoux, and Ingalls online). These enculturated norms lead American Indian children to attempt a private mastery of the material, while not disrupting the community's harmony through their success. This private learning and community focus does not mesh with a

competitive system that showcases both achievement and failure in an effort to refine behavior.

These cultural norms can easily come into conflict with American school methods. Mr. John Hart, a seasoned elementary and high school teacher, described a teaching experience he had with this cultural group (interview). When he asked a student to come up to the board and try a problem, the student refused. At the time, Hart did not know that request was in conflict with the cultural norms that supported personal mastery and humility. When the student refused, Hart then asked one of the students the question directly. The student attempted out of respect, but answered incorrectly. When the teacher proceeded to ask other students, they all refused to answer, as it would be disrespectful to the one who initially answered incorrectly and promote disharmony in the classroom. Hart initially perceived these refusals as disrespect and a lack of discipline in the classroom. One of the students pulled him aside and explained the cultural norms to Hart, who realized his mistake and proceeded to change his teaching methods.

This example shows how cultural norms can determine the success of classroom methods with certain students. More importantly, it reveals that the teacher's knowledge of cultural norms is vital in understanding students. In the above example, if Mr. Hart had never discovered the students' norms, he would have proceeded to administer a system punishment or reprimands. Students would have felt that the punishment was unfounded, leading to dislike of the teacher and, potentially, the subject taught. As Hammond, Dupoux, and Ingalls point out in a study of conflicting cultures, "Typically, most classroom management training for prospective teachers relies on behavioral outcomes based on generic characteristics believed to characterize traditional and non-traditional

students, ignoring ethnic, cultural, or socioeconomic differences” (online). Considering this statement, teachers who ignore, proceed to misinterpret, and discipline actions resulting from culture norms are effectively forming a “cultural source of misbehavior.” This action leads to American Indian students’ unintentional discrimination, a phenomenon that easily extends to other cultures because of their different norms.

Parents of American Indian students promote their cultural norms over American social norms. So when teachers misinterpret and discipline their children, parents see this as an attempt to “Americanize” their children and deny their American Indian culture, thus putting both the students and parents at odds with the school system. This conflict of cultural beliefs has led to some startling figures, like those found in the Hammond, Dupoux, and Ingalls study: “...potentially inaccurate teacher observation can result in an inappropriate referral to special education or place the American Indian student at educational risk. The mismatch between the two cultures (school and Apache community) may explain, in part, reports indicating that about 44,000 American Indians children in K-12 schools are classified with a disability, and that less than 50% graduate from high school” (online). Even if these sobering percentages only partially stem from cultural differences, awareness of potential prejudices in the classroom supports the need for equal opportunity and development for students of all non-Anglo-American groups.

### *China: Disciplining for Life*

China’s school rules mirror the nation’s strict social norms. The seriousness of classroom rules often reflects the communist government’s policy. Conformity seems to be a reinforced standard in the school system. China’s school rules promote integration and respect in their compulsory nine-year school program. One study reasons that “the

breaking of behavioural codes in schools might have the possibility of leading the students to become law-violating citizens, so the rule-breaking behaviour of the student has significance not only for learning and teaching in schools but also for their lives in society” (Laiyee Leung and Wing-lin Lee 49). An inability to follow rules supposedly foreshadows the student’s future law-breaking tendencies, making discipline a major priority in the Chinese school system.

Chinese students respond to rules that they do not agree with through ignoring these regulations, but they met with reprimands from both the school and their parents. According to a comparative study, teachers and schools find that there is a correlation between consistently enforcing punishments or repercussions and decreases in student misbehavior (Laiyee Leung and Wing-lin Lee 49-50). The key forms of misbehavior are “being late to school, breaching of hair and dress codes, and smoking” (Laiyee Leung and Wing-lin Lee 50). Minor punishable offenses could include dying hair or not wearing the uniform correctly, while serious offenses could include smoking on campus. China and Hong Kong’s law does not deem smoking as illegal, but as a negative behavior and thus its harsh punishment in the school system. Students rebel against these policies and, in disciplined schools, a reprimand quickly follows. Since students are required to attend school, ultimately they conform or choose consistent admonishment.

Parents also play an important role in this school system. As in many other countries, parents are culturally expected to have control over their children’s actions. As Laiyee Leung and Wing-lin state, when the student does not face rules and authority at home, the school’s discipline system is not as effective (online). Consequently, the school expects that parents comply and aid in disciplining students.

*Greece: A Education Set in Stone*

The Greek school system has a curriculum defined by its Ministry of Education and Religion. As a study on the nation's system states: "Academically, schools are tied to a curriculum which may not be modified, even if teachers were willing to try" (Didaskalou 476). Teachers and students attempted to slowly reform the set curriculum with little success. In the Greek system, teachers and schools also have little control over the organization and discipline methods employed in the classroom.

In this constrained environment, students are not highly inspired to learn, and the government has recognized a rise in discipline problems. Potentially, this issue is due to the lack of communication between policy makers and students as "the value of pupil participation in all aspects of school activity, and particularly behaviour, is not recognized" (Didaskalou 477). Communication between these two parties could help each side understand the source of discipline problems and bring a more community-based and accepting environment into the classroom. In addition to this divide between curriculum-makers and the students, the planning, rules, and reform of the school system do not include parents' input. When parents were included to help enforce discipline, school reform was not productive; "It was suggested that in cases where schools had established an active involvement of parents, this was often accompanied by negative behavior, conflict and a perceived intention on the part of parents to seek to control the school" (Didaskalou 477). Researchers, such as Didaskalou, seem to be hinting that discipline problems stem in part from student's feelings and needs not being addressed in the classroom (474-5). Once the Greek system can incorporate students' needs, diversify the curriculum, and implement new methods of classroom management, teachers and

parents will have more of an ability to face discipline problems, and students will have less of a motive to rebel against a rigid authority.

*United Kingdom: Rules and Conformity*

The increases in students' lack of discipline concern both the United Kingdom and the US. The rise in school violence has caused particular worry, but research has found that "While some instances of violence in schools attracted considerable media and public attention, these instances were rare" ("Managing Challenging Behaviour" 1). These findings are consistent with those of the American system, revealing that the more consistent problem facing teachers is dealing with rebellious behavior in the classroom. Research focusing on "Managing Challenging Behaviour" found a correlation between an enforced, clear system of rules and a good level of discipline (1). British schools have responded by having a contract-like agreement made by the staff and then passed on to students and parents. This agreement ensures that the rules, the consequences, and their enforcement are consistent and understood by all parties.

Some schools still find that these rule agreements fall short in the disruptive classroom. Teachers worry that students are losing sense of the personal moral code that forms the foundation for correct behavior. The rise in rebelliousness or strong individualism is said to "place emphasis on the need for individuals to now turn inward for moral judgements about their own behaviour instead of regarding 'right' and 'wrong' as analogous with 'conformity' and 'non-conformity'" (Watt and Higgins 2). This statement alludes to the growing concern over students placing social conformity over morality. In the UK, directly teaching morality seems to repair some of the moral decay that students are facing.

The school system views parents as partners with the school in enforcing and reforming the rules; “The emphasis on home-school links within the schools in the UK has its roots in the belief that involving parents in the education of their children promotes children’s development and increases achievement, both academically and socially” (Didaskalou 474). Rather than seeing them as a threat or culpable party, the schools view parents as a resource for information about the student. In addition, teachers and authorities within the system communicate with parents to find the reasons behind student misbehavior, while also coordinating discipline in the home and school environment to maintain consistency.

These vital communications between the parents and school seem to support communication and good conduct in the classroom. From signing a contract explaining the school’s policy on discipline to parents who enforce ethics, British students face a solid system of discipline. Although some teachers worry about students developing a personal sense of correct action, the system seems to find success by focusing on communication with all parties to overcome behavior problems.

#### *Japan: The Educational Powerhouse*

By reputation, one of the top educational powerhouses in the world is Japan. Japanese students have some of the highest test scores in comparison to other countries; in addition, the nation has one of the highest newspaper readership percentages in the world (Rohlen 30; Marlan online). More importantly, when compared to the US, Japan has a higher twelfth-grade graduation rate, a lower absentee rate, and greater time dedicated to homework (Rohlen 30). Despite extensive research to figure out what makes

this school system so successful compared to American schools, the gap between Japanese and the US education system remains today.

The disparity could be largely due to the cultural norms that surround schooling in Japan. Schools represent a path to a greater future. Through success on the entrance exam, students can obtain a place in prestigious colleges, such as Tokyo University, which produces only a three percent graduating population, but those graduates compose the majority of top ranking jobs (Rohlen 34). Persistence and diligence are vital qualities to accomplishing this feat, and the families of the students expect these traits. Success and dedication in school corresponds with to great potential, respect, and success in Japanese culture. Rohlen's study of this school system revealed that students have to focus on achieving self-discipline both in their actions in the classroom and in their class work (35). Japan, like China, finds that low school rank coordinates with delinquency and lack of discipline. Unlike China, in Japan, the low ranking scores reflect on an individual's character and show that he or she is not up to par. Parents support this cultural belief and work with schools in upholding discipline. The labeling of character based on performance and parent's partnership with schools presses students to succeed in the classroom and avoid discipline issues.

To accomplish effective classroom management, Japanese schools focus on positive behavior rather than punishment and reprimand, "Words of inspiration and challenge grace the walls of most Japanese schools ... But words of admonition with corresponding punishments do not" (DeCoker online). The focus on positive behavior not only reinforces positive behavior for the individual but also for the rest of the class. The

association between discipline, positive behavior, and social norms provides a solid foundation for effective classroom management.

In addition to pushing for academic success, Japan forms communal and disciplined classrooms based on social expectations and pressures. With this high-pressure situation, students make school the home away from home. The classroom is there not only for learning, but also for socializing and eating. Students are not fully angelic as their conduct in the classroom and can sometimes be rowdy in comparison to those in American classrooms. Gary DeCoker, in a comparative perspective, found that “[Japanese teachers] pointed out that American teachers often got upset about the level of noise in their classrooms and yelled at their students, even though, from a Japanese teacher's perspective, the classroom was reasonably quiet” (online). Despite this divergence in cultural standards, the drive for Japanese students to conform to social norms provides a clear purpose and instills a level of discipline unmatched by the overall American system.

The success in academics and classroom management seems intertwined, as Japanese culture drives students to control conduct and schoolwork. The ability of students to accomplish discipline in both arenas reflects on their positive qualities as a person and their prospects in the future. Students’ development of discipline begins with training at an early age. The relationship between school and parents compliment the system of discipline that the students attempt to master.

#### *United States: Revisited*

The US education system seems to need an increase in classroom management in a number of elementary and high-schools. Teachers state that parents are no longer

controlling or teaching morality and discipline to their children. With the end of corporeal punishment in the classroom and the rise of Zero Tolerance, educators have to explore other methods of enforcing the rules. Ideas such as restorative justice, an effort to “open the lines of communication” through peer mediation, handle discipline in a new and seemingly positive way (Chmelynski online). At the same time, laws have come to limit discipline methods as the line between moral and inappropriate has changed over time (Taylor online). These laws are vital to protecting a student’s rights, but many view these as a protective wall. Teachers ultimately cannot force students to do anything; “you can’t touch us” is a phrase that now applies literally and figuratively. To add to this struggle, parents are no longer as supportive. An article, “The D Word”, focusing on issues with discipline in the classroom, points out that “Now, one out of two teachers report having been accused by parents themselves of unfair discipline”, rather than meeting with consistent support of disciplinary measure as found in past decades (Flannery online). Some teachers blame the parents for not instilling a sense of discipline, and the parents turn around and blame the teachers for the same thing. To make matters worse between parents and teachers, parents now have the ability and means to sue the school and, potentially, a specific teacher.

The discipline issue includes student motives, which can center on their effort to show individuality and, often times, their social identity. These efforts can coincide with raised resistance to authority or learning and a lack of discipline. In an article written by Margaret Metzger, a seasoned teacher sharing her experiences, she explains that young teachers often try to control rather than manage classes, leading to unsuccessful results (online). Student often rebel against efforts to control, while seeming to function better in

more student-sensitive environments. In addition, considering the diversity of American schools, teachers may accidentally misread social signals and discipline the student's culture because of a misunderstanding. From finding role models for misguided teens to promoting cultural understanding, there are a variety of methods that address these issues. Teachers in America are adapting quickly to the disruptive classroom, but the national concern remains. A book on classroom management and experience may be the best resource on recognizing effective discipline methods for fledging teachers.

However, considering a multicultural outlook, what insights can other countries offer on discipline? America cannot integrate the social norms that support many countries' systems, as cultural change is a slow and costly attempt. However, some methods and practices do bring up a number of good approaches to increasing discipline in the classroom. The continued misunderstanding of cultural beliefs shows that some teachers need to focus on learning the cultures of all of their students rather than using a one-size fits all method. China, the United Kingdom, and other countries speak to the importance of having parents on-board with education, as the most effective method of discipline seems to occur when schools and parents work together. There also seems to be a correlation between self-discipline involving school's responsiveness to students' feedback and, more importantly, establishing a clear purpose to educational discipline. From increased cultural awareness, parent involvement, to sensitivity to students' opinions, other cultures offer a number of different insights in improving classroom discipline, even though cultural differences might limit the effective integration of these methods in the American system.

Even with cultural variation, a pattern in managed school systems around the globe reveals the key to classroom discipline. A communal and respectful environment where students and teachers can exchange knowledge while expressing culture and needs allows for a positive learning environment and a lower level of behavior issues. This bridge between the educator and the students forges an inclusive school culture, which helps develop and reveal the purpose of learning. Whether or not America implements other nations' discipline methods, improved cultural understanding and a more global perspective in the American classroom will reduce misguided prejudice and possibly spark an improvement in each learning environment. Even a minor advancement would provide a more student-centered, multicultural, and higher quality education. A step towards a positive exchange of knowledge between students and teachers strengthens not only American education system, but also each of its student and thus the world.

*"In the end we will preserve only what we love. We love only what we understand, and we will understand only what we are taught."*

– Senegalese poet, Bana Dioun

\* This paper has no intention to assume that its conclusions are inclusive or “end all.” A greater variety of sources and access to more direct research of the countries studied would help give a more complete picture of each country's discipline standards and social and cultural norms. All findings are inherently based on some level of generalization. They are not meant to stereotype a culture or country, as the purpose of this paper is to recognize specific differences in certain discipline ideologies, and all aspects are not covered.

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## Heroes Revisited

By: Catherine Kelly

In his tragedies, Sophocles introduced noble characters later defined by Aristotle as tragic heroes. Sophocles' plays are still a favorite choice among many theater companies today because his heroes are indeed very human and the public can identify with their actions and their motives. As defined by Aristotle, the tragic hero belongs to a noble family, is neither a good person nor a bad one, and possesses an inner flaw or *harmatia* that will lead to his/her fall. However, with this fall, the tragic hero comes to understand his/her error and gains insight and wisdom. If we apply this definition to Sophocles' Antigone, we will realize that Antigone does not fit this model perfectly, but her Uncle Creon does. So why did Sophocles name his play after Antigone? In analyzing the two characters, we will realize that Antigone and Creon, while sharing many traits of the tragic heroes, also differ greatly. They are both very different in terms of their integrity, the sense of honor they retain at the end of the play, their motives, and how they handle the choices they feel forced to make. Antigone is a multi-layered political, psychosexual, and spiritual drama, which is at the very core of human experience and has found continuous resonance and relevance since it was first staged.

The timeless appeal of Antigone resides in a socio-political conflict between two archetypes. Creon is the ruler/the man, and Antigone the subject/the woman. George Steiner, a renowned reviewer for the New Yorker magazine explains that the political appeal of the play resides in the duel between Creon and Antigone: "Named or implicit,

the two figures and the mortal argument between them initiate, exemplify, and polarize primary elements in the discourse on man and society as it has been conducted in the West.” (qtd. in Des Pres.) Indeed, the conflict between Creon and Antigone revolves around the power of the head of state versus individual loyalty to one’s clan and around the conflict between the worldview of man and that of a woman. These socio-political conflicts have occurred across centuries and are still alive today, and this is why Antigone is used in many academic political science courses. In the Aristotelian definition, Creon is the “tragic hero”. However, we will see that Antigone fits the characteristics of what a modern hero would be. In the modern worldview, it is Antigone who would be the hero.

Before we approach the modernity of the character of Antigone, let us reflect more deeply on Creon and Antigone in the classic sense of the tragic hero. Antigone is the daughter of Oedipus (although through a strange and dramatic twist of fate, she is also his half-sister). Oedipus was the King of Thebes, and when he was forced to leave the city, Creon, Oedipus’ brother-in-law, became the regent of Thebes. When the play starts, Creon has just become king, following the death of Antigone’s two brothers, who were destined to rule the city. We are definitely at the top of Thebes’s aristocracy and in that sense, both Creon and Antigone fit Aristotle’s definition of the tragic hero.

Another important point in Aristotle’s definition is that heroes should neither be perfect nor terribly evil, so that the audience can identify easily with them. It is important that the audience should “feel their pain,” and through identification be able to process their own dilemmas--or the tragedies of their own lives. Greek tragedies were a

mandatory event because they were the vehicles by which the people could cleanse their emotions and feelings (*catharsis*). They were therapeutic according to Aristotle.

Both Creon and Antigone fit that model. Creon is the new King of Thebes, after the death of Oedipus's direct heirs. Surely, he would not have been king if he had demonstrated to the people of Thebes any evidence of evil traits. Creon is a typical noble man. Creon is superbly sized by R.P. Winnington-Ingram, a Professor at King's College in London: "In modern terms, we might see a bluff soldier who applies the standards of military discipline to his own family and would apply them to politics—a narrow and dangerous man, but not ignoble, a man of principle." Creon, like the "bluff soldier" appears to be a man of principle acting solely for the well being of the city. However, as the drama unfolds, we discover Creon's flaw or *harmatia*, which is similar to the traits of any insecure ruler. Or as Winnington-Ingram suggests, "He [Creon] is a politician without the capacity to be a statesman because he cannot resist the temptation of power." He needs to prove to Thebes that he is strong and firm and therefore will not relent once his decision to put Antigone to death has been taken.

Furthermore, the mere idea of being challenged by a woman seems to induce blinding resentment in Creon. "*I swear I am no man and she the man, if she can win this and not pay for it.*" (Sophocles 2085). As Professor of the Classics at Harvard University Charles Segal points out: "He [Creon] sees Antigone as a challenge to his most important values and his self-image." When he finally agrees at the very end to bury Polyneices and free Antigone, it is unfortunately too late. And three deaths, Antigone's of course, but also those of his own son and wife, were the results of his inflexibility, his *harmatia*. Therefore throughout the play, up until the very moment where the consequences of his

harshness unfold under his eyes, Creon appears inflexible, arrogant, hot tempered, unforgiving, and closed-minded. Creon's desire to dominate Antigone seems to stem strongly from the desire of male dominance over female. In that respect, this ancient play is indeed timeless, since this tyranny is still a plague throughout the world.

We do not know much about Antigone except that she is a young princess and has inspired Haemon's great passion. She is therefore worthy of love, of Haemon's love and her sister Ismene's love. We are again in front of a typical noble woman. However, and that might be another divergence between our two contenders for the hero status, Antigone comes with the heavy weight of her heredity. As the chorus puts it, "*She is the daughter of a harsh father*" (Sophocles 2076). And, as she herself laments: "*What parents I was born of, God help me! The curse is on me too...*" (Sophocles 2094). There is such a darkness to her birth that some critics say that in insisting to honor her brother and die rather than marrying Haemon and live, she might be acting out the incestuous nature of her origins. In a provocative statement John Seery affirms, "This dark knot links them [Antigone and Ismene] with the monstrous necessities of human origins (who but their sisters could Cain and Abel wed?)"

However, without putting any sexual motivations into the brotherly attachment that Antigone feels for Polyneices, the infamy of this "original sin" linked to her family might explain why she would not endure the other infamy of her brother's "un-burial". This nobility and unselfishness of purpose are characteristics of a modern notion of what it means to be a hero. Bernard Knox in the concluding statement of "Introduction to Three Theban Plays" declares, "She [Antigone] is the embodiment of the only consolation tragedy can offer—that in certain heroic natures unmerited suffering and

death can be met with a greatness of soul, which because it is purely human, brings honor to all.”

Another example of the unselfish heroism displayed by Antigone is her actions towards her sister. It is interesting to examine Antigone’s attitude towards Ismene from the perspective that the ultimate goal of Antigone was to restore the honor of her noble lineage. She might appear harsh, dismissive and intolerant towards Ismene. But we can’t help but admire the political wisdom of such a young character who fights to save the life of the only potential survivor of her family. Creon in his blind rage was ready to send Ismene to death, and Ismene was ready to die with her sister. *Sister, do not dishonor me, denying me a common death with you.*” (Sophocles 2087). But Antigone wants none of this: *“Justice will not allow you what you refused and I will have none of your partnership”* (Sophocles 2087).

Antigone is deeply aware of her place in the history of Thebes. She is trying to get beyond the legacy left by her father and to create a legacy for her sister in which the family honor and place in society might be fully restored. Oedipus was in some ways “impeached”. In Antic Greece, the worst thing that could happen to a ruler was the loss of his speech. Antigone dies with her full voice that she uses loud and clear. In that sense, she has improved the status of her clan. But unfortunately, she will die childless. Her desire to keep Ismene alive might be viewed as a desire not to lose the family ties.

Interestingly enough, Antigone and Creon share the same flaws: Inflexibility and stubbornness. Once Antigone has decided, against the orders of her Uncle Creon, to bury her brother Polyneices and to follow the rituals imposed by the religion of Thebes, no

argument and no one will be able to change her mind, not even the threat of death. She says it once and for all to her sister Ismene, “*It is not for him [Creon] to keep me from my own*” (Sophocles 2075), and in spite of all the compelling reasons Ismene is giving her, she will not budge. Ismene will conclude their first argument with a statement that can very well summarize Antigone’s personality “*You are in love with the impossible*”. We find this statement another indication of the modern nature of Antigone’s heroism. A modern hero is someone who tries to accomplish the impossible. Antigone will keep to her words and repeat them over and over in different situations. To Creon, she simply says, “*There is nothing shameful in honoring my brother*” (Sophocles 2086). Essentially she is saying, with the arrogance and the self-righteousness of her young age, that since she knows that she is doing the right thing, there is no use in trying to persuade her to do otherwise.

We have seen how Creon and Antigone are very alike in their *hamartia* or tragic flaw. Both are prisoners of their excessive pride and inflexibility, which, for both of them, will be the cause of their eventual fall. However, to return to the Aristotelian definition of the tragic hero, in this final fall, the tragic hero should understand his/her error and realize how he/she has contributed to their tragic destiny. They will gain insight and wisdom. But is this true of both Creon and Antigone?

When Creon realizes that both his son and wife are dead, he loses his composure and pride. He calls himself a “*wretch*,” a “*vain silly man who killed you, son, and you, too, lady*” (Sophocles 2104). Surely if he could relive this day, knowing how it would end, he would take another path. He would let Antigone bury her brother. What is this

act of pious rebellion in comparison to the loss of his wife and son? Were his losses worth his gains? It does not seem so. Nothing of that sort happens with Antigone. While lamenting her destiny and her early death, "*I am the last of them and I go down in the worst death of all for I have not lived the due term of my life.*" (Sophocles 2094), she shows no regrets towards her deed because she knows she is right as she demonstrates when addressing her dead brother, Polyneices: "*Yet those who think rightly will think I did right in honoring you.*"(2095). So while Creon follows to the letter Aristotle's definition of the tragic hero, Antigone does not. She does not exhibit remorse and does not acknowledge her *harmatia*. But which one of these two characters is truly a hero in the fuller sense of that word?

Which one of these two characters would the people of Thebes rather identify with, as they taste their *catharsis*? Creon and Antigone may share the same flaw, but if we look at the protagonists' motives, their sense of integrity and the choices that were offered to them, we can clearly answer the question. Creon acted out of a sense of political ambition and a need to appear as a strong ruler and a strong man. He cannot stand any challenge to his authority, to his power, to his masculinity. He fails to weigh fully the dilemma he is facing. Antigone is his niece and his son's fiancée. Polyneices was his nephew. Should they be treated as vulgar criminals? Antigone simply wishes to honor the memory of her brother and bury him as she felt she should according to the customs of Thebes and the laws of the gods. No viewer, either ancient or modern, can help but see Antigone as the heroine in regard to the purity of her motivations.

It is also true that, at the end, it is Antigone who retains her sense of honor and nobility. As corroborated by Cambridge scholar, Winnington-Ingram, “Antigone comes, nobly, to her disaster; Creon, in his ignoble fashion, comes to his.” Creon, realizing that his actions were those of a small-minded man, reverses himself tragically too late. At the end of the play, he has lost his son, his wife, and any sense of self-worth and dignity. “*I do not know where to turn my eyes, to look to for support*” (Sophocles 2104). Everything is gone. He might even have lost his abilities as a ruler and wishes to die. The chorus then has to take charge and remind him of his duties towards Thebes: “*These things [death] are for the future. We must deal with what impends*” (2104).

But while Antigone has also lost everything (mother, father, fiancé, brothers, and ultimately her own life), she never loses her sense of honor and the rightness of her judgments. She retains to the end the certainty that she is dying for the right reasons. And in her determination and courage, her last words are not words of self-pity, but curses against those who have done this injustice to her. It is she that both the ancient and modern viewers admire as heroic. She transcends her destiny. She shows no regrets for her deeds, because knowing she is right, and a stranger to compromise, she has essentially no choice. She was born into a family with a tragic destiny. Now that her two brothers have murdered one another, what else could she do but save whatever little honor and dignity she could for her family by respecting her two brothers equally as much as she might.

Creon’s case is entirely different. He is a grown man, a politician. He should be used to compromising; it is the essence of politics. Several times he was presented with the opportunity to open his eyes and avoid his disastrous fate: First, by his son Haemon

who is pleading for the life of his beloved Antigone, “*Yield something of your anger, give way a little*” (Sophocles 2090); then by the blind prophet Teiresias, “*Then realize you are on the razor edge of danger*” (Sophocles 2097); and even by the city itself when Haemon reveals that entire people of Thebes say that Antigone is not “*tainted by the disease of wickedness.*” (Sophocles 2091). He does not understand the multiple messages he is receiving from everywhere. When everyone in his entourage is begging for him to open his eyes to the reality of the situation, his answer is still arrogance and stubbornness: “*Should the city tell me how I am to rule them?*”(Sophocles 2091). We indeed hear statements of that nature from some of our rulers today when, entrenched in their false vision, they are asked to confront reality. This certainly shows the political relevance and modern appeal of the play.

In fact, throughout history either Creon or Antigone has been viewed as the hero depending on the politics of the moment. At times when a strong national leader is viewed as desirable, and the state predominant over the individual, Creon’s actions often find justification. Indeed, as Bernard Knox explains in “Introduction to Three Theban Plays”, in the first half of the nineteenth century when German nationalism was on the rise, Hegel viewed loyalty to the state as primordial, and Creon’s attitude, justified. “Creon is not a tyrant, he is really a moral power. He is not in the wrong” (quoted in Knox 2108).

In contrast, Anouilh’s interpretation of Antigone was applied to the events of the Second World War. According to Smythe, this play was inspired from a true event--a lonely act of rebellion against the “collabos”, as were called the French supporters of the

Nazis and their puppet Vichy Government. Immediately censured by the Germans in 1944, the play knew an immense success after his definite release in 1946 (Smythe). For a French viewer, after years of silence and submission to the Nazis, the cathartic effect of Antigone's courage to confront tyranny and speak the truth must have been very liberating. She encourages them to speak up, "You hear that, Creon? The thing is catching. Who knows but that lots of people will catch the disease from me." (Anouilh 44).

Because I am French, I was already familiar with Anouilh's interpretation of Antigone. However, when I discovered and read Miro Gavran 1983's interpretation of the play, I was quite surprised. Gavran found the conflict of a female's resistance to tyranny relevant to depict the sociopolitical climate of Croatia, which was then under the iron claw of Tito. Written with only the characters of Antigone and Creon, Creon's Antigone of Gavran reveals the tools of dictatorship, including secret police, political intrigues, lies, megalomania, paranoia, and extreme disdain for human life. For example, when Antigone asks Creon if he really thinks he will deceive the entire country, he answers, "Of course I will. I am a genius." (Gavran). In this play, Creon is omnipotent; he controls everyone's destiny. He says, "But my people do think with my head. They must, for I forbid all other thoughts." (Gavran). In Gavran's play, Creon writes the intrigues leading to Antigone's death sentence and forces her to play her role. His goal is the destruction of what he perceives are his most dangerous enemies, the members of his immediate family, without the blame of his people. Contrary to Hegel's perception of Creon as a moral leader, Gavran shows Creon as immoral and tyrannical. How many Antigones are now suffering to honor the kinship of their clans in the inflamed Middle

East region? And how many of them are silenced by male's tyranny? In our western society, where individual rights and freedom are sacrosanct, Sophocles' Antigone appears purely heroic

The political relevance of the Sophocles' play is further enhanced by the conflicts opposing Creon and Antigone on a spiritual level. Creon is uncomfortable with the laws of the gods, which are above the laws he himself has laid down, and he does not seem to understand that an individual would think otherwise. This is very consistent with the tyrannical nature of his ruling. Creon's spiritual blindness is underlined by the final speech of the Chorus: "*Wisdom is far the chief element in happiness, and secondly, no irreverence towards the gods.*" (Sophocles 2105). Terrence Des Pres speaks of "the wreckage that occurs when spiritual being collides with politics." And indeed, we might wonder with Wennington Ingram, "why a woman, so far from breaking divine law should die shamefully and under the amputation of impiety?" Or simply reflect upon the kind of world in which the dead are left to rot in the open air and where we bury the living.

Creon was blind to the idea that he had choices and possibilities to reverse his ruling. In that sense, he created his own destruction, and in that sense he fits perfectly the Aristotelian model of the tragic hero. But he is not truly a hero in any sense in which we use that word today. Today a true hero is one who is ready to risk his or her life to accomplish a noble action. Creon's motives were not noble, but self-serving. Antigone, like many tragic heroic figures, goes like a Joan of Arc to her death without fear, but with the confidence she gains from the certainty that she has done what was right. Creon who, at the end of the play, knows he was wrong, has to face his own

failure. While we understand Creon, we admire Antigone. Thebes probably did too, and it seems that Sophocles himself sided with Antigone when he named his tragedy after her.

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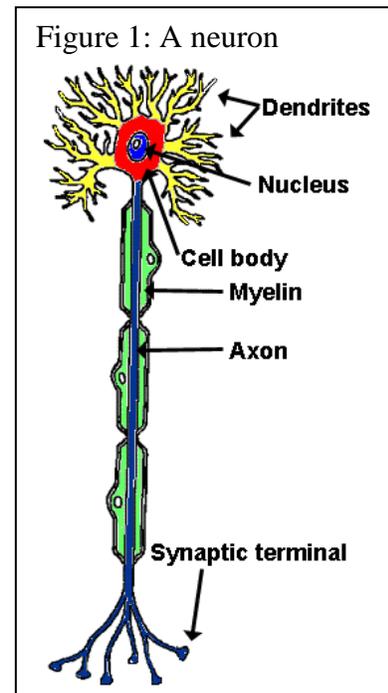
# Brain Damage Due to Injury

By: Hannah Rice

Every year, 800 000 people suffer a traumatic brain injury in the US alone. The damage inflicted by brain injury can have profound implications, at both physical and psychological levels. The brain is a unique and powerful organ, the workings of which are only beginning to be discovered by science. This makes treating brain injuries very difficult. Research on the brain is underway but much is still unknown: it is an essential field that has the potential to impact the lives of millions of people worldwide.

This paper will investigate the impact of brain damage due to injury; from the cellular to the macro level, and examine current treatment methods and research. It aims to evaluate the hypothesis that the best way to treat brain injury is through medication that targets damage at the cellular level.

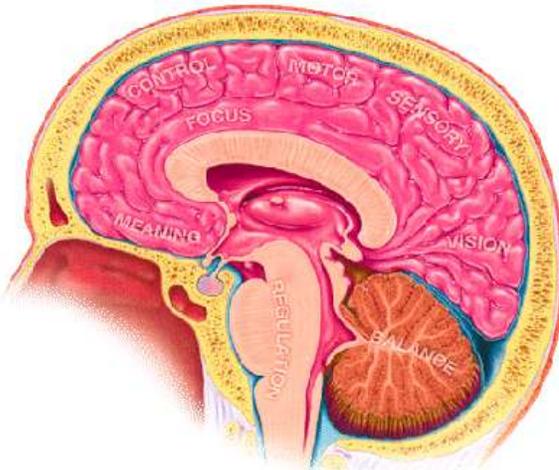
In order to evaluate brain damage, a basic understanding of the nature and function of the working brain is necessary. The brain is our most complex organ; responsible for the coordination of all our bodily activities, and control of our emotions, decisions, and personalities. Together with the spinal chord, it forms the central nervous system. The brain is a vulnerable structure protected by the cranium and the meninges (three thin tissue layers), that receives 20% of the body's entire blood supply (Silverstein & Silverstein, 1986). It is made up of two distinct cell



types: neurons, depicted in 'Figure 1', transmit electrical signals; and glial cells anchor, insulate and nourish the nerve cells. Although glial cells outnumber neurons in a ratio of ten to one, it is the neurons that are responsible for the complex and intricate functioning of the brain.

The effects of brain injury can be best understood by considering which areas of the brain are damaged. This is because the brain is split into different structures or regions, each with its own specific function, as demonstrated by 'Figure 2.' Briefly, the cerebellum is responsible for the integration of sensory and motor information, and balance and coordination control; the epithalamus, thalamus and hypothalamus engage in information processing and routing, and control emotion and arousal; the midbrain, medulla oblongata and pons are for the maintenance of homeostasis, coordination of movements, and conduction of information to higher brain areas. (Campbell &

Figure 2: Functions of the brain (cross section)



Reece, 2005). The cerebrum – responsible for higher cognitive functions – is split into two hemispheres, which are divided into lobes. Figure two illustrates specific functions of some of these lobes, but generally the right hemisphere is associated with creativity

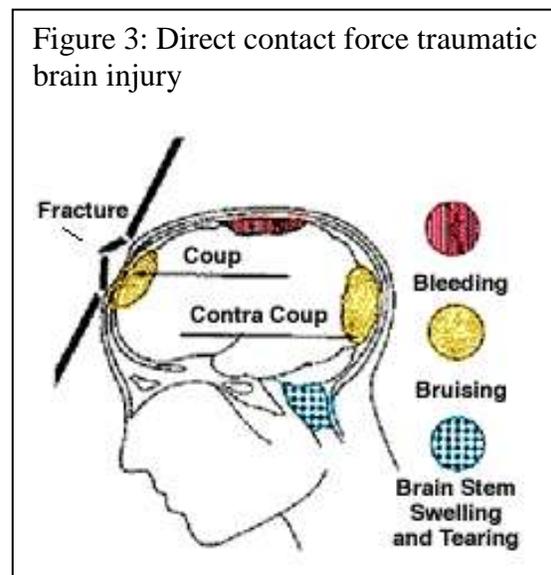
how the position and function of brain

regions directly correlates to brain damage symptoms, is that people with damage to the

cerebellum often exhibit balance and coordination problems. (Roberts Stoler & Albers Hill, 1998).

This paper deals with brain damage due to injury. This excludes damage resulting from neurodegenerative disorders like Parkinson's disease and Alzheimer's. Brain injuries are split into two categories: traumatic and non-traumatic. Traumatic injuries are either direct or diffuse. 'Figure 3' displays the effect of direct contact force injuries, in which the brain is slammed against the inside of the skull causing bruising from torn blood vessels in specific areas of the cerebrum. This bruising, or internal bleeding, is problematic because the skull cannot expand, and there is nowhere for the excess fluid to go. Pressure builds up and can inhibit the proper functioning of the neurons or even kill them. Frontal lobe damage is common with this type of injury, and patients often experience planning, concentration and behavior problems (Roberts Stoler & Albers Hill, 1998). Damage from diffuse injuries or concussion is a result of the brain being shifted

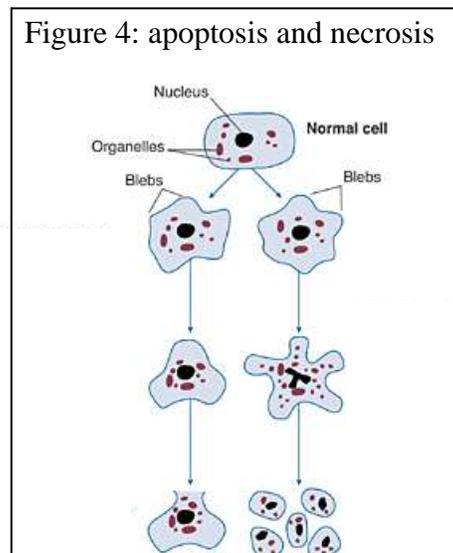
and rotated inside the skull, or of energy shock waves passing through the brain (Gunderson, 1990). This can stretch and tear the cells, severing vital connections within the brain and interfering with the neurons' ability to fire; making information processing slow and multitasking laborious (Roberts Stoler & Albers Hill, 1998).



Most non-traumatic brain injuries are related to cerebral hypoxia or cerebral ischemia: a shortage of oxygen or blood to the brain, respectively (Wikipedia, 2006). Both result in oxygen starvation of the delicate brain cells and can ultimately lead to conditions such as cerebral palsy, epilepsy, and retardation (Vanucci, 1990). One of the primary problems with oxygen deprivation in brain tissue is the rapidity of its effects – because brain cells cannot store oxygen they begin to die within four minutes of a hypoxic/ischemic attack (Lees, 2006). Oxygen deprivation triggers an “ischemic cascade” which starts when mitochondria become unable to produce ATP, causing the cell’s energy supply to fall rapidly. This slows and eventually disables the sodium-potassium pump; the neurons’ membrane potential is not maintained and they become unable to fire. Over-activation of glutamate receptors (glutamate is an excitatory neurotransmitter) results in large influxes of calcium ions into the cells, which activates enzymes that damage cell structures such as membranes, the cytoskeleton and DNA; eventually leading to cell death (Life Extension Magazine, 2001). Common causes of hypoxia include drowning, strangling, choking, suffocation, cardiac arrest and carbon monoxide poisoning. Ischemia can result from hematoma, aneurysm and stroke.

Brain tumors are growths of glial cells that divide uncontrollably. Both cancerous tumors that invade healthy tissue, and benign tumors that do not (but cause a build up of pressure that inhibits circulation), can lead to brain damage. Toxic poisoning from the intake of alcohol, certain drugs, and poisons causes cell death or malfunction. There are an infinite number of examples of this type of brain injury; for instance, some metals like aluminum, zinc, and copper are suspected of destroying neurons, and alcohol has been shown to block absorption of vitamin B1, causing memory problems (Hyde & Seraro, 2000). There are a number of viruses that can lead to brain damage, including bacterial meningitis, hydrocephalus and encephalitis – all cause swelling, increased intracranial pressure and localized cell death (Goldsmith, 2001).

The most profound effects of brain injuries are a result of cell death, not impaired functioning or tearing. Cell death occurs through two different mechanisms:



apoptosis and necrosis (Pankuwiet, Jobmann, Crombach, Portig, 1999), the stages of which are shown in 'Figure 4'. Both can be induced by brain injury. Necrosis is unprogrammed cell death – after acute cellular injury from traumatic brain injuries, tumors, poisoning and viruses. Apoptosis, or programmed cell death, is a natural mechanism that takes place throughout our lifetime. It is key to the maintenance of homeostasis and development; dying cells are phagocytosed and their contents recycled. However, after cerebral hypoxia or ischemia, an increase in intracellular calcium ion concentration (as described above) leads to the mitochondrial permeability transition pore opening, causing mitochondria to swell and release apoptosis inducing proteins. Thus, the mechanism of programmed cell death can be activated unwontedly. Apoptotic cells release chemical signals that stimulate other cells to begin phagocytosis; necrosis is harder for the body to deal with because the lack of signaling makes it difficult for the immune system to locate damaged tissue and reprocess it. Apoptosis cell death may be preventable if scientists can determine a way to interfere with its initiation (Sairanen, 2005).

Although extensive cell death can occur almost immediately after a brain injury, in most cases this is not the end of the story. There are several mechanisms that can lead to secondary cell death. Reperfusion refers to tissue damage after the oxygen or blood supply is restored after a hypoxic/ischemic attack. Normally, mitochondria produce reactive oxygen species that are dealt with by antioxidants, but a period of anoxia (complete hypoxia) followed by prompt resuscitation can lead to an overproduction of these. In this case, homeostasis can be interrupted because free radicals will outnumber

antioxidants. Free radicals are highly reactive and can ionize organic molecules in lipid membranes and proteins, as well as DNA – severely inhibiting cell functioning. In addition, ionized molecules can act as free radicals themselves, creating a chain reaction that, coupled with the malfunctions of damaged and malformed molecules, injures other cells (Christophe & Nicolas, 2006). Another mechanism that leads to secondary cell death is the body's own immune response. Leukocytes (white blood cells) accumulate at the site of the injury, and often build up in tiny capillaries, obstructing them and leading to more ischemia (Clark, 2005).

Brain cell death is especially problematic because brain cells cannot regenerate. Whereas neurons in the peripheral nervous system can re-grow if damaged, those in the central nervous system cannot. This is a result of the different types of cells that create the myelin sheath (layers of membranes that surround axons and provide electrical insulation). PNS myelin sheaths are produced by schwann cells that lay down a basement membrane, creating a framework within which the neuron can regenerate. CNS myelin sheaths are produced by oligodendrocytes; cells that not only fail to lay down a basement membrane, but actually produce a protein that inhibits regeneration. While it has been speculated that this is because the potential for faulty rewiring outweighs the advantages of regeneration (Edelson, 1991), this difference means that if a certain area of the brain is damaged it will never regain its function.

With so many people affected by brain injury every year, the development of effective treatment methods is essential. Currently, treatment is split into two main categories: medication and rehabilitation.

Medication can be helpful immediately, and in the aftermath of an injury. Some drugs focus on minimizing damage, while others target its effects. Patients in the throws of a hypoxic/ischemic attack can benefit from barbiturates that lower the oxygen needs of the cells; making them less vulnerable to shortages. In addition, prompt medical treatment to minimize swelling after any type of brain injury can significantly reduce secondary cell death. This can be achieved either by directly draining fluid from the head with a cerebral shunt, or by administering diuretics, which generally work by increasing the body's excretion of sodium, thereby increasing water loss. Many drugs are used to aid recovery from brain injury; from those that work to control resultant conditions such as epilepsy, to those that stimulate functional recovery. After a brain injury, many people lose both physical and mental abilities, which the brain can be stimulated to regain. Amphetamines have been successfully used to speed this process. They act by releasing stores of norepinephrine and dopamine from nerve terminals (by creating open channels), and by inhibiting their reuptake. This leads to high concentrations a neurotransmitters in synaptic clefts, which promotes nerve impulse transmission. Natural nerve growth factor chemicals can be used to stimulate RNA synthesis and ribosomal production of proteins, which are needed for axon and dendrite growth: the same mechanism is involved in the natural process of learning (Silverstein & Silverstein, 1986).

Another way to enhance recovery, related to learning, is to use drugs that improve memory. Vasodilators and metabolic enhancers serve this purpose by widening cerebral blood vessels, thus increasing oxygen use and circulation. They also increase neurotransmitter concentrations and stimulate axon and dendrite growth. Improving microcirculation and oxygen and glucose use in brain cells has proven to be especially

helpful in promoting brain stimulation. Communication between the cerebral hemispheres via the corpus callosum has been shown to improve with the use of nootropic drugs, which also stimulate ATP production, increasing energy availability and enhancing cell metabolism (Parenete & Herrmann, 1996).

Rehabilitation focuses on brain stimulation at the macro level, with the goal of returning patients to their normal functional capacity. Because brain cells retain the ability to create new synapses throughout a person's lifetime, another part of their brain may be able to take over the function of a damaged area (Viegas, 2003).

Rehabilitation employs a variety of therapies that are tailored to the patient's individual needs; dictated by the type and severity of their brain damage. There are many different types of rehabilitation programs. Physical therapy involves gentle exercises designed to decrease pain and strengthen the injured area. Occupational therapy helps build daily living and fine motor skills. Vocational therapy targets a person's employment prospects, teaching new or different work skills and/or identifying job alternatives. Speech and language therapy helps resolve communication and hearing disorders – improving concentration, articulation, listening and comprehension skills. Cognitive remediation modifies the environment in order to minimize the effects of injury on everyday living – it is based on the premise that adapting to deficits is less frustrating and more successful than reeducation. Finally, special education helps children to find new approaches to academic work (Roberts Stoler & Albers Hill, 1998). None of these treatments has a 100% success rate; rather, they gradually improve a patient's condition. All rely

heavily on patients attitude and participation, requiring repeated and long-term practice and adaptation. Thus, psychological factors also play a large role in recovery. “Perhaps the greatest impact of [brain injury] is psychological. An unexpected, unexplained inability to function can deeply shake your sense of self” (Roberts Stoler & Albers Hill, 1998). For this reason, psychotherapy is often used in conjunction with rehabilitation in order to achieve the best results. Psychotherapy deals with behavioral or emotional problems that may result from injury, as well as patients’ psychological reactions to their condition. The first aspect of this is traditional psychotherapy, which helps patients identify, understand and cope with the consequences of their injury. The second is behavioral medicine, which teaches better responses to medical complaints like pain and muscle tension using techniques such as biofeedback. However, the effectiveness of this type of psychotherapy has been a topic of much debate amongst physicians, and its results have been reported as “lackluster” and unreliable unless reinforced by constant training sessions (Edelson, 1991). Finally, psychopharmacology combines medicine and psychology; utilizing drugs that help change or regulate mental activity, mood and behavior – like antidepressants and antianxiety agents. While psychotherapy alone will not directly induce physical recovery from brain injuries, it is clear that a positive mental attitude can go a long way to improve the effectiveness of rehabilitation.

A number of alternative treatments are sometimes used in conjuncture with conventional methods. These include acupuncture, chiropractics, homeopathy and herbology. All focus on natural healing of the whole person. Alternative treatment success is debatable, but many individuals feel it has positive effects and contributes to

the healing process. If nothing else, alternative treatments can often improve the general wellbeing of a patient; allowing them to focus on the positives, and leading to improvements in their mental state that make them better able to cope with their situation and better equipped to deal with it.

Exciting new discoveries about the intricate workings of the brain have begun to yield new and improved methods for the treatment of brain injury. The focus of most is at the cellular level, and many are at the cutting edge of technology. Because secondary tissue damage is at the root of most of the severe, long-term deficits a person with brain injury may experience (Boon, 2002), much of the current research is focused on interrupting the cascade of events that culminate in this. One of the most promising of these is brain cooling, which is currently being used at New York Presbyterian Hospital to treat newborns with oxygen-deprivation damage (Fleischer, 2004). Fleischer reported that 'unfavorable' outcomes were reduced significantly from 66% to 48% in 2004. A recent study, attempting to account for this, found that both excitatory and inhibitory neurotransmitters are significantly reduced at cool temperatures (Sharma, 2006). This indicates that brain cooling may inhibit the activation of glutamine receptors, which triggers excitotoxicity and the rapid influx of calcium ions that leads to secondary cell death. Another positive effect of this treatment is that it reduces brain inflammation – which itself can create cell death in the aftermath of an injury.

The other major mechanism that is thought to play a significant role in cell death after injury is the production and circulation of free radicals, leading to oxidative stress. The brain is especially vulnerable to oxidative stress because of its high fatty acid content

(in lipid membranes) and surprisingly sparse population of antioxidants (reducing agents that bind to free radicals and inactivate them) (Life extension magazine, 2001). By definition, oxidative stress results when free radical formation is unbalanced in proportion to protective antioxidants (Immunity today, 2006). Therefore, much research emphasis has been put on increasing the concentration of antioxidants in the brain in order to counteract the free radicals formed after injury. One method, is to use hyperbaric oxygen therapy (HBOT), which exposes patients to 100% pressurized oxygen; greatly increasing tissue oxygen concentrations for short periods. This stimulates an adaptive increase in superoxide dismutase (SOD) synthesis, one of the body's principal internally produced enzymatic antioxidants. In addition, it improves blood flow to the effected area, by causing the arteries to dilate and by stimulating the growth of new blood vessels in areas of reduced circulation (i.e. where capillaries have been torn or blocked during injury). While not new, HBOT has only lately begun to gain recognition for treatment of health problems related to a wide range of conditions such as atherosclerosis, stroke, peripheral vascular disease, diabetic ulcers, wound healing, cerebral palsy, multiple sclerosis, and brain injury (Vladavsky, 2006). After enzymes, the body's second defense against free radicals depends on intracellular levels of antioxidants. The majority of these are water and fat soluble vitamins, underlining the idea that good nutrition plays a key role in brain injury recovery (Parenete & Herrmann, 1996). Good free radical scavengers include ascorbic acid, vitamin A, vitamin E (which protects lipid membranes from oxidation), and coenzyme Q-10 (which has received specific attention recently because of its role in maintaining mitochondrial functioning in a low-oxygen environment). Although it is not an antioxidant, glutathione also has beneficial effects; increasing the

efficiency of red blood cells in carrying oxygen. Flavonoids are naturally occurring polyphenolic compounds that have antioxidative, anti-inflammatory and neuroprotective effects. A recent study showed that they aid in brain injury recovery, not only through their antioxidant properties, but also by reducing necrotic cell death as a result of inflammation (Shin, 2006).

Scientists anticipate that a potential cure for brain damage could lie in stem cell research. Although not yet viable, the possibility that these undifferentiated cells may be able to take the place of dead neurons in the central nervous system offers hope that brain damage will one day be curable. In this case, ethical issues could be sidestepped because there is evidence that adult stem cells are more beneficial than embryonic, because self donation lessens the chances of rejection (Viegas, 2003).

Due to the complex nature of the brain and our limited knowledge of its workings, brain damage is very difficult to treat. Contrary to my hypothesis, it seems that a combination of modalities is most effective. While drugs are useful to minimize swelling, increase oxygen consumption, promote impulse transmission, increase energy availability and allow neurons to grow new dendrites and axons, it is clear that rehabilitation methods are essential, to stimulate the brain to regain lost functions. In order for rehabilitation to be successful, patients need to have a positive attitude towards treatment and be willing to work hard before they see significant results. This is where alternative methods and psychotherapy can be utilized. Finally, new treatment methods, which aim to prevent secondary cell death by improving cellular respiration, preventing oxidative stress and inhibiting apoptosis initiation, are promising in that they offer a

means by which to decrease brain damage after injury and thereby improve patients' prognosis. Since the effects of brain damage can be so devastating, and very hard to deal with, continued research into treatment methods, and possible cures, should be an area of priority in the scientific world.

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## **Homo versus Hetero Familial: Separate but Equal**

**By: Ivy Lynn Fox**

The current political climate has brought to the forefront the issue of gay marriage. It has become a subject that has been as polarizing as abortion. It seems in our culture the closer a topic gets to the hearth and home of the family, the more passionate individuals become, both sides debating what family should be, could be, and would be. The value placed upon the family is borne out in the halls of our elected representatives, thereby granting and guaranteeing (as well as limiting) the family unit's legal protections and amenities. It is one of our most prized and precious institutions. As with anything that has such esteemed value, many want their "piece of the pie." It is no different with the gay population. There is awareness in the gay community that the only respectable currency that will be recognized in our culture is that of a union identified as marriage. No other wording will do. It brings with it a dignity that none other can deliver. Without recognition as a family, two gay or lesbian people cohabitating together will never hold the same significance or standing as marriage does in our society irrespective of how much they love each other or how long they have been in a committed relationship together.

Veronica Stolte-Heiskanen, a professor at the University of Helsinki, is an internationally acknowledged authority in empirical science studies. She believes that the four societal functions of the family unit are economic, biological, social and the spiritual reproduction of the human race (903; Reiss 443). Looking at each contribution separately, this paper will argue that those functions can be performed by homosexual families as well as heterosexual ones. The pervasive cultural bias against gays having an

intimate, private family and raising a family must, in the cause of fairness, be examined without prejudiced distortion.

The first societal contribution mentioned is economic (Reiss 447). The fact of the matter is that the family does contribute financial resources to society (Stolte-Heiskanen 903). Money does make the world go round and communities operate on good old-fashioned American currency. In times long past, families were primarily responsible for producing, distributing, and consuming commodities (Stolte-Heiskanen 909; Waite 463). Contemporary families have, for the most part, lost the job of being producers and distributors. Nonetheless, the family is still responsible for providing employees for labor power (Stolte-Heiskanen 903). The days of local farming, the making of custom attire by the local seamstress, and the community concept of "barn rising" along with many other family-oriented activities have long given way to mass production, which is characteristic of the industrialization era. Even though families no longer produce or distribute goods on a large scale basis (because of the take over of large corporate conglomerates and imports), this still leaves us with the consumption of commodities, an economic function families still provide.

Every family consumes (Stolte-Heiskanen 915). The reality is it does not matter if that family is homosexual or heterosexual; both must consume products to survive and thrive. Thus, in regard to this argument, homosexual families have the ability to perform as well as heterosexual ones. In fact, since children are a conscious effort in a homosexual family, unless the presence of children levels the financial playing field, homosexual families tend to have more disposable income when children are *not* part of their equation. But even when gay parents have children, because children are a

deliberate choice and not an "accident," most homosexuals have taken the time to invest in jobs and careers (Martin 1993, 234-235). Some couples even go to the extent of seeking counseling to see if children should be a part of their relationship and the process whereby they might achieve creating that family (Johnson 89; Martin 1998, 2). As an interesting side note, on average lesbians are in a committed relationship five years before parenthood (Johnson 89). Gay men have usually been together even longer, seven years being the average before they decide to become parents (Johnson 89). According to Johnson, "the decision [to become parents] is not made lightly...a great deal of thought and discussion...takes place prior to their final decision" (89-90).

Along with the decision to become parents though comes the reality of the cost of having children in the household. A great number of homosexuals are professionals or belong to the upper middle-class. The National Study of Gay and Lesbian Parents compounded a research study on the educational attainment of homosexual parents and have found that the median figures were 15% for some college among gay and lesbians; 33.5% were college graduates; and 48.5% had earned graduate degrees (Johnson 83). To give a moderately comparative picture between both hetero/homosexuals' educational levels, an archived article constructed by The Academic Resource Index (ACRES) tallied the educational degrees of parents in general. The median figures were 41% had some college; 14% were college graduates; and 13% earned graduate degrees (Touchstone 9). However when viewing these statistics, it must be kept in mind that these parental statistics probably also include some non-identified gays and lesbians as well. Nevertheless, in light of this information, it is with confidence that this paper argues that gay families financially contribute proportionately, if not more so, to society than

heterosexual families since it is apparent that their presence is significant in the highest educational levels.

After the economic function of the family, the second listed contribution that families make to society is the biological provision and protection of children (Reiss 447; Stolte-Heiskanen 909; Waite 463). While it is not biologically feasible for gay couples to add reproduction to the list of functions they can serve toward the familial society, they certainly are capable of protecting and socializing children, preparing them toward becoming contributing members of society (Reiss 451). Proliferation of the next generation most certainly must be done by heterosexuals in whatever relational configuration it may be. But our group and foster homes, as well as orphanages, are full of children needing families. There never seems to be a short supply of children in need of finding someone to want and love them. As is known by anybody that has a heart for children, parenting can encompass more than just birthing a baby; that is only the first step in a lifetime process that typically does not end until the last breath is taken by a parent (Martin 1998, 3). A "parent" need not give birth to a child in order to love it. Unfortunately, our society has not been so eager to allow gays and lesbians the opportunity to parent unwanted children and so other methods needed to be created.

In the 1970's, the second-wave of feminism brought with it the opportunity for lesbians to begin to contemplate that maybe they could become parents without fathers (Benkov 109). According to Laura Benkov, gay women had succumbed to the prospect of never being mothers because they chose not to partner with men (108-110). When feminism brought with it the right of sexual reproduction to American women, lesbians took up the banner and a movement began called the "choosing children movement"

(110). The nurturing cries of the female began to be answered. It would be many more years before gay men could jump onto the bandwagon because of the fear of AIDS, as well as the stigma attached to gay men. They were not seen as capable of nurturing and rearing children; their desire to be fathers was looked upon with skepticism as to their motivation (Benkov 110-111). Furthermore, in Benkov's writing, she reveals that even though lesbians had begun to overcome the psychological hurdles of being a mother, society was still not ready (111). It was as late as the 1980s before women had finally had enough rejection from the male-dominated medical field and took it upon themselves to establish a sperm bank that would impregnate women who were not married (Benkov 118-119; Oswald 376). With institutions frowning upon adoptions to gay couples and the lengths that gays and lesbians have gone through to circumvent an otherwise difficult pathway to bring children into their lives, other creative ways have been fashioned (Oswald 376). An article in the Los Angeles Times reports one unconventional path a gay man and his long-time lesbian friend took. The gay man's sperm was used in-vitro to fertilize her egg. She carried the baby and both lived together as a couple to raise the child while leading separate romantic lives (Glionna 3). Since two gay men cannot produce children, they usually must resort to some form of joint parenting arrangements, as in the previous example; otherwise, surrogacy or adoption and, depending upon the state, fostering are their only avenues (Benkov 111; Oswald 376). Even when homosexual couples attempt the adoption trail, the cost and private intrusion into every area of their lives is seen to them as a small price to pay to give their parental capacity an opportunity to be expended (Oswald 376). Citing April Martin, "Gays and lesbians make excellent parents because their children are planned for and truly wanted" (1998, 1).

An additional issue that must be taken into consideration when one thinks about protecting children is their security and the different strategies that can make that feasible. The American Academy of Pediatrics acknowledges that extensive research has explored the topic of homosexual parents in comparison with heterosexual parents, and they have concluded that "children with parents that are homosexual can have the same advantages and same expectations for health, adjustments, and development as can children whose parents are heterosexual" (Hagan et al, 339). The article continues to appeal for *national* legislation to protect these families with children instead of having family courts judge on a case-by-case basis (Hagan et al, 339). Hagan et al's article continues with a plea for the protection of health benefits for the children, consent for medical care, and financial security in view of a parent's death (340). Additionally, in the unfortunate event of the parents separating, the rights and responsibilities that are entitled to children of heterosexual couples should apply as well to the children of homosexual couples, such as custody and visitation rights and child support (Hagan et al, 340). This is an area that is slow in making ground to match heterosexual paternity, but it is not for want on the part of the gay parent; it lies in the fault of a community dragging its feet to give equality to parents, an issue separate from the gays and lesbian's issue of marriage. This type of legislation is important to protect the children, which should ultimately be the motivating factor (Johnson 173).

After the economic and biological function, the third function of the family is the socialization of children. Coltrane and Collins' textbook on the sociology of families defines socialization as "the process of training a new member in the beliefs and practices of a social group" (Coltrane 593). Depending on a person's outlook, a child exposed to

homosexual parenting might find a broader "social molding" perspective thereby breaching the traditional gender roles which have limited both sexes in the past (445). What does social molding accomplish? For most of our societal evolution, boys have been socialized to be the masculine breadwinners and leaders of the family, while girls have been socialized to be feminine stay-at-home moms, the nurturer of the family (Sabini 403-404). The idea behind socialization "was to produce people who not only played out their assigned roles in the family, but did so without any sense of coercion or loss...[they] were to see their playing out assigned roles as the 'natural' unfolding of their personalities" (Sabini 404). While neither hetero/homosexuals will find this function difficult, both will socialize their children with their own perspective in mind; however, it is with no doubt that homosexual parents will socialize their children to understand that gender roles are to be a personal, natural unfolding and not a conformity to societal standards (Johnson 176). "Gay and lesbians parents put a high premium on teaching their children to respect others and to value diversity" (Johnson 170). Gays and lesbians have had to battle society's demands to "reaffirm human differences, rather than an inevitable set of relationships that punishes those who resist or subvert social norms" (Oswald 380). As with all bias, it is up to one's interpretation as to whether it makes for a healthier society to have a set of inflexible roles predetermined for each sex or perhaps to trust that each individual will define him/herself according to his/her own internal make-up.

After the economic, biological and social functions, the last function parents complete is the spiritual reproduction of children. Since the biological component does not play a part in this function, spiritual reproduction would not be limited to the homosexual parents. Nonetheless, there is another institution that attempts to do so, the

institution of religion. It is a well known fact that there are a fair percentage of religious institutions that reject gays and lesbians. They would see gay and lesbians raising children as an abomination and harmful to these young developing minds. In opposition to this mindset though and in fairness to not clump all organized religion together, there are moderate faiths that are much more inclusive of humanity, recognizing the diversity of God's creation among civilization (Heelas 4).

Perhaps the distinction here would be that various religious organizations have used explicit religious regulations and beliefs about marriage and the family to gain a larger moral platform for social control as well as increasing the numbers of their congregants by way of heterosexual procreation (D'Antonio et al. 222). The tradition in the West, by way of religion, has been "a family model that is patriarchal and group centered-rather than individual-centered, while stressing conformity above love or personal growth" (D'Antonio et al. 222-223). It would be hard to fathom a church that does not advocate love and the sacredness of any one particular soul, but their hypocrisy becomes evident in the practice of impossible divorce laws, sexuality only with the purpose of procreation, as well as matrimonial inclusivity of one's religious faith (D'Antonio et al. 223).

For the denominations that welcome and accept the gay community, here is where the spiritual growth of gay and lesbian couples and their children will flourish as well as their spiritual socialization. They will learn to be accepting of all and nonjudgmental of those around them, something that at times is severely lacking in our society at large. They will learn to embrace the diversity of God's humanity and leave the judging to God. Nevertheless, many in the gay community have been so damaged by organized religion

that they have turned away and now seek an inner spirituality over ordered and controlled religion. Abandoning ordered religion for fear of the subtle negative attitudes. Their focus is much more of an introverted faith, worked out within their own souls and their creator, as opposed to an external faith (Heelas 1-2). This path of spiritual experience as well is filtered down through their children; there for, parents are passing on a spiritual heritage to their child, one that has not been limited by man and his mundane fears.

To conclude this paper, Ramona Oswald's article brings to light the uphill battle that gays and lesbians must endure in this overt, unreceptive but changing environment they currently live in (381). She maintains that

Though all families are ongoing social accomplishments, gay and lesbian family networks are in the difficult position of having to not only succeed in the face of social adversity but also to continuously establish their mere existence in a world that does not institutionally privilege their forms. (381)

America was founded on diversity. It is what has made her strong; it is what has made her soil sought after from those who have been born on foreign soil. She is a country that has not limited her concerns or resources for those less fortunate even when it has cost her the lives of her very own sons and daughters. Somehow she has managed through the centuries to allow those of different faiths, different nationalities, and different bloods to make her shores their own. America has not been without pains from all these forms of diversity staking their own piece of home; nevertheless she continues to offer shelter, protection, and a realization of dreams.

We again are at the brink of giving sanction to those who have not been wanted in times past. If our history is any tale of our future, we will find that those once rejected

will add their time, talent, investments, and very life blood to make America even greater than she is now. The value of each human life is full of God-given potential and embracing those individuals will only make America stronger. To continue to reject those only robs the greater of talents America might otherwise not be able to retain. Are gays and lesbians separate but equal?

"Separate but equal" is never that; it is a separate category that allows others to continue to put gay and lesbian families in the 'deviant' column, a column that segregates them from the rest of society. This paper has examined and made arguments for the ways in which the homosexual couple meets, and at times, surpasses the ability to have a family, raise children, and in the end, produce socially conscience contributing members of society to the future of this world. It is America's loss not to embrace these families and extend an attitude of equality tangible in all our laws and mores. Any time an attitude of oppression permeates a culture, it is a loss to the entire social order.

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## **Click Enter: Save a Life**

**By: Carli McGoff**

The bad news is that the people living in rural regions of developing nations lack basic health necessities and are therefore dying of conditions that are highly treatable and/or preventable usually at a low expense. It gets worse. According to the World Bank, 70% of the world's poor live in rural areas with the majority of them having no access to basic healthcare.

Now time for the good news: an innovative system has been introduced and looks to be revolutionizing humanitarian aid. The rise in technology, specifically the internet, is allowing humanitarian aid to reach the developing nation's rural poor's healthcare systems in ways never before achieved. There is a vast array of definitions for the term "globalization;" however, nearly all of these various definitions classify this charitable use of technology to reach the rural poor as an aspect of globalization. The system of online micro donating and micro lending is a key component in the solution to the lack of basic healthcare in rural regions of developing nations because it allows the emergence of innovative humanitarian aid methods.

People living in rural regions of developing nations lack the basic health care and are dying needlessly of sicknesses that are highly treatable and/or highly preventable usually for under \$1.00. Statistics show that large numbers of human beings are losing their lives to these highly curable and/or preventable diseases such as malaria, respiratory infection, influenza, worms, measles and dysentery. According to the Healthstore Foundation's statistics, in Africa alone 3 million people die of these diseases yearly; furthermore, 25,000 children around the world die every day of these highly curable

diseases which equates to 1000 children dying every hour! In fact, according to the World Health Organization's Infectious Disease Report, the majority of the 13 million deaths per year from infectious diseases are easily preventable. Dysentery alone kills 1,800,000 people yearly and according to the U.C. Atlas Global Inequality statistics dysentery is the number four cause of death in developing nations; however, in developed countries, such as the United States, dysentery is not even make it to the top ten list regarding number of deaths per year. Why should almost two million people die every year of a condition that can often be cured with a \$4.99 bottle of medicine?

After reading troubling statistics, one may question the effectiveness of large organizations such as the World Bank and the World Health Organization. The dilemma with large organizations such as these is that by focusing mainly on highly populated regions rather than rural areas and, even with the great amount of money they spend, the fact still remains that 13 million people die every year of diseases that can be cured at a low expense. The World Health Organization recognized in their press release in 1999 that a small list of infectious diseases causes ninety percent of the deaths in people under 44 and in most cases it would cost under \$0.35 to prevent these sicknesses. Ninety percent "of all infectious disease deaths for people under 44 years – could have been easily prevented with an expenditure of, at it's lowest, \$3.9 million, and at it's highest, \$220 million. That is, anywhere from 0.4 percent to 20 percent of W.H.O.'s budget" so obviously this system of humanitarian aid needs to be altered in order to increase in effectiveness (Doherty).

An example of this neglect for rural region's healthcare systems is from 1991 – 2001, the World Bank lent twenty-five percent of their total lending to rural areas and this

came out to approximately five billion dollars per year. Though this may seem like a large number, remember that seventy percent of the poor live in rural areas; therefore, twenty-five percent of total lending “is not congruent with the greater incidence of poverty” (Executive Summary). Due to the lack of healthcare-related funding in rural areas of developing nations, the rural residents suffer from the lack of healthcare facilities. For example, in the rural regions of Kenya only 30% of the residents have access to healthcare whereas in the Kenya’s cities, such as Nairobi, that number rises to 70%. Another example is in Bolivia, where 63% of the rural population has no access to healthcare (Universal Giving). According to the Washington Post article, *The Persistently Poor*, the internal report on the World Bank declared that programs aimed at the rural poor have been “particularly ineffective” (Goodman).

Large organizations such as the World Bank and the World Health Organization, along with foundations such as the Bill and Melinda Gates Foundation and The Global Fund work toward providing healthcare to all impoverished people in developing nations are often times successful in reaching their goals; as stated above, much of this money goes to areas with mass numbers of people rather than gravitating to the rural regions. William Easterly, author of *The White Man’s Burden*, says that it is a tragedy that the “West spent \$2.3 trillion on foreign aid over the last five decades and still had not managed to get 12-cent medicines to children to prevent half of all malaria deaths. The West spent \$2.3 trillion and still had not managed to get \$4 bed nets to poor families. The West spent \$2.3 trillion and still had not managed to get \$3 to each new mother to prevent five million child deaths.” It would be a false statement to say that the West’s efforts are ineffective; however, the statistics provide proof that humanitarian aid, with

regard to healthcare, needs to be more efficient – especially in the rural regions of developing nations which tends to be neglected.

Micro donating and lending via the internet is an essential tool to utilize when funding healthcare efforts in rural developing nations because it is convenient, efficient, and effective. Micro donating and lending fall are defined as types of micro-financing which is furthermore defined as “the supply of loans, savings, and other basic financial services to the poor” and can be easily understood with this simple example (CGAP). Imagine somebody wants to build a pharmacy in rural Nigeria and needs one million dollars. Rather than approaching one individual and asking them to donate this large sum of money, this social entrepreneur would approach 100 people and ask them to donate \$10,000 each and this would benefit the entrepreneur or organization in two ways. The first is because they are more likely to receive the funding because individuals, when donating, are more likely to part with a smaller chunk of money. The second way this method is beneficial to the social entrepreneur is because they are now building 100 relationships and making 100 people aware of their efforts and goals; furthermore, these 100 people are also going to be holding the social entrepreneur accountable thus keeping him or her on task. Micro financing over the Internet occurs when this system is displayed online so that the average internet user can log on and donate or lend a chosen sum of money at their convenience.

There are various method that have emerged to aid rural regions of developing nation’s healthcare systems including working as an individual social entrepreneur, working for a small non-profit organization, working towards promoting a campaign and working to build and operate micro franchises. These methods are all empowered by

their success in gaining funds and raising awareness through online micro lending and donating websites.

An example of the success of the online micro-lending tool in aiding the health care of rural developing nations is the Kiva Foundation, founded in 2005. Julian Dibbell wrote in his article, "Bigger Brother," that the Kiva foundation "simply democratizes access to a worldwide microfinance movement that has been empowering the working poor for two decades." The Kiva Foundation's success in transporting money to entrepreneurs in developing nations is proven through their statistics: according to the 2006 Kiva.org press release, since they began one year ago \$430,000 has been raised in loans of \$25 increments from more than 5,400 users and they have achieved a 100% repayment rate on 28 completed loans thus far.

The Kiva Foundation has a vast variety of social entrepreneurs to lend to and is not solely devoted to a specific cause; however, many of the lending options focus on individual entrepreneurs promoting the healthcare of the rural poor. One example is Phoebe Abanga in Siaya, Kenya. Phoebe works in a rural community in Western Kenya focusing on maternity services. Through the Kiva Foundation, Phoebe requested a loan of \$2000 to buy drugs for her community pharmacy, received the \$2000 worth of micro loans, and beginning Jan 1, 2007 she began to pay the loan back. Phoebe's information page on the Kiva Foundation website shows that people from all over America including states such as California, Virginia, Illinois, Minnesota, Massachusetts, North Carolina, Washington, Florida, Texas, Tennessee, New York, New Jersey, Pennsylvania, Hawaii, Arkansas, Oregon, and Wisconsin loaned Phoebe the money over the internet. Lenders outside of the United States included people from Vienna and Canada. According to her

information on the Kiva Foundation website, Phoebe plans to pay back the loan within 12-16 months.

A second example of the success of using the internet as a tool for online micro lending and donating in aiding the health care of rural developing nations is the Universal Giving Foundation which illustrates donating rather than lending. Like the Kiva Foundation, Universal Giving is an online organization that serves as a portal for people with access to the internet to finance those in need all around the world. The Kiva Foundation allows one to loan to a “specific entrepreneur in the developing country” while Universal Giving centers on donating to small organizations. An example of the impact that the Universal Giving Foundation is having on the rural poor is illustrated with the Mano a Mano Medical Organization in Bolivia. The Mano a Mano Organization was founded in 1994 and as of 2006 has constructed 62 rural community clinics (Universal Giving). For \$330 one rural clinic can be financed in a rural Bolivian community which had no previous access to healthcare.

A second example of a small non-profit organization that is financed through Universal Giving is Doctors of the World – USA which was founded in 1990. This organization provides essential healthcare and healthcare training to the rural poor around the world. In Thailand, they partnered with a clinic to serve 20,000 migrant patients in 2002. Also in 2002, Doctors of the World – USA worked in Kosovo educating the rural poor on Tuberculosis symptoms, worked in San Carlos, Mexico to provide medical and surgical service to over 15,000 poor and indigenous people in Mexico, and improved healthcare in various other countries such as the United States and Russia (Universal Giving).

Global giving is a third example of an online site which serves as a portal for internet users to financially assist an individual, a small non profit organization or a franchisee working to aid the rural poor in the area of healthcare. Like the Universal Giving Foundation, Global Giving allows internet users to donate money rather than use loans which would need to be repaid. Eighty-five to ninety percent of the donor's contribution arrives to the local project leaders within two months. Global Giving's success is shown by the fact that it has been growing one hundred percent since it began and has "directed donations to more than 700 projects in 85 countries and has given out \$4.25 million in donations since 2001" (Global Giving).

An example of a charity project that Global Giving is working with is called Healthcare for 350,000 in troubled Eastern DRC. This charity is led by Stacey Freeman and is sponsored by the International Medical Corps. It is located in the Democratic Republic of the Congo and is asking for a total of \$75,000. Presently, there are 59 health facilities in eastern DRC that provide basic healthcare to remote regions. They have received \$832 from internet donors as of February 12, 2007 and are still in dire need of more. The Kiva Foundation, Universal Giving and Global Giving are just three examples of successful online micro financing organizations that make lending and donating to those in need convenient, efficient and effective.

Nothingbutnets.net is a website that is slightly different than the previous three because it focuses solely on a campaign to prevent malaria by providing ten dollar bed nets to those who cannot afford them – including the rural poor. According to Jeffery Sachs, director of the Earth Institute at Columbia University, "a comprehensive program [for malaria control] would cost about \$4.50 per African at risk, or about \$3 billion a year

for the whole continent... let me put the \$3 billion in perspective: there are a billion of us in the high-income world--that amounts to \$3 a person, or one Starbucks coffee a year” (Sachs 1). Nothingbutnets.net utilizes the internet to reach those who can afford to “send a net and save a life” and encourage this “comprehensive program” in which Sachs lays out. (nothingbutnets.net)

Thus far, the methods of working as an individual entrepreneur, the method of working for a small non-profit organizations and the method of promoting a campaign online have been examined. The fourth method that has seen success thanks to the use of the internet for micro financing – in this case seeking micro donations – is organizations that focus around building micro franchises. Micro franchising is a beneficial system to incorporate when running healthcare-related facilities in rural regions of developing nations because the system creates employment growth, promotes education and encourages healthy competition. The micro franchising system also creates many small uniform facilities to be scattered through out the countryside thus providing access to a greater number of rural inhabitants.

Building micro franchises in rural regions of developing countries creates employment for the rural residents because each micro franchise needs an owner/operator and a specific number of employees. Micro franchises follow a pre-set tested system, easily replicated model of business which allows rural residents to quickly learn how to become successful owners and operators thus promoting economic growth.

Micro franchises in rural areas promote education because the owners and operators are trained for success and spread their knowledge with their communities. An example of a successful organization that builds micro franchises promoting health care

in rural regions of developing countries is the Janani Indian Society. The Janani Indian Society, founded in 1996, believes in the success of private sectors rather than the non-governmental organization sector which accounts for “barely 0.7% of the healthcare in India and by itself is not a viable option” (Janani). Janani’s success is shown by the 40,000 rural health providers who have been trained through the society as well as the 520 medical clinics that have been built as of June 2006.

New micro franchises opening in rural areas of developing nations encourage a healthy competition. When a new clinic enters the market, “competitors are forced to improve prices, availability and quality to compete” (CFWshop Proposal). This healthy competition helps rid the healthcare system of inflated prices, phony medications and corrupt healthcare workers.

Often times the rural poor have no access to healthcare facilities because their only means for transportation is walking. For example, in Kenya “up to 56% of total population lives more than 1 hour walking distance from a public health facility”. As mentioned previously, only 30% of the rural poor in Kenya have access to a healthcare facility (Healthstore Foundation). Building many tiny basic pharmacies provides a larger degree of health care access to a broader number of people. This can be compared to a McDonalds fast food restaurant or a Starbucks coffee shop who are popular, in part, because of the mass number of locations they own.

When the tool of online micro donating / lending is linked to the system of micro franchising a powerful outcome will arise in which small organizations led by social entrepreneurs in rural regions receive funds from micro loans or donations which are provided by a mass number of people through the internet.

The Healthstore Foundation in Kenya is an example of an organization that has successfully linked online donating to the micro franchising system. The Healthstore foundation began building Child and Family Wellness shops, otherwise known as CFW shops, in Kenya seven years ago. The foundation was founded by an American attorney named Scott Hillstrom and Eva Ombaka, a native Tanzanian. When attempting to reach a successful business model to run the Healthstore Foundation, Hillstrom was inspired by the ideals of the McDonalds franchises because the McDonalds franchise system causes the owner/operators of the individual restaurants to follow rules designed to produce a consistent, quality product and service (Healthstore Foundation).

Two additional people who played a key role in the formation of the Healthstore foundation were Liza Kimbo and Lazarus Koech who joined Hillstrom and Ombaka in overcoming the challenges of building this for-profit organization. Some of the challenges included overcoming local resistance to the new pharmacies, skepticism of the motives behind the business model and receiving proper funding. According to the CFWshops proposal to the Ministry of Health, “the prevailing legal framework in the country makes it difficult to acquire licenses for each of the outlets, and the process for licensing is cumbersome and time consuming.”

By 2001, 26 CFWshops, or pharmacies, had been opened in rural Kenya and approximately 10,000 patients were being treated every month. By 2004, 67 shops had been opened in rural Kenya and approximately 177,670 patients had been treated. In 2005 the number of shops fell to 63; however, the number of patients treated that year rose to 446,956. This increase in patients treated was a result of successful health promotion campaigns. Much of the financing to build and sustain the CFWshops came

through internet donors who found this charity project on the Global Giving website and chose to donate. Over \$100,000 has been donated thus far to the CFWshops through the Global Giving website. Not only was this enough money to sponsor approximately sixteen pharmacies but it also has created over-the-internet relationships between the donors and the Kenyan pharmacies

Credence Maina is one of the Healthstore Foundation's franchise owners. Credence applied to be a franchisee of a CFWshop in 1999 and received a micro-loan of \$800 to get started. She receives her drugs from SHEF, the Sustainable Healthcare Enterprise Foundation, which is "a micro-franchise distribution network created to expand access to affordable critical drugs and basic health services" and was founded by Hillstrom (Healthstore Foundation). As of 2002 Credence not only benefits her community by treating 1000 patients per month; but, she also has also been able to fund the education of her children because she earns nearly ten times the income she earned before become a CFW shop owner.

There are two main negative aspects to address when examining the tool of online micro donating and lending to healthcare systems in rural regions of developing nations. The first negative aspect is that donors/lenders often times feel insecure with sending money through the internet due to fear of being deceived. It can be nerve-racking to type in one's credit card number online and donate/lend money without physically receiving confirmation or proof that the money was used properly.

This feeling of insecurity can be alleviated and is quite unnecessary for two specific reasons. The first reason that donors/lenders should rest assured that their money is being put to good use is because these online portals, such as the three mentioned

previously, are 501(c) 3 public foundations. An organization must first be approved by the United States Revenue Code before being listed as a 501( c ) 3 organization which includes various charitable foundations who are thus exempt from federal income taxes and any donations made to these organizations are tax deductible (Internal Revenue Service). Since these online giving portals are 501( c ) 3 foundations, it is assured that all the projects funded through them are “high quality and are USA PATRIOT Act-compliant and 501(c)3 equivalent” (GGF).

When one visits a donating/lending website and explores the information provided on the various projects, ideally they should rest assured that if the website is credible, then the project leaders will have all been previously researched to assure legitimacy. Furthermore, why should donors/lenders feel more assured by sending their money in the mail rather than over the internet? Yes, you can mail a check; however, who is to guarantee that your check will end up in the right hands? That being said, it can still remain nerve-racking to type in your credit card number online and donate/lend money without physically receiving confirmation. In order to change this insecurity it is essential that project leaders of organizations provide a personal appeal and proof of integrity and legitimacy.

A possible ideal solution would be a simple video tape mailed out to each donor/lender displaying the child that was treated, the pharmacy that was funded, the medicine that was purchased, etc. Furthermore, invitations could be mailed to each donor/lender to visit the site in which the finances worked toward. A second possible solution which may make internet users feel more secure with donating / lending online is

to post video footage on the project leaders information page. The footage could include interviews with patients, updates on recent success stories, footage of the region, etc.

A second problem with the tool of online micro financing to health-related organizations in rural regions of developing nations is that the social entrepreneurs or project leaders constantly must depend on strangers, often times from across the world, to log on and donate/lend money – at least until the project is able to sustain itself financially. For example, Phoebe Abanga from Kenya, who was mentioned above, who received loans using the Kiva foundation depended on the visitors of the Kiva Foundation website to lend her the \$2000 she needed to buy drugs for her community pharmacy.

This use of the internet by charity projects to gain funding and to broaden awareness may not have all of its quirks worked out yet; however, there is no question that this idea will continue to grow and flourish through out future years. According to Dennis Whittle, co-founder of the Global Giving Foundation, “recent market research indicates that it is attractive to the ten percent of U.S. households classified as Globally Engaged...these household collectively give away \$2.5 billion overseas right now and they are VERY attracted by the idea of a direct connection to projects.” According to *The Chronicle of Philanthropy's* survey involving 460 top executives from the non-profit world, “A decade from now, executives who responded to the survey said, one of every four dollars raised in private charitable contributions will be donated via the Internet” (Billitri)

The hot topic right now is globalization and although, it seems no one can agree on a definition for the term, no matter the meaning, this use of the internet to connect with humanitarian aid in rural developing nations falls under the “globalization

umbrella”. The internet is empowering the individual to assist the rural poor in ways no humanitarian effort has been able to do yet.

The well-known NY Times columnist and Pulitzer Prize winner, Thomas Freidman, defines globalization as, “the integration of markets, finance, and technology in a way that shrinks the world from a size medium to a size small.” He then goes on to say:

Globalization enables each of us, wherever we live, to reach around the world farther, faster, deeper, and cheaper than ever before and at the same time allows the world to reach into each of us farther, faster, deeper, and cheaper than ever before. I believe this process is almost entirely driven by technology.

If you take this definition of globalization as absolute then there is no question that the use of the internet to aid in humanitarian efforts in rural regions of developing nations is an example of globalization. Online micro donating and lending does exactly what Freidman says globalization does – it enables individuals, no matter where they reside, to reach almost anywhere in the world with the click of our computer mouse in powerful ways costing them only the amount of money they wish to spend.

For example, an eighteen year old young lady in West Virginia can now log onto her internet from her laptop in her kitchen, access a site such as the Kiva foundation, search for an individual social entrepreneur, a small non-profit organization, or a franchisee operator in Tanzania, donate \$25.00 and then go to bed – the whole process not taking more than five minutes. This is an ideal example of integrating finance and technology to interconnect the world – thus making it shrink from “a size medium to a size small”.

American journalist, Robert Kaplan, agrees with Friedman in regards to the claim that globalization is shrinking the world from medium to small in the sense that “everything effects everything else...the world is coming together” (Kaplan). Kaplan, however, believes that increased technology will only add instability due to the fact that “there is still nothing like a global leviathan or a centralizing force...the international bureaucracy atop [the world] is so infantile and underdeveloped that it cannot cope with growing instability” (Kaplan). According to Kaplan, rather than a need for increasing technology, there is a growing need for a centralizing force to improve infrastructure.

When asked if online micro donating and lending to rural regions of developing nations via websites such as Kiva, Universal Giving, nothinbutnets.net or Global Giving are indeed aspects of globalization, Kaplan would most likely respond that, yes, they are because they bring the world together. Kaplan would stress that, rather than simply providing healthcare for inhabitants of these rural regions, online donors and lenders need to finance organizations that promote creating order and building infrastructure.

As shown previously, there are many methods of improving healthcare for rural developing regions including, working as an individual entrepreneur, working for a small non-profit foundation, working to promote healthcare campaigns or working to build micro franchises, which are united in their usage of online donating/lending sites such as Kiva, Universal Giving, nothingbutnets.net and Global Giving. After examination of these four methods, Kaplan would most likely encourage online donors/lenders to send their funding to the organizations, such as the Healthstore foundation, that build micro franchises because of the systematic stability they strive to provide to regions.

A third view of globalization is given by the political scientist, Aram Hessami, who states that globalization “stands for the empowerment of the individual challenging the traditional holders of power. Thus, a web of interconnectedness has been created so revolutionary in scope, depth, and speed that has caused a unique qualitative change from all previous historical periods” (Hessami) According to Hessami’s definition of the term, online micro donating and lending to rural regions of developing nations healthcare systems is an example of globalization. The “traditional holders of power” in this case would stand for large organizations such as the World Bank and the World Health Organization whose systems are, in a sense, challenged by this new scheme of humanitarian aid revolving around the internet. Other traditional powers that are challenged include the rural region’s own governments who have failed to provide suitable healthcare systems.

Hessami spoke of “the empowerment of the individual” which is a key aspect in the online donating/lending system. Not only are the donors/lenders now empowered to contribute conveniently, efficiently, and effectively; but, the individual entrepreneurs such as Pheobe Abanga, the small non-profit organizations such as Mano a Mano, and the micro franchisees such as Credence Maina are now empowered to gain sufficient funding and broaden awareness in ways which would not have been possible without internet.

Friedman, Kaplan and Hessami all have different opinions on globalization; however, all three of their definitions support the idea that online micro donating and lending to promote healthcare in rural regions of developing countries is an effect. In a sense, the internet itself is a cause of increased globalization and what one utilizes the internet for is an effect of this cause.

The disposable income is available, the technology of online donating and lending is now on hand and empowering; now it is up to the individual to take advantage of this empowerment and become involved in making a change. It is a choice. There is no financial gain for the donor or lender – only the contentment of knowing that a life was saved and the satisfaction and gained knowledge of being involved in a positive force.

Imagine one is driving to an important meeting and running a bit late. He or she drives past a shallow pond and notice a small child drowning. To wade in the water and pull the child out would mean getting his or her clothes drenched with pond water, having to drive home to change into dry clean clothes, thus missing the meeting. Hopefully, one would arrive at the conclusion that saving a child's life outweighs the comparatively small cost of missing a meeting. Would it make a difference if this child was across the country if you could still save them at such a small cost? There are children “drowning” everywhere and the cost to save them is all too often the price of a U.S. cup of coffee. This analogy of a saving a drowning child in a pond was presented by the well-known moral philosopher, Peter Singer who is known for articulating difficult ethics-related questions in thought-provoking forms. Those fortunate enough to have money to spare – even if it is minimal – and have access to the internet have an opportunity to take advantage of the power that technology and an increasingly globalizing world has brought about.

People living in rural regions of developing nations lack basic health necessities and are therefore dying of conditions that are highly treatable and/or preventable usually for the price of a U.S. cup of coffee; however, thanks to the effects of globalization through the internet, this innovative system is revolutionizing humanitarian aid. The rise

in technology is allowing humanitarian aid to reach the developing nation's rural poor in ways never before achieved and will increasingly shrink the world "from a size medium to a size small" thus empowering the individual "to reach around the world farther, faster, deeper, and cheaper than ever before" (Friedman). This use of online micro donating and lending may not be the end-all answer to solving the healthcare predicament in rural regions; however, in combination with the already existing large organizations and humanitarian aid plus the rising awareness of the lack of healthcare in rural developing nations, online micro donating and lending is a key element. Theorists, such as Kaplan, claim that technology is advancing faster than humans can handle it – much like a child with a toy that he is or she is not mature enough to handle appropriately. Utilizing the internet to reach those in need offsets the harm and uncalled for complexity that often times walks hand in hand with the rise of technology and illustrates that in an increasingly globalizing world, connections can be made allowing lives to be touched, and the empowerment of the individual can function as a strong positive force.

# The Vampire's Bite on Reality

By: Jacob Gagner

Vampires are everywhere. From the silver screen to cereal bowls, they lurk throughout contemporary culture, and they do it in force. In popular literature such as Queen of the Damned by Anne Rice and Nightmares and Dreamscapes by Stephen King, we can find the vampire preying on countless, helpless victims with each trembling turn of the page. In comic books like Morbius and Blade by Marvel comics, we can empathize with the vampire anti-hero who uses a much “darker” method of dispatching evil. In music, we can listen to vampires—hundreds of them—in songs ranging from Neil Diamond's “Vampire Blues,” to “Vlad the Impaler” by GWAR. In video games like Castlevania, The Legacy of Kaine- Soul Reaver, and Bloodrayne, we can either hunt down and kill vampires or control one and wreak blood-splattering havoc for forty-plus hours. In cinema, we can watch over 250 vampire movies that have been produced since the start of the 20<sup>th</sup> century, and we can see them in almost every genre to include comedies like Transylvania 6500, kids movies like Monster Squad, and even “hardcore pornography like Buffy the Vampire Layer” (Anani).

Speaking of Buffy, we can watch countless movie spin-offs, television shows, and cartoons starring vampires like, Buffy the Vampire Slayer, Angel, The Munsters, and Eureka's Castle. Even Sesame Street has a vampire, the Count, teaching our children how to count with a thick, Eastern European accent. Vampires are also in cartoons like Count Duckula and Scooby Doo. For the more serious “cartooner,” we have Japanese films like Blood the Last Vampire and Vampire Hunter D. But that’s not all; we can eat Count Chocula for breakfast and gobble down gummy vampire treats. We can throw plastic

fangs in our mouths, run around, and play “vampires,” or we can purchase toys like McFarlane's Monsters, games like Vampire: The Masquerade, and play “vampires” in a whole new way. All this, and Halloween hasn't even been mentioned yet.

Yes, vampires are everywhere, and garlic won't make these ones go away. Our fascination with the vampire is so strong that the vampire could easily be argued as the single most popular and predominate supernatural monster in modern culture.

Subsequently, fascination often leads to emulation, and it can have a positive effect on society. However, emulation can also be unhealthy, and can quickly regress into obsession, and addiction. Through the power of the media, in all its vast and expanding forms, the latter has been done with vampires; in fact, by evolving the vampire myth in present day culture, contemporary society has created real ones, 21<sup>st</sup> century vampires.

In order to realize the actuality of the 21<sup>st</sup> century vampire, we first have to figure out exactly what a vampire is, and to do that, we have to start at the origin of vampire mythology.

In almost every pre-existing culture, there was a vampire-like creature in some form or fashion, which makes the exact origin of the vampire impossible to determine. Dating as far back as 2000 B.C., traces of the vampire were found in ancient Mesopotamian works depicting a hierarchy of “seven deadly spirits” as well as the “Ekimmu, the spirit of an unburied person unable to rest” (Melton 27-28). In addition to Mesopotamian mythology, Sumerian, Babylonian, and Assyrian mythology created the “Lilitu, the Lilu, the Ardat Lili, and the Irdu Lili, all vampire-like demons that stalked the night, preying on children.” (Melton 421-422). Similar to the Ekimmu myth, Constantine Gregory concludes that in ancient Egypt, “The Egyptians had believed that the ka, one

half of the soul independent of the physical body, would eternally wander the earth in search of food and attack people, draining their blood and psychic energy if embalming rituals weren't done properly and/or if the ka wasn't provided food and drink in the tomb it rested in" (14-15).

China, in turn, had the "Chiang-shih" (also spelled Kiang-shi), which manifested when the p'o, the inferior part of the soul, was very strong and wouldn't leave the body. Since the Chiang-shih couldn't escape coffins buried under soil, the manifestation had to take place before the burial, but if the burial took too long, the Chiang-shih, appearing as normal people, would attack the living, ripping off the heads and limbs of their victims and raping women (Melton 114-116) (Cottrill). China also had the "Pinyin," or the "Stiff" or "Hopping Corpse," which fed on the life energy of its victims (Melton 114-116; Cottrill).

Over in India, there were the Vetalas, spirits that would inhabit and reanimate corpses, and the Rakshasas, bestial, ogre-like creatures with fangs and a taste for human blood. There were also the Yatu Dhana, evil sorcerers who ate the leftovers of the Rakshasas and the lesser Pisachas, who were eaters of flesh (Melton 361-362). Most importantly though, there was the Hindu goddess of destruction, Kali, who represented a form of the Hindu "Divine Mother" as the devourer of all time and the transformation that is death ("The Hindu Goddess Kali"). In her most vicious form, she was a black-skinned, four armed, blood-drinking demi-woman bearing fangs and adorned with rows upon rows of severed heads and limbs (Melton 393-394). Then there were the Churals, women who died an unexpected death. If such a woman was treated badly by her family

before she died, she could become a “Dakini, an associate of Kali, and partake in her bloodthirsty frenzies” (Melton 364).

Then in Ancient Greece, they had the “Lamia,” with Micha Lindemans defining them as “women/serpent creatures who stole the blood of children” (“Lamia”). Along with the Lamiai, were the correlated “Empusai,” and “Mormolykiai,” the latter being a “woman-spirit who cannibalized children” (Melton 304-305). Greek mythology also had the “Vrykolaka” meaning “the being that returns from the grave” which was adopted from the ancient Slavic word *vbdlk'b dlaka* meaning “wolf pelt wearer” or “one who wears wolf pelts during rituals” (Melton 305, 769). As Greek mythology infused with Roman triumph, the Strix, night demons (commonly associated with the screech owl) that attacked infants and drained their blood, were created. The Strix later transformed into the Strige, Strigoi, and Stregas. “All of them,” as Gordon Melton describes, “were witches who turned into birds and sucked the blood of their victims” (580-593).

Even though all of these civilizations had various myths containing some of basic elements of the vampire (and still, there were many others like the Japanese Kappa, the Algonquin Wendigo, and the Malaysian Penanggalan...) the strongest roots of the vampire myth came from Eastern European, Slavic folklore and thus, became the first evolutionary paradigm of the 21<sup>st</sup> century vampire.

First, Slavic culture created the term “obyri” or “obiri,” which translates into the Bulgarian term “vampir” (Whyte) and became the name ultimately adopted (with variations) throughout Western Europe, eventually progressing into today's English “vampire.” Second, with the Christianization of the Slavic regions during the late 8<sup>th</sup> and early 9<sup>th</sup> century (“Bulgaria”), the vampire became incorporated into the Christian

religion, as the converted Slavs maintained some of their pagan traditions, thus transforming the vampire into creatures of the devil. Third, the Slavic gypsy minority, who descended from parts of India, also contributed to the vampire myth with their strong supernatural beliefs of vampire-like creatures and occult-like practices, such as maintaining a constant relationship with the dead and leaving the dead offerings such as food or milk (Melton 310-315, 395; Whyte).

In addition, there was a severe lack of “scientific knowledge on medicine or post-mortem decay” (Gregory 20-21), along with various unknown poxes and diseases like Tuberculosis (“A Brief History of Tuberculosis”; Melton 505) and the rare Porphyria (Boeffy). Unsanitary living conditions and a high infant mortality rate were also present. As a consequence, the vampire myth became the end all explanation for the unexplained and with the “creation of the Slavic alphabet by Saints Cyril and Methodius” (“Bulgaria”), the first documented cases were written on the vampire. These documents helped solidify some of the more common characteristics previously found amongst many various cultures. These common traits include but definitely aren't limited to:

**The appearance of vampires** – exhumed corpses that had unnatural, irregular, or prolonged decomposition, ruddy (reddish) skin, looked bloated, had fresh blood near the mouth, and/or had new fingernail or tooth growth, people who didn't cast a shadow on the ground or have a reflection in a mirror (Gregory 34-37, Melton 504-506, 625-629, Whyte).

**The signs and causes of vampires** – irregular, sudden and/or unexplained deaths to include livestock, suicide, death as a criminal, or an evil sorcerer/witch,

improper or no burial, excommunication, children born out of wedlock or born with a caul, children born with teeth, hair, extra nipples, and/or a tail, premature birth, children who died before baptism or had improper baptisms, children conceived on certain days like eclipses or other ill-warranted religious days, a black cat crossing a pregnant woman's path or jumping over a corpse or coffin, and anyone who was attacked by a vampire (Gregory 34-37, Melton 504-506, 625-629, Whyte).

**Wards and tools used to prevent/destroy vampires** – sunlight, placing garlic or crucifixes in coffins, burying the coffin upside down, filling coffins with grain, sawdust, or rice (vampires couldn't resist counting things), placing blocks or scythes under the corpse's chin, dousing them with holy water, nailing their clothes to the coffin, piercing thorns or stakes through the body the body with the intent of pinning them to the ground, staking their heart, decapitation, repeating the burial service and/or exorcism (Gregory 34-37, Melton 504-506, 625-629, Whyte).

The first documented cases started in 1721 with string of vampire attacks in East Prussia and continued throughout the Hapsburg Monarchy from 1725, to 1734. From these emerged two of the most popular, documented cases of vampirism: the case of Peter Plogojowitz and Arnold Paole.

In 1725, Peter Plogojowitz was a Serbian peasant who died in a small town called Kisolova. Three days after his death, his son reported that Plogojowitz had come to him in the middle of the night, asking for food. His son gave him some food, which he ate and

then left. When Plogojowitz appeared two nights later, the son refused to feed Plogojowitz and was found dead the next morning. Within a short time after the boy's death, some of the villagers became sick from exhaustion and were diagnosed as having "excessive blood loss." A few reported that in their dreams, Plogojowitz throttled them while they slept and sucked their blood. A total of nine villagers with like symptoms died soon after. Upon the examination of the dead villagers' and Plogojowitz's corpses, the townsfolk asserted that Plogojowitz's body fit the appearance (mentioned above) of a vampire while the others did not, and with the reluctance of the local magistrate, proceeded to stake and burn his body. While staking him, Plogojowitz apparently groaned as fresh blood poured out of his body, effectively concluding that, to the villagers, Plogojowitz was a vampire (Gregory 20, Melton 525-526).

Arnold Paole was born in Medvegia in the 1700's and served in the "Turkish Serbian" army until 1726. When he returned to Medvegia, he told some of the villagers that, while at war, he was attacked by a vampire which he tracked down and killed. He then ate dirt from the vampire's tomb and soaked his wounds in the vampire's blood in order to cleanse himself of the attack. However, Paole was still afraid that he might be infected. A few weeks later, Paole fell off a hay wagon and broke his neck. The villagers, for fear that he might become a vampire, immediately buried his body. Three weeks later, reports of Paole sightings started to surface, and four of the villagers who made these reports died unexpectedly. On the 40<sup>th</sup> day after his death, Paole's body was exhumed and examined by villagers, soldiers, and army surgeons. Like Plogojowitz, Paole's body fit the appearance (mentioned above) of a vampire. His body was also reported to have

gasped and spew fresh blood when it was staked. Paole's body was then decapitated and burned (Gregory 21, Melton 518-519).

Then in 1731, a total of seventeen people located near the Medvegia area mysteriously died within a three-month span along with reports of a recently deceased man named Milo attacking some of the villagers. Villagers related these deaths to Paole and concluded that some of the deceased must have eaten cattle that Paole had bitten. This, along with the Plogojowitz case, prompted an imperial inquiry by Regimental Field Surgeon Johannes Fluckinger who examined all seventeen bodies. He determined that twelve of them were too fresh to be of natural decay and examined these bodies further, discovering that some of the chests and organs still contained blood, which explained the bodies' plump, well-fed look. He also found new skin and fingernail growth. After finishing his examination, Fluckinger concluded that these bodies were in vampiric condition, and the bodies were decapitated and burned (Gregory 21, Melton 518-519).

Afterwards, Fluckinger's reports became very popular throughout Europe. In turn, Fluckinger's reports provided the "focal point for all further vampire literature" (Melton 519) and became single greatest contribution to the vampire hysteria during the 18<sup>th</sup> century (Gregory 20-25). Soon there were reports of vampires all over Europe, superstition filling in where logic could not. The vampire, in at least one case, the case of Mercy Brown, found its way to America in an attempt to explain Tuberculosis (Belanger). But this "vampire fever" didn't last long, as the age of the Enlightenment, an intellectual movement stressing the use of reason over revelation and superstition to discover truth, came into full swing. By the end of the 18<sup>th</sup> century, "science had killed

the vampire epidemic, but it was about to be resurrected by a new master: Romantic Literature” (Gregory 24-25).

Through the late 18<sup>th</sup> and 19<sup>th</sup> centuries, the vampire lived through the art and literature created during the Renaissance. But it wasn't until 1897, that the vampire witnessed its second evolutionary paradigm by a man named Bram Stoker.

Up until this point, vampires were still generally considered as hideous, reckless, undead creatures of the night that fed on both humans and livestock. Bram Stoker's 1897 novel Dracula changed that perspective entirely. Stoker adopted the name Dracula from the Romanian folk hero Vlad Draculya, meaning “son of the dragon,” who was also called Vlad the Impaler for his “hobby” of decapitating the heads of his enemies and impaling them on poles. Vlad, the prince of Wallachia, successfully defended his kingdom from the Ottoman Empire and was known to use extremely brutal methods of torture and punishment on both his Turkish adversaries and his own people. (Geringer, Melton 760-761).

Nevertheless, as the story also dealt with underlying themes of the working class versus the aristocrats and the ultimate power of religion, Stoker paved the way for the more humanistic vampire, and it was his Dracula who became the ultimate archetype of all vampires in modern culture (Melton 196, 197).

No longer was the vampire a hapless creature wandering the night searching for food. Dracula was wealthy, wore dark, lavish clothing and was wrapped in a cape. He was charismatic, intelligent, and powerful. He was nearly immortal, possessed great strength, and could fly, change shape, teleport, and use telepathy and telekinesis. But

most of all, Dracula had the power to seduce his prey, all of whom were beautiful women, and convert them into a member of his undead harem.

No longer was there a multitude of conventional ways to destroy a vampire either. Dracula could only be hurt or destroyed with garlic, holy water, crucifixes, stakes or sunlight, and he couldn't cast a shadow or a reflection in a mirror. In short, Dracula became the bare minimum of what was to be expected of all vampires in modern culture.

At the turn of the 20<sup>th</sup> century, the vampire myth began to spin out of control from Stoker's Dracula archetype. Starting with the 1909 silent film Vampire of the Coast, all the way up to Van Helsing, produced in 2004 (Delahoyde), the vampire metamorphosed into a rolling ball of greenbacks, filing into virtually every multi-media facet and market. Like all things, the vampire became "a subject of exploitation within the ever-increasing capitalist economy" (Marx).

Now, while the dark, Gothic subculture grows in numbers, so does the number of vampire-related TV shows and cartoons. There are now such things as space vampires, robot vampires, ninja vampires and cute-n-cuddly baby vampires. Along with the evil, blood-sucking vampire of old, we now have vampire superheroes, vampire buddies, and vampire moms and dads. Overall, the changes made to Bram Stoker's Dracula archetype have become so rapid and numerous that the entire 20<sup>th</sup> century could be considered as the next evolutionary paradigm of the vampire.

There were, however, four key elements during the 20<sup>th</sup> century that played a much more significant role in the 21<sup>st</sup> century evolution of the vampire: the news media, Anne Rice's "Vampire Chronicles," the movie "The Lost Boys," and the role-playing game Vampire: The Masquerade.

While throughout the recorded history of man there are many documented cases of occult practices and blood-drinking, ritualistic murderers, it wasn't until the early 1900's when the news media began labeling serial killers and murderers as “vampires” (Ramsland). German born Fritz Haarmann was labeled a “vampire” during the 1920's after being arrested, tried and convicted of killing twenty-seven of an estimated fifty victims. The victims, all of whom were young male vagrants, thieves or prostitutes, were lured by either Haarmann or his accomplice, Hans Grans, back to Haarmann's apartment where he would kill them, sometimes by biting their throats in a sexual rage. To get rid of the evidence, Haarmann sold the bodies as black market pork and distributed the clothing to the impoverished. On December 19, 1924, Haarmann received twenty-four death sentences while Grans received one. Both men were executed shortly after (Gilbert).

In the 1930's, the “Dusseldorf Vampire,” Peter Kurten, aptly earned his media title after being arrested and openly confessing to seventy-nine different offenses that included burglary, rape, molestation, murder, and arson. He was convicted on seven counts of attempted murder and nine counts of murder, one of which was an eight-year-old girl who was brutally stabbed thirteen times, molested, and burned with petrol. An unremorseful Kurtin was sentenced to death on July 2, 1932 (Gilbert).

Then in the early 1940's, the news media headlined English serial killer John George Haigh as a “vampire.” Haigh was convicted of murdering eight women who, after killing them, dissolved the bodies in sulphuric acid (Ramsland).

Later, during the 1970's, Richard Trenton Chase became the “Vampire of Sacramento.” After being convicted of six grizzly murders, which included sodomizing,

drinking the blood, and eating the organs of the victims, Chase was sentenced to death via gas chamber (Ramsland).

It was also during the 1970's, that novelist Anne Rice's Interview with the Vampire was published, effectively starting her long list of bestselling vampire novels. In her first novel, Rice introduced Lestat di Lioncort, a very charismatic vampire who, despite his aristocratic background, grew up in poverty and made his own way in the world.

With twelve vampire novels published to date, some of Rice's more popular ones were made into films. On November 11, 1994, Interview with the Vampire, starring Tom Cruise and Brad Pitt, became a smash hit at the box office. Yet another one of Rice's novel, Queen of the Damned featuring R&B star Aaliyah, was made into a major motion picture and was released on February 22, 2002 (Anani). Despite Rice's many contributions to the vampire myth, it was the dark, sensitive, sensual Lestat who further blended the vampire creature of the old with Stokers initial Dracula. Lestat became so popular that numerous "fanclubs emerged bearing Lestat's name, along with a gothic rock band and the twelve-part comic book series The Vampire Lestat by Innovation" (Melton 570-571). From his world-wide fan base, Lestat became the second vampire archetype of modern culture.

During the 1980's, the vampire myth took yet another sadistic turn. In Massachusetts, at the start of the decade, a delusional James Riva claimed to hear the voice of a vampire and killed his grandmother, because he believed she was sucking his blood while he slept. The jury convicted him of second degree murder, and Riva was sentenced to life in prison. Then in 1982, Polish native Juan Koltrun raped, murdered and

drank the blood of two women, thus labeled the “Podlaski Vampire.” Koltrun was also convicted of raping five other women (Ramsland).

Then on July 31<sup>st</sup> 1987, Warner brothers released the film “The Lost Boys” in America, starring teen icons Jason Patric, Kiefer Sutherland, Corey Haim, and Cory Feldman (Anani). The movie depicted wild, teenage vampires loose on a killing spree in a fictional Santa Carla. In the movie, the vampire gang tries to recruit a new family into their fold, but with the power of Christ on their side, the family defeats the vampires triumphantly. The Lost Boys did extremely well at the box office, and helped propel the evolution of the vampire to an ever-appealing, younger generation by making it “cool” to be a vampire.

The news media, consistently tugging on the reigns of the vampire myth, labeled Russian Andrei Chikatilo “the Forest Strip Vampire” in 1990. Chikatilo was arrested for sexually assaulting, cannibalizing, and drinking the blood of over fifty victims. Chikatilo was sentenced to death and executed on February 14, 1994 (Ramsland).

Shortly after Chikatilo's reign of terror had ended, the role-playing game Vampire: The Masquerade was officially released in 1991 by the American gaming company White Wolf. The game, based loosely on Dungeons and Dragons, put people in the role of vampires from different clans and in a story telling fashion, they acted out their characters in a modern Gothic world. Vampire: The Masquerade was extremely successful and won the Origins Award for Best Role-Playing Rules of 1991. The popular game released three editions between 1991 and 1998, and was finally discontinued in 2004 (Melton 734-737).

In 1996, the first Vampire: The Masquerade-related murder took place involving twenty-one-year-old Caleb Fairley who was arrested for strangling a mother and her nine year old child in Collegeville Pennsylvania. The investigation revealed a dark-sided, troubled, insecure Fairley, who frequented Goth-clubs, collected vampire paraphernalia, and played Vampire: The Masquerade. Fairley was convicted and sentenced to two consecutive life sentences (Ramsland).

The vampire crossover into reality continued with sixteen-year-old Roderick Ferrell who, on Thanksgiving Day in 1996, led a group of teenagers from Murry, Kentucky to Eustis, Florida and killed the parents of his former girlfriend. Ferrel avidly played Vampire: The Masquerade, but wanting more, he formed a vampire clan outside the game. After receiving a call from his ex-girlfriend who complained about her living conditions, Ferrel went to Eustis and killed her parents, leaving a “V” made from cigarette burns on the father's chest. After his arrest, Ferrell claimed that he had no soul—that he was possessed, and made up vampire rituals to give him an adrenaline rush. He believed that vampires did, in fact, exist, and because they chose him, he had the power to do anything. Ferrel was eventually convicted and sentenced to death (Ramsland).

With Vampire: The Masquerade as the latest catalyst in the evolution of the vampire, the combined media platform of the 20<sup>th</sup> century enabled the creation of a new cultural phenomenon, the self-professed, self-enacting vampire. This finished the evolution of the 21<sup>st</sup> century vampire.

Joshua Rudiger was among the first self-professed vampire captured by the news media. In 1998, twenty-two-year-old Rudiger, claiming to be a vampire, went on a rampage through San Fransisco, slashing the necks of homeless people with a knife.

Rudiger, stating that he needed to drink blood, injured three men and killed one woman who died from blood loss. Rudiger, who had a history of mental illness, was convicted and given a sentence of twenty-three years (Ramsland).

In 2002, Manuela and Daniel Ruda were arrested in Bochum Germany for fatally stabbing a man over sixty-six times, beating him with claw hammers, drinking his blood, and then leaving his body to decompose next to a coffin where Manuela slept. When the trial started, Manuela Ruda told the court about her encounters with vampire cults, and how she developed a taste for blood while participating in “bite parties.” Manuela concluded that neither she nor her husband were innocent as they were instruments of the devil. Both were institutionalized (Ramsland).

*To this day, the list keeps growing...*

So what exactly is a vampire? Is it the mythical creature from the days of old, or the modern day “vampire,” self professed and likewise labeled by the media? Through maddening heights of consumerism and the rapid evolution of the vampire throughout the 20<sup>th</sup> century, it’s hard to say which is which anymore. Tracing back the origins of the vampire myth to the present day, there really is only one characteristic that has maintained a relative constant, the need or the desire to consume the life energy or the blood of the victims. Whether or not consuming blood grants the consumer any sort of supernatural power isn't the question at hand here and could be contested either way depending on what culture the topic is presented in. But if the only solid constituent

needed to qualify one as a vampire is to consume the blood of a victim, then clearly the vampire has evolved from mere myth into physical reality.

Some might argue that the cases presented here aren't conclusive evidence to the physical reality of the vampire, that these sexually-frenzied psychopaths are nothing more than isolated cases of abnormal behavior. This couldn't be any closer to or farther from the truth. In order to truly have existing vampires, these cases have to be isolated instances of abnormal behavior. If everyone were to run around and suck blood off each other, it would be a common characteristic found in all humans and nothing more. Only a few can become vampires, or else, due to simple geography and procreation, we would all eventually become vampires. Thus, the abnormality of vampirism is eradicated.

Still, others might confuse the media's role in creating the 21<sup>st</sup> century vampire and actually blame the media. With this I ask, would these crimes have been committed if the vampire myth never existed? It's highly likely. These "vampires" would have butchered regardless of title. Instead of "vampires," however, they would have been labeled something else, something that would have equally captured our attention, and given way to our fascination. In a capitalist society, the media only reflects what society wants. Otherwise, they would cease to exist.

But why do we want vampires? Stephen King seems to think that we are all mentally ill to some degree, and "we crave horror to show that we're not afraid of the dark, to re-establish our feelings of normality in a perpetual, alienating world, and to let loose our inner 'monsters' in a positive way" ("Why We Crave Horror Movies"). King's beliefs have truth to them; although his answer presented here is only partially correct, as it deals with the horror genre in general. So why the vampire? Why the pale-skinned,

attractive demi-human who feasts on the blood of his or her victims and has the power to fly, change shape, seduce, cast spells, read minds, and be immortal? Isn't the answer obvious? The vampire, through evolution, has encompassed everything we as humans can never have and what some would kill for to attain.

To conclude, vampires are everywhere, and in more ways than we would like to realize. In order to satisfy our “vampiric” addiction through mass media capitalistic consumption, we have evolved the vampire to fit the phenomena of our culture just as every culture before this one had; except we did it at an exponential rate, and to such an extent, that we have spawned an unintentional side-effect to the vampire myth, the living, the physical, 21<sup>st</sup> century vampire.

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# **America's Global Gag Rule: What Happened to Life, Liberty, and the Pursuit of Happiness?**

**By: Josephine Ta**

Every minute around the world, 380 women become pregnant, 190 women face an unplanned or unwanted pregnancy, 110 women experience a pregnancy related complication, 40 women have an unsafe abortion, and 1 woman dies of pregnancy related complications (Rosenfield and Min 85). In developed countries such as the United States, women are offered an abundance of options when faced with pregnancies, planned or unplanned. Options for women in the United States range from adoption to abortion. Abortion is a relatively new option, as it only became a legally protected family planning method for women thirty-four years ago.

January 22, 1973 is a landmark day in history for women across this country. On this date, the women of the United States were guaranteed the right to make choices about their own bodies in regards to pregnancy options and family planning methods. On January 22, 1973, the Supreme Court ruled in the case of Roe vs. Wade that women be secured the right to abortion and to attain access to safe abortion care (Hassini). For years and years in the United States, the debate surrounding abortion has been a heated and emotional one. Is it right or is it wrong? Does an abortion really take the life of a baby? Should a woman have the right to make the choice to have an abortion? These questions consume the agendas of religious discussions as well political ones.

As the topic of abortion has further more impacted the lives of women in the United States, so too has it impacted the lives of women across the globe, especially women living in under-developed countries. According to the Global Health Council, "every minute, somewhere in the world, a woman is either dying from, or suffering the

effects of a pregnancy that was unplanned and in many instances, unwanted” (Daulaire 5). Each year, an estimated 200 million women around the world become pregnant. Out of those 200 million pregnancies, approximately 33% of them are unwanted or unintended (Daulaire 3). What options are made available to the women who fall within that 33%? In developed countries such as United States, women have access to and are granted the right to a variety of family planning methods. Unfortunately, women living in under-developed do not share the same privileges.

A combination of inadequate access to family planning assistance, a lack of contraceptive methods, restrictive abortion laws allow women living in developing countries very few options. Other contributing factors may include poverty, social and economic marginalization, ignorance, and gender bias (Daulaire 5). These factors have contributed to the fact that approximately 25% of all adult women living in these developing countries suffer some type of illness or injury that is caused or related to pregnancy and childbirth (Hassini). In countries such as Ethiopia, where abortions are illegal with exceptions to cases of rape, incest, and endangerment to the mother’s life, women are left with no other option than to deliver. Therefore, many women who are faced with unwanted pregnancies are either driven to back-street abortionists or may conduct the abortion procedure themselves without the proper knowledge of how to do so, without safe or sterile medical instruments and in unhygienic environments.

One policy aimed to help reduce the number of worldwide abortions is President George W. Bush’s Global Gag Rule, which was reinstated on January 22, 2001. Coincidentally, this is the anniversary of Roe vs. Wade, the Supreme Court case that gave American women the choice to have an abortion and to attain access to safe abortion

care, pre-abortion and post-abortion. The Global Gag Rule was previously known as the Mexico City policy, which was put into effect 1984 by former President Ronald Reagan. According to President George W. Bush's presidential memorandum given on January 22, 2001, the Mexico City policy required that non-governmental organizations (NGOs) agree to neither perform nor promote abortion as a method of family planning in order to receive funding from the United States. President Bush stated that "taxpayer funds should not be used to pay for abortions or advocate or actively promote abortion, either here or abroad. It is therefore my belief that the Mexico City Policy should be restored." The purpose of this policy was to make certain that U.S. funding to foreign NGOs was not used towards abortion materials or distributing information regarding abortion. The Mexico City policy stayed in effect until it was rescinded on January 22, 1993 by former President Bill Clinton.

Current President George W. Bush's Global Gag Rule maintains the same idea as the former Mexico City policy. This policy states that any foreign non-governmental organizations that wish to receive funding and family planning assistance from the United States must agree not to promote abortion or distribute information or advice concerning abortion (Coen). According to Population Action International, the restrictions of the policy also prohibit foreign NGOs that are receiving U.S. assistance for family planning from using U.S. funds or funds from any other source to perform abortions except in the cases of rape, incest, or a threat to the woman's life ("What You Need To Know"). Now although the foreign NGOs that comply with the terms of the Global Gag Rule are prohibited from performing abortions or distributing information regarding abortion, the restrictions do not prohibit foreign NGOs from treating injuries or illnesses that occur

post-abortion, whether they were performed legally or illegally, as stated in the presidential memorandum (“What You Need To Know”). According to the Global Gag Rule, foreign NGOs are prohibited from pre-abortion counseling, which may warn pregnant women about the risks and side effects of abortions that are performed legally and illegally. This policy restricts NGOs from giving pregnant women vital reproductive health information, warning them of the risks they subject themselves to in going through with an abortion, yet are encouraged to treat women who come in excessively bleeding or seriously injured due to complications from an abortion.

The Global Gag Rule aims to reduce worldwide abortion rates by making abortions less available through the enforcement of this policy. In stating that the U.S. will not give funding or assistance to any foreign NGOs that promote or distribute information about abortion, the U.S. is promoting an anti-abortion attitude, which is not even entirely an “American” attitude since abortion is legal in the United States. The policy essentially carries the values and beliefs of a select group of conservative Americans and attempts to persuade the countries that it is enforced on to take on these same beliefs and values. The effects of the Global Gag Rule prove that a health care policy that puts ideology before sound public health practices will have a tremendous impact on health service delivery, an impact which is quite damaging in this. This policy stems from a conservative standpoint and has taken a large toll on the efforts by organizations and collective groups, such as by the International Conference on Population Development (ICPD) to advance the international agenda on reproductive health and rights by limiting access to services and technologies that many be used to improve reproductive health (Langer 1552).

The Global Gag Rule is a policy that combines public health care, foreign aid, and conservative ideology. According to Robert Kaplan, foreign aid has never helped what it was intended to help. Instead, he suggests that foreign aid “has been a way that we have projected our own strategic power. Because when we give money to a certain region in the world, we have more influence in that region of the world” (Kaplan). The Global Gag Rule and Kaplan’s perspective on foreign aid fit perfectly together. The United States implements a policy which states that if a foreign NGO should decide to sign the Global Gag Rule and abide by its terms and conditions that the U.S. will give them funding and assistance. When the U.S. gives funding and aid to a foreign NGO, they exert power over them in the sense that the United States has control over what the NGO is saying and doing. In this case, the U.S. exerts control over foreign NGOs in developing countries regardless what foreign NGOs decide to do with the Global Gag Rule. When foreign NGOs accept and abide by the policy’s terms, it means that the NGO has agreed under the policy not to promote abortion or distribute information regarding abortion, nor may they use U.S. funds or funds from elsewhere to be involved in any activity relating to abortion, including lobbying their own government towards reforms in abortion laws. When foreign NGOs reject and choose not to abide by the Global Gag Rule’s terms, the U.S. exerts control over them in the sense that they will not give the NGOs the desperately needed funding that they require to assist the population in reproductive health services.

The Global Gag Rule also fits quite flawlessly with Robert Kaplan’s definition of globalization. According to Kaplan, globalization is a code word for a weak form of the new “American imperialism,” meaning that it is an American, western way of doing

things (Kaplan). He states in his interview with Joe Sotille of ADM that “our model of political development...won out to the extent that there as yet no other specific competing models, because the area outside of the globalized roam of the world...inside the poorest parts of Sub-Saharan Africa... are not offering a competing model” (Kaplan). In looking at globalization in the context of the Global Gag Rule, the Global Gag Rule plays the part of the model of development that has no competing model, which is why it is able to exert so much influence on developing countries. Kaplan names globalization the new word for a new kind of “undeclared imperialism” and that because it is undeclared, it is weak but not without consequences. In looking this at this definition in context with the Global Gag Rule, these consequences depend on the choice of the foreign NGO to accept or oppose the policy’s terms. But regardless of the choice made, the United States, which plays the role of the model of development with no competing model, will exercise control over less powerful countries in an “imperialistic” manner in order to spread its “western ways of doing things” (Kaplan).

But this “western way of doing things” has had serious ramifications not only on international family planning but also and more importantly women’s reproductive health. Through the execution of the Global Gag Rule, foreign NGOs are faced with a difficult decision. Upon accepting the terms of the policy, foreign NGOs are eligible to receive U.S. funding and assistance. But while doing so, they are withholding vital information concerning women’s reproductive health, compromising the health care provided to pregnant women in developing countries. Upon rejecting the policy’s terms, foreign NGOs make themselves ineligible to receive desperately needed funding and must compensate by trying to produce funding on their own in order to provide women

with necessary health services. More often than not, foreign NGOs choose to reject the policy's terms, causing them to lose funding for materials such as contraceptive supplies and forces them to cut health education programs (Coen). Through the execution of this policy, millions of men and women are exposed to HIV/AIDS, unwanted pregnancies, and unsafe and sometimes illegal abortions due to the lack of funding and assistance needed by foreign non-governmental organizations (Langer 1553).

According to Robert Kaplan, there is a growing importance of NGOs not only because there is an abundance of them, but also because they are "the people on the ground who know how to do things on the ground" (Kaplan). NGOs consist of the people who are directly involved with the problem and who are working hands on in order to resolve it. Therefore, the restrictions that the Global Gag Rule puts on NGOs will have a significant and direct effect on the population of developing countries since it is the NGOs who have the people working directly with the people to alleviate problems and offer assistance and services to those who need it. Although the intentions of the Global Gag Rule are to reduce the number of worldwide abortions by making them less available to women, the results have been contrary. Realistically, the lives of women living in underdeveloped countries are at an extremely high risk through the implementation of this policy.

With the Global Gag rule in effect, women of developing countries will continue to experience a lack of proper reproductive health care, an aspect of life that they so desperately need. The statistics will continue to show increasingly high maternal mortality rates and complications as results of unsafe abortions. The objective of the Global Gag Rule was not only to reduce worldwide abortion rates, but also to persuade

other countries to refrain from using abortion as a method of family planning. Yet, in the United States, a woman's right to choose her method of family planning is clearly protected through the case of *Roe vs. Wade*. The objective of this policy is clearly influenced by personal values, which may be its main flaw. Although the intentions of the Global Gag Rule have been to reduce worldwide abortion rates and to prevent abortions from being used as a major method of family planning, it has shown contrary results and has had serious ramifications on women's reproductive health in developing countries.

Every minute, somewhere in the world, a woman dies from the complications of pregnancy and childbirth. From these deaths, less than 1 percent of them occur in the developed world. A comparison of developed and developing countries reveals that one out of every 61 women in developing countries will die while giving birth as opposed to one out of every 2,800 women in developed countries. In looking at specific countries, it is even easier to see the tremendous difference in reproductive health care between developed and developing countries. In Ethiopia, pregnancy complications will kill one out of every 10 women, whereas in Sweden only one out of 29,800 women will die due to pregnancy complications (Starrs and Hoope-Bender 79). According to the World Health Organization, out of an estimated 20 million unsafe abortions that occur, with an unsafe abortion being defined as an abortion performed without the attention of a trained health professional, only 69,000 of them will occur in the industrialized world (Mills 576). In developing countries one out of 65 women dies of reproductive health problems. In developing countries, by comparison, one out of 2,125 women dies from similar causes. Although reproductive health services may be available in many countries, many

times they are poorly funded and therefore are often unavailable to poor people, such as those in developing countries (Grown et al. 58).

According to the WHO, in developing countries as many as 1,600 women die from the complications of pregnancy and childbirth every day. Out of the 1,600 women who die from pregnancy and childbirth complications, almost nine-tenths of them occur in Sub-Saharan Africa and Asia. Ethiopia is among the ten countries of Africa with the highest maternal mortality (Kebbede 185). The UN Millennium Project states that “The differences in reproductive health between the rich and the poor are larger than in any other area of health care” (“UN Millennium Development Goals”). Ana Langer from *The Lancet* states that “What is undeniable is that problems in sexual and reproductive health are still a high priority for developing countries... Insufficient international support from donors is often attributed to the incapacity of the sexual and reproductive health community” (1553). Such a staggering difference between these two statistics certainly gives cause to reexamine the way women’s reproductive health is being handled in developing countries.

According to the International Conference on Population Development (ICPD),

“Reproductive health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capacity to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for the regulation of fertility which are not against the law, and the right of access to appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant” (Grown et al. 5-6).

Reproductive health is not only necessary for survival but it is also a human right. Yet, reproductive health conditions are the leading cause of death and illness in women of childbearing age worldwide.

In order to combat this issue of poor or lack of reproductive health for women across the globe, the International Conference on Population and Development convened in 1994 to put the issues of sexual and reproductive health and rights at the center of the international agenda (Langer 1552). At this conference, 179 countries agreed that “meeting the needs for education and health, including reproductive health, is a prerequisite for sustainable development over the longer term”. Established during this conference was the Programme of Action, which set concrete goals focused on ensuring universal access to reproductive health care by the year 2015. Included in the goal of attaining universal access to reproductive health care was achievement of universal access to family planning, assisted childbirth and prevention of sexually transmitted infections (STIs), including HIV/AIDS (“UNFPA: United Nations Population Fund”). The significance of the issues surrounding poor reproductive rights and the need to improve women’s poor reproductive rights or lack thereof became clear through the ICPD. At the March 2005 World Summit, the fundamental role of sexual and reproductive rights was affirmed at its highest level by former UN Secretary General Kofi Annan (Langer 1552).

The Global Gag Rule, reinstated by President George W. Bush, may have been created to positively impact women’s reproductive health by reducing the number of worldwide abortions yet has failed to do so and has contrarily had significantly harmful effects on the women living in developing countries. It has clearly impeded on the

progress of the ICPD in trying to attain universal reproductive health care by limiting the information health clinic personnel may receive, limiting contraceptives by cutting off funding and donations, and limiting the amount of reproductive health information that women may receive when foreign NGOs oppose the policy.

According to the Center for Reproductive Rights, the Global Gag Rule “restricts foreign non-governmental organizations (NGOs) that receive USAID family planning funds from using their own, non-U.S. funds to provide legal abortion services, lobby their own governments for abortion law reform, or even provide accurate medical counseling or referrals regarding abortion (“The Bush Global Gag Rule”). According to the policy’s terms, foreign NGOs who abide by the policy’s terms may not inform women ahead of time of the risks that she subjects herself to pre-abortion. But the presidential memorandum does state that any of the restrictions imposed by this policy does not limit these foreign non-governmental organizations from treating illnesses and injuries that were caused by abortions, whether were legally or illegally performed. Basically, if a woman walks into a clinic bleeding excessively from a self-performed abortion or an abortion performed by a back street abortionist, which is a person without medical knowledge, training, or sterile medical instruments, the clinic’s medical personnel, under the Global Gag Rule, may treat her for the bleeding or any other post-abortion complications but are not able to warn her of the risks of the abortion beforehand.

Although this policy was aimed at reducing the number of worldwide abortions, it seems to have done quite the opposite. From the beginning, the intentions of this policy have been to cut the number of abortions worldwide by making it less accessible to women. According to Jessica Arons and Shira Saperstein, by making abortions less

accessible, they have the potential to disappear (“The Right Way to Reduce Abortion”). Therefore, through implementing the Global Gag Rule, which reinstates an anti-abortion attitude, the belief is that women will cease to consider abortion as an option. But it isn’t as easy as it sounds. By cutting off vital funding to these foreign non-governmental organizations that work to help women in underdeveloped countries, the policy is not only compromising the quality of reproductive health care provided to these women but it has also been responsible for the deaths of more than 70,000 who have had unsafe abortions done and for the millions more who have been temporarily and permanently disabled (Hassini). Ethiopia is a country in which the harming effects of this policy can be seen.

The Global Gag Rule has a detrimental effect on Ethiopian women from both sides of the policy. When non-governmental organizations choose to accept the terms of the policy, which state that they will not provide any information or advice about abortion options or promote abortion in any way, they continue to receive funding and assistance from USAID. But how important is the continuation of U.S. funding if the organizations, through complying with this policy’s terms, imposes on the quality of health care that the health professional can provide? How important is pushing a religiously charged policy if it is not contributing to the welfare of those living in developing countries? Through this policy, the quality of women’s reproductive health care is compromised, and as a result, women are experiencing life-threatening conditions and difficulties.

Ethiopia is a prime example of a developing country that has seen nothing but damaging effects on reproductive health care as a result of the implementation of the

Global Gag Rule. Ethiopia's two main family planning organizations, the Family Guidance Association of Ethiopia (or FGAE) and Marie Stopes International Ethiopia (MSIE), have experienced many difficulties in serving the Ethiopian population in the area of reproductive health care due to the Global Gag Rule. By refusing to abide by the Global Gag Rule's terms in early 2002, FGAE has lost 35% of its budget, while MSIE has lost 10% of its budget (Turnball and Bogecho 1). A large reduction in these two organizations' budget has contributed to the loss of donated contraceptive supplies and technical support from the U.S. Agency for International Development or USAID.

The loss of donated contraceptive supplies has had a harsh impact on the contraceptive shortage in Ethiopia. Non-governmental organizations that do not sign the Global Gag Rule also lose access to U.S. donated contraceptives, including condoms. Modern contraceptives are fundamental to enabling women and men to prevent unwanted pregnancy, protect themselves from HIV/AIDS, and avoid unsafe abortion – a leading cause of maternal injury, illness, and death in the developing world (“Country in Focus: Ethiopia” 1). According to an Ethiopia Case Study from 2005, the Global Gag rule has “worsened Ethiopia's contraceptive shortages by preventing U.S. contraceptive supplies from reaching two prominent family planning providers,” FGAE and MSIE. A Demographic Health Survey (DHS) showed that from the 80% of Ethiopian women who are aware of contraception, a scarce 8.1% actually use it (Turnball and Bogecho 4). According to Girma Kebede, as stated by the 2000 Demographic and Health Survey, only 8% of Ethiopian women between that ages of 15 and 44 years had access to contraceptive supplies. The Survey predicted that contraceptive use would have jumped to a staggering 44% had family planning services been available (Kebede 184-5).

The Global Gag Rule has aggravated the contraceptive shortage in Ethiopia and its distribution to men and women throughout the country. The loss of donated contraceptive supplies by the United States has critically worsened an effort by major family planning services, FGAE and MSIE, to deal with the rapidly increasing demand for contraceptive supplies in the country. The pre-existing contraceptive supply shortage has been significantly impacted by primary family planning organizations lack of U.S. donated supplies and funding (Turnball and Bogecho 4).

In a country that has the highest maternal mortality rate in the world of 1,800 per 100,000 deliveries and where HIV/AIDS is a crisis especially among women and youth, contraceptives are essential to preventing such problems in women's health. The Country Director of an Ethiopian NGO states, "We are experiencing a national crisis in contraceptives here. The Global Gag Rule has come at the wrong time." (Turnball and Bogecho 4). The Family Guidance Association of Ethiopia, a major family planning organization in Ethiopia, previously held "condom corners" in its clinics, where boxes full of free condoms were made available to the public and were refilled on a regular basis. After the reinstatement of the Global Gag Rule, FGAE clinics were no longer able to provide free condoms to the population. Instead, those who were in need of condoms needed to sign up for them in advance in order to ensure that they were set aside for them when the condoms arrived. In addition to this "condom waiting list," condoms were no longer given for free, costing 50 cents for six condoms after the implementation of the Global Gag Rule (Turnball and Bogecho 6). Now, 50 cents may not sound like an expensive price, but taking into consideration the status of this developing country and taking into consideration the fact that the population prior to the implementation of the

Global Gag Rule was able to receive condoms for free, it is suggested by the executive director of a family planning organization that many people are discouraged by the new procedures necessary to obtain condoms (Turnball and Bogecho 6). This lack of contraceptive supplies due to inadequate funding is not only concentrated in Ethiopia. In fact, according to the Countdown 2015 magazine “If ALL the available condoms in Africa were evenly distributed, every man would receive only three or four per year” (Vogel and Landry 45). In a country where HIV/AIDS is a concern and where the maternal mortality rate is the highest in the world due to unsafe abortions, the presence of contraceptives is a significant factor in reducing the spread of HIV/AIDS, reducing maternal mortality rates, and reducing the number of unsafe abortions that occur

The lack funding and donation of contraceptive supplies has then led to an increase in unwanted or unplanned pregnancies, maternal mortality, and the spread of HIV/AIDS. The spread of HIV/AIDS can also be easily reduced by the presence of contraceptive supplies, which are lacking due to the Global Gag Rule. The Global Gag Rule adversely impacts HIV/AIDS prevention efforts through its erosion of family planning programs. The same family planning providers who lose funding due to the global gag rule are on the front line in the fight against the spread of HIV/AIDS. These providers have integrated their traditional family planning services with HIV/AIDS prevention efforts, recognizing both as essential components of reproductive health care (Turnball and Bogecho 7). The number of AIDS infections in Ethiopia is so overwhelming that it almost seems unreal. In Ethiopia, one out of every eleven people between the ages of 15 and 49 years has HIV, which is an increase from one in thirty one people in 1993. In urbanized areas, one out of every six adults is infected with HIV, an

increase from one in thirty one adults in 1990 (Kebbede 195). According to Girma Kebbede, Ethiopia has the third largest HIV-positive population in the world, with more than 700 people dying each day from AIDS (195). With such a crucial HIV/AIDS impact on Ethiopia and with family planning providers being a primary source of contraceptive supplies, including barrier methods of birth control such as the male and female condom which are key to preventing sexually transmitted HIV, the loss of funding from rejecting the Global Gag Rule will have serious consequences on women and men of developing countries, not to mention an impact on the spread of HIV/AIDS. These same family planning clinics serve as “one-stop” centers where women are able to access contraception, pre- and post-natal care, and management of STIs, among a variety of other services (Rosenfield and Min 84). The presence of contraceptive supplies would contribute greatly in reducing the number of HIV/AIDS cases in Ethiopia.

In Ethiopia, the high incidence of illegal, unsafe abortion is a leading cause of maternal deaths, accounting for 54% of maternal deaths (Kebbede 185). The presence of contraceptive supplies could very easily reduce the number of illegal abortions performed, therefore reducing the number of maternal deaths. The presence of contraceptive supplies, which the U.S. could be donating had it not been for the policy, could very easily reduce the number of illegal abortions performed, therefore reducing the number of maternal deaths. Nearly 70,000 women die each year due to abortion complications, with millions of women suffering injuries and permanent disabilities. World Health Organization states that almost 20 million unsafe abortions occur annually almost all in developing countries.

According to Girma Kebede, family planning programs have been imperative in the reduction of unmet needs by making contraception, such as condoms, financially affordable and physically accessible (100). The large lack of contraceptives and other reproductive health services for young women and the absence of safe abortion services has contributed highly to the astounding number of maternal deaths. Because abortion is illegal in Ethiopia, many young women with unplanned pregnancies are forced to seek abortions performed under dangerous life-threatening conditions by an untrained medical professional with non-sterile instruments in unhygienic environments (Kebede 185). According to the WHO, “more Ethiopian women die in hospitals from illegal abortion complications than for almost any other medical reason’ except tuberculosis. It is estimated that seven in ten women who are brought to the hospital suffering from serious problems after back street abortions die” (Kebede 185).

Another important aspect of reproductive health care that the Global Gag Rule has affected has been training of NGO staff for reproductive health clinics. Through refusing to abide by the policy’s terms, foreign non-governmental organizations also lose out on U.S. technical assistance. Once making the choice not to abide by the policy’s terms, both the Family Guidance Association of Ethiopia (FGAE) and the Marie Stopes International Ethiopia (MSIE) lost U.S. high-quality technical assistance which includes training for NGO staff. The loss of U.S. technical assistance has reduced the effectiveness of FGAE’s and MSIE’s service delivery and prevented them from keeping up to date on the latest developments in the field of reproductive health (Turnbull and Bogecho 5) In a country such as Ethiopia where the government spends only \$1.68 per person annually on health care, and where 47% of the population currently has no access to health care, the loss of

U.S. training for those working in reproductive health clinics is extremely detrimental (“Country in Focus: Ethiopia” 1).

Unfortunately, these are the grim consequences of the Global Gag Rule. This is the cost of our “American imperialism” on women living in developing countries. During this process of globalization or “American imperialism” as Kaplan calls it, the United States imposes our Western ways on those less competitive regions, in this case developing countries, and it having consequences. When we impose our Western ways on a developing country, such as Ethiopia, that is not fit to adapt those ways, it has consequences, severe & damaging consequences on the population. Regardless of what foreign non-governmental organizations decide to make of the Global Gag Rule, the United States will exercise control over less powerful countries in an “imperialistic” manner in order to spread its “western ways of doing things” (Kaplan).

The Global Gag Rule, which embodies this “western way of doing things,” propagates a conservative anti-abortion approach on reproductive health care, and has in turn had damaging effects on women of developing countries. Our Western way of doing things includes the freedom to make choices, the freedom of speech, and the accessibility to meet our many needs. In our Western country, in our Western way of doing things, we like to base what we do on the principles of life, liberty and the pursuit of happiness, three principles upon which our country was built on.

So why does the Global Gag rule, put into effect by the United States, not take into mind these same principles? This policy destroys lives – the lives of mothers & babies due to pregnancy complications and unsafe abortions and the lives of men & women due to the spread of HIV/AIDS. This policy puts a ‘gag’ on liberty and freedom

of speech. This policy is far from one that promotes the pursuit of happiness. Where did these principles go? These principles were never present in this policy, neither were they taken into consideration during the making of it. An initial interpretation of the Global Gag Rule may have brought about the impression that the Global Gag Rule is great in aiming to reduce worldwide abortions and saving lives. But in taking an extra minute to reexamine this policy, it is clear to see that lives are not being saved. In fact, lives are being shattered through our “Western way of doing things.”

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## ***Pale Fire: Art as a Mirror/Fragment of Reality***

**By: Roxana Bartolomé**

Gracing human history with reflections of and on life, art has long offered a faithful companionship to the human experience. However, despite its lasting presence, the worth of art's contribution to humanity has been a subject of frequent debate- the founder of Western philosophical thought, Plato (428-327 B.C.E.), standing prominently as one of art's most vehement critics. Notably, in Book X of the Republic, Plato scrutinizes the nature of aesthetics, maintaining that art, in restricting reality to fit the framework of an individual's artistic vision, is tainted dangerously by deception. According to this premise, Plato argues that contemplating the world through the artist's lens of perception further alienates people from their daily realities, already illusory under the compromising terms of the human sensory experience. With the subsequent of Western philosophy being a footnote to Plato, (as observed by the contemporary philosopher Alfred North Whitehead), many of Plato's judgments have been forcefully contested throughout history, and perhaps none more effectively than the value of art's contribution to the deepening of humankind's understanding of the earthly experience.

An especially provocative voice, prying deep into the question of art's worth, is offered by Vladimir Nabokov (1899-1977). Internationally celebrated as a twentieth century virtuoso of prose, Nabokov employs his art as a tool to advocate the transcendent quality of the artistic creation. Written along this strain of thought, Nabokov's 1962 novel, *Pale Fire*, reveals the highly personal and immortal nature of art and as such, elevates art as the inextinguishable flame "above and behind" (316) Plato's allegorical

prisoners of Earth's den, suggesting that art sheds light and casts shadows on the path of life. According to Nabokov's vision, blinded by art is only he/she who looks away before reading into the implications of the presented perspective with a scrupulous eye.

Following this approach, art's careful observer may hope to internalize the candor of the pale fire inherent in artistic creations and thus illuminate the path along which life's journey unfolds. However, rather than providing a direct vantage on reality, Nabokov believes that "art at its greatest is fantastically deceitful and complex" (*Playboy* 40).

Accordingly, *Pale Fire* provides a vast labyrinth of mirrors that distort reality to reflect the contorted lenses of perception through which the characters comprehend their life stories. It is the task of the reader then to glean from the undulating contours of the narrative instances of meaning that may be integrated into one's personal understanding of life.

A novel of intricate design consisting of a foreword, a poem, variant verses, a commentary and an index, *Pale Fire* presents two divergent fictions (both guised as commentaries on "reality") carved upon an elaborate backdrop of shifting details. However, despite its multiple components, the heart of the novel can be easily identified as "Pale Fire," the 999-line poem carefully crafted into four cantos of heroic couplets by the archetypal American academic poet, John Shade. Autobiographical in content, "Pale Fire," establishes the preeminent theme in Nabokov's novel, namely, the desire to translate the abstruse terms of the world's truths into a personal pattern of meaning. The resonating rumble of this artistic endeavor is magnified (not without a strong pang of irony) in the *apparatus criticus* affixed to the poem by Charles Kinbote, Shade's neighbor and fellow university professor who, upon the poet's sudden death, becomes his

self-appointed editor and critic. Disillusioned upon discovering that “Pale Fire” does not offer a recognizable reflection of his vision of reality, Kinbote uses Shade’s poem as a template upon which he superimposes his own artistic speculations on life, entertaining an alter ego as King Charles the Beloved- the dethroned king of the exotic kingdom of Zembla. Juxtaposing the two protagonists’ artistic attempts to establish an empowered existence, *Pale Fire* vividly illustrates the idea that even individuals who partake in the same physical reality may in fact inhabit mental universes as foreign to one another as the “distant Northern land” of Zembla lies in relation to America.

In consequence of the vertigo and disorientation inevitably felt when juggling between contending “realities,” the reader seeks a sense of narrative direction within the text. At such a juncture, Shade’s poem tends to be accorded precedence over Kinbote’s narrative, the latter having lost credibility early in the foreword due to indications of Kinbote’s overtly manipulative and controlling manner, in claims that “for better or worse, it is the commentator who has the last word” (29). According to Maurice Courtier, professor of English and American Literature at the University of Nice, in contrast to Kinbote’s dubious commentary,

[Shade’s] poem does not seem, at first, to raise any problem in terms of narrative reliability... We blissfully absorb its lexical and specular virtuosity, we sympathize with the tortured parents who are painfully aware of their daughter’s absence of a love life, with their grief after she commits suicide. As we do so, we

totally overlook Kinbote's pretensions, realizing that we are here in the presence of a highly sincere and sensitive man. (57)

Thus, Shade's composed and structured thoughts recollected in the rhyming couplets of "Pale Fire," entice the reader to contemplate reality through his artistic lens of perception and, in turn, to discard Kinbote's narrative which seems "to twist and banter an ambiguous *apparatus criticus* into the monstrous semblance of a novel" that details the contextually irrelevant exile of the Zemblen king (86).

Nabokov, in contrast, by absenting his authorial voice throughout the course of *Pale Fire*, steers free of legitimizing one narrative "reality" over the other. Instead, Nabokov intends to give free reign to the artistic expressions of the characters in the text as well as to the consequent impressions of the reader.

Given this lack of physical presence and, hence, his apparent disinterest in controlling the narrative, Nabokov's stance with regard to art and the art of living is not explicitly expressed within the novel, making it relevant to analyze *Pale Fire* within the larger context of the postmodernist convention to which it appertains. Representing a radical shift from the traditional constructs of thought --ranging from Plato's classical philosophy to modernism-- that seek to establish an explanatory cohesion of experience, postmodernism endorses a fragmented multiperspectival "reality," referred to as Nietzschean Perspectivism after its namesake, Friedrich Nietzsche (1844-1900). Thus, in postmodernist thought, reality may be legitimately described in infinite ways on the

account that there does not exist a sole objective universal truth that pertains to “reality”. Inherent to this premise is the idea that the “truths” through which we attempt to describe the world are of a personal nature and as such, highly subjective- a concept echoed by Nabokov in a published interview:

Reality is a subjective affair... You can get nearer and nearer, so to speak, to reality; but you can never get near enough because reality is an infinite succession of steps, levels of perception, false bottoms, and hence unquenchable and unattainable. (*Strong Opinions*, 10-11)

The unconventional structure of *Pale Fire*, coupled with the discordant actualities recounted by its two narrators, is highly suggestive of the postmodernist fragmentation of reality. According to this aesthetic vision, reality represents a discontinuity isolated from any overriding directional pull that would bestow a sense of hidden meaning upon its dynamic. Despite evidence supporting this nihilistic view, the protagonists in Nabokov’s *Pale Fire* are enticed to synthesize a narrative structure upon their lives as a means to review the “coincidences, patterns, recurrences, and foreshadowings [that] seem to be reliable evidence of methodical, deliberate planning on the part of nature and fate” (Maddox 1). Nabokov’s novel thus takes shape according to the conjecture on the part of its protagonists that only in retrospect may one hope to discern the intricate weave of the design that presumably reigns over human fate. In canto 3 of “Pale Fire,” Shade describes his vision of this “contrapuntal theme” of human existence as:

Just this: not text, but texture; not the dream  
But topsy-turvical coincidence,  
Not flimsy nonsense, but a web of sense.  
Yes! It sufficed that I in life could find  
Some kind of link-and-bobolink, some kind  
Of correlated pattern in the game,  
Plexed artistry, and something of the same  
Pleasure in it as they who played it found. (63)

It is clear that Shade, like many Nabokovian characters, according to Lucy Maddox, believes that by “imposing a narrative structure on the chaos of [his] experience will give the past a semblance of a carefully constructed novel and make the intentional pattern of plot become clear” (3). However, unlike Shade, Nabokov does not seek to establish a grand narrative through his work, claiming: “One of the functions of all my novels is to prove that the novel in general does not exist” (*Strong Opinions* 115). Thus, in *Pale Fire*, by making evident the gaps existent within, as well as between, the narrative perspectives of Shade and Kinbote, Nabokov suggests the nonexistence of a singular unifying truth underling life or its artistic forms of expression.

However, the same conditions of art’s subjectivity that equate it with semblance and deception, simultaneously serve to validate art as a rhetorical construct capable of providing the metaphorical stepping stones needed for the creation of a personal path towards pleasure. A vivid depiction of this empowering quality of art is found in

Kinbote's extravagant commentary on "Pale Fire," containing the "special rich streak of magical madness" (296-297) absent from Shade's "eminently Appalachian" (296) narrative. According to Maddox, Kinbote's resultant "Zembla fantasy allows [him] to bypass ordinary social restraints and give free expression to a swarm of intense private and social feelings" (24), while simultaneously, "the formal strategies of... [Kinbote's] romance... provide a way of translating [his] personal conflicts into the archetypal" (27). The resultant metamorphosis of his personal plight into an illusory universal language restructures Kinbote's moral base, allowing him to affirm love for himself through his alter ego, King Charles the Beloved. As Priscilla Meyer notes, such an instance of "Lepidopteral metamorphosis... is one of Nabokov's metaphors for what really happens when art is passed through the lens of artistic imagination" (7). In fact, the power of Kinbote's artistic vision:

[Induces] the reader to disregard the referential value of Kinbote's commentary and to privilege its imaginary and poetic value on a par with the poem which, at first, it simply seemed to caricature. (Courtier 60)

Thus, by translating Shade's "autobiographical, eminently Appalachian, rather old-fashioned narrative in a neo-Popian prosaic style" (296) into the language and symbols of his own experience, Kinbote transcends the role as Shade's literary critic, becoming an artist in his own right. Kinbote's literal enthronement as the writer and commentator "who has the last word" calls to mind an utterance on the part of Shade that has now risen to a prophetic stature:

One should not apply [madness] to a person who deliberately peels off a drab and unhappy past and replaces it with a brilliant invention. That's merely turning a new leaf with the left hand. (238)

To this end, the entirety of *Pale Fire* seems to apply, ultimately harmonizing the two narratives of its dichotomous protagonists as distinct, yet valid paths towards a sense of self-actualization. For although Kinbote may be more easily classifiable as one who through a sense of tragic optimism redrafts the facts of his life to reinvent himself-- "transforming the world, taking it in and taking it apart, re-combining its elements in the very process of storing them up as so to produce at some unspecified date an organic miracle" (27)-- Shade likewise, explores "his own life stuff" (296) from a new angle. In the opening stanza of his poem, Shade shadows death in hopes of gaining a retrospective vantage on his life:

I was the shadow of the waxwing slain  
By the false azure in the windowpane;  
I was the smudge of ashen fluff- and I  
Lived on, flew on, in the reflected sky.  
And from the inside too, I'd duplicate  
Myself, my lamp, an apple on a plate:  
Uncurtaining the night, I'd let dark glass  
Hang all the furniture above the grass,

And how delightful when a fall of snow  
Covered my glimpse of lawn and reached up so  
As to make bed and chair exactly stand  
Upon that snow, on that crystal land! (33)

As Brian Boyd explains, “in his imagination, Shade becomes both the smudge of ashen fluff, the bird’s corpse on the ground, and its spirit soaring into the blue reflected world” (440). Thus Shade, (although less conspicuously than Kinbote), adopts an alter-ego to retrace the course of his life with the intention of identifying an intricately woven “web of sense” (63) that would allow to replace painful memories with the meaningful explanations offered by the illusion of a “fantastically planned, / richly rhymed life” (68). However, while Nabokov’s characters believe “that imposing a narrative structure on the chaos of their experience will give the past a semblance of a carefully constructed novel and make the intentional pattern of plot become clear” (Maddox 3), they are blind to the truths revealed in Nabokov’s juxtaposition of Shade’s and Kinbote’s seemingly irreconcilable artistic and temperamental identities. This idea is exemplified in the eerie correlation between Shade’s “crystal land” (33) and Zembla, whose etymology Kinbote explains: “the name Zembla is a corruption not of the Russian *zymlya*, but of Semberland, a land of reflections, of ‘resemblers’” (265).

In becoming aware of such “periodic acts of reconciliation,” as referred to by Nietzsche, that occur between opposing forces of Shade’s Apollonian detached and rational objectivity with Kinbote’s Dionysian passion and vividly manifested subjectivity,

the reader is offered a cohesive vision of the often unnoticed complementarity and intermingling of divergent artistic approaches. Thus, “in sustaining this metaphor-like double perspective” (Maddox 31) in *Pale Fire*, Nabokov rejects the existence of a sole world-revealing perspective, establishing instead the idea of reciprocity in art and life. In light of this vision, it seems plausible that Nabokov, “in creating his artists, expresses both his anti-selves and himself,” as Lawrence L. Lee suggests (136). Priscilla Meyer develops this idea one step further, contending that in *Pale Fire*, Nabokov “parodies the personal nature of his angle of vision as Kinbote’s insane political tendentiousness and Shade’s limited purview” (6). It becomes evident that in harmonizing the discordant elements of his own fragmented personality within the intricate weave of *Pale Fire*, the novel surpasses the notions of madness that it initially conjures. Nabokov’s capacity to induce such a metamorphosis of thought through the development of his plot evokes the transcendent quality of art.

In *Pale Fire*, the characters come to appreciate, through their artistic endeavors, the physical manifestations of art’s transcendence. Shade, for instance, suddenly self-conscious of the author’s manipulative control over “reality” as it is projected through art, writes in the fourth canto of “Pale Fire”:

The pen stops in mid-air, then swoops to bar  
A cancelled sunset or restore a star,  
And thus it physically guides the phrase  
Toward the faint daylight through the inky maze. (64)

Perplexed by the power of his poetic hand, dexterous enough to metaphorically rearrange the constellation upon his horizon, Shade goes on to say:

...I feel I understand  
Existence, or at least a minute part  
Of my existence, only through my art,  
In terms of combinational delight;  
And if my private universe scans right,  
So does the verse of galaxies divine  
Which I suspect is in iambic line. (69)

Through his writing, Shade has discovered a tool with which he can unhinge and reconstruct reality within his particular framework of perception, mastering his earlier stated efforts “to translate into one’s private tongue a public fate” (41).

However, despite his rational and objective sensibility, in declaring his poetry as his *only* means to ascribe order to his universe, Shade has closed himself to the possibility of acquiring variant perspectives on life to be discovered through the infinite permutations of artful living. Crippled by the limited scope of his lens of perception, Shade is oblivious to the lurking danger that ultimately costs him his life:

As I am reasonably sure that I  
Shall wake at six tomorrow, on July

The twenty-second, nineteen fifty-nine,  
And that day will probably be fine. (69)

The poem's consistent rhyme and meter clearly delineating its flow, give Shade a false feeling of control over the unraveling narrative of his life. Upon his death however, the last uncompleted couplet points to the painfully foretelling idea of "*Man's life as commentary to abstruse/ Unfinished poem*" (67).

As if to heed this notion, Kinbote's commentary on Shade's poem all but provides annotations of true referential value, allowing for the reader's personal speculations on Shade's life and death to color the poem's landscape. However, towards the end of his sprawling annotations, Kinbote reveals his true motives behind his self-referential commentary to "Pale Fire" that fails to provide useful information about the poet: "My commentary to this poem... represents an attempt to sort out those echoes and wavelets of fire, and pale and phosphorescent hints, and all the many subliminal debts to me" (297). Crestfallen by the poet's apparent neglect to provide a refuge for Zembla's royal fugitive, a theme "burning in [Kinbote's] brain" (80), Kinbote deconstructs the poem only to piece it back together in his commentary, where the omnipresence of his Zemblen theme completely disfigures Shade's "Pale Fire." Through this exploit, Maddox observes:

[Kinbote arrives] at the exhilarating but disorienting conclusion that personal identity can be rejected like an unpopular king, and that replacing it is only a

matter of discovering the alternative self that is hidden away somewhere in anonymity, fully formed, waiting to be found, named, and empowered. The identity of the self, in other words, does not have to be created gradually through accretion; instead, it can be discovered-- in a flash-- in the text of a newspaper, or someone else's poem. (22)

Through the realization that art offers to possibility of adopting a plethora of perspectives, Kinbote has discovered a vehicle for transcendence:

I shall continue to exist. I may assume other disguises, other forms but I shall try to exist. I may turn up yet, on another campus, as an old, happy, healthy, heterosexual Russian, a writer in exile, sans fame, sans future, sans audience, sans anything but his art.... Oh, I may do many things! History permitting, I may sail back to my recovered kingdom, and with a great sob greet the gray coastline and the gleam of a roof in the rain. (300-301)

Kinbote's acceptance of a pluralistic perspective in embracing con-artistry permits him, like a phoenix, to "live on... in the reflected sky" (33) and thus, breeds immortality in its truest sense.

Enlightened by the vision of the world-changing power of art in its many manifestations, the reader is encouraged to sift through the grains of knowledge instilled in Nabokov's work in search of that rare desert sand to be handpicked and blown into the

substance capable of reflecting personal truths. However, Nabokov knows, the piece of glass created will be but a fragment of the mirror mosaics of our lives.

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# **Health Care in Need of a Cure**

**By: Catherine English**

The United States is the only nation amongst the world's developed nations to have no form of socialized medicine other than its Medicare and Medicaid programs. Simply defined, socialized medicine is a government-regulated system for providing healthcare for all by means of subsidies derived from taxation. The U.S. medical insurance model is mostly privatized and is paid for in different ways. As it stands, our healthcare system is predominantly a for-profit model controlled by bureaucrats and business people. Consequently, the cost of healthcare in the U.S. is astronomical and many are not covered by any type of health insurance. The U.S. healthcare system must be revamped into a cost-effective system that provides high quality care to the entire population.

According to recent Census estimates, nearly 16% of the U.S. population (46.6 million) are uninsured. While most agree that the U.S. has the best healthcare and medical technology available in the world, a large segment of our population lacks affordable access to that care. A recent study done by The Kaiser Family Foundation, a private, [non-profit](#), think-tank that focuses on the major health care issues, shows that the average yearly cost of the most popular types of insurance plans offered by employers hit \$11,765 this year, with the average employee paying \$3,226 of that total. However, while average premiums have risen 87% since 2000, workers' earnings have only risen 20% (Appleby).

Taking a further look back in time, since 1960, the price tag of healthcare in the U.S. has risen a shocking 4000% (WHO). This fact proves that most U.S. citizens are

willing and able to pay for first-rate health care. However, it also helps feed the monstrous problem. The combination of ignorance, apathy, lack of creativity, and power brokers who fight to maintain a fat bottom line, and laziness create a hostile, muddy environment where change seems nearly impossible. Those who understand this issue and push to see it addressed are like those hoping to fly to the moon fueled by nothing more than their passion and good intentions. Conversely, those with the power to change it are often those who also profit from it. Consequently there is little incentive to do so.

U.S. citizens pay more than twice what any other developed nation pays for healthcare. However, the World Health Organization (WHO) ranks U.S. citizens at 37 overall in life expectancy; a very poor return for one's money (WHO). Most Americans are unaware of this fact and the vast majority have no idea of the world view of healthcare. As much as sweeping changes are needed, making them is fraught with heavy hitting opponents, controversial ethical issues, and confusion. Simple fear, fueled by ignorance and exploited by the industry's power brokers appears to be the major reason that healthcare reform is at a standstill. It's easier to face the devil you know rather than the one you don't and easier still to put one's head in the sand.

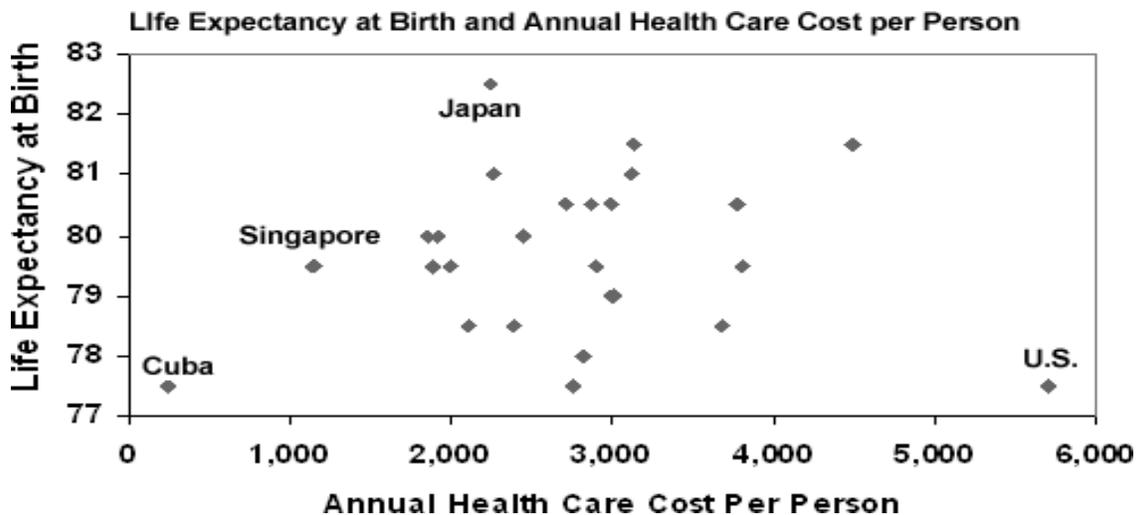
Mr. and Ms. Middle Class have been led to believe that if the system is changed it will become more expensive while providing fewer benefits. They fear their taxes will increase while quality of care decreases and becomes less accessible. Although they are correct that taxes would likely increase, they don't look deeply enough to understand that the taxpayer would save a whopping amount simply because he no longer funds privatized insurances through out-of-pocket expenses. We could realistically continue spending more than any other nation and support the best healthcare in the world with the

outstanding services continuing to research and development and pay significantly less than what we now spend.

It is ironic to note that while we in the U.S. hold high the banner of human rights, most of us are unaware of the U.N. Universal Declaration of Human Rights. Article 25 in this Declaration states, “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing, and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age, or other lack of livelihood in circumstances beyond his control.” It also states, “Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock shall enjoy the same social protection” (WHO). Our actions clearly demonstrate that we do not support this ideal. It appears that in the United States, access to healthcare is a privilege while in the rest of the developed world it is a birthright.

Table 1 below clearly shows the disparity between the nations. The U.S. stands far apart in the money it shells out for healthcare at \$5,711/person/year (15.2% of its GDP). At the other end of the spectrum is Cuba who spends a mere \$251/person/year (7.8% of its GDP), and yet Cuba has a nearly identical life expectancy as the U.S. (WHO). Twenty-five countries spend less than half of what we spend and yet have a greater life expectancy than we do.

**Table 1**



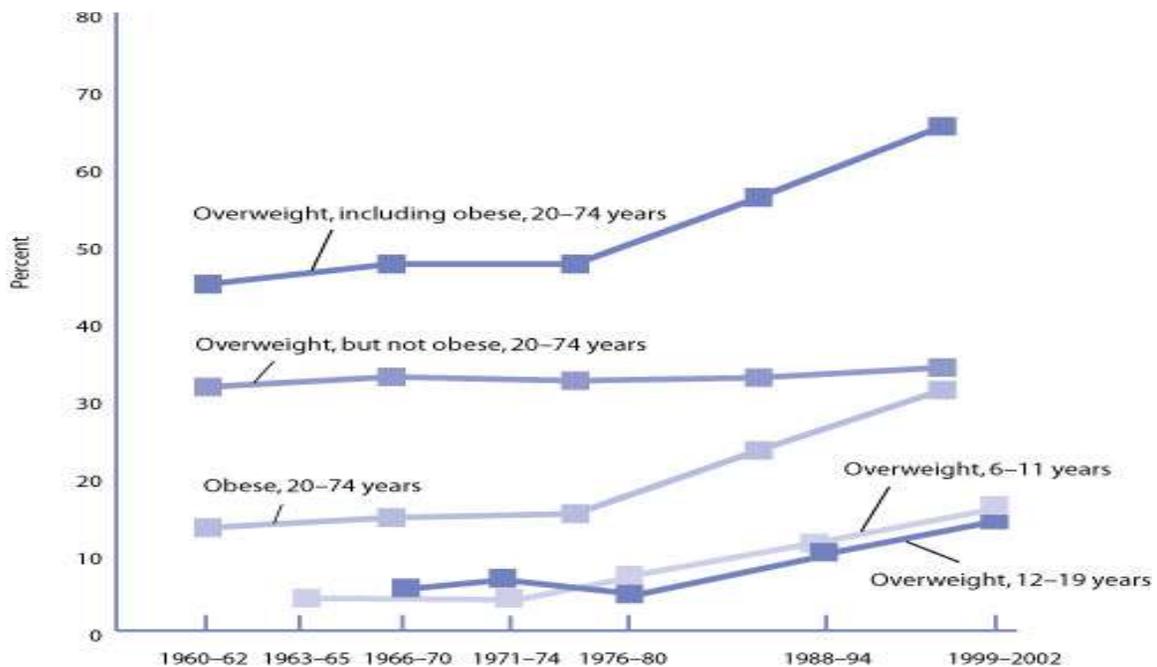
### Longevity and Obesity

In fairness, longevity must be examined in proper context as it is a complex issue. Social and environmental concerns such as violent crime and pollution impact it. However, the problem of obesity has been incontrovertibly proven to impact longevity and needs to be mentioned. The disparity of obesity levels between the rest of the world and the U.S. is perhaps the most important factor impacting longevity. The U.S. has the highest obesity rate in the world, closely followed by Canada. We are infamous for our unhealthy lifestyle and obesity. As a society, we don't exercise. We smoke, eat our Big Macs, drink to excess, work too hard, and get too little sleep. This cavalier lifestyle is not conducive to longevity. It is conducive to serious health problems such as high blood pressure, cancers, high-risk pregnancies, diabetes, and heart disease. According to the National Institute for Health (NIH), nearly one-third of adults over 20 years old are obese, with a Body Mass Index (BMI) greater than or equal to 30, and less than one-half

adults are at a healthy weight, that is BMI 18.5-24 [The terms overweight (BMI  $\geq 25$ ) and obese (BMI  $> 30$ ) should not be confused as they are not the same when evaluating BMI].

The table below simply and clearly illustrates the fact that our national weight gain has steadily increased over the years among both genders, all ages, all racial/ethnic groups, all educational levels, and all smoking levels. From 1960 to 2002, the prevalence of overweight increased from 44.8 to 65.2% in U.S. adults age 20 to 74. The prevalence of obesity during this same time period more than doubled among adults age 20 to 74 from 13.3 to 30.5%, with most of this rise occurring in the past 20 years. From 1988 to 2002, the prevalence of extreme obesity increased from 2.9 to 4.9%, up from 0.8% in 1960 (NIH).

**Table 2**



Being overweight is not simply a matter of aesthetics. The growing girth of Americans is a major health catastrophe. Numerous studies have definitively proven that

obesity has a direct effect on mortality rates. Those who are obese have a 10-50% increased risk of death from all causes compared to healthy weight individuals.

Overweight people are three times more likely to have coronary artery disease, two to six times more likely to develop high blood pressure, more than three times as likely to develop type-2 diabetes, and twice as likely to develop gallstones than normal weight people. Obesity, however, is more serious, causing an estimated 50 to 100% increase in premature deaths (estimated to be 300,000 deaths per year) (Besharov).

Obesity not only increases mortality, it also adds astronomical cost to medical expenditures. A recent study done by the Committee on Agriculture, Nutrition and Forestry estimated annual medical spending due to overweight and obesity to be as much as \$92.6 billion in 2002 dollars—9.1% of U.S. health expenditures (NIH). From a world-view perspective, it seems strange that obesity in the U.S. is found predominantly amongst the poor. Today, as many as 70% of low-income adults are overweight, about 10% more than the non-poor. Adolescents from low-income families are twice as likely to be overweight (16% vs. 8%). Racial disparities are even greater. Almost 80% of African-American women are overweight---a third more than white women. Even more serious, about 50% of African-American women are obese---two thirds more than white women (Besharov). Those at the highest risk for becoming severely ill due an unhealthy diet and sedentary lifestyle are also those most unlikely to receive adequate healthcare in the U.S.

## The United States—An Anomaly

In today's world, the U.S. is an anomaly in its handling of its healthcare system. Although the majority of our population is covered by insurance, we still have significantly more uninsured than any other developed nation. Although most Americans have little understanding of other models of healthcare, an overwhelming 80% of respondents to a USA Today poll claimed dissatisfaction with the total tab the nation spends on it. That cost is estimated to hit \$2.2 trillion, or \$7,129 a person, this year. (The survey, based on a national sample of 1,201 adults, has a margin of error of plus or minus 3 percentage points.) "The current era of shifting costs to workers has hurt working people but has not had much impact on healthcare costs," says Drew Altman, president of the Kaiser Family Foundation, "but the American people have little appetite for slowing the spread of new medical technology, which is the biggest driver behind rising health care costs" (Appleby).

It's interesting to note that most of the respondents surveyed (56%) said they prefer a universal system. However, support for changes to the system dropped to about one-third or less when respondents were asked if they would support universal coverage if it included restrictions on the doctors or treatments they could have or if it cost them more than they're now paying in taxes or premiums (USA Today). And this is where the rub is. Asking that question suggests that this is exactly what would happen if the U.S. were to switch to universal coverage. However, there is little evidence to support such a notion. Although many other nations with socialized medicine models have laws restricting the doctor/patient ratio and require queuing, there is little evidence that the amount paid for universal coverage would necessarily increase.

The problem is pervasive and not easily addressed. To U.S. citizens, personal autonomy and freedom of choice are inherent rights and most of us fear socialism in any form. Rising prices for medical services, particularly hospital prices, growing labor costs, research and development, and waste and inefficiency all add to the problem of exponential spending on healthcare. Robert LeBow, MD, author of Health Care Meltdown, sees greed as one of the strongest opponents to reform. He states, “By delaying or averting a comprehensive solution, the healthcare entrepreneurs prolong the time they are able to reap profits from the system.” Dr. LeBow complains that “... they keep profits for themselves and their shareholders while my patients, and millions more like them are forced to become ‘healthcare beggars’ or ‘go without’” (LeBow).

On the other side of the fence is the fact that although socialized medicine is vastly cheaper than what we have in the U.S., it is fraught with serious problems. Socialized medicine statistically seems to do well on all fronts. However, the cliché is that “socialized medicine works very well for the healthy.” The uncertainty of receiving the benefits one is entitled to in a timely manner can be frightening to those who are seriously ill. Most socialized medicine models involve waiting in a queue. This includes waiting for serious, life-saving services. Additionally, there are laws protecting the system at the expense of the individual. For example, Canada mandates that “if the Canadian government says it provides a particular medical service, it is illegal for a Canadian citizen to pay for and obtain that service privately. At the same time, the Canadian government bureaucracy rations medical services” (Krugman). This is the antithesis of freedom of choice and would feel un-American and repulsive to most Americans.

Limited availability of medical personnel, services, and facilities under the socialized medicine model, coupled with the issue of being forced to wait in a queue can be life-threatening. Explaining the results of a survey of hospital administrators in Australia, New Zealand, Great Britain, the United States, and Canada, researcher, Robert Blendon, and colleagues explain that 50% of the Canadian hospital administrators said the average waiting time for a 65-year-old man requiring a routine hip replacement was more than six months. Not one American hospital administrator reported waiting periods that long. Eighty-six percent of American hospital administrators said the average waiting time was shorter than three weeks; only 3% of Canadian hospital administrators said their patients had this brief a wait" (Krugman).

Sally Pipes, a Canadian who runs the U.S.-based Pacific Research Institute and who is the author of a book on the Canadian system says that "Between 1993 and 2003, [in Canada] the median waiting time for referral by a general practitioner to treatment increased by 90%, from 9.3 weeks to 17.7 weeks, according to an annual survey of physicians by the Vancouver-based Fraser Institute. For cancer patients, the waiting time for medical oncology more than doubled from 2.5 weeks to 6.1 weeks, and the waiting time for radiation oncology increased from 5.3 weeks to 8.1 weeks making Canadians' fears of waiting in a queue justifiable" (Krugman).

Canadians say that patients pay nothing for services. I've heard this personally from every one of my Canadian friends. In reality, however, 22% of all of Canada's tax revenues go to pay for Canada's health care system (Fund). That's a high price for citizens to spend for services they can't be sure they'll get in a timely fashion *if* they live long enough to get them. And this price tag doesn't include out of pocket expenses

citizens must make for pharmaceuticals. Every citizen I spoke to said that he fears getting a life-threatening illness with their current healthcare system.

From the latest statistics (1999) from the Organization for Economic Co-operation and Development (OECD) "Health Data" (table 3), it appears that Japan has the best healthcare and highest longevity in the world. The ratio of Japan's medical expenditure to GDP is ranked 18th among 29 OECD member nations, which is lower than the middle level. The ratio to GDP is only representing the relative size of the spending to the nation's economic scale. According to "Per capita medical expenditure," which indicates the medical expense for each citizen, Japan is ranked the 6th among 29 nations. Considering the extremely high medical expenditure in the U.S. and Switzerland, Japan's standard is still at a high level among OECD nations even if it is 6<sup>th</sup>. Furthermore, Japan's total medical expenditure is about \$310,000m, only 30% of what the U.S. pays, and is ranked the 2nd among OECD nations. This amount is 1.5 times greater than Germany's, which is ranked 3<sup>rd</sup>, 2.2 times of France's, and 3.6 times of the U.K.'s (Table 3).

Total health spending accounted for 15.3% of GDP in the United States in 2004, the highest share in the OECD and more than six percentage points higher than the average of 8.9% in all OECD countries. By comparison, Switzerland and Germany allocated 11.6% and 10.9% of their GDP to health, respectively, and France 10.5%. The United States also ranks far ahead of other OECD countries in terms of total health spending per capita, with spending of \$6,100 (USD; adjusted for purchasing power parity). This is more than twice the OECD *average* of \$2,550 (USD) in 2004. Luxembourg comes after with spending of just over \$5,000 (USD) per capita, followed

by Switzerland and Norway with spending of around \$4,000 (USD) per capita.

Differences in health spending across countries may reflect differences in price, volume and quality of medical goods and services consumed (OECD) (Table 3).

The public sector (taxation) is the main source of health funding in all OECD countries, except for the United States and Mexico. In the United States, only 45% of health spending is funded by government revenues, well below the average (73%) in the other OECD countries. The public share of total health spending remains the lowest among OECD countries. On the other hand, private insurance accounts for 37% of total health spending in the United States, by far the largest share among OECD countries. Beside the United States, Canada, France and the Netherlands also have a relatively large share of health spending paid by private insurance (more than 12%) (Table 4).

Despite the relatively high level of health expenditure in the United States, there are fewer physicians per capita than in most other OECD countries. In 2004, the United States had 2.4 practicing physicians per 1000 population, below the OECD average of 3.0. There were 7.9 nurses per 1000 population in the United States in 2002, which is slightly lower than the average of 8.3 across OECD countries. The number of acute care hospital beds in the United States in 2004 was 2.8 per 1000 population, also lower than the OECD average of 4.1 beds per 1000 population. As in most OECD countries, the number of hospital beds per capita has fallen over the past twenty-five years, from 4.4 beds per 1000 population in 1980 to 2.8 in 2004. This decline coincides with a reduction in average length of stays in hospitals and an increase in day-surgery patient (Table 5) (OECD).

**Table 3**

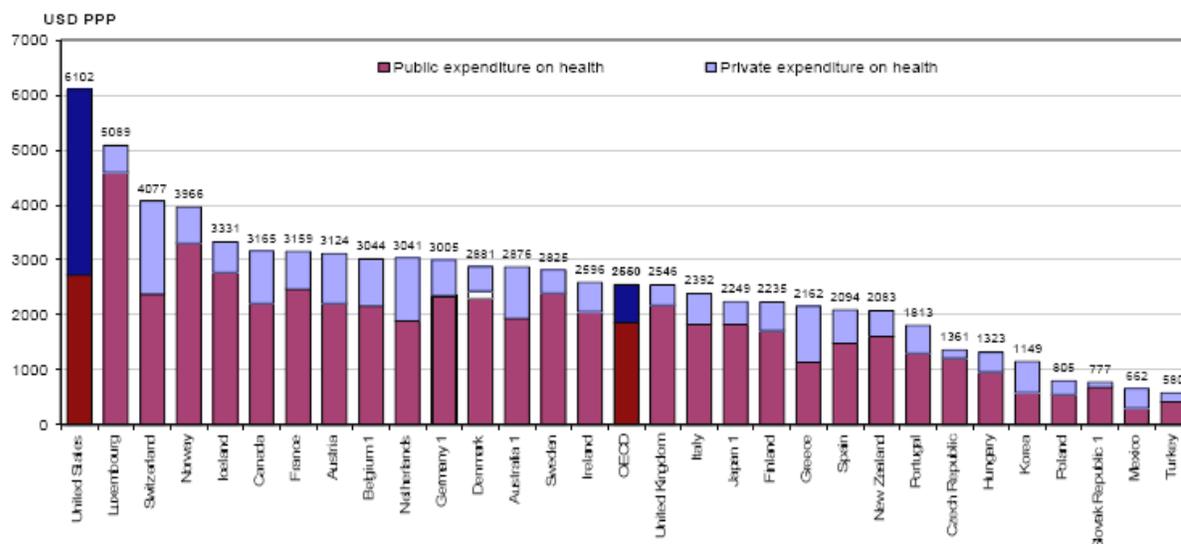
	Total medical expenditures (\$1 million)		Ratio of total medical expenditures to GDP (%)		Per capita medical expenditures (\$)	
U.S.	1,095,100	1	14.0	1	4,090	1
Japan	309,407	2	7.3	18	2,453	6
Germany	219,942	3	10.4	2	2,677	3
France	137,564	4	9.9	4	2,348	8
Italy	87,084	5	7.6	13	1,515	17
U.K.	85,738	6	6.7	24	1,457	18
Canada	55,533	7	9.3	5	1,837	13
Spain	39,450	8	7.4	16	994	21
Australia	33,609	9	8.3	8	1,818	14
Netherlands	30,821	10	8.5	7	1,975	12
Switzerland	25,655	11	10.2	3	3,584	2
Sweden	19,685	12	8.6	6	2,225	9
Mexico	18,987	13	4.7	27	193	27
South Korea	18,844	14	4.0	28	410	24
Belgium	18,493	15	7.6	13	1,816	15
Austria	16,256	16	7.9	11	2,003	11
Denmark	12,610	17	7.7	12	2,391	7
Norway	11,544	18	7.4	16	2,472	5
Finland	8,571	19	7.3	18	1,668	16
Greece	8,442	20	7.1	20	803	23
Portugal	8,020	21	8.2	9	807	22
Poland	7,165	22	5.3	26	185	28
Turkey (Note)	6,878	23	3.8	29	110	29
New Zealand	4,973	24	7.6	13	1,352	19
Ireland	4,848	25	7.0	22	1,324	20
Czech	3,724	26	7.0	22	361	25
Hungary	2,966	27	6.5	25	291	26
Luxembourg	1,098	28	7.1	20	2,609	4
Iceland	599	29	8.0	10	2,217	10

Source: OECD "Health Data '98"

Note: The data used for Turkey is of 1996. The numerals on the right side of each column indicates the ranking among 29 OECD member nations.

**Table 4**

**Health expenditure per capita, public and private expenditure, OECD countries, 2004**



1. 2003. Source: OECD Health Data 2006, June 2006.

Data are expressed in US dollars adjusted for purchasing power parities (PPPs), which provide a means of comparing spending between countries on a common base. PPPs are the rates of currency conversion that equalise the cost of a given 'basket' of goods and services in different countries.

**Table 5**

	Total number of hospital beds (1996)	Number of hospital beds per 1,000 people (1996)	Number of nurses per hospital bed (1995)	Ratio of inpatient expenditure in the total medical expenditures (1995)	Average length of stay in hospital (days) (1996)	Inpatient days per person (1995)	Number of doctor visits as outpatient (times/year) (1995)
Japan	1,660,784 (1997)	13.2 (1997)	0.4 (1997)	29.4	33.5	4.1	15.8
U.S.	1,097,700	4.1	1.6 (1992)	42.6	7.8	1.1	6.0
U.K.	264,520	4.5	1.7 (1992)	42.2	9.8	1.7	5.9
Germany	783,631	9.6	0.6	34.6	14.3	3.0	6.4
France	508,075	8.7	0.4	44.4	11.2	2.6	6.3 (1993)
Italy	344,840	6.0	0.8	47.0	9.8	1.6	11.0 (1988)
Canada	154,000	5.1	0.8 (1991)	45.3	12.0	1.9	6.8 (1993)
Sweden	49,468	5.6	1.0 (1992)	—	7.5	1.4	3.0
South Korea	209,303	4.6	0.5	33.7	13.0	0.8	9.5

Source: "Survey of Medical Care Institutions - Hospital Reports" is used for "Total number of hospital beds", "Number of hospital beds per 1,000 people", "Number of nurses per hospital bed", and "Average length of stay in hospital" in Japan. Other data and the data for foreign countries are based on "OECD Health Data 98".

Notes: 1. Beds in clinics are not included in the total number of hospital beds in Japan.  
2. "Number of nurses per hospital bed" is for the acute care hospital beds.

Changing the way healthcare insurance is handled in the U.S. is daunting for many reasons. Perhaps the main reason the issues are not effectively addressed is simply because medicine is big business in the U.S. At the forefront is the power of pharmaceutical companies. In 2004, the United States was the top spender on pharmaceuticals, followed by France (OECD). Although many politicians claim that they see and want to address the problem, many of them are funded by pharmaceutical lobbyists.



According to USA Today, “Since 1998, drug companies have spent \$758m on lobbying — more than any other industry, according to government records analyzed by the watchdog group, The Center for Public Integrity,. In Washington, the industry has 1,274 lobbyists — more than two for every member of Congress.” They go on to state, “Over the years those lobbyists have been very successful, demonstrating that the industry knows politics as well as it knows chemistry. Drug companies won coverage for prescription drugs under Medicare in 2003 while blocking the government from negotiating prices downward. They have so far kept out imports of cheaper medicines from Canada and other countries. And they have protected a system that uses company fees to speed the drug-approval process” (Drinkard). It appears that the fox is guarding the hen house.

In the U.S., the healthcare question is perhaps the biggest and most complicated question of the day. Fixing the problem means coming face-to-face with the “damned if you do/damned if you don’t” scenario. Because medicine is so closely tied to our GDP,

quick and drastic changes would have disastrous consequences on our economy. And yet, it is a complicated problem that will continue to grow in its present state. The past few years have seen the quality of our healthcare decrease due to businesses' love affair with the "bottom line." The compassionate, human aspect of healthcare has been subtracted from the equation for the sake of profit. Those with the influence and authority to make effective changes are the very ones who are empowered by and profit from what must be changed.

Clearly, the problem is huge and is complicated by many factors. However, it must be effectively addressed. Simply put, I propose that we deal with the healthcare issue in the same way we deal with funding the public school system. Allow the government to create its own healthcare insurance coverage and create a tax to fund it as we do for public schools. Just as public schools are funded through property taxes no matter if one has children who use it or not, the government could do the same regarding healthcare and/or also use a lottery and sales tax to generate revenue. Corporations and/or citizens who wish to avail themselves of government healthcare insurance would throw in a mandated amount over and above what they are taxed, perhaps using the commonly used "tier" system. What would likely happen is that private insurance companies would be forced to become competitive. Prices would come down simply because competition would create a true free market. Pharmaceuticals corporations, hospitals, physicians, and services would be forced to fall in line to remain competitive. The GDP would consequently be somewhat protected and true change would still be enacted over a period of time.

Perhaps the better suggestion would be to meld privatization and socialized medicine: Create a government plan that the public can invest in. This would create knowledgeable watchdogs with vested interest. It is a common complaint that the government does a poor job of watch-dogging itself when given de facto power over anything. It is also an undeniable fact that we spend a colossal amount of money on healthcare in the U.S. It is fact that we have more than enough money to spend on such things and are used to spending it. If the sleeping U.S. citizenry roused itself and forced the hands of its lawmakers to make creative changes to the healthcare system, we could easily pay much less for enviable healthcare enabling ourselves to have our proverbial cake and eat it, too.

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# **One Man's Trash is Another Man's Treasure: A Look at Compulsive Hoarding**

**By: Cathy Guptill**

Most of us know at least one person who collects something. When I was a child, my mother had a collection of bells and souvenir teaspoons. My sister has a rather large collection of Longaberger Baskets®. At one time, I had a modest collection of angel figurines. Many people collect items that represent a particular interest. For some collectors, the acquisition of a new item for their collection is a casual affair. Their collection grows sporadically as they receive new pieces as gifts from family and friends. Others are so passionate about their collection that they will go to great lengths to add desired pieces to it. For a select few, however, the need to save and collect relatively useless items is driven by an intense anxiety that urges them to keep items for which they have no need. For example, a person may save every newspaper that comes to his/her door. Moreover, he/she may find it necessary to purchase extra copies of the same edition in case the original is destroyed. This systematic saving of unnecessary items frequently leads to dangerously cluttered living spaces. While these individuals are commonly referred to as “pack-rats,” psychologists classify this final group of collectors as “compulsive hoarders.”

## **Clinical Aspects of Hoarding**

In order to understand compulsive hoarding, it is first necessary to define the driving force behind it, namely anxiety. When a person has a sense that he/she is in some sort of danger, it sets off a chain of reactions in the central nervous system that results in an increase in certain bodily responses. For example, when we perceive something as a threat, such as when we are startled by a sudden loud noise, we experience an increase in

our breathing and heart rate. Additionally, we reflexively tense up our muscles and may also begin to sweat (Comer, 2005). These are all normal physiological responses to the fear generated by the perceived threat, and are collectively referred to as the “fight or flight” response. For some people, however, this sense of danger is felt inappropriately and often interferes with their ability to live their normal lives; they often are diagnosed with anxiety disorders (Comer, 2005).

The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association, 2000) lists several specific anxiety disorders, including generalized anxiety disorder, phobia, and obsessive-compulsive disorder (OCD). OCD is unique in that it is comprised of two separate components that occur together: obsessions and compulsions. An obsession is defined as “a persistent thought, idea, impulse, or image that is experienced repeatedly, feels intrusive, and causes anxiety” (Comer, 2005, p. 120). A compulsion, on the other hand, is “a repetitive and rigid behavior or mental act that a person feels driven to perform in order to prevent or reduce anxiety” (Comer, 2005, p.120). Thus, in OCD, the compulsion is a response to the anxiety that the obsession generates. Another characteristic of OCD is the recognition, on the part of the sufferer, that the obsessions and compulsions experienced are extreme and irrational (APA, 2000).

Research has shown that there are some specific cognitive beliefs common among individuals with OCD (Tolin, Woods, and Abramowitz, 2003). First, they have an inflated sense of responsibility with regard to the things they obsess about. Specifically, they blame themselves if their obsession hinders them from preventing harm or if the obsession itself results in harm. Secondly, they believe that every thought they have is

significant, and therefore, warrants their full attention. Third, they also feel that they have the ability to control all their thoughts, and are, thus, obligated to do so. Obviously, this is an impossible task. The sense of failure felt by OCD patients in this regard only serves to increase their anxiety and obsessive behaviors.

Another cognitive phenomenon which affects OCD patients is an overestimation of perceived threat (Tolin, et al., 2003). For example, individuals with fears of contamination have inflated perceptions of their risk of becoming infected. They also expect that they will experience more severe symptoms should they become ill. Additionally, those with OCD also don't like uncertainty. This generally leads to difficulty in making decisions when clear-cut instructions are absent. As if the aforementioned beliefs weren't challenging enough, OCD sufferers also are plagued by the belief that they must achieve perfection in everything they do. This need for perfection permeates everything in their lives. To make even a minor mistake generates a huge amount of anxiety for them.

Clinically, OCD sufferers often are characterized by their specific "subtype." For example, some individuals with OCD focus on order, others on cleanliness. One "subtype," however, which seems to be distinctly different and perhaps even represents a unique disorder, is compulsive hoarding (Saxena, et al., 2004). Although not specifically listed in the DSM-IV-TR (APA, 2000), hoarding generally is defined as "the acquisition of and failure to discard possessions that are useless or of limited value, resulting in clutter that renders living spaces unusable for their intended purpose and causes significant distress and impairment" (Steketee, Frost, and Kyrios, 2003, p. 463). Compulsive hoarding behavior is evident in an estimated 18%-42% of those diagnosed

with OCD (Saxena, Brody, Maidment, Smith, et al., 2004) and also can be comorbid with depression, schizophrenia, anorexia nervosa, and mental retardation. For about 10%-20% of all patients diagnosed with OCD, compulsive hoarding and saving behavior is their primary OCD symptom (Saxena, et al., 2004).

In addition to the OCD beliefs mentioned previously, those who hoard also possess some cognitive qualities that are unique to them. Research has identified three general areas in which hoarders appear to have additional cognitive deficits: a difficulty processing information as it relates to memory, the tendency to form strong emotional bonds with possessions, and having erroneous beliefs about their possessions (Steketee, et al., 2003).

Compulsive hoarders appear to have a reduced capacity for remembering visual stimuli, a deficiency compounded by additional difficulty making decisions about the worth of items (Steketee, et al., 2003). In a study that tested visual and verbal memory tasks of hoarders vs. non-hoarders, hoarders were found to have a more difficult time recalling visual images than the control group, indicating a diminished ability to encode visual information (Steketee, et al., 2003). Not surprisingly, then, hoarders also report a lack of confidence in their ability to remember important information about objects that are discarded.

Additionally, because of their difficulty determining object value, hoarders often are reluctant to throw items away. Their biggest fear is that the value of an item will be realized after it has been discarded. The mere thought of making such a mistake generates an enormous amount of anxiety. Their solution to this dilemma is to save everything. Moreover, some hoarders struggle with the belief that simply thinking about

an item that has been discarded is proof that it must have been important (Steketee, et al., 2003). Those who hoard also tend to overestimate the amount of anxiety they will feel if a tossed item comes to mind (Frost, Steketee, & Greene, 2003).

Compulsive hoarders further are challenged by the strong emotional attachment they form with their possessions. Hoarders are reluctant to discard items because they feel as though they are throwing a piece of themselves away. Many of the items they save have sentimental value and serve as reminders of events that happened in their lives (Frost, et al., 2003). This emotional attachment to possessions, coupled with their memory impairments, makes it easier to understand the compulsion hoarders have to save items they no longer need or use.

Finally, compulsive hoarders are plagued with erroneous beliefs about their ability to exert control over their belongings (Frost, et al., 2003). This is due, in part, to the exaggerated sense of responsibility they feel regarding their possessions. Hoarders will hold onto objects that they no longer need for the simple fact that they may be of use to someone, and therefore, must be retained. Some even feel that it is their duty to hold on to these items in the event that they encounter someone who could use them.

Compulsive hoarders become extremely upset when someone comes into their home uninvited and throws items away (Boodman, 2000). This is usually done by concerned and well-meaning family and friends who think they are helping the hoarder with his/her problem. In reality, their actions only serve to increase the level of anxiety felt by their loved one. It is important to note that the saving behavior exhibited by compulsive hoarders is aimed at reducing the anxiety they experience when faced with making a decision about an item. Psychiatrist Dr. Lorrin Koran explains it this way: “A

compulsive hoarder never experiences pleasure...He hoards only to reduce anxiety”  
(Levine, 1991).

### Case Studies

To understand the severity of the clutter and the debilitating anxiety that surrounds the compulsive hoarder, it is useful to examine the lives of some who have suffered from the disorder. Perhaps the most famous case of hoarding behavior involves Langley and Homer Collyer, two brothers who lived together in a brownstone located in Manhattan (Levine, 1991). They were regarded by others as eccentric recluses, and spent most of their lives isolated from the outside world. At night, Langley could be seen foraging through the neighborhood trash looking for discarded items that he felt were still useful. His odd behavior attracted the attention of the local community. Eventually, people began to spread rumors indicating that the Collyer brothers had amassed a vast amount of wealth and had it hidden away in their home. Naturally, these rumors generated an intense curiosity and, consequently, Homer and Langley frequently were faced with unwanted intrusions on their privacy. The full extent of the Collyers’ problem with hoarding went undiscovered until 1947, when they were discovered dead inside their home (Penzel, 2006). Along with the bodies of the deceased, police hauled away 136 tons of “stuff,” including 14 grand pianos and the chassis of a model-T Ford (Boodman, 2000). Most of the clutter consisted of newspapers and other paper items that had been carefully arranged in a series of tunnels dotted with booby traps designed to topple on unsuspecting intruders. In fact, Langley met his unfortunate demise when he accidentally triggered one of the traps and was buried alive by the debris (Boodman, 2000).

Although many individuals with compulsive hoarding are socially isolated like the Collyer brothers, others are able to lead essentially normal lives outside of their homes. Consider, for example, a 70-year-old woman named Patricia Edwards (Boodman, 2000). By all appearances, Patricia is a healthy and active senior citizen. She has a circle of friends with whom she meets regularly, is active in her community, and enjoys traveling abroad. She takes pride in looking her best when going out. However, a visit to her home reveals a side of her that is in stark contrast to this image of neatness. Behind her front door is a living room that is nearly jam-packed with “stuff” that, for various reasons, she simply can’t relinquish. There is only a narrow path that leads from the front door to the interior of the house. Patricia’s hoarding problem began when she was a child. During her adult life, her hoarding behavior was kept under control by her non-hoarding husband. When he left her for another woman 25 years prior, her hoarding behavior resumed unchecked and, before long, she had filled her 4 bedroom home with saved items. Patricia sought treatment for her compulsive hoarding behavior several years ago, which consisted of standard OCD therapies. Unfortunately, as is the case for many compulsive hoarders, this treatment approach proved to be unsuccessful in effecting any permanent change in her condition (Boodman, 2000).

### Treatment

Until recently, individuals with compulsive hoarding behavior were treated using a combined approach of drug therapy and cognitive-behavioral techniques (Levine, 1991). Since OCD symptoms may be linked to low levels of the neurotransmitter serotonin, standard drug therapy is generally in the form of a serotonin-specific antidepressant, such as fluoxetine (Comer, 2005). Fluoxetine inhibits the reuptake of

serotonin in the brain, thereby leaving more neurotransmitter available for use in the synapse.

In cognitive-behavioral therapy, patients generally are treated with the technique of exposure and response prevention (ERP) in conjunction with habituation training. In ERP, patients are placed in a situation that generates their unique anxiety response. However, they are not permitted to engage in any of their compulsive rituals to reduce the level of anxiety they are experiencing (Comer, 2005). Cognitive-Behavioral psychologists believe repeated exposure to these anxiety-producing situations, coupled with the lack of the feared consequence, will eventually reduce the severity of the individual's anxiety response.

In addition to ERP, habituation training requires patients to think constantly about their obsessions (Comer, 2005). It is believed that if one is encouraged to dwell on an obsession, the anxiety that it generates will fade with the continued intense focus. In essence, the mind simply becomes fatigued and loses interest in the obsession. When this is achieved, the obsessive thoughts cease, thereby reducing the patient's anxiety.

Each of these types of treatment has proven fairly successful in non-hoarding OCD patients. As mentioned, however, this usually is not the case with compulsive hoarders. Only about 17% of individuals with compulsive hoarding behavior experience a significant reduction in their symptoms with these therapies (Boodman, 2000). As a result, compulsive hoarders have gained the reputation among clinical psychologists as being notoriously difficult to treat. This low success rate in the treatment of compulsive hoarding led Frost, et al., (2003) to experiment with a new treatment approach for this disorder.

In their research, Frost, et al., (2003) utilized a variety of cognitive and behavioral treatment approaches specifically focused on compulsive hoarders. For example, they employed a group therapy approach in conjunction with individual therapy focused on exposure and response techniques. Initially, group therapy sessions were held weekly and lasted two hours each. Following a predetermined schedule, these sessions were gradually spaced farther apart.

The first several group therapy meetings were primarily psychoeducational. Specifically, participants were educated about the nature of their disorder and its affect on their ability to function on a daily basis (Frost, et al., 2003). Group leaders also outlined the goal of the treatment approach to the participants. Additionally, group members were required to complete an assessment that would indicate the severity of their compulsive hoarding symptoms. The specific symptoms assessed included difficulty in making decisions, emotional attachment to possessions, difficulty in ability to discard possessions, level of clutter in the home, and acquisition of new possessions.

Once this foundation was laid, the group therapy sessions began to focus on teaching the members how to make decisions, specifically with regard to organizing their possessions. At each session, members were required to bring a bag of items from home. The therapist would then instruct each person to chose an item from his/her bag and place it on what they called the “Purgatory Table” (Frost, et al., 2003, p. 330). The purpose of this exercise was to allow individuals to express their beliefs about the worth of the item and subsequent anxiety over the potential loss of it. It also provided the therapist an opportunity to observe individuals’ reaction when asked to consider discarding their items. Additionally, other group members were given an opportunity to present the

merits of keeping or discarding the object. At the end of the meeting, each member had the option of either relinquishing the item or taking it back home. This was done in a manner so as not to make individuals feel pressured to let go of an item they felt they needed to keep (Frost, et al., 2003).

Concurrent with the group therapy sessions, each member also was visited by a therapy assistant in his/her home. Initially these visits occurred weekly and lasted for ninety minutes (Frost, et al., 2003). During these visits, the therapy assistant worked with the individual on applying the strategies presented in the group therapy meetings. During the first several of these individual therapy sessions, the decision-making process proved to be both physically and mentally exhausting for many of the patients. Consequently, they were only able to utilize a small fraction of the ninety minutes on organization of the clutter in the patient's home. However, as the treatment progressed, many of the patients were able to focus on and make decisions about their possessions for the entire session. Eventually, the patients were given assignments to work on between sessions. Some even began to take initiative and worked on organizing their items beyond what was required.

Overall, this method of treating individuals with compulsive hoarding behavior proved to be quite successful. Many of the participants began to employ the organizational and decision-making strategies presented in the treatment process. When participants were reassessed upon completion of the study, many showed a reduction in the severity of hoarding symptoms in all areas (Frost, et al., 2003). One of the specific benefits of the group therapy approach to treatment was that it provided much needed social interaction for the participants in a safe and comfortable environment.

Unfortunately, the treatment process Frost et al. (2003) employed typically lasted more than a year and initial progress was painfully slow. It is possible that a significant number of individuals will become frustrated at the lack of progress and the enormous effort required to organize and process the vast amount of clutter in their living spaces. It also is uncertain whether this approach to treatment will enjoy such a high level of success in a wider population. Further, although numerous studies have examined the treatment of non-hoarding OCD, additional studies are needed to determine if alternative talk and/or drug therapies would yield an improved response rate in compulsive hoarding individuals.

### Neurological Research

Recent neurological research provides a possible explanation for the discrepancy in successful treatment between hoarding and non-hoarding OCD patients. Prior to a 2004 study (Saxena, et al.), very little, if any, neurological research had been done comparing the brain scans of compulsive hoarders with non-hoarding OCD individuals. Given the similarity of symptoms between individuals with OCD and compulsive hoarders, many psychologists reasoned that the two conditions had correspondingly similar malfunctions in neurological processing.

Saxena, et al. (2004) compared neurological images of compulsive hoarders with those of non-hoarding OCD individuals and a control group and found significant differences in the neurological brain function among the groups. This ground-breaking study utilized both magnetic resonance imaging (MRI) based-region-of-interest analysis and statistical parametric mapping (SPM). In all, nine bilateral regions of the brain were

chosen a priori based on previous research that indicated an association with symptoms of OCD, depression, and response to treatment.

The combined results of the MRI and SPM scans indicated that patients with compulsive hoarding had significantly *reduced* glucose metabolism in the brain areas associated with decision-making and emotional self-control. Since glucose metabolism is an indication of neurological activity, this finding is consistent with cognitive deficiencies typically exhibited by compulsive hoarders. Further analysis also revealed *increased* glucose metabolism in a specific brain region associated with severity of hoarding behavior. The study found no significant differences between the comparison groups in the areas of the brain related to depression symptoms and no correlation between the severity of hoarding behavior and any of the nine targeted regions-of-interest (Saxena, et al., 2004).

The most significant result of this study was that it revealed several brain regions that differ in glucose metabolism in non-hoarding OCD patients as compared with compulsive hoarders. The significant differences in utilization of glucose in specific regions of the brain suggest a neurobiological distinction between compulsive hoarders and non-hoarding OCD individuals (Saxena, et al., 2004). Prior to this study, it was somewhat of a mystery to psychologists why psychotropic drugs which effectively reduced OCD symptoms had little or no effect on individuals with compulsive hoarding behavior. This study suggests that the poor response to standard OCD drug therapies may be linked to the distinct pattern of glucose metabolism in compulsive hoarders (Saxena, et al., 2004) The results of this study highlight the need to approach treatment

of compulsive hoarding behavior in a manner that addresses the specific neurobiological malfunctions that are unique to this disorder.

### Conclusion

Until recently, compulsive hoarding behavior had been largely ignored by the psychological community. One gets the sense that it generally was considered a nuisance, due in part to the challenge in achieving a successful treatment outcome. It traditionally has been considered a sub-type of OCD because of the common anxiety and compulsive aspects of the disorder. However, given some key clinical differences and the findings of the ground-breaking study by Saxena, et al., (2004), one might argue that there is sufficient evidence to warrant a change in the classification of this disorder.

Biologically, compulsive hoarders exhibit a unique pattern of brain functioning significantly different from that of non-hoarding OCD individuals. Additionally, whereas OCD is equally common among men and women (DSM-IV, 1994), the research by Saxena, et al., (2004) indicated the possibility of a higher incidence of compulsive hoarding behavior in older women. Furthermore, individuals with OCD often recognize that their obsessions and compulsions are excessive and are thus, more likely to seek treatment. In contrast, most compulsive hoarders do not view their saving behavior as unusual. Consequently, they rarely seek help from a therapist.

Given these significant differences between individuals with OCD and compulsive hoarders, it seems reasonable to question the appropriateness of conceptualizing compulsive hoarding behavior as a sub-type of OCD. Further research exploring both the cognitive aspects of compulsive hoarding and the treatment of this disorder is needed to determine whether it should be classified as a separate and distinct

anxiety disorder. More research also is needed to determine whether alternative drug therapies would increase the rate of successfully treating individuals with compulsive hoarding. Additionally, further investigations are needed to determine whether significant gender and age differences exist regarding the prevalence of this disorder. Finally, studies that focus on whether individuals may have cognitive mindsets that predispose them to developing compulsive hoarding behavior would be prudent.

When the medical field was in its infancy, the focus of practitioners was primarily on treating patients after they had become ill. Over time, this focus shifted to investigating the root causes of disease in an effort to identify ways of preventing the onset of certain illnesses. Similarly, the discipline of psychology has traditionally focused on treating clients once they developed a mental illness. Perhaps, the psychological community needs to shift its focus from merely treating individuals who are currently manifesting symptoms of a mental disorder to investigating methods that will identify individuals that have a predisposition towards developing a mental illness. Given that symptoms of compulsive hoarding generally manifest by adolescence, (Boodman, 2000) it is possible that, once identified, these individuals could receive preventative treatment that would deter the onset of this disorder. It has been estimated that the costs associated with treatment, lost wages, and lost productivity due to anxiety disorders amount to a staggering \$42 million per year in the United States alone (Comer, 2005). In light of these statistics, it is clear that the benefits of promoting the prevention of mental illness would have an enormously positive impact on society as a whole.

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# **The Unborn Person**

**By: Ryan Catala**

## The Unborn Person

People are, by nature, inquisitive. The most important questions that we can ask affect all aspects of an individual's life. What is the purpose of life? What is truth? These inquiries are the basis of philosophy. In ethics, philosophers rationally work through questions, like these, applying the answers to moral dilemmas. The answers lead to suggestions on what we should and should not do. In this paper, I will use various ethical and philosophical approaches to answer the following philosophical question: When does human life begin? After supporting my claim that human life begins at the point of brain activity, I will refute the application of potentiality to issues involving life and fetal development. Lastly, I will apply these answers to the current dilemma surrounding stem cell research.

Everyone seems to have answers to philosophical questions. However, in answering these questions, many people erroneously resort to religious authority, cultural habits and traditions, or personal intuitions, to substantiate their claims. The proper way to justify an assertion in philosophy is with arguments. In essence, philosophers wish to give well-argued answers to fundamental questions. This is the only way to derive rationally acceptable conclusions.

In theory, a philosopher should be able to answer a profound question in a way that all other rational people can understand. The following illustration will explain this concept. If you were to ask an uneducated person what the square root of eighty-one is,

most likely, they would be unable to give you the correct answer. In addition, if the person were to dispute your claim that nine is, in fact, the square root of eighty-one, you would find it nearly impossible to explain it, rationally. Understanding square roots requires understanding of other quantitative reasoning skills, including exponents and multiplication. If you taught this person addition, multiplication and exponents, it would be possible to support your claim that nine is the square root of 81. Approaching foundational questions requires a similar approach. The application of related facts, theories, and concepts make it possible to support a thesis for what the necessary elements for human life are.

An understanding of when a fetus becomes a human person would solve a plethora of dilemmas. Unfortunately, there is currently no legal definition for human life. Once we determine this point in time, we can conclude when the fetus has access to the inalienable rights granted to all humans. In America, these rights are granted through application of the Constitution (14<sup>th</sup> Amendment). This paper will serve as a foundation for a legal definition of when human life begins. Before addressing the implications of this definition, a definitive answer must be given for the following question: what are the necessary and sufficient conditions for an entity to be considered a human life?

The legal definition of death is based on an understanding of an important organ. An ad hoc committee at Harvard University created in 1968, set out to determine criteria for a person being dead. They concluded that death occurs when a person's brain has lost all detectable function and activity (MacKinnon 133). This has become the legal and accepted definition of death; labeled, total brain death. It is not necessary for the brain to function completely, or even correctly. Someone in a Partial Vegetative State, or PVS, is

still alive. These people have lost most function in their brains, with the exception of the brain stem. The brain stem works to perform basic functions of life, including breathing, heart rate maintenance and swallowing (Mackinnon 134). People in this condition cannot move or speak. However bleak a life in this condition may be, it is still a human life. At this point, we know that every human must have a working brain, at least.

I propose that human life should begin at the presence of detectable brain waves. This occurs between the sixth and eighth week of development (Mackinnon 161). The emission of detectable brain waves is evidence to the brain's function and more importantly, the fetus' humanity. The benefit to using brain function as the defining point of humanity is the non-arbitrary manner it rests on. If death is the absence of brain activity, then perhaps, life should begin at the presence of brain activity. Because the legal definition of death references brain function, the definition of human life should reference brain function, as well. This symmetry gives the argument strength. Therefore, for legal purposes, human life should be defined by brain activity.

To defend the assertion that human life begins with brain activity, I will adapt concepts from the noted philosopher, Aristotle (384-322 BC). Aristotle's Four Causes theory, as explained in his work entitled "Physics," helps support this thesis. It is important to realize that there are differences between my account and the accounts of this philosopher. Certain components of his work are not reflected in my application. For example, Aristotle's Four Causes are not tangible components, as I describe them. Rather, they are aspects of the soul. To maintain relevance and credibility, this aspect is omitted. However, it must be noted that explanations, illustrated through the Four Causes theory, help to support brain activity as the defining point of humanity.

Analysis of Aristotle's Four Causes theory helps us answer our fundamental question. In it, he proposed that all things, including humans, must satisfy four criteria in order to come into existence. Individually, these causes are labeled the formal, efficient, material and final causes. The formal cause of something is its essence (Aristotle 28). If we were to apply this theory to a house, the blueprints and floor plans would make up the formal cause. Before a house can come into being, designs must be drawn up. The material cause is comprised of tangible elements that are needed in order for something to come into existence (Aristotle 28). Keeping with the house example, the material cause is composed of bricks, wood and nails, among other things. The efficient cause is the force that brings the formal and material causes into realization (Aristotle 29). A blueprint or picture of a house is not yet a house. Neither is a pile of brick, for that matter. Builders must follow the blueprint plans to turn bricks and wood into walls, floors, and eventually, create a home. The builders represent the efficient cause because they enable house's creation. The final cause is the object's purpose (Aristotle 28). For a house, the final cause could be for living in or selling. (The final cause component of Aristotle's theory has been rejected by modern science and for the purposes of this paper will be disregarded.) Using this theory to describe the coming to be of a human life is helpful because when brain waves are present humans satisfy all three of the accepted components of existence, the formal, efficient, and material causes.

A person's formal cause is their DNA. DNA is the essence of humanity. It lays the plans for our individual bodies. During the Genome Project, scientists undertook the responsibility of mapping human genes. We have learned that all individual human beings have a unique DNA code. There is, however, a human element to all human DNA.

All people have 46 chromosomes. These chromosomes, found in the nucleus of every cell in the body, are found in pairs, making 23 sets. Within these chromosomes are specific combinations of four proteins: thymine, adenine, cytosine and guanine. These arrangements, known as genes, are responsible for the construction of every element of human life. They make up the genes responsible for height, hair color, ear size and shape. Japanese scientists have even found a gene, labeled CYP2A6, which is believed to be responsible for heavy smoking (Japan para.1). Each gene contains the blueprint for a person's construction. Therefore, a person must have DNA before it can become a human.

The human satisfaction of Aristotle's material cause is more complex. A human body is composed of organ systems. These organ systems are a collection of organs. The organs are made from tissues and tissues are made from cells. This trend continues until you reach the chromosomes of DNA. As observed above, DNA is comprised of four essential proteins, thymine, adenine, cytosine and guanine. The fact that these four proteins are the building blocks for every component of human life makes them the true material cause. However, just as metal must be molded into nails before they are useful in the construction of a house, these proteins must materialize into organ systems before they truly satisfy the criteria. For example, the nervous system, which controls voluntary and involuntary movement, contains the brain, nerves, and the spinal cord. This system mandates breathing, circulation and other vital functions. These organs, along with others, work to maintain life. Therefore, the functionality of the organs, specifically the brain, is a vital component to human life.

Stem cells turn the codes in our DNA into the organs of the body. Therefore, stem cells are the “builders” of the body, or the efficient cause. These special cells serve a single purpose; develop into other types of cells. Although they cannot perform specific functions, they develop into the cells that can. During cell division, stem cells undergo the process of specialization and becoming any cell within the body, including blood cells, muscle cells or even neuron cells. Naturally, they serve as a repair system for body. For example, if a blood cell dies it can be replaced by a stem cell that turns into a blood cell. Specific internal and external signals cause different results in stem cell differentiation. For example, internally, DNA instructions can dictate for a group of stem cell to become a heart muscle, during fetal development. External chemical reactions from neighboring cells can change stem cells to bone tissue, repairing a broken bone. Stems cells turn DNA blueprints into organs and bodily systems, making them the necessary efficient cause of humanity.

Now that we have the elements of human life organized, it is possible to rationally support brain activity as the originating point of humanity. Humans need DNA. At the moment of conception, a zygote is formed that contains a unique genetic code. The father and mother each contribute twenty-three chromosomes, combining to create a unique genetic code (MacKinnon 161). However, conception cannot be the definitive point of humanity because the zygote still lacks other vital criteria for human life. DNA satisfies the formal cause criteria, but at conception, the zygote is still deficient of the material and efficient causes. In week two of development, the embryo is embedded in the uterine wall (MacKinnon 161). At this point, the embryo has access to all the necessary nutrients needed for the developmental process. However, it still is deficient of the material causes

of human life, namely viable organs. During the next few weeks, the vital organ systems, such as the brain, spinal cord and heart are developed, while the embryo starts to develop arms and legs (MacKinnon 161). At this point, the embryo satisfies all three accepted components of Aristotle's theory.

Allowing this to be the defining point of humanity is debatable, but for the purposes of law and reason, a more specific limit must be in place. It would be nearly impossible to enforce an arbitrary point, in between two and eight weeks. Instead, the defining moment comes between the sixth and eighth weeks, when the brain emits detectable brain waves (Mackinnon 161). When an embryo emits brain waves, it should be declared human. It has a unique DNA code, therefore satisfying the equivalent of the formal cause. It has proteins that create and maintain working organs, which would fulfill the material cause. The stem cells, present from 3-5 days into development, serve as the efficient cause, translating codes into viable organs. Using this philosophical theory, we can support a fetus being considered a human at the presence of brain waves.

Many people will object to this argument, stating that human life begins at conception. Often times, this account is based on the concept of potentiality. This theory states that all entities that have the potential to develop into humans have the moral significance of a fully developed human (MacKinnon 171). Personally, I agree with this statement, but the application of this premise is often erroneous. All entities that have the potential to be human should be treated as such, but a fertilized egg should not have the same legal standing as a fully developed human. This single-celled entity has the potential to develop into a human, but it has many critical hurdles to overcome. A person in law school cannot practice law and a high school student does not have a diploma.

This newly formed cell has the potential to develop into a human being, but it is not human.

To clarify this account, I have tailored a unique concept, called active potentiality. Something is considered to have active potential when it has all the necessary elements required to sustain development and is reasonably proceeding towards the next stage. In other words, if the entity, theoretically isolated from the rest of the world, can make use of available resources and develop into something else, it has active potential. In order to maintain uniformity, I will use the construction of a house to demonstrate this concept. If a pile of bricks is isolated in a jar and left alone, it will not develop into a house. You would not say that the bricks are “actively” becoming a house. Of course, the bricks have potential to become parts of a house, but they are not currently in the process. However, if those bricks were brought to a construction site, where they were part of a plan being carried out by builders, they would have active potential. They are reasonably on their way to becoming a house. Though the house may not be complete, the components of it (the foundation, walls and doorways) should be given the ethical standing of a complete house.

A fertilized egg does not have active potential. It cannot be considered human because it lacks certain criteria, for example, the material cause. The following thought experiment clearly explains this concept. If you were to isolate a newly formed zygote and place it into a container, it would not develop into a human. Located in the fallopian tube these cells do not have access to external nutrients. They may try to govern their own existence, but they lack the nutrients and energy required to complete fetal development. Therefore, we can conclude that these zygotes do not have active potential.

In contrast, an embryo attached to the uterine wall displays active potentiality. If isolated in a jar, this entity would develop into a human child. Attachment to the uterine wall gives it access to vital nutrients needed for growth, satisfying this concept of active potentiality. Although these embryos do not satisfy the legal definition of life, because they are deficient of brain activity, I suggest that we should not interfere with these entities, because they display active potential.

The “active potential” and “brain waves” accounts lead to an interesting development for stem cell research. The 1998 discovery of how to develop human stem cells from embryos ignited debates that have yet to cease. I will now proceed to outline the facts of stem cell research. Embryos used in stem cell research come from consenting donors in in-vitro fertilization clinics. They are allowed to develop naturally for 3-5 days into a blastocyst (Stem Cell Basics). Using certain laboratory technology, the inner cell mass of the blastocyst is isolated in a dish. The dish is coated with mouse cells and filled with a fluid. The process of cell culture allows the cells to divide and multiply. When this process is repeated, an unlimited number of stem cells can be produced. This process of cell culture and subculture, (using the reproduced cells to create a second batch of cells) can turn 30 stem cells into 30 million stem cells (Stem Cell Basics). As discussed earlier, each of these cells can develop into the many cell types in the body. If the cells survive this process, they are considered a unique stem cell line. Current research is undergoing to determine how stimuli cause differentiation. By changing the fluid in the dish, called the culture medium, the cells can change into certain specialized cells. Other methods of stimulating specialization are altering the dish surface, or inserting specific genes into the stem cells.

Stem cell research is a story of hope and possibilities. The main purpose of stem cell research is to develop cell-based therapies. This theory leads to promising possibilities for the cure of Parkinson's disease. Parkinson's disease results from a lack of dopamine being released in the cells within the brain (Stem Cell Basics). Stem cells can develop into the cells that produce dopamine. Studies of this process, performed on mice, have resulted in increased levels of dopamine production and higher mobility (Stem Cell Basics). Using similar means, a cure for humans with Parkinson's disease could likely develop. Because stem cells can be mass-produced, an innumerable supply of a cure could be developed. Stem cell research needs many years of laboratory research to develop into a viable source for therapeutic uses. The possibilities of stem cell research seem to be endless.

After looking at all the facts, many people still object to stem cell research. Belief that the embryos used in research are human has led to a large group of conservatives fighting to ban the practice. Opponents maintain that life begins at conception, similar to supporters of potentiality. In summation, they believe that God grants life and only He may take it away. Any attempt to end the life of a fetus, embryo, or person is immoral and should be made illegal. However, the philosophical basis for this argument is that the blastocyst used in the research is a human life. In using the new legal definition of life, it becomes clear that the embryos used in stem cell research are not yet human. These blastocysts lack the vital elements for human life; they do not have brains, let alone detectable brain activity. In fact, the embryos used in the research do not even have the active potential to develop brains, because during this stage of development the embryo

has not dropped into the womb or attached to the uterine wall. If the truth about stem cell research is exposed, people can make informed decisions regarding the matter.

Validating “brain waves” as the legal definition of human life would have implications on another hot button issue, abortion. This would permit procedure involving the fetus’ life until the presence of brain waves. Abortions, which are allowed under the Roe v. Wade Supreme Court decision of 1973 (MacKinnon 163), would be limited to fetuses that have no detectable brain activity. People attempting to have abortions would be subject to exams that would search for detectable brain waves. If there are brain waves, any termination of the fetus would be, legally speaking, a murder. However, before this critical point almost two months into development, women would have the option to abort their pregnancies.

These issues have polarized the nation. There are factions on both sides of the political spectrum that feel strongly. This effect seems to parallel another polarizing issue: slavery. During the 1850’s slavery was a sensitive issue. Plantation owners in the south fought to continue the practice, citing financial reasons. Their economy was based on slavery and free labor. They did not want to pay wages to millions of workers that had previously worked without pay. Even after the Civil War Amendments were passed these plantation owners continued to hold that their point was valid. It was only in the past century, when a consensus on the immorality of slavery has occurred. Those southern slave owners failed to recognize the rights of the slaves. However, their ignorance did not negate the government’s duty to pass legislation, protecting the rights of the slaves.

The absence of detectable brain waves has defined death for nearly forty years. We, as rational citizens, can now conclude that human life begins at the presence of these

brain waves. Clearly, certain fetuses are humans, too. For many years, we have disregarded them and seen them as the property of their mothers. However, just like with slavery, we were wrong. Moving forward we must protect the rights of the unborn person, as long as they have detectable brain waves.

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## **Film Noir Then and Now: A Stylistic and Thematic Analysis**

**By: Colleen Chisolm**

Since its inception, shortly after the end of World War II, film noir has remained one of the most debated and diverse topics in cinema; critics and scholars are in constant disagreement over just about every aspect of the genre. Some even suggest that film noir is not an actual genre, in the way that western or gangster films are, but more a style or attitude of filmmaking that spans a great number of genres and a great number of years. While it is hard to pin down exactly what constitutes noir, such films are typically characterized by the use of dramatic, low-key lighting; unusual camera angles and cinematography; and often narrative, voice-over techniques. Although the term itself was invented in retrospect, it is generally accepted that the classic period of film noir ranges from the early 1940s to the late 1950s. Any film made after this time that harks back to traditional noir techniques and themes is labeled neo-noir. Both classic and neo-noir films convey the same themes of hopelessness, anxiety, and alienation. Stylistically, however, the two often differ greatly; neo-noir takes various elements from the classic era and transforms them, developing a new approach to the genre that is all its own.

The film most commonly referred to as the first true noir is John Huston's adaptation of *The Maltese Falcon*, which was released in 1941. Although it does not include narration, which became one of the telling features of noir throughout the years, this film set the precedent for all the noirs that followed it. In his review of the film in the *New York Times*, Bosley Crowther says Huston "worked out his own style, which is brisk and supremely hardboiled... a blend of mind and muscle - plus a slight touch of pathos" (127). While there is certainly no arguing the fact that the film is indeed brisk and hardboiled, perhaps it is too much so. The characters are like cardboard cutouts; each one seeming to represent a stereotype of what would later become typical noir characters. The action of the film is hard to follow and at times barely makes sense. It jumps from one confusing sequence of events to another, following

closely along with antagonist Brigid O'Shaughnessy's lies and deceptions. In one of the final scenes, the protagonist, private investigator Sam Spade, explains his decision to turn Brigid in to the police. This is a climactic moment of the film in which the audience should feel sympathetic to both characters; to Brigid because she will be going to jail and to Spade because he is forced to turn against his supposed lover. Yet the love he speaks of is never shown on screen, at least not to the extent that he seems to allude to. Instead of the usual uncertainty as to whether the fate of the characters was deserved, the audience is left feeling vindicated; the good guy wins and the bad guy, or in this case, as it often is in film noir, the bad girl, gets caught.

It is the images and cinematography that make this film shine as an example of classic noir. From the very beginning, the film is dark and shadowy, filled with visual symbolism. One scene, early on in the film, in which Spade receives a phone call informing him of his partner's murder, consists of nothing more than a close up on the night stand, the camera unmoving, an open window with the curtains blowing in the background being the only source of light. Several scenes later, two detectives come to Spade's apartment to inform him of the murder of Floyd Thursby, the man his partner had been following when he was killed. When they tell Spade how Thursby was killed, the shot is quite similar; the detective sits next to the nightstand, in front of the window, with the curtains still blowing. This is a technique featured quite a few times throughout the film, using the open window and curtains to symbolize the growing dangers faced by Spade and his involvement with Brigid. One of the most obvious examples of visual symbolism comes at the end when "the iron bars of an elevator grille close across [Brigid's] beautiful tear-stained face, foreshadowing the years she is going to spend [in prison]" (Naremore 155). This use of such subtle, symbolic images is one of the trademark techniques of both classic and neo-noir film.

Perhaps an even greater example of classic noir, encompassing all the aspects of the genre perfectly, is *Double Indemnity*, released in 1944. The action of *Double Indemnity* flows much more smoothly and is easier to follow than that of *The Maltese Falcon*. The characters are much more realistic and two sided, constantly being developed throughout the length of the film. The theme of ambiguity is portrayed perfectly in this film; despite the fact that he has committed murder, the audience finds it difficult to condemn the main character, Walter Neff. As the film progresses we realize that Phyllis, the antagonist and a femme fatale in every sense of the term, heavily influenced his actions, whether directly or indirectly. In this way, director Billy Wilder exemplifies the noir style by emphasizing the "doomed and obsessive qualities" of Neff's

relationship with Phyllis, making this film the epitome of the “she kissed him so he would kill” plot device commonly used in classic noir (Silver 94).

One of the images present throughout the film is that of Neff lighting cigars for his friend and coworker, Keyes, who never seems to have matches of his own. There are a number of these moments shown, but its powerful symbolism isn't fully realized until the very last scene of the film, in which Keyes lights the cigarette dangling from an injured Neff's mouth, after he collapses in the hallway of their office trying to make his final escape. The juxtaposition of Neff's narration and the flashback scenes that move the story along “has the great advantage of focusing on the inner schisms and contradictions of a mind in crisis struggling to impose coherence on the chaos of self and society” (Evans 166). This excellent description of the effectiveness of narrative, although specifically referencing *Double Indemnity*, could just as easily describe any noir, classic or otherwise, that uses narration as a way of progressing the story.

One such example is *Taxi Driver*, directed by Martin Scorsese and released in 1976, at a time when film noir had all but vanished from existence. *Taxi Driver* emerged as the perfect blend of classic noir themes with modern day realism. While the visual style of this film respects the typical noir mode, it is the unrelenting deterioration of main character Travis Bickle's sanity as he tries to come to terms with the world around him that truly makes it a film noir. From the very first scene, which is shot over “a hazy, neon New York... the city is presented as a hard, elusive, cold and corrupt enemy” (Silver 283). In many ways, the city itself, full of filth and scum, is the antagonist of the film. Through the narration and the many scenes featuring Travis alone, either in his apartment

or driving through the city in his cab, the audience is made voyeur to Travis' struggle against his disgust with the urban decay he must constantly endure.

Travis is the ultimate noir protagonist, ambiguity and uncertainty evident in every aspect of his personality. At one point during the film, Betsy, a young woman Travis finds himself attracted to, compares him to the song *Pilgrim Chapter 33* by Kris Kristofferson, quoting the lyrics "he's a prophet and a pusher, partly truth, partly fiction. A walking contradiction" (Scorcese). Travis unintentionally sabotages his budding relationship with Betsy when he takes her to a pornographic movie, a scene which reflects just how accurate a description those lyrics really are; he is constantly complaining about the sex and violence throughout the city, and yet he spends a great deal of his time at X-rated theaters. In an attempt to reconcile with Betsy, he sends her several bouquets of flowers, but she returns them all. In one particularly symbolic scene, the camera pans across the floor of Travis' apartment, showing the wilting flowers as the voice-over says, "the smell of the flowers only made me sicker" (Scorcese). A shot later in the film shows Travis burning these flowers in the sink, symbolizing his final detachment from reality, as he readies himself to fight the evil of the city with his own form of violence. In the shots surrounding the infamous "you talking to me?" scene, the film and voice-over replay themselves in a jerky, disorganized manner, representing Travis' fractured and obsessive mind.

*Taxi Driver* reflects the idea that "film noir is to a large degree "antisocial." Even if he has a moral aim, its hero remains ambivalent in the face of Evil" (Borde 29). Meeting Iris, a twelve-year-old prostitute, is what finally pushes Travis over the edge. He tries valiantly to save her from her fate, perhaps, in a way, trying to also save himself

in the process. In a blatantly violent montage of scenes that would never have been allowed in films of the classic era, Travis wreaks vengeance on the men surrounding Iris: her pimp, the manager of the hotel they frequent, and the man with her in the hotel room. He then attempts to shoot himself, with two different guns, but they are both out of bullets. Afterward, the newspapers praise Travis as a hero for attempting to bring justice to the criminals of the city, showing the true equivocal nature of the noir style.

Everything about the film *Fight Club*, released in 1999 by renowned neo-noir director David Fincher, both visually and thematically, epitomizes this design. The main character and protagonist, who is never named but obliquely refers to himself as Jack throughout the film, is the incarnation of the contradictory nature of American society. The film itself is a brazen and shameless commentary on our society, much like the noir films of the past were to their own cultures and times. Jack is enslaved to his corporate office job and the consumerist urges that he can't help but give in to. In the beginning of the film, there is a scene that shows his apartment being filled with all his possessions, one piece of furniture at a time. Next to each item appears the catalog description and price, as Jack's voice-over questions "what kind of dining room set defines me as a person?" (Fincher). This symbolizes his addiction to the materialistic attitude society has created in him. He is unhappy with this life, however, and as a result subconsciously creates an alter-ego, Tyler Durden. Tyler, part antihero and part antagonist, represents everything that Jack wishes he could be: strong, forthright, and free of any and all attachments to the world Jack has been indulging himself in. *Fight Club* explores the duality of human consciousness, but in a different way than most other noir films. One such example of this is found in the character of Marla, and how Jack and Tyler each

react to her; Jack hates her and blames her for many of his problems, while Tyler ends up sleeping with her.

From the title sequence, which is a digitally created succession of shots panning up from the depths of the Jack's brain, to the very last frame of the film, *Fight Club* takes what classic and even early neo-noir films did and runs with it, creating an intense, unique, and often disturbing cinematic experience. The dark and gloomy lighting of the film accurately reflects its mood. The opening scene is an amazing example of modern film noir cinematography, moving so quickly from one location to another the images are nothing more than a blur until the camera stills on a few shots along the way. Another component of the unique symbolism found in this film appears in the form of five single-frame subliminal images of Tyler before the audience is formally introduced to the character. Each appearing at a crucial moment in the progression of his deteriorating psyche, these flashes of Tyler show Jack's struggle with the cynicism he feels towards his life and the fact that he is desperately searching for some kind of escape.

According to Raymond Borde and Etienne Chaumeton, two of the most prominent noir critics, the distinguishing features of film noir are "the moral ambiguity, the criminal violence, and the contradictory complexity of events and motives [which] work together to give the spectator the same feeling of anxiety and insecurity" as is often felt by the characters themselves (13). This is one of the things that draws people to this genre, and why it has not only survived for over six decades but also has been able to evolve with the times. Film noir shows life as it is actually lived, rather than attempting to glorify or romanticize the harsh realities of the world. This honest and unabashed approach to portraying everyday life is refreshing at the same time as being slightly

unnerving. Still, there is something morbidly fascinating about being witness to the destruction and misfortune of others, as long you can remain safe in the knowledge that it is not happening to you. Perhaps it is this inherently voyeuristic element in all of us that make the bleak, doomed themes of film noir so incredibly addictive.

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**Participation Information for  
2007 Beacon Conference for Student Scholars at Two-Year Colleges  
At Rockland Community College  
Suffern, New York  
June 1, 2007**

<b>COLLEGE</b>	<b>SUBMISSIONS</b>	<b>STUDENTS SUBMITTING</b>	<b>READERS</b>	<b>PRESENTERS</b>	<b>POSTERS</b>	<b>MENTORS</b>
BERGEN COMMUNITY COLLEGE	5	5	3	3	0	3
BOROUGH OF MANHATTAN COMMUNITY COLLEGE	3	3	0	1	0	3
DUTCHESS COMMUNITY COLLEGE	18	18	0	4	2	4
ERIE COMMUNITY COLLEGE	4	4	6	2	0	2
La GUARDIA COMMUNITY COLLEGE	2	2	0	0	1	1
LEHIGH-CARBON COMMUNITY COLLEGE	1	1	6	0	0	1
MONTGOMERY COLLEGE	43	39	5	15	4	14
NORTHAMPTON COMMUNITY COLLEGE	12	10	9	3	3	9
NORTHERN VIRGINIA COMMUNITY COLLEGE	3	3	0	2	0	2
PRINCE GEORGE'S COMMUNITY COLLEGE	0	0	1	0	0	0
OCEAN COMMUNITY COLLEGE	3	3	0	0	1	1
ORANGE COUNTY COMMUNITY COLLEGE	0	0	1	0	0	0
READING-AREA COMMUNITY COLLEGE	2	2	0	2	0	1
ROCKLAND COMMUNITY COLLEGE	29	24	16	13	3	8
SULLIVAN COMMUNITY COLLEGE	0	0	1	0	0	0
ULSTER COUNTY COMMUNITY COLLEGE	3	3	3	2	0	2
WESTCHESTER COMMUNITY COLLEGE	12	12	0	4	1	7
<b>TOTAL</b>	<b>140</b>	<b>129</b>	<b>51</b>	<b>51</b>	<b>15</b>	<b>58</b>