BEACON 2005

FRIDAY, JUNE 3rd

12th Annual Beacon Conference

Student Scholars at Two-Year Colleges
Funded by a Coalition of Two-Year Colleges

Montgomery College

Rockville, Maryland

Honors Program

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BEACON 2005

A CONFERENCE FOR STUDENT SCHOLARS AT TWO-YEAR COLLEGES

FRIDAY, JUNE 3rd

The Beacon Conference is an annual conference that recognizes and celebrates the achievements of two-year college students in research, writing, and speaking. 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 read and the top three papers in each category are selected for presentation at the annual conference in June. 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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Ulster County Community College (NY)	Miho Kawai, Michelle Rodden
Westchester Community College (NY)	Elizabeth Gaffney, Mira Sakrajda

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We appreciate the assistance and dedication of those who volunteered their time and energies to the Beacon 2005 Conference:

Anu Ahuja, Beile Amaha, Rony Assefa, Lornelle Blankenship, Oanh Bui, Miriam Carter, Janice Cavin, Ollie Davidson, Kathy Droubi, Helen Friedkin, Gustavo Gilardi, Lynn Griffin, Eyerusalem Hailemeskel, Linda Hankey, Hal Hultman, Carolyn Johnson, Lisa Johnson, Jann Logan, Judy Martinez, Sandra Morales-Bermudez, Bill Patterson, Don Rejonis, Julie Rogers, Om Rusten, Khadijeh Vahdat, Joe Vera, and Ruthann Wilbraham.

Their gifts of time, monies, and in-kind items have contributed to the success of Beacon 2005. We greatly appreciate their generosity.

Session I: Economics
9:00 a.m. – 10:30 a.m.
Humanities 132

Readers:

Barbara Connolly, *Westchester*
James Mabry, *Dutchess*
Rachel Plaska, *Lehigh Carbon*

Judge:

Dr. Mitra Farahbaksh
Senior Economist
International Monetary Fund

Moderator:

Professor Bill Talbot
Montgomery College, Rockville Campus

Presenters:

Gordon Adams
"Cultivating Sustainability: Ensuring a Sound Agricultural Future"
Mentor: Seemi Ahmad, *Dutchess*

Peter Dunne
"American Oil Consumption: A Global Problem with Local Solutions"
Mentor: Rashidul Alam, *Montgomery College-Rockville*

Abiola Folarin
"Is it the Economy or Moral Values, Stupid or Otherwise?"
Mentor: Mitchell Tropin, *Montgomery College-Takoma Park*

Panel Sponsor:

Kathy Wessman, Instructional Dean
Business, Management and Information Science
Montgomery College, Rockville Campus

Session I: Gender Studies
9:00 a.m. – 10:30 a.m.
Humanities 131

Readers:

Suzann Boettger, *Bergen*
Genevieve Carminati, *Montgomery-Rockville*
Jill Hirt, *Northampton*

Judge:

Dr. Laura Moore
Assistant Professor
Hood College

Moderator:

Ms. Jacki Moffi
Montgomery College, Rockville Campus

Presenters:

Linda Small-Spence
"Girls of South Africa"
Mentor: Elizabeth Gaffney, *Westchester*

Adrienne S. Reed
"Eve's Eden: Profiling a Nation's Progress Toward Cohesive Gender Spheres of Thought"
Mentor: John Lawlor Jr., *Reading*

Carolanne Zilliox
"The Make-up of Wharton's Society"
Mentor: Elizabeth Gaffney, *Westchester*

Panel Sponsor:

Phi Theta Kappa, Beta Lambda Alpha Chapter
Montgomery College, Rockville Campus

Session I: History
9:00 a.m. – 10:30 a.m.
Humanities 109

Readers:

David Beisel, *Rockland*
Julie Green, *Northern Virginia*
Creed Hyatt, *Lehigh Carbon*

Judge:

Dr. David B. Sicilia
Associate Professor, History
University of Maryland

Moderator:

Professor Lee Annis
Montgomery College, Rockville Campus

Presenters:

Jave Galt-Miller
"Socrates and Individualism"
Mentor: Cathy Hoult, *Ocean*

Zach Lindsey
"Four Sides in Colombia's Civil War is Three Sides Too Many"
Mentor: Allison Carpenter, *Northampton*

Marcia Stoudt
"Angels of the Civil War"
Mentor: John Lawlor Jr., *Reading*

Panel Sponsor:

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Session I: Literature I
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Humanities 104

Readers:
Nancy Trautman, *Northampton*
Margaret Boese, *Ocean*
Vern Lindquist, *Sullivan*

Judge:
Professor Bradford Haas
Director, Honors Program
Columbia Union College

Moderator:
Professor Tammy Peery
Montgomery College, Germantown

Presenters:

Christopher Day
"Officer and a Gentleman: The Conflict Between the Military and Civilian Mindset in Othello and Much Ado About Nothing"
Mentor: Nancy Hazelton, *Rockland*

Mona Lee
"Rousseau, Kierkegaard, Frankl, and Sartre: Shedding Light on the Existential Plight of Tolstoy's Ivan Ilych"
Mentor: Rachael Wilson, *Montgomery-Rockville*

Anna Melyakova
"The Gogolian Textual Provocation"
Mentor: Rachael Wilson, *Montgomery-Rockville*

Panel Sponsor:
Carolyn Terry, Instructional Dean, Humanities
Montgomery College, Rockville Campus

Session I: Interdisciplinary Studies
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Humanities 133

Readers:

Toni Emery, *Dutchess*
Susan Mattern, *Lehigh Carbon*
Elaine Olaoye, *Brookdale*

Judge:

Dr. Karen Mudar
Anthropologist
National Park Service

Moderator:

Dr. Paul Lux
Montgomery College, Rockville

Presenters:

Alison K. Niska
"Bilingual Education for the Deaf: Facilitating Learning and Equipping Students to Reach Their Full Potential"
Mentor: Carl N. Schroeder, *Montgomery-Rockville*

Jennifer Westfall
"The Tooth, the Whole Tooth: A Study of Bitemark Analysis for Forensics"
Mentor: Laura Ellsworth, *Pringe George's*

Karen Dillon Woolery
"Bilingualism Through Social Interaction"
Mentor: Kamala Edwards, *Montgomery-Rockville*

Panel Sponsor:
Helen Youth, Director
Center for Teaching and Learning
Montgomery College, Rockville Campus

Session II: Literature II
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Humanities 133

Readers:

Phyllis MacCameron, *Erie*
Martha Robinson, *Ulster*
Rasma Koch, *Westchester*

Judge:

Dr. John F. Andrews
President, The Shakespeare Guild
Executive Director, The English-Speaking Union

Moderator:

Professor Joan Naake
Montgomery College, Germantown

Presenters:

Vicky Aurich
"Barn Burning" :Analysis of the Sentence Structure As a Key to the Meaning"
Mentor: Joan Naake, *Montgomery*

Jennifer Ausden
"The Emotive Gender"
Mentor: Joan Naake, *Montgomery*

Jill Manell
"Linking Reality to Fiction: The Biographical Connections to Escapism in The Glass Menagerie"
Mentor: Dorothy Altman, *Bergen*

Panel Sponsor:
Sherman Helberg
Director of Admissions and Registration
Montgomery College, Rockville Campus

Session II: Physical Sciences
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Humanities 132

Readers:

Rob Blum, *Lehigh Carbon*
John Leiser, *Northampton*
Charles Pearce, *Lehigh Carbon*

Judge:

Dr. George Sherwood
University System of Maryland/Shady Grove

Moderator:

Dr. Ken Beem
Montgomery College, Rockville

Presenters:

Brent Bridges
"Chemiluminescence—'Light Sticks'"
Mentor: Nevart Tahmazian, *Montgomery-Rockville*

Jennifer Davis
"Superstrings: Theory of the Universe"
Mentor: Samuel Draper, *Rockland*

Julianne Voll
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Mentor: Nahed Salama, *Rockland*

Panel Sponsor:

Ed Roberts, Instructional Dean
Applied Technologies and Gudelsky Institute for Technical Education
Montgomery College, Rockville Campus

Session II: Philosophy and Religion
10:45 a.m. – 12:15 p.m.
Humanities 131

Readers:
Thomas Jewell, *Bergen*
Martin Lecker, *Rockland*
Dean Nelson, *Dutchess*

Judge:
Professor Zdravko Plantak
Chair, Department of Religion
Columbia Union College

Moderator:
Professor Chris Collins
Montgomery College, Rockville

Presenters:

P. Rachel Bianucci
"Humanity For A Hamburger: Ethicality of Using Animals for Food"
Mentor: Timothy Russell, *Sullivan*

Susanna Fix
"The Key to Frost's Poetry"
Mentor: John Robertson, *Northern Virginia*

Wendy Littner-Thompson
"Living in the Flow ad Nonattachment as Common Themes in the Tao Te Ching and Yoga"
Mentor: Harold Weiss, *Northampton*

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Humanities 109

Readers:
Peter Phipps, *Dutchess*
Lynne Schmelter-Davis, *Brookdale*
Robert Schwartz, *Ulster*

Judge:
Dr. James T. Lamiell
Department of Psychology
Georgetown University

Moderator:
Dr. Rudy White
Montgomery College, Rockville

Presenters:

Shariffa Ali
"The Effect of Family Structure on Personality/Case Study: Princess Diana, Princess of Wales"
Mentor: Janice Walters, *Manhattan*

Judy Miller
"The Post-Institutionalized Child: A Personal Account of the Link to Learning Disabilities and Attachment Disorder"
Mentor: Karen H. Jacobson, *Reading*

Panel Sponsor:
Elena Saenz-Welch, Director of Academic Initiatives
Montgomery College, Rockville Campus

Session II: Technology and Mathematics
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Humanities 104

Readers:

Eugene Bowen, *Brookdale*
Ned Schillow, *Lehigh Carbon*
James Perry, *Ulster*

Judge:

Professor Angela Walters
Department of Computer Sciences and Mathematics
Capitol College

Moderator:

Professor Deb Poese
Montgomery College, Rockville

Presenters:

Sandra Ciganek
"Genetic Engineering of Crops"
Mentor: George Krasilovsky, *Rockland*

James Coursey
"Nuclear Power: The Future of Energy in the United States"
Mentor: Rashidul Alam, *Montgomery-Rockville*

Thomas Kern
"The Complicated Numbers"
Mentor: Eugene Bowen, *Brookdale*

Panel Sponsor:

Dr. Judy E. Ackerman, Vice President and Provost
Montgomery College, Rockville Campus

Session III: Allied Health
1:30 p.m. – 3:00 p.m.
Humanities 132

Readers:

Thomas Butler, *Rockland*
Marcia A. Gellin, *Erie*
Judith K. Ehninger, *Lehigh Carbon*

Judge:

Dr. Robert Burke
Director, Wertlieb Educational Institute
George Washington University

Moderator:

Dr. Carole Wolin
Montgomery College, Takoma Park

Presenters:

Kathryn Diamond
"Progress or Poison? Does Genetic Engineering Take More Than it Gives?"
Mentor: Linda Sledge, *Westchester*

Melvina Evereklian
"The Effect of Stressful Life Events on Childhood Rheumatic Diseases"
Mentor: Barbara Hoberman, *Montgomery-Rockville*

Evette Olszyk
"Dead Man Walking: The Silent Death of Progressive Multifocal Leukoencephalopathy and HIV/AIDS "
Mentor: Evi L. Dobrila, *Northampton*

Panel Sponsor:

Paula Matuskey, Instructional Dean
Arts, Humanities, Social Sciences
Montgomery College, Takoma Park Campus

Session III: The Arts
1:30pm - 3:00pm
Humanities 133

Readers: Donald K. Beman, *Erie*
Melanie Klein, *Bergen*
Michelle Hardy, *Prince George's*

Judge: Professor Chawky Frenn
Department of Art and Visual Technology
George Mason University

Moderator: Mr. Don Smith
Montgomery College, Rockville

Presenters:

Hannah Freeman
"Lost in Translation: The Original Intent of Chinese Literati and the Western (Mis)interpretation of the Same Techniques"
Mentor: Rachael Wilson, *Montgomery-Rockville*

Erin Jones
"The Expression of Oppression: Art that Emerged from Apartheid South Africa"
Mentor: Julie Wakeman-Linn, *Montgomery-Rockville*

Jennifer Rachuna
"Insights A look at the Art and Artists of Post-Apartheid South Africa"
Mentor: Julie Wakeman-Linn, *Montgomery-Rockville*

Panel Sponsor:
Gail Minor-Smith, Interim Instructional Dean
Fine, Performing and Visual Arts, Performing Arts Center

Session III: Literature III
1:30 p.m. – 3:00 p.m.
Humanities 131

Readers:

Alfred Ruggiero, *Northampton*
Alfred Longo, *Ocean*
Joanne Gerken, *Lehigh Carbon*

Judge:

Dr. Laura Dickinson
Department of English
Associate Professor, Capitol College

Moderator:

Professor Julie Wakeman-Linn
Montgomery College, Rockville

Presenters:

Heidi Feichtinger
"Dreams versus Reality: The Condemned Worlds of Emma Bovary and Blanche Dubois"
Mentor: Elaine Toia, *Rockland*

Jacqueline Guarino-Woodford
"Denial Is The Greatest Disability"
Mentor: Mark Altschuler, *Bergen*

Jonathon Hutt
"Fitzgerald: The Weakness of the Female Character in The Great Gatsby, 'Winter Dreams', and 'The Swimmers'"
Mentor: Samuel Draper, *Rockland*

Panel Sponsor:

Carolyn Terry, Instructional Dean, Humanities
Montgomery College, Rockville Campus

Session III: Natural Sciences
1:30 p.m. – 3:00 p.m.
Humanities 109

Readers:

Beatriz Villars, *Northampton*
Eric Deangelo, *Lehigh Carbon*
Michelle A. Rodden, *Ulster*

Judge:

Dr. Helen Moore
Senior Scientist
Celera Genomics

Moderator:

Professor Sharon Ward
Montgomery College, Rockville

Presenters:

Okemeteri Esiekpe
"Identification of Native Plants as Beneficiary Insectary Plants"
Mentor: Christine Barrow, *Prince George's*

Erica Friedman
"Coral Reefs: We Need Them Desperately, Yet We Are Killing Them Quickly"
Mentor: Beth S. Kolp, *Dutchess*

Roy Gordon
Feminization of Fish in the Cacapon and Potomac Rivers"
Mentor: David Kieffer, *Montgomery-Germantown*

Panel Sponsor:

Kathy Michaelian, Instructional Dean
Business, Science, Mathematics, Applied Technologies
Montgomery College, Germantown Campus

Session III: Social Sciences
1:30 p.m. – 3:00 p.m.
Humanities 104

Readers:

Christine Bowditch, *Lehigh Carbon*
Laura Ellsworth, *Prince George's*
Gene Grabiner, *Erie*

Judge:

Dr. Maria Green Cowles
Associate Director, Honors Program
American University

Moderator:

Professor Nathan Starr
Montgomery College, Rockville

Presenters:

Donald F. Burke
"The Loss of Democracy in Ancient Greece and Rome: A Model for Our Time"
Mentor: Cathy Hoult, *Ocean*

Abigail Furnish
"What the United Nations Could Learn from Regional Intergovernmental Organizations"
Mentor: Rebecca Cartwright, *Montgomery-Rockville*

Easter Z. Wood
"Uncle Sam Is Newspeak for Big Brother"
Mentor: Ellen Mareneck, *Bronx*

Panel Sponsor:

Kayran Moore, Institutional Advancement
Montgomery College

Cultivating Sustainability:
Ensuring a Sound Agricultural Future

By: Gordon Adams

Introduction

It may be difficult to believe, but we have been utilizing agriculture and domesticating animals for only about 1 percent of our time in existence (Fagan 215). This transition, however – from hunters and gatherers to a more sedentary lifestyle – led to profound and lasting changes for the human population – some of which can surely be argued as to whether they were beneficial. No matter how you look at it, though, farming has allowed us to develop into the society we are today and we would be surely be very different without it.

Since the inception of agriculture some 12,000 years ago, techniques and tools have evolved – some drastically and some insignificantly. The value of hard, honest work was still realized however. People and cultures learned to develop unique cultivation methods to meet their needs and their environment, creating a diverse food system; eventually trade began to play a role in the production of a peoples' agricultural resources. For most people, though, their own crops remained the main source of food and they invested much time and labor into them. True agrarians also knew that they must respect the environment – and the communities – which sustained their crops. "They gave priority to honest accounting that included soil, land, community, good work, and to agriculture as the foundation for culture" (Orr, 98).

Today, however, we have become accustomed to an agricultural system that relies more on technology and mechanization than human care and labor. Crops are grown in a country only to be shipped halfway across the globe to another country where these very same crops could be cultivated. We have a system which creates artificially low food prices by ignoring the social and environmental costs; where the farms more closely resemble factories and the landlords, CEO's. This system, I believe, has been implemented beyond a sustainable level and set us on a course for economic, environmental, and social ruin. This agricultural model that commonly exists

worldwide today – the agribusiness, factory farm model, puts profits and alleged productivity over sustainability and community and continues to place a stranglehold on people around the globe. Rodney Leonard of the Community Nutrition Institute of Washington, D.C. writing in 1988 of industrial agriculture described it as a "system managed by executives of corporations that genetically convert plants and animals into miniature factories producing chemicals, drugs and body parts through biotechnology; farmers will grow and harvest these factories on command of corporate managers" (cited in Alderspring Ranch, ¶ 3).

Fortunately, though, there is a movement on the opposite end of the spectrum to convert our society and our agriculture into one that places community and sustainability before profits and corporate dominance, and in doing so often becomes more productive. Additionally, many of the ideas put forth by this movement have been utilized in the past. Even though agriculture on the whole has been slowly evolving into the corporate-like system it is today, there have been, throughout history, significant portions of the population who decided to try to stay connected with the land and the people that support them and in doing so continued to cultivate a sense of sustainability and community. These people, like those involved in the current sustainable agriculture movement, realized that "small family farms are the backbone of a community, a nation, and of society as a whole" (Thery, Small Farms section). As G.T. Wrench states in his book *Restoration of the Peasantries*, " The original strength of Rome, like that of China, was that of a superior family-agriculture" (cited in Thery, Small Farms Section). The early United States exhibited conditions of small-scale, more locally based agriculture too and it is those types of conditions that allowed our culture to become what it is today. Harold Volkmer, a former U.S. Congressman and chairman of the USDA National Commission of Small Farms, put it this way: "Our nation's economic foundation is built on the backs of America's small farmers. Their survival and success is not only important to their families, but to consumers, rural communities, the environment, and the global economy" (cited in Thery, References section).

Obviously, the present movement towards a sustainable future has a lot to build on. It won't be easy, however, and there is much to be accomplished. As throughout history, stable agricultural communities have declined and disappeared "not because [they] were weak, lazy, or incompetent. To the contrary, they mostly failed because of larger economic and political forces" (Orr, 96). These communities, which Orr refers to as "the agrarian world" – a world which feeds us and sustains us – "are being crushed by the remorseless development of civilization… the

glittering, fast-paced, consumer-oriented world of Madison Avenue and Hollywood" (Orr, 95-96). There is much at stake here and many possibilities for change. In order to succeed, however, the culture of sustainable-minded people must first overcome the broader forces at work and then it will be able to reshape agriculture as a whole and hopefully for generations to come.

Our increasingly industrialized society has given rise to what many consider technological and social progress. Every new gadget, each house built, and a rise in GDP are often seen as only progress without negative consequences. If there happen to be some downsides, they are simply pushed aside as necessary costs of progress. Furthermore, industrialized nations often fall prey to the power of "the bottom line," where environmental and social costs, for example, are frequently seen as insignificant to economic gain. Additionally, in this type of environment, it is usually the rich and powerful who influence the major aspects of society and in turn set its agenda. The information and policies set forth by those in power, while possibly false or misguided, is either accepted by the majority of people or implemented against their will. The industrialized world is being praised and sustained by these very same people – the few who greatly benefit from it. So, I ask: who is this supposed model of progress really helping?

The agricultural system (both domestically and worldwide) has been drastically affected by the industrialized and supposedly advanced people of the world. We are now faced with a mainstream form of agriculture (commonly referred to as either industrial agriculture, agribusiness, or factory farming) which seems to view the farm as simply a system of inputs and outputs where "the goal is to increase yield… and decrease costs of production, usually by exploiting economies of scale" (Union of Concerned Scientists (UCS), cited in Horrigan, Lawrence, and Walker, 445). Seemingly ignored, however, are the effects of this agribusiness model on things like the environment, public health, small farmers, communities, and the economy (beyond profits and GDP). As Alderspring Ranch (a farm that raises grass fed, free-range beef) describes it, "human care is replaced by mechanical equipment. Love for a place is replaced by maximizing profits. The dignity of the independent farmer is replaced by the hired-hand mentality of a farm manager, management skills replaced by corporate directives… [and] rural communities die as income generated from the farm is transferred to distant owners… rather than circulated through the local… economy" (Alderspring.com, ¶ 1). While supporters of

agribusiness will likely dispute these allegations or label them as insignificant, I believe that the evidence (albeit often difficult to interpret) is stacked against them.

Effects of Industrial Agriculture on:

The Environment and Health

Industrial agriculture places enormous strains on the environment and human health. Just the sheer size of some of the factory farms is enough to make one realize the impact they can have. The United Nations-affiliated International Food Policy Research Institute has concluded that "nearly 40 percent of the world's agricultural land is seriously degraded, undermining both present and future production capacity" (Scherr S. and Yadav S., cited in ota.com, ¶ 2). This degradation can be directly linked to human actions and the current methods of agricultural production. Helena Norberg-Hodge et al. estimate that "industrial farms cause $34.7 billion worth of environmental damage in the U.S. each year" (cited in sustainabletable.org, Environment section). This, of course, is going to directly affect humans as well. Horrigan et al. report that "industrial food production methods – and some of the food they produce – are causing both acute and chronic disease in humans" (449). Besides the externalities from the farms themselves, the societal conditions which industrial agriculture has helped to create (like the fast food industry and an expectation for a constant supply of foods from around the world) are also a threat to human and environmental health. Obviously the effects are far-reaching.

Current mainstream farming practices consume vast amounts of non-renewable resources and deplete renewable sources simply because they are expended at such a fast rate. Agribusiness is heavily dependent upon input and energy-intensive methods of production, with these inputs often coming from off the farm. These include "fertilizer, pesticides, water for irrigation, and mechanization. All of these in turn depend on fossil fuel energy," (Harris, 29) which of course poses additional environmental and health problems. In fact, "the food production system accounts for 17% of all fossil fuel use in the U.S." (Horrigan, Lawrence, and Walker, 448). Factory farms are also extremely energy inefficient. "Huge amounts of energy are used… in transporting, processing and packaging food, and bringing it to the supermarket" (Trainer, ¶ 1). Sustainabletable.org states that "foods are shipped an average of 1,500 miles before reaching consumers" (Transportation section).

Farming is obviously going to take advantage of water resources. The inefficient and wasteful techniques akin to industrial agriculture, however, use vast amounts of water. On the whole, agriculture accounts for about 69% of global water use. Irrigation for the massive farms is "depleting [many] underground aquifers faster than they can be recharged" (Horrigan et al., 446). The Ogallala Aquifer, for example, which supplies much of the Midwest with water and is "a critical resource for the region's agriculture,... [is experiencing a] water table drop of as much as 1 meter/year" (McMichael AJ., cited in Horrigan et al., 447). Even worse is that some of the sources being drawn from are "fossil aquifers," which receive very little or no recharge. Beef production, which is prominent in agribusiness, requires especially large volumes of water – "as much as 100 times that required to produce equivalent amounts of protein from grain" (Pimentel D. et al., cited in Horrigan et al., 448). Poor irrigation techniques can also lead to salinization and waterlogging, which greatly diminishes a soil's productivity. The Food and Agriculture Organization of the United Nations has estimated that "about 13% of the world's irrigated land is either waterlogged or excessively salty, and another 33% is affected to some degree" (Horrigan et al., 447-48).

Agribusiness is responsible as well for the pollution of many water sources. The practices contaminate groundwater and surface water with "toxic pesticides, fertilizers, hormone… [and] antibiotics residue, and harmful pathogens contained in manure" (sustainable table.org, Water section). Horrigan et al. cite the EPA as "blaming current farming practices for 70% of the pollution in the nation's rivers and streams… [which adds up to] more than 173,000 miles of waterways" (447). This has an impact on the functioning of ecosystems as well as that of humans.

Soil has also been greatly affected by the onset of agribusiness. Soil is obviously extremely important to agriculture, yet, as with the previous issues, a corporate mentality often seems to forget this. Consequently, "deterioration of soils is one of the most serious challenges facing humankind as it attempts to feed a growing population" (Horrigan et al., 447). The heavy machinery affiliated with this form of agriculture "compacts the soil, destroying soil structure and killing beneficial organisms in the soil food web" (447). Overgrazing by livestock will also compact soil and strip land of the vegetation that holds it in place. It has been estimated by the United Nations that, due in large part to poor agricultural practices, wind and water erode 1% of the world's topsoil each year. And once this soil is lost, it could "take anywhere from 20 to 1,000

years for [even] a centimeter of soil to form" (447). Desertification, the process by which once viable land becomes unusable and seriously degraded, can be a result of poor soil management and poor water management and is another major issue of concern. Fertilizer, pesticides, and other pollutants from factory farms are major contributors to the contamination and deterioration of soils as well.

In 1998, "the world used 137 million metric tons of chemical fertilizers, of which U.S. agriculture consumed about… 15%" (Horrigan et al., 446). However, "a significant portion of the nutrients applied do not reach the crops as intended. Instead they leach into ground and surface water, where they become serious pollutants" (Harris, 216). Tilman (1998) "estimated that crops actually absorb only one-third to one-half of the nitrogen applied to farmland as fertilizer" (cited in Horrigan et al., 446). Excessive nutrients in water and soil can be very damaging to the natural environment and in turn humans as well. Nitrates and phosphates, two commonly used fertilizers, "promote unwanted algae growth that [can] choke out other life in rivers, lakes, and even oceans" (Harris, 216). Large amounts of fertilizers being added to the soil year after year can drastically alter soil chemistry and composition. Other valuable nutrients in soil – called micronutrients – can be depleted and this "gradually reduces both yields and nutritional values of the crops" (216). Fertilizer use has also been linked to global atmospheric problems, like global warming and ozone depletion, and likely has damaging consequences on some of the earth's natural cycles. For example, the amount of "artificial nitrogen applied to crops now exceeds the amount supplied through natural nitrogen fixation by soil microorganisms" (217).

Pesticide use represents another major downfall of agribusiness. It is estimated that each year 3 million tons of pesticides are used worldwide (Horrigan et al., 446). This includes herbicides, insecticides, and fungicides and formulations from "about 1,600 different chemicals" (with this number increasing rapidly) – some of which are still lacking toxicity data (446). As with fertilizers, many of these chemicals don't even reach their intended target or are applied in excess. Cornell entomologist David Pimentel and his colleagues said that "it has been estimated that only 0.1% of applied pesticides reach the target pests, leaving the bulk of the pesticides (99.9%) to impact the environment" (cited in Horrigan et al., 446). In addition to killing the target pests, pesticides kill and harm many other species. Declines in bird and beneficial insect populations as well as developmental abnormalities in amphibians have been attributed to

pesticide use. An especially disturbing finding has been the dramatic decline in the number of honeybee colonies. In the U.S., the "number of... colonies... dropped from 4.4 million in 1985 to < 1.9 million in 1997 [and is likely still falling], in large part due to direct and indirect effects of pesticides" (446). It is important to note that "honeybees are involved in the pollination of at least $10 billion worth of U.S. crops, providing farmers with an essential 'natural service'" (446). Yet, we are destroying them with our wanton use of pesticides. Another often overlooked consequence of excessive pesticide use is the fact that target species can develop resistance to the chemicals, thus rendering them useless and ineffective. Horrigan et al. report that "the number of insect species known to display pesticide resistance has increased from <20 in 1950 to >500 as of 1990. Meanwhile, scientists have identified 273 plant species that exhibit herbicide resistance" (447). So, in effect, we are changing the functioning of species and ecosystems and at the same time being forced to develop even more chemicals to combat pests because they quickly become obsolete. This is a very counterproductive and costly technique.

In addition to the environmental impacts, pesticides can be very dangerous to humans. They are especially dangerous to us because they can bioaccumulate. Being high up on the food chain, humans are exposed to higher amounts of toxins. Exposure can occur through "residues in food,… contaminated drinking water, and through the air" (Horrigan et al., 451). A 2002 report found that 71% of conventionally-grown produce samples contained a pesticide residue as compared to only 13% of organically-grown samples (ofrf.org, ¶ 3). "Heavy use of pesticides is associated with elevated cancer risks" (sustainabletable.org, Health section) "and disruption of the body's reproductive, immune, endocrine, and nervous systems" (Horrigan et al., 450). Worldwide, nearly "2 million poisonings and 10,000 deaths occur each year from pesticides" (Quijano R. et al., cited in Horrigan et al., 450).

Other chemical inputs include hormones and antibiotics. Cattle, for example, are injected with hormones to make them grow faster. However, many are estrogen-based and seemingly as a result of this, some male fish in water exposed to farm runoff have been found growing female organs. In addition to residue that is transported into water bodies, the artificial hormones are present in the beef as well. This has been cited as a possible cause for the more rapid maturation in girls.

Livestock are also injected with "approximately 25 million pounds of antibiotics and related drugs each year" (sustainabletable.org, Antibiotics section). This adds up to "seventy

percent of U.S.-produced antibiotics" (UCS, cited in Horrigan et al., 451) or "more than 8 times the amount used to treat disease in humans" (UCS, cited in sustainabletabe.org, Antibiotics section). This excessive use, however, can make these drugs less effective in humans by "enhancing the development of drug-resistant strains of disease, which can then be transmitted to humans" (Horrigan et al., 451).

Industrial farms raising livestock pose even further problems. Eric Schlosser, in his book *Fast Food Nation*, discusses the massive amounts of manure produced on a factory farm. "Every day," he states "each [cow] deposits about fifty pounds of manure" (150). Two feedlots in Colorado, for example, "produce more excrement than the cities of Denver, Boston, Atlanta, and St. Louis – combined" (150). "Unlike human waste, [however], this manure is not sent to a treatment plant. It is dumped into pits, huge pools of excrement the industry [euphemistically] calls 'lagoons'" (150). Certainly, this is going to cause some problems. First of all, the environment simply cannot process this huge and concentrated amount of waste. Secondly, the "lagoons" are never sealed tight and in fact often leak, releasing harmful pathogens into the soil and water. Manure runoff from factory farms has been blamed for outbreaks of *Pfiesteria piscicida* and can contain *Salmonella* and *Cryptosporidium (*Horrigan et al., 451). Lastly, the stench emitted from these piles of manure and the entire farm is awful – for both the surrounding community and the workers. Schlosser describes it as "a combination of live animals, manure, and dead animals being rendered into dog food" (149). Horrigan et al. report that "farmers and farm workers have [actually] died from asphyxiation after entering underground ['lagoons']" (451). The prevalence of occupational respiratory disease (occupational asthma, acute and chronic bronchitis, organic dust toxic sydrome) in factory farm workers "can be as high as 30%" (Choiniere Y. and Munroe J., cited in Horrigan et al., 451) while "people living near large-scale facilities reported elevated incidences of headaches, respiratory problems, eye irritation, nausea, weakness, and chest tightness" (Thu K. et al., cited in Horrigan et al., 451).

"Agriculture," asserts Horrigan et al. "is dependent on biodiversity for its existence and, at the same time, is a threat to biodiversity in its implementation" (448). Biological diversity has helped farmers throughout history develop, harness, and maintain many different crops. "Wild genes support nearly all our crops [and] we exploit crops kept productive by regularly receiving new genes from wild relatives" (Myers, 23). Yet, the increasing reliance of industrial agriculture on synthetic chemicals, monocultures, and genetically modified organisms has reduced

biodiversity and these original crops and genes that farming relies on. In addition, the consolidation of the seed industry has resulted in massive decreases in the number of non-hybrid plants available. The thousands of years of evolution it took a plant to develop its complex resistance genes is being chipped away at by modern breeding and planting techniques (Horrigan et al., 448). In Indonesia, for instance, the planting of a modern monoculture rice "led to the extinction of 1,500 local rice varieties in just 15 years" (WRI, IUCN, and UNEP, cited in Horrigan et al., 448). As David Frost, the owner of an organic CSA in Patterson, New York, quite simply explained to me, "monoculture stresses the land." Monoculture crops are also much more susceptible to environmental strains, like drought, and can be much less productive as a result. A field planted with a variety of crops (especially those native to the area) will be much more likely to make it through a drought than a field planted with just one type of crop.

Genetically modified organisms (GMOs) are also a great threat to biodiversity and pose many other risks. Of course, you could say that we have been genetically modifying organisms since we first began domesticating plants and animals, but up until recent times the stakes and the scope of our abilities was not that notable. And the modifications we have performed throughout history have had negative consequences as well. Look, for example, at how our interbreeding of dogs has resulted in hip and joint problems for many of them. And who knows, through our modifications we may have eliminated possibly beneficial species of plants and animals that we will never even know about.

We have come to a point now where we can quickly remove, replace, and mix genes not only for plants, but animals too. We can create disease-resistant crops and develop hybrids of hundreds of plants and animals. One private company actually developed " 'terminator' technology, which renders seeds infertile in the second generation" (Gorelick, 5). Besides environmental concerns, this definitely raises ethical and social concerns, especially given the fact that many of these seeds are sold to developing countries who are as a result indebted to covetous foreign corporations. Proponents will argue that this technology can save lives, produce more food, actually help clean the environment, and creates numerous other possibilities. Yet, knowing that there are already negative consequences and that in the future we could be faced with even more, it is very difficult to see how the benefits could outweigh the costs. This technology has the ability to literally change life on earth and it would be wise to reconsider before allowing it to get too out of hand. And with regard to food production, a lack of food is

not the problem. Rather, unequal distribution is the issue. Harris reports that "evenly distributed, [the current] level of output would be adequate to provide each person with a mostly vegetarian diet, supplemented with a little meat, fish, or eggs" (210). In large part, it is due to the consumption patterns and meat-centered, yet grain intensive diet of the developed world (which can be quite unhealthy) that many people are undernourished. So, instituting a dangerous technology like genetic modification is simply not the answer because it overlooks the heart of the problem and has the ability to cause many more.

By creating disease and pest resistant crops, for example, we could be developing a plant that if released into the wild may have no natural predators and could become some sort of "super crop." This sort of situation is evident with the introduction of invasive species into an area where they have no predators. Once they have taken hold, they are easily able to multiply and destroy native plant and animal species. The economic and environmental costs of this have been enormous. These crops could also transfer modified genes to wild relatives and decimate them in this way. The use of GMO crops could lead to increased herbicide use as well. The most common reason for manipulating crop genes is to confer resistance to commercial herbicides (so when the herbicide is sprayed to kill pests it won't harm the modified crops). However, this supposed sense of security may lead farmers to use even more pesticides. It could also increase resistance among those plants which are being targeted, likewise leading to increased pesticide use. The second most common use for GMO crops is to give them resistance to insects, viruses, and fungi. This is accomplished by making the plants emit a toxin. While this toxin (*Bacillus thuringiensis*) is naturally occurring in soil, it isn't normally emitted from plants and can be harmful or even fatal to some wildlife. Two recent studies found that "pollen from *Bt* corn can be deadly for monarch butterfly larvae" (cited in Horrigan et al., 449). Moreover, this could simply "hasten the development of *Bt* resistance in insects,… eliminating an important organic pest control method" (449).

The health effects of genetically modified foods are very real too. For instance, "new allergens could be introduced into the food supply because the sources for genetically engineered material may include organisms not previously eaten by humans" (452). Furthermore, it would be harder for people with food allergies to avoid consuming an offending food if genes from that food are integrated into a food to which they had previously no allergic reactions. For example, "soybeans that were genetically engineered to contain proteins from Brazil nuts caused reactions

in individuals who were allergic to Brazil Nuts" (Nordlee JA., cited in Horrigan et al. 452). The possibility exists that there are many other harmful consequences that could result from genetically engineered organisms – and could be far worse than imagined.

Small Farmers, Local Communities, and Economies

"It would be wrong to say that Hank's death was caused by the consolidating and homogenizing influence of fast-food chains, by monopoly power in the meatpacking industry, by depressed prices in the cattle market, by the economic forces bankrupting independent ranchers, by the tax laws that favor wealthy ranchers, by the unrelenting push of Colorado's real estate developers. But it would not be entirely wrong" (Schlosser, 146). Schlosser had met Hank while researching for his book and he served as a juxtaposition to the "Fast Food Nation" Schlosser so vividly describes. Being one of those independent, sustainable minded farmers, Hank was under enormous pressure and had taken his own life. Unfortunately, this is more common than one would hope. "The suicide rate among ranchers and farmers in the United States is now about three times higher than the national average" (146). And as Schlosser implies, this is not simply a coincidence; there are many reasons that help explain it.

While of course not every farmer in this position commits suicide, the fact of the matter is that many of them are facing great challenges with the incipience of the corporate mindset. On their website, the Agribusiness Accountability Initiative depicts the situation in this way: "Whether in their own names or through joint ventures, strategic alliances and subsidiary agreements, most of the major transnational agro-food companies now operate globally… corporate oligopoly power now shapes the food system on every continent" (agribusinessaccountability.org, ¶ 1). As is evidenced by Wal-Mart, when large corporations move into a community, they are able to dominate and control the market. In turn, smaller local businesses are greatly affected, sometimes being forced to close down, and the local economy is damaged.

The "get big or get out" policy has unfortunately become the status quo. Sandy Gordon of Gordon Farms Inc., is a local farmer who raises free-range, grass fed cattle and he told me that the only way he gets by is with a supplementary job. He said that the economic conditions are the main reason for the loss of so many local farms.

The "globalization of food," as Gorelick calls it "impels every region to specialize in whichever commodity its farmers can produce most cheaply, and to offer those products on global markets. All foods consumed locally, meanwhile, must be brought in from elsewhere" (¶ 12). The highly specialized farms favored in this system are most often those belonging to the large agribusinesses. "Attaining the scale needed and the equipment required can drain the capital reserves of all but the biggest farmers… small farms are driven under, their lands consolidated into those of the largest and wealthiest farmers" (¶ 13).

A globalized economy doesn't reward those dedicated to place and community – like small farmers. Instead, it "subsidizes mobility… [and the] 'winners' include investors who scour the planet for the highest return, moving capital from country to country; corporate middlemen who make use of subsidies, currency swings, and 'free trade' agreements to profit by transporting everyday needs – including food – many thousands of miles; and transnational corporations that locate wherever they are offered tax breaks, cheap labor, and lax environmental and workplace rules" (¶ 8). These conditions condemn small farmers. What's more, the large agricultural companies, with their tremendous wealth, have managed to vertically integrate themselves into practically every aspect of farm production and distribution – "from seeds, fertilizers, and equipment, to processing, transporting, and marketing" (¶ 21). Foodfirst.org reports that "8 percent of farms account for 72 percent of sales" (Mittal, ¶ 14). "Cargill," for example, "controls 80% of global grain distribution… Four other companies control 87% of American beef, and another four control 84% of American cereal" (¶ 21). In fact, "control over food has become so concentrated in the U.S., 10 cents out of every food dollar now goes to one corporation, Philip Morris; another 6 cents goes to Cargill" (¶ 21). The "technological treadmill" instilled by the industrial world is another affliction to farmers. They are compelled to purchase the latest equipment, the most potent chemical inputs, and the highest-yielding seeds (most of which are produced by and benefit the large agribusinesses). These things may raise single-crop yields, but often lowers a farmer's net income – capital expenses and production and technology costs simply cost more money.

Free trade, the foundation for a global economy, has been used as a conveyor for the expansion of industrial agriculture. "Already, one out of three acres planted in the United States produces food or fiber destined for export, and one quarter of American farm sales are now exports" (Mittal, ¶ 4). Free trade, and the implementation of agreements like NAFTA, are touted

as a way to break down barriers and create an interwoven world economy. This may be true, but at the expense of many people, especially small farmers. Trade agreements are written to benefit business and increase profits and dominance in other markets, but often only exacerbate poverty and rural problems. It "hinders local food production and thereby increases poor countries' dependence on volatile international food supplies" (agribusinessaccountability.org, ¶ 1). The WTO agreement on Agriculture, for instance, "requires that countries open their economies to agricultural products" (Mittal, ¶ 4). This in no way guarantees better food supplies. "In Mexico, imports of agricultural products have increased 44% since NAFTA, while food insecurity in the rural sector has increased from 36% in 1992 to 52.4% (mofga.org, ¶ 4).

Government actions are not helping suffering small farmers either. Most, including the U.S., have only encouraged free trade, without acknowledging the enormous toll it takes on farmers. Secondly, and due in large part to free-trade, is that "the monopolistic control of food – though patently illegal – is largely ignored by regulators often in the belief that large scale is a necessary prerequisite to 'competitiveness' in the global economy" (Gorelick, ¶ 33). As a result, "government policies actively encourage a reduction in the number of farms in the name of efficiency" (¶ 34). Lastly, and probably most important, are the massive subsidies handed out to large agribusiness firms and used to implement the infrastructure necessary for their survival. This, in addition to the complete disregard for social and environmental costs, allows them to sell their products on the "international market far below their cost of production" (mofga.org, ¶ 1) – completely disenfranchising smaller farms. Gorelick estimates that "roughly 80% of the farms subsidies... in the U.S., U.K., and E.U.... go to the biggest 20% of its farmers" (¶30). According to the NFFC, "more than 40% of net income of agriculture in the U.S. comes from the federal government in the form of direct subsidies" (mofga.org, ¶ 3). The U.S. government has earmarked billions of dollars for ground transportation projects and global communications facilities aimed at improving access to world markets. (Gorelick, ¶ 27). Government sponsored research also disproportionately benefits large agribusinesses, as it is often focused on chemical fixes and increased mechanization. Lipson found that "of the 30,000 agricultural research projects on the USDA's Current Research Information System for 1995, only 34 had a strong organic focus" (cited in Horrigan et al., 453). What's more, this government subsidization has "trained consumers and our society [with] artificially low food prices" (mofga.org, ¶ 3) – creating a complete illusion with regard the farming methods. The appalling environmental and

health costs incurred by industrial agriculture are practically ignored and they are handed additional funds simply so they can immerse themselves in every market available. Apparently, the local, sustainable-minded farmer doesn't seem to be a high priority for most governments.

In addition to the assault by industrial agriculture itself, there are other commercial forces degrading the small farmer. "Whatever status farmers once had," states David Orr "has withered in the onslaught of the advertising, entertainment, and communication industries" (96). Take the "Got Milk" campaign for example. According to holistic politics.org, small farmers are forced to make contributions to commodity advertising funds for things like the "Got Milk" campaign. However, "such mass marketing favors the big farms" (¶ 10). Therefore, already struggling farmers are being forced to put money into a fund that doesn't even help them.

Considering all these factors, it's no wonder the industrial farm model is so prevalent. It's also no surprise that it has and is continuing to devastate small farmers, communities, and economies. In the corporate world, the prevailing concern seems to be the bottom-line – not livelihoods of people or a community. That's not to say that there aren't philanthropic-minded businesses, but it appears that overall (the agriculture industry included) corporations tend to be interested in profits, no matter what the cost. And the costs of industrial agriculture have been enormous.

As mentioned, small farms have been greatly ostracized by the industrial, globalized model that has such a powerful grip on society. If they haven't been completely driven out of agriculture, small farmers are likely living meager lives trying to keep their own business afloat, as they get less and less for their produce. In the UK, for example, "farm income dropped by as much as 75 percent [in two years], driving more than 20,000 farmers from the land" (Gorelick, ¶ 2). And here in the U.S., "more than 620,000 productive farms have disappeared since 1981, either bought by larger farms or 'developed' into ranchettes, subdivisions, or strip malls" (alderspring.com, ¶ 2). Displaced farmers, especially in developing countries, are then forced to "eke [out] miserable livelihoods in cities where they form the core of cheap labor for sweatshops" (Mittal, ¶ 13). In India, Mittal has even witnessed poor farmers consuming pesticides to end their lives (¶ 13). Even in my own hometown and the surrounding area, I have noticed the great pressure facing farmers. The encroaching "modernized" society, with its "super" grocery stores, Wal-Marts, and massive housing developments, has taken a toll on local farms. "For sale" signs, strip malls, and excessive luxury houses seem to be usurping the once

beautiful and productive farm fields. Like Sandy Gordon from Gordon Farms, Inc. told me, "the land is a farmer's only asset... [and often] the only choice they're left with is to sell it." And while they may make some money, I believe that the land itself and all the time and labor invested in it is often more important to a farmer than the money.

Those farmers lucky – better yet – unlucky enough to be "hooked to the global economy have been reduced to little more than serfs in a corporate feudal system" (Gorelick, ¶ 22). The few agribusinesses, along with fluctuating world markets and currencies, "effectively dictate the prices farmers will receive" (¶ 22). The USDA estimates that "corporate concentration in the beef-packing business alone costs the nation's cattle producers $10 billion a year in revenues… a season of hard work can easily leave them with just enough to pay for inputs, farm labor, machinery, rent, and interest on their loans. Those that don't earn enough to pay those costs soon lose their farms" (¶ 23). Food corporations are taking an ever-increasing share of the price people pay for food, while the farmers' share continues to shrink. "In the U.S., only 21 cents of every dollar spent on domestically produced food goes to farmers, while the remaining 79 cents goes to corporate middlemen and marketers" (¶ 20). This only drives even more farmers out of the business.

The working conditions for an industrial farmer are horrid too. Described by Ted Trainer as "boring, routine, alienated labor" (arts.unsw.edu), work on these farms (which more resemble factories) can be dangerous and unhealthy. Speed and profit are often more important than the livelihoods of the workers. The large amounts of chemicals, manure, and a confined, dirty workplace cause significant health problems for workers. Psychologically, it can be very degrading as well. Schlosser describes the conditions in and created by the ConAgra Beef Company's meatpacking plants: "cattle are the main units of production, where workers and machines turn large steer into small, vacuum-sealed packages of meat... they have turned one of the nation's bests-paying manufacturing jobs into one of the lowest-paying, created a migrant industrial workforce of poor immigrants, tolerated high injury rates, and spawned rural ghettos in the American heartland" (149). Turnover rates are extremely high too. "During one 18-month period, more than five thousand people were employed at [Monfort's] Greeley beef plant – an annual turnover rate of about 400 percent" (160). Responding to similar rates, an IBP company labor representative, during a federal hearing in the 1980's, said the following: "We found very little correlation between turnover and profitability... For instance, insurance, as you know, is

very costly. Insurance is not available to new employees until they've worked there for a period of a year or, in some cases, six months. Vacations don't accrue until the second year. There are some economies, frankly, that result from hiring new employees" (161). And that, unfortunately, seems to be the mainstream in the corporate world – profit before people.

Large industrial farms can adversely impact entire communities as well. The environmental and health consequences are obvious – pollution, use of pesticides, depletion of water resources, loss of rural character and beauty. Sometimes overlooked, though, is the effect on local communities and businesses. Steven Gorelick effectively sums it up: "villages and small towns are being sapped of vitality, and many of their social and economic institutions are simply disappearing" (5). "In corporate-farm towns, the income earned in agriculture is drained off into larger cities [where absentee owners use it to] support distant enterprises" (Rosset, ¶ 11). Peter Rosset, of Food First, has found that "in farming communities dominated by large corporate farms, nearby towns [actually depopulated and] died off" (¶ 11). "In China,... the modernization of agriculture has already led to the uprooting of more than half the rural population in the last two decades" (¶ 6).

A large corporate farm is first of all going to greatly pressure any smaller operations (both farming and non-farming), likely putting people out of business. "When 235,000 [U.S.] farms failed during the mid-1980's,..." for example, "60,000 other rural businesses went down with them" (Gorelick, ¶ 4). Dominated by the technology and mechanization, industrial farms will hire as few people as possible. And agribusinesses typically purchase equipment and supplies from outside the region. Combined, this increases (or at least doesn't improve) unemployment and diminishes people emotionally and physically. "Crime, poverty, drug abuse, and homelessness," states Schlosser, "have lately taken root in towns where you'd least expect [them]" (149). "Local governments are often forced to pay for expensive infrastructure development projects" as well (sustainabletable.org, Economic Development section). Lastly, property values can be greatly diminished in a factory farm town. For example, "the value of homes in Iowa located within ½ mile of a CAFO were reduced by 40%" (Padgett and Johnson, cited in sustainabletable.org, Economic Development section).

Interestingly, proponents will argue that their large factory farms will actually help the community. As evidenced, however, this is usually not the case. These large, multinational corporations, like ConAgra's Beef Company, instead see an opportunity to take advantage of

often already struggling people and make some money. They don't really have a stake in the health of a community – as long as there's a few people to do the dirty work and money to make.

Cultivating Sustainability

Fortunately, there is an alternative to this system, and on a small-scale it is already in existence. Sustainable, or organic agriculture, adopts many techniques that have been utilized for hundreds, even thousands of years – before the introduction of artificial growing methods and large-scale mechanization. It beckons to a simpler, more down-to-earth time, yet can also integrate into our present-day society. Sustainable agriculture, if fully implemented, would have the ability to transform our society as well – for the better. It considers its impacts on the natural environment, realizes the value of people and community, and most importantly, as its name implies, it is sustainable.

Unlike industrial agriculture, organic farming doesn't rely on pesticides, excessive fertilizers, genetic modification, antibiotics, or hormones. Nor does it flagrantly overexploit the land and natural resources. Instead, as David Frost explained to me, it rests on the simple fact that "if you take good care of the land, the land will take good care of you." In effect, organic farmers understand that the natural systems which sustain farming must be sustained themselves. Says Harris, "rather than seeing agricultural production as a process of combining inputs… to maximize output… the [sustainable farmer] would argue that agriculture is a process of intervention in the natural biophysical cycles responsible for plant [and animal] growth" (221). A truly sustainable farm can actually exist in harmony with these cycles and even create a viable habitat for a diversity of plant and animal life.

There are a number of techniques that characterize sustainable farming. First, it emphasizes good stewardship of the soil, including its chemical, biological, and physical properties. As Sir Albert Howard declares in *An Agricultural Testament*, "the maintenance of the fertility of the soil is the first condition of any permanent system of agriculture" (cited in Thery, Sustainable Farming section). Organic farmers "build healthy soils by nourishing the living components of the soil" (ofrf.org, ¶ 9). "An acre of healthy soil can contain 4 tons of organisms… which perform vital functions that aid in plant growth" (Horrigan at al., 452). No-

till and low-till practices in addition to rotational grazing of livestock protect the soil by reducing erosion and minimizing overall disturbance. This, in turn, helps retain good soil structure, vegetative cover, water, and nutrients. Rotational grazing can also save on feed costs and averts manure buildup (Horrigan, 452). Next, instead of leaving bare, unstable soil revealed to the elements, windbreaks and cover crops are used to improve soil quality and prevent erosion. They also minimize weed growth, which of course curtails the need for pesticides. There is continual addition of organic matter (usually composed plant and animal wastes) to the soil to help replenish it because after all, that's what forms soil in the first place. Lastly, nutrients are applied to soil and crops only after careful monitoring and not in excess. All these things combined provide the organic farmer with healthy, productive soil. And with healthy soil, you have healthy plants, and healthy plants foster healthy people (Frost).

Water resources are protected as well. Unlike industrial farms, sustainable farms attempt to conserve water, using the least wasteful watering methods and using it only when needed. Drought-resistant crops can be planted to reduce water usage. In addition, water pollution is limited, as the use of artificial fertilizers, pesticides, and hormones is non-existent or very minimal. While manure is used to fertilize the crops, a proficient organic farmer will not apply it in excess, thus limiting runoff. Also, they will not raise more livestock and produce more waste than the environment can handle.

Biological diversity can be better protected and even enhanced with the implementation of sustainable farming methods, helping both the farmer and the environment. As Christine Thery puts it, "an integrated pattern that mimics natural biodiversity… reaps the benefits of collaborating with nature" (Small Farms Fit section). Organic farms plant a wide variety of crops – often called intercropping – as compared to the common monocultures of conventional farms. They also try to plant crops which are native to the area and may use some naturally pest resistance crops or natural predators. If raising livestock, these farms will have animals that are adapted to the surrounding environment as well. Lastly, the use of genetically modified organisms is prohibited. All these things are both environmentally and economically beneficial. Intercropping creates many niches for wildlife and also produces a much more reliable harvest in the event of an environmental strain. Using native and naturally pest resistant species, along with crop rotation and intercropping, reduces the need for chemical inputs, like fertilizers and pesticides – saving money and preserving the environment. And the restriction on genetically

modified crops eliminates all the negative consequences associated with them. In addition to good cultivation techniques, organic farmers will attempt to integrate existing habitats into their fields of livestock and crops. Forested patches and preserved wetlands, for example, can provide needed habitat for a variety of plants and animals. Sandy Gordon told me that his farm is home to "prolific wildlife, [including] coyotes, geese, herons, and bears." His free-range cattle easily coexist with all these creatures and Sandy is happy to have them on his farm.

Livestock on an organic farm are also much better off. Sandy's cattle, for example, are allowed to graze in open fields, are not exposed to any pesticides or herbicides, are not injected with any growth hormones, and are given antibiotics only when sick. They are fed high protein hay – a much more natural diet than the grain and animal parts they're fed in conventional feedlots. They are even given personalized attention by Sandy and his wife. While this may sound unimportant, it actually helps the animals feel much more secure and allows them to live a healthier life. This is only one example, but it holds true for any authentic organic farm, in which the overriding concern is that the animals have access to the outdoors and get to live as natural a life as possible.

Sustainable farms do not rely nearly as heavily on fossil fuels as do industrial farms. The diminished need for transportation, chemical inputs, mechanized equipment, and processing and packaging of food greatly decreases the need for non-renewable and polluting fossil fuels. Helena Norberg-Hodge et al. found that "small-scale, organic farms farming operations… use 60% less fossil fuel than conventional industrial farms" (cited in sustainabletable.org, Fossil Fuel section). Sustainable farms depend more on human energy and labor instead.

Lastly, and something which is more pertinent in recent times, is the fact that locally-based food systems are much less vulnerable to international or domestic variables, like markets and oil supplies. They are also less likely to be disturbed by something like a terrorist attack. A person would have a much easier time disrupting a massive, extended food system, than they would with smaller, more local operations.

Obviously, smaller, organic farms are much more beneficial than conventional farms. They better protect the environment and as a result, are much less detrimental to human health. Harmful chemicals in the air, water, and food itself is very limited or completely absent; water usage is minimized; genetically engineered crops and artificial growth hormones are forbidden; and biodiversity is protected. Put simply, the natural environment is allowed to function along

with humans instead of being subverted by them, producing healthier crops and healthier people. Organic crops have even been shown to contain higher "amounts of beneficial vitamins, minerals, EFAs (essential fatty acids) and antioxidants" (Cleeton, 2004).

Sustainable farming can also yield just as much, if not more than conventional methods – and without all the negative social and environmental externalities. Industrial farms may produce "a lot of one crop, [but] generate nothing else of use to the farmer" (Rosset, ¶ 5). "Small farms," however, "produce far more per acre or hectare than large farms" (¶ 4). "In Thailand," for example, "farms of two to four acres produce 60% more rice per acre than bigger farms… Across the Third World, small farms are 2-10 times more productive per acre than larger farms… [and] in the U.S., farms smaller than 27 acres have more than 10 times the dollar-per-acre output of larger farms" (Thery, Small Farms Fit section). These farms can do this without expensive inputs and without degrading the natural and social environment. In effect, they're production costs are probably much cheaper than those of a typical agribusiness.

Organic methods essentially reflect the true cost of food, as they, unlike industrial farms, account for social and environmental costs. Large-scale agribusinesses, through economies of scale, may be able to sell food at a cheaper price but that does not mean that they are truly producing it at a cheaper price. They do not care about the environmental and social damage they cause and therefore do not reflect it in the cost. As a result, food prices are often artificially low and we are unable to fully realize the cost of our food. Sustainable farms allow us to understand the consequences of our actions and thus encourage us to lessen our impact.

Communities can prosper, too, with the introduction of a sustainable, organic farm. The mentality among the people of a small-scale, organic farm is just so drastically different from that of someone running a conventional farm. "Instead of placing emphasis on the highest or global level of competitive interaction, [they] start at the bottom and place emphasis on the development of strong, independent, semiautonomous regions with unique identities" (alderspring.com, ¶ 18). They put people, community, and the environment before profits. Hard work and cooperation is valued above exploitation and so called efficiency. And the farm can become an integral part of people's lives, instead of an eyesore or embarrassment. In fact, it could be a major source of food for the community.

The primary input on the farm is labor, so they can support local economies by providing jobs. Secondly, "decentralized land ownership produces more equitable economic opportunity

for people in rural areas, as well as greater social [and monetary] capital" – which can be circulated among the citizens (Rosset, ¶ 4). Local farms also have a stake in the community, so they will be inclined to support local businesses and realize that they can be "held accountable for any negative actions that harm the community" (alderspring.com, ¶13). Furthermore, owners of small, sustainable farms are usually "actively involved in their communities, boosting civic participation and helping to build resilient rural [neighborhoods]" (sustainabletable.org, ¶ Economic Development section). Family farms can also be a nurturing place for both parents and children. Knowledge, skills, and experience can be passed on to community members through direct involvement on the farm. Connection to the people who grow the food is increased and interaction between citizens and the farmers could produce even more able farmers. Local farms allow people to develop a personal connection to the food they eat, too. This can actually be quite important in developing peoples' awareness to where their food comes from and how it's grown – something which has been all but lost in the modern, supermarket world. Once people understand this, they can better comprehend the impacts we as humans have upon the planet and hopefully form an appreciation for the environment which sustains them.

The Amish and Mennonite farm communities in the Eastern U.S. provide an ideal example of the feasibility of the small farm. "Lancaster County in Pennsylvania, which is dominated by these small farmers who eschew much modern technology… is the most productive farm county east of the Mississippi River… [with] $700 million in gross sales of agricultural products… and an additional $250 million from tourists who appreciate the beauty of traditional small farm landscapes" (D'Souza and Ikerd, cited in alderspring.com, ¶ 17).

Indeed, the two farmers mentioned throughout the paper illustrate wonderfully the value of local, sustainable methods as well. Sandy Gordon and his wife, who raise free-range cattle, tend to them every day and make sure they are not on any one field for too long. They are able to provide their customers with custom meats and personalized service. Along with other local farmers, they have started a farmer's market and in turn produced local jobs and income. They are now working on acquiring conservation easements to help protect the resources they have been bestowed.

David Frost, the owner of Cascade Farms, a local CSA (Community Supported Agriculture), has managed to develop a very productive farm on a very small piece of land. In fact, he said that they're able to feed 100 families on less than 1 acre. He, along with the rest of

the workers, provide the community with vegetables, eggs, pies and an assortment of other foods and products, like Christmas trees. He is encouraging the growth of more CSAs because he believes the more the better. Lastly, the farm is a place for learning and gatherings. People volunteer their time on the farm and are also motivated to become part of the community. I have been to the farm a number of times and I can definitely attest to its value.

Conclusion

While organic farming is increasing, it still makes up far too small a percentage of total agriculture. In the U.S., it applies to only about "2% of the food supply" (ofrf.org). This number is far too low for sustainable techniques to become a truly major and influential force in farming. Of course, impacts are being felt, but sustainable agriculture must become dominant and soon, if we wish to have a healthy and still productive environment in the future. Our current model is sacrificing future generations with its excessive use and pollution of natural resources, harmful health affects, and degradation of communities. This model is inherently unsustainable and therefore can not last.

Past civilizations have "risen on the strength of their agriculture and subsequently collapsed because their farming methods had eroded the natural resource base" (Ponting C., cited in Horrigan et al., 452). Unfortunately, we seem to be headed in the same direction. "The development of [modern farming technologies has led to] the complacent attitude that these products would solve the world's agricultural problems, and there would no longer [be] a need to know the identity and interactions of the organisms that comprise agricultural systems" (Miller and Rossman, 217). Or, in some cases, we seem to understand too much and are willing to genetically alter life without realizing the full repercussions. Industrial farming does not seem to realize the importance of the things that sustain us – including the environment and people. We must find a balance with nature and the systems within it. If we continue to try to subvert it, as David Frost explained to me, it will come back and bite us.

The sustainable model is able to achieve this delicate balance. It respect the fact that the natural systems which sustain agriculture must also be sustained themselves. Instead of viewing the farm as a factory, it sees it as a complex ecosystem that, if properly managed, can incorporate into the surrounding environment. Unlike agribusinesses, sustainable-minded farmers fully

account for their impact on the environment and do not force the costs of their actions onto society. Moreover, organic food much more accurately reflects the true cost of growing and distributing food and thus helps us realize and hopefully lessen our impact on the environment. While organic food is still a relatively small portion of the agricultural market, it is obvious that the idea is gaining popularity and that people are willing to support organically-grown foods. People understand the impacts of agriculture are want to encourage efforts that, although they may seem more expensive, are actually less so when all everything is accounted for.

With sustainability incorporated into other aspects of society, such as transportation, we could even effectively utilize some of the techniques associated with conventional farming, like marketing and worldwide distribution. However, sustainable farms would still focus on the immediate community and if most communities had viable local farms, the need for distribution would be diminished anyway. Sustainable agriculture and local farms help instill a better understanding among people, can encourage civic participation, and help people connect with their food and its origins. Agrarianism, on the local scale, has proven throughout history to be practical and valuable. It may involve more labor, community participation, and improved knowledge of the land, but these things are very valuable too. The full implementation of small-scale, sustainable farming can help us achieve this improved environmental and social state.

Works Cited

"As Food Companies Globalize, So Too Does the Reaction to Oligopoly Power!" The Agribusiness Accountability Initiative: Global Responses. 2 Dec. 2004. <http://www.agribusinessaccountability.org/page/global_responses/>.

Cleeton, James. "Organic Foods in Relation to Nutrition and Health Key Facts." Medical News Today. 11 Jul. 2004. Association of Primary Care Groups and Trusts (UK). 1 Dec. 2004. <http://www.medicalnewstoday.com/medicalnews.php?newsid=10587>.

Fagan, Brian M. People of the Earth: An Introduction to World Prehistory. Upper Saddle River, NJ: Pearson Prentice Hall, 2004.

"For the Plantation Owners." The Balance of Wealth. 2 Dec. 2004. <http://holisticpolitics.org/BalanceOfWealth/PlantationOwners.php>.

"Frequently Asked Questions About Organic Farming." About Organic. 4 Dec. 2004. <http://www.ofrf.org/general/about_organic/index.html>.

Frost, David. Phone interview. 30 Nov. 2004.

Gordon, Sandy. Phone interview. 28 Nov. 2004.

Gorelick, Steven. "The Farm Crisis: How We Are Killing the Small Farmer." ISEC. 1 Dec. 2004. <http://www.isec.org.uk/articles/farm.html>.

Harris, Jonathan M. Environmental and Natural Resource Economics: A Contemporary Approach. Boston: Houghton Mifflin Company, 2002.

Horrigan, Leo, Robert S. Lawrence, and Polly Walker. "How Sustainable Agriculture

Can Address the Environmental and Human Health Harms of Industrial Agriculture." Environmental Health Perspectives 110.5 (2002): 445-456.

"Introduction to Sustainability: Sustainable vs. Industrial: A Comparison." Sustianable Table. 2 Dec. 2004. <http://www.sustainabletable.org/intro/comparison/>.

Miller, Douglass R., and Amy Rossman. "Biodiversity and Systematics: Their Application to Agriculture." Biodiversity II: Understanding and Protecting Our Biological Resources. Ed. Marjorie L. Reaka-Kudla, Don E. Wilson, and Edward O. Wilson. Washington, D.C.: Joseph Henry Press, 1997. 217.

Mittal, Anuradha. Interview: "Losing the Farm: An Interview with Anuradha Mittal." Foodfirst. 1 Aug. 2003. Accessed 1 Dec. 2004. <http://www.foodfirst.org/media /printformat.php?id=361>.

Myers, Norman. "What's This Biodiversity and What's It Done For Us Today?" The Biodiversity Crisis: Losing What Counts. Ed. Michael Novacek. New York: The New Press, 2001. 23.

Orr, David W. Patriotism, Politics, and the Environment in an Age of Terror. Washington: Island Press, 2004.

Rosset, Peter. "On the Benefits of Small Farms." Foodfirst.org. Institute for Food and Development Policy Backgrounder. Winter 1999.Vol. 6, No. 4. 2 Dec. 2004. <http://foodfirst.org/pubs/backgrdrs/1999/w99v6n4.html>.

Rosset, Peter. "Small-Scale Farming: A Global Perspective – Benefits of Small Farms Greater Than Those of Large Farms." The Ecologist. June, 2000. <http://www. findarticles.com/p/articles.mi_m2456/is_4_30/ai_63699778>.

Schlosser, Eric. Fast Food Nation. Boston: Houghton Mifflin Company, 2001.

"Small Family Farms and Ranches." Alderspring Grass Fed Beef. 2 Dec. 2004. <http://www.alderspring.com/rural_communities/html/small_farms.html>.

Thery, Christine. "Small Farms." Small Farms: Journey to Forever. 4 Dec. 2004. <http://journeytoforever.org/farm.html>.

Trainer, Ted. "Agriculture: Conventional vs. Alternative." The Simpler Way. 2 Dec. 2004. <http://arts.unsw.edu.au/tsw/D57AgricultureConvlVsAlt.html>.

"Why Should MOFGA object to CAFTA, the FTAA, NAFTA, and similar international trade agreements." Mofga – News. 4 Dec. 2004. <http://www.mofga.org/pubpol_tradeinfo.html>.

Eve's Eden: Profiling a Nation's Progress toward Cohesive Gender Spheres of Thought

By: Adrienne Reed

American discourse has the undeniable ability to change the way thinking individuals perceive and respond to their world. Yet, the daily influx of seemingly discontinuous views flowing from private, public and academic sectors (a reasonable event where culture and counter-culture are constantly in motion) can be overwhelming and confusing. Even more frustrating is the task of trying to determine which pieces of communication are truth, and which are half-truth, distorted truth or opinion. Particularly challenging is the process of asking questions and searching out answers—a means that often enlightens to the point of the realization that even in the midst of certain absolute historical details, truth may be (since subjective opinions abound) nothing more than a relative estimation of the facts being presented. Nonetheless, one must at least try to make sense of it all, as in this historical survey of America's early patriarchal underpinnings and the efforts that fostered the expansion of feminist consciousness. Offering a springboard for historical consciousness, this study is a voyage of exploration and a journey toward empowerment.

To approach the history of America's patriarchal and feminist systems of thought requires a sense of how to relate to the information. Thus, one begins by considering classification (a scientific method for defining how each part fits into the whole, ordering it by characteristics and describing what it is and is not). Historian John Demos, author of Entertaining Satan, explains that classification is important for understanding how individual parts of society make up the whole of America—defining and tracking change and visible surface events, as well as clarifying change as it occurs, i.e. biographical, psychological, sociological and historical—all of which are often used in historical

mapping (394). Biography, he says, clarifies certain types, such as those "dependent on traditional values," whereas psychology clarifies specific "shift[s] in dynamic" personalities (394-5). Sociology, he says, recounts shifts in community size and, therefore, interpersonal relationships, and clarifies changing "spatial relationships [as in] 'organic' community [giving] way to 'pluralism'" (398). History, he notes, then takes into account changing value-systems, explaining that, while society once functioned by accepting occurring events as being closely linked one to another (a complete historical experience) "later generations were more inclined to take events one at a time, without looking backward or forward (or inward) for special meaning. In a sense [history tracked how] Americans were becoming a-historical" (399). However, classification according to gender has prompted an outcry for change from females since America's inception.

Change begets change; as Arthur M. Schlesinger, Jr., author of The Almanac of American History, confirms: "The law of acceleration dooms modern society to inexorable change" ("Intro," 13). Therefore, the changing needs of American's would bring about changing functions, and changing beliefs. Change was not always welcomed, however; yet, early American's were accustomed to change as much as they were accustomed to classification. If they were to survive, for instance, they needed order and, thus, they classified roles. Yet, this too proved problematic, as in the case of gender expectations. James A. Doyle, author of Sex and Gender defines gender in contemporary terms: "the social, cultural, and psychological aspects that pertain to the traits, norms, stereotypes, and roles considered typical and desirable for those who society has designated as male or female" (9). Classifying roles was necessary, in the seventeenth century, as John Demos explains, in A Little Commonwealth: husbands depended on "a wife ... to maintain an efficient household" (67). Carol Hymowitz and Michaele Weissman's, in A History of Women In America, point out that women's activities were categorically and basically the same "throughout ... the colonies:" bearing children; supervising households, working outside the home; participating in legal and political proceedings; and practicing medicine (4-7). (Interestingly, their list reveals that women were functioning in public and private capacities.) Order being necessary for survival explains why community might oppress a woman who stepped out of prescribed roles.

According to Patricia Lengermann and Ruth Wallace, women have been the greater recipients of oppression throughout world history: "Women's unequal and inferior status is a nearly universal social fact; ... [With] variations from culture to culture and time to time only in the degree of subordination" (Gender In America, 3). Demos, though, offers that while early communities were pervasively similar, as in "gender relations, with male preference being, virtually everywhere, the central theme," history reflects that "early American family life" revealed patterns of contrasting difference within each settlement (A Little Commonwealth, "Foreword," vii-xii). He explains.

> [E]vidence from New England ... [reflects] little sign of generalized (or 'structural') conflict between the sexes. Male dominance of public affairs was scarcely an issue, and in private life there was considerable scope for female initiative. Considered overall, the relations of men and women were less constrained by differences of role and status than would be the case for most later generations of Americans. ... Moreover, no single line in the extant materials raises the issue of sex-defined patterns of authority. (Entertaining, 63)

Yet, in A Little Commonwealth Demos seemingly refutes his own argument, presenting what appears to be a discontinuous thought regarding this matter: "...[I]n a general way ...male dominance was accepted principle all over the Western World in the seventeenth century" (82). In the second example he is speaking of a broader category—the Western World, whereas in the previous reference it is the smaller community of New England.

Demos's broader conclusion is that historical records reveal early forms of misogyny deeply ingrained in both sexes as well as other cultures besides those in America (64). Generally, colonists accepted Calvinist Theologian John Knox's analysis of the Biblical accounting of Genesis: woman having been created after and from man was "to be subservient to [man]" (Demos, A Little, 15-17). John Knox himself declared, "[W]oman in her greatest perfection was made to serve and obey man" (qtd. in Demos, A Little, 17). Anne Hutchinson suffered early misogynistic group oppression. Brought to trial because she did not willingly and naturally subordinate herself "to male authority," Governor Winthrop charged that she was "usurping authority over him whom God hath made her head and husband" (Demos, qtd in Entertaining 64). Modern general texts note

that she, having been well educated in religious subjects and interpretation of the Scripture (by her father, a revered Puritan preacher), hosted meetings to discuss the clergy's sermons where she rejected the hypocritical ideas of the colony's religious leaders—earning herself a reputation as a critic (Berkin et al. 56). An excerpt from the transcript of her "Trial at the Court at Newton: 1637" sheds some insight.

> **Gov. John Winthrop:** Mrs. Hutchinson, you are called here as one of those that have troubled the peace of the commonwealth and the churches here; ... you have spoken ... prejudicial to the honour of the churches and ministers, ... maintained a meeting and an assembly in your house that hath been condemned by the general assembly as a thing not tolerable nor comely in the sight of God nor fitting for your sex, ... Your conscience you must keep, or it must be kept for you. (Anonymous, "Anne" "Opening Charge")

During the trial, the leaders demanding she explain under whose influence she acted, whereas she confidently answered.

> **Mrs. Anne Hutchinson:** If you please to give me leave I shall give you the ground of what I know to be true. Being much troubled to see the falseness of the constitution of the Church of England, I had like to have turned Separatist. ... Since that time I confess I have been more choice and he hath left me to distinguish between the voice of my beloved and the voice of Moses, the voice of John the Baptist and the voice of antichrist, for all those voices are spoken of in scripture. Now if you do condemn me for speaking what in my conscience I know to be truth I must commit myself unto the Lord. (Anonymous, "Anne")

Rejecting the Calvinist doctrine of the elect, insisting salvation for all, she was tried during "the last stages of a troubled pregnancy," and ordered to leave Massachusetts Bay Colony, after leaders determined she was "a criminal three times over—a religious heretic, a political traitor, and a woman who did not conform to her role" (Hymowitz and Weissman 16-17). By reproving religious duplicity in the Massachusetts Bay Colony, Hutchinson indirectly spoke against oppression. The group misogyny Demos spoke of was the more difficult struggle, as seen in the Puritans' response to the news that Indians

had massacred her and her children: "appropriate punishment" by the hand of God (Berkin et al. 56). Hutchinson's story exemplifies the kinds of oppression American women have suffered. Yet, while she may have served as a wife and mother according to Knox's interpretations and colonial standards, she did not blindly obey colonial male leaders—she fought for her right to express her mind and live by her conscience.

In spite of Adamic patriarchal foundations and categorization methods, America's New Eden was a prime foundation for Eve's emerging feminist thoughts. Foremost, settlers' ideas of independence are revealed in their traveling to this New World, and in their exploration and development of America, as well as in their independence from Britain and the establishment of their own government. They would not have separated themselves from their homelands and journeyed to America unless they had a mindset of freedom of thought and belief—unless they valued freedom from tyrannical rule, and respect for individual thought. Logically they revered ideas of independence and reform. Those views built America, and are represented in the opening paragraph of the "Constitution of the United States:" "We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America" (Berkin et al., par. 1, A-8-9). Although their ideas became concrete in "The Constitution," they were initially written in the "Declaration of Independence:" "A decent respect to the opinions of mankind ..." (Berkin et al. A-7). Consequently, the mind set was in place for the internal forces to work in this group. They were frustrated and, therefore, determined to govern themselves. Gender classification aside, these ideas have fueled Americanism, and inspired feminist thought.

Feminist consciousness was evidenced as early as in the writing of the "Declaration of Independence." Consider, for example, a letter written by Abigail Adams to her husband John, as he and the Continental Congress convened to deliberate independence.

> Remember the Ladies, and be more generous and favorable to them than your ancestors. Do not put such unlimited power into the hands of the Husbands. Remember all Men would be tyrants if they could. If perticuliar

> care and attention is not paid to the Ladies we are determined to foment a Rebelion, and will not hold ourselves bound by any Laws in which we have no voice, or Representation. (56)

Likewise, consider John Adams' response to his wife.

> [Y]our letter was the first Intimation that another Tribe more numerous and powerful than all the rest were grown discontented. ... Depend upon it, We know better than to repeal our Masculine systems. Altho they are in full Force, you know they are little more than Theory. We dare not exert our Power in its full Latitude. We are obliged to go fair, and softly, and in Practice you know We are the subjects. I begin to think the Ministry as deep as they are wicked. [A]t last they have stimulated the ([Ladies]) to demand new Priviledges and threaten to rebel. (57)

While it is important to note that early American men were listening and heeding to the voices of American women, it is equally important to note Adams' response regarding women's abilities to fight for their individual rights. Logically, his words would suppose that women will overcome oppression if they are made aware of their legal rights, and if they are willing to enforce those rights.

Enforcing one's rights references back to the "Declaration of Independence's" ideas that, "... [If] a long train of abuses and usurpations, pursing invariably the same object, evinces a design to reduce them under absolute despotism, it is their right, it is their duty, to throw off such government, and to provide new guards for their future security" (Berkin et al. A-7). Even so, society does well to remember that documents and government are only one part of the whole, and specific cultural roles and expectations, as well as religious attitudes would have hindered early American women, as in Hutchinson's case. For even if husbands abused their wives by using their religious authority to oppress them, as Demos explains, "[R]esistance was not admissible" (A Little Commonwealth, 84). It can also be argued that while settlers' early efforts to establish laws and governments, and document ideas as in John Locke's "Second Treatise on Government" as well as the "Declaration of Independence," were supposed to reflect the needs of the whole nation, lower class Americans believed they reflected the privileges of upper class (Zinn, A People's History 74). However, for this topic it is

enough to note that the internal systems were in place, and they did and do still apply to all Americans.

It is well to note too that no progressive society exists within an internal vacuum. Internal and external ideas contribute to social expansion or social oppression. Consider, for instance, eighteenth-century French deistic philosopher and author Jean Jacques Rousseau. In a modern American college textbook, A History of Western Society, authors John P. McKay et al. reference Rousseau's 1762 "Emile ou de l'education" ("Emile; On Education"), noting that he "constructed sharp gender divisions" ("Gender Constructions," 686). According to the Internet Encyclopedia of Philosophy, "Rousseau [was reacting] against the artificiality and corruption of the social customs and institutions of the time" (Anonymous, "Biography," par. 1). The excerpt from Book 5 of Rousseau's work, included in McKay et al.'s essay could be considered a proposal against gender stereotyping. "In everything not connected with sex, woman is man. She has the same organs, the same needs, the same faculties. The machine is constructed in the same way; its parts are the same; the one functions as does the other; the form is similar; and in whatever respect one considers them, the difference between them is only one of more or less" (qtd. in McKay et. al. 686). Yet, taken with Demos's account that seventeenth century American culture, "maintained a deep and primitive kind of suspicion of women, solely on account of their sex," Rousseau's continuing thoughts are not entirely liberating (A Little Commonwealth, 82). "In everything connected with sex, woman and man are in every respect related and in every respect different. The difficulty of comparing them comes from the difficulty of determining what in their constitutions is due to sex and what is not..." (qtd. in McKay et. al. 686). That which appeared to be thoughts of gender equality breaks down and reveals discontinuity of thought. Interestingly, he was considered one of the foremost thinkers of that era, and was influencing worldwide change: "In Emile [Rousseau] presents the ideal citizen and the means of training the child ... and was the inspiration ... of world-wide pedagogical methods" (Anonymous, "Biography," par. 2). Besides, seemingly discontinuous thoughts have always been and will continue to be at play in a democratic society—for, if there is a culture there will be a counter-culture—within individual parts and within the whole.

It is not enough to recognize the internal and external forces at work in advancing patriarchal and feminist consciousness. It is also important to know what drives oppressive attitudes, ideas and behaviors. Commonly, they stem from ancient spiritual beliefs, traditions and customs that foster male supremacy and patriarchal authoritarianism. "Religion framed the essential standards of conduct, and served to 'explain' every manner of event, ... Church and State were formally separate, but in practice they were everywhere intertwined" (Demos, A Little Commonwealth, "Intro," 13). Hymowitz and Weissman's have the same opinion: "No body of ideas had a greater influence on American colonials than did Protestant theology" (A History, 15). The original idea that foster male supremacy and patriarchal authoritarianism is "[s]ome basic taint of corruption was thought to be inherent in the feminine constitution—a belief rationalized, of course, by the story of Eve's initial treachery in the Garden of Eden" (Demos, A Little, 83). The story Demos references—as recorded in the Biblical book of Genesis— records Eve as the first woman who decided for herself what she would and would not do. Referencing this accounting (with notes in parenthesis, as viewed online in the Puritan's Geneva Bible), Christian's proclaim that Eve ignored God's instructions that Adam gave her.

> And the LORD God {l} commanded the man, saying, Of every tree of the garden thou mayest freely eat: (So that man might know there was a sovereign Lord, to whom he owed obedience.); But of the tree of the knowledge of good and evil, thou shalt not eat of it: for in the day that thou eatest thereof thou shalt surely {m} die. ((m) By death he means the separation of man from God, who is our life and chief happiness: and also that our disobedience is the cause of it.). (2:16-17)

As the account is told, Eve's choice was not without consequence and, as some believe, her decision brought endless pain and suffering to all of humanity.

> Now the serpent was more {a} subtil ... And he {b} said unto the woman, 'Yea, hath God said, Ye shall not eat of every tree of the garden?' ... ((c) In doubting God's warnings she yielded to Satan.) ... And when the woman saw that the tree [was] good for food, and that it [was] pleasant to the eyes, and a tree to be desired to make [one] wise, she took of the fruit

> thereof, and did eat, and gave also unto her husband with her; and he {f} did eat. ((f) Not so much to please his wife, as moved by ambition at her persuasion.) (The Geneva Bible, Genesis 3:1-7, "Notes")

This Biblical narrative implicitly offers an example of the source of religious male dominance, and the reason for rejecting females as being unwise enough to make their own decisions. It is also an example of social customs that equally defend the female as the mother of humanity while humiliating her for her failure to accept a subordinate role. These kinds of ideas fuel oppressive attitudes and behaviors in America's history.

Beyond Eve's rebellion, America's oral and textual discourse reveals stories of women and men who have rejected oppression, and encouraged America's democratic society to adopt views and customs that demonstrated equal respect for the dignity of all Americans, regardless of gender, age, or ethnicity. The independence and social latitude that women have experienced began in America more out of necessity, than because of social equality ideologies; yet, by Demos's accountings, social equality was on the rise early on.

Inadvertently, colonial men promoted feminist consciousness. While property ownership between married couples in the early colonies was oppressive—"Legally, all property in a marriage, including a woman's clothing, belonged to [a woman's] husband"—Demos notes changes were occurring (12). These changes were occurring because Plymouth husbands were making estate decisions regarding their wife's general rights and privileges, improving women's legal status, especially in "comparison to [those of] ... the mother country ... [where the wife was still] largely subsumed under the legal personality of her husband: ... virtually without rights to own property, make contracts, or sue for damages on her own account" (Demos, A Little, 85). In contrast, Hymowitz and Weissman say, "Colonial society did not support the idea of equality between men and women. European men brought with them to America the tenet that woman was man's inferior. ... [A] belief ... minimized by the conditions of the New World" (A History, 2). Again, one author looks at the whole and another looking at a piece.

Colonial women, other than Abigail Adams, were also promoting feminist consciousness. Consider, for example, the contributions of Anne Bradstreet—friend to

Anne Hutchinson, and daughter to Governor Thomas Dudley (who sat on the panel at Hutchinson's trial). Like Hutchinson, Bradstreet was an educated woman. A fact, quite understated in many of today's literary works—she is documented as the first published poet of the New World—establishing her as the founder of American poetry. Moreover, evidencing traces of the intellectual shift to eliminate biased gender categorization, her poetry paved the way for and validated the significance of the female voice in both American and British writing. Compared to Hutchinson, Bradstreet played by the rules of the colonialists, accepting the role she was expected to fulfill, serving and submitting to male authority—which may be the reason she was able to speak out for social change in her literary efforts—even if hers was a subtle approach. It is also likely that Bradstreet's subtlety was partly due to the fact that she was a close friend to Hutchinson, and partly due to having been chided for her outspokenness against the "New World and its new manners" upon her arrival in colonial America; for, as she herself wrote "after I was convinced it was the way of God, I submitted to it and joined to the church at Boston" ("My dear children," 240). Furthermore, having once written, "I am obnoxious to each carping tongue / Who says my hand a needle better fits," she may have recognized that certain behavior by a woman, such as writing, would be perceived by the Puritan community as inappropriate (qtd. McMichael et al. 146).

Nonetheless, while she was outspoken in her literary efforts, she embraced the colony's religious and social role. John Woodbridge, colonial preacher and Bradstreet's brother-in-law, was instrumental in publishing The Tenth Muse. In the writing of the books "Epistle" he applauded the work as the work of a woman who knew and adhered to her role. It is "the work of a woman honored, and esteemed where she lives, for her gracious demeanour, her eminent parts, her pious conversation, her courteous disposition, her exact diligence in her place, and discrete managing of her family occasions, and more than so, these poems are the fruit but of some few hours, curtailed from her sleep and other refreshments" (3). She and her work were also embraced and encouraged by other strong Puritan men. These included business, political and religious leaders, i.e. Governor Thomas Dudley (father); Governor Simon Bradstreet (husband); and Cotton Mather and Nathaniel Ward (ministers and friends). George McMichael et al., author of Anthology of American Literature, note that these men were not threatened by Bradstreet's

accomplishments but recognized her worth as an individual, supporting and approving the publication of her poetic efforts (146). Remarkable actions, since, according to Douglas Wilson, author of Beyond Stateliest Marble, at that time in history no other work of such caliber had been previously written by a woman, much less published (231).

Predictably, as mentioned previously, influences of the expanding world of geography and ideas found their way into the normally rigid writings of Puritans like Bradstreet. As her work reveals these ideas moving toward the realization and recognition of the feminist voice—ideas moving toward the eradication of patriarchal attitudes that promoted biased gender categorization—ideas that eventually evolved into movements of reformation, independence and feminism—ideas recognizable in Bradstreet's elegy "In Honor of That High and Mighty Princess Queen Elizabeth of Happy Memory." This poem, elegiac in type, functions as an allegory, presenting a number of deep internal meanings. It reveals Bradstreet's attitude that women are capable of more than the culture gives them credit for; and as Adrienne Rich notes, the reason Bradstreet found her way into the archives and hearts of American women, even though Wilson asserts, in Bradstreet's autobiography, that feminists err in claiming Bradstreet as one of their own (xvii; 31-2). In this poem, Bradstreet presents an argument for the value of an individual's works beyond gender categorization: "No Phoenix pen, nor Spenser's poetry, / No Speed's nor Camden's learned history, / Eliza's works wars, praise, can e'er compact; / The world's the theatre where she did act" ("In Honor," Lines 24-27, 195). Bradstreet also presents the argument that in contrast to her well-known male counterparts Queen Elizabeth did more than write about the world, and that she was more than a poetical ornament or historical reference to adorn a page. Bradstreet, in her subtle approach was boldly stating that the Queen was an active player in writing the world's history.

Likewise, Bradstreet's words suggest that the Queen's accomplishments liberated women from the kinds of thinking that male, by gender, is superior. Later in the poem, she reminds cynics that there are many in the world willing to testify that gender does not determine capability, and thereby testify to the information she submits as proof.

From all the kings on earth she won the prize.

Nor say I more than duly is her due,

Millions will testify that this is true.

She hath wiped of th' aspersion of her sex,

That women wisdom lack to play the rex. (Lines 31-5, 196)

Simultaneously, while Bradstreet says the Queen's ruling actions established her as a "pattern for kings" to follow, she calls women to acknowledge the Queen as their pride—the vindicator of the female gender, as seen in line 124, "Here lies the pride of queens, pattern of kings" (198). Similarly, one should consider Bradstreet's use of the phrase "to play the rex" ("In Honor," Line 35, 196). The Oxford English Dictionary notes a number of definitions for the word "rex." These include to play pranks in a merry and festive way, or in the case of Sylvester's translation of Du Bartas' II: "to play rex [...], to act as lord or master, to domineer" and "to play the Rex," as in "playe the Rex, placing and displacing the Bishops at hys pleasure" (rex1). Bradstreet's irony and sense of humor is revealed in the definitions above, suggest that the Queen's works make a mockery out of those who would oppress women based on their gender:

Now say, have women worth? or have they none?

Or had they some, but with our Queen is't gone?

Nay masculines, you have taxed us long,

But she, though dead, will vindicate our wrong.

Let such as say our sex is void of reason,

Know 'tis a slander now but once was treason. (Lines 100-5, 197-8)

Perhaps Bradstreet is suggesting that the Queen was playing as a master, in spite of her gender, and to some degree found the ruling to be a game of sorts—a joyful and pleasurable ability to control the men beneath her. In fact, this poem reveals Bradstreet's ability to "play the rex" by poignantly using irony to drive home the truth of chauvinism.

Bradstreet's poem, beyond praising the Queen and heralding women's abilities, has an internal allegorical message that observes her religious convictions, while driving home the point that gender classification is moot even in religious observation. Comparing the Queen to the universal image of the phoenix, she writes, "She was a Phoenix queen, so shall she be, / Her ashes not revived, more Phoenix she" ("In Honor," 197, Lines 94-5). At first, this seems an odd example for arguing gender equality. The message becomes clear, however, when considering Hesiod's account of the self-

regenerative creature, as illustrated in The Dictionary of Literary Symbols: "a little phoenix," symbolic of longevity and "proof that the Resurrection is possible, ...is born from the 'father' phoenix, ... and when he grows sufficiently strong it carries the remains of its father to the Egyptian city of the Sun, Heliopolis" (Ferber 153). One might wonder why Bradstreet, if she stands against gender classification, would use the image of a male surrogate for the regeneration of his own life (no female needed) to represent the Queen. As Greer explains, "The early seventeenth century had not lumbered itself with a pseudo-scientific theory of sex differences. … [And] the teaching of the [Calvinist] Church was still based on Genesis 2 as interpreted by Augustine"; therefore, the soul was considered sexless, confirming the Puritan belief that the soul could not "be considered male" unless "the doctrine of the resurrection of the body was denied" (Kissing the Rod 28-9). Bradstreet, using classic symbolism, and religious evidence, proved she was expert at ironically poking fun at the classical masters by elevating the works and worth of a woman and by stating that beyond life there was no categorization by gender: logically she aligned her religious beliefs with her belief in equality. Each aforementioned point illustrates her subtle assertive ability to promote the feminist voice.

Other women, too, besides Eve, Hutchinson and Bradstreet, considered custom a tyrant. Elizabeth Cady Stanton was involved in the first "women's rights movement," (Hymowitz and Weissman 88). She believed in the worth of women, the necessity to dispense with gender classification and the ability of women to fight for their rights; yet, understood that "Thus far women have been mere echoes of men. … The true woman is as yet a dream of the future ("1888 speech," qtd. in Schneir, Preface). Not as subtle as Bradstreet, and certainly not banned for her aggressive outspoken beliefs the way Hutchinson had been, Stanton proved women's reform efforts were gaining strength, partially due to the growing numbers of believers and supporters, partially due to the waning influence of oppressive traditions.

Consider Quaker Susan B. Anthony, who challenged "false interpretations of Bible texts," and "the role of the church in the subjugation of women;" who challenged the New York "Legislature for revision of the married women's property statute;" who challenged women themselves to "bring about change" through political power; and who eventually challenged the United States of America, stating in her memoirs that "the

Fourteenth Amendment defined 'citizen' as all *persons* born or naturalized in the United States, which made women eligible to vote" (qtd. in Schneir 132-136).

And, Mary Wollstonecraft who lived "at the time of the American Revolution" and "believed the much-discussed rights of man should be extended to include women," influencing America in her European efforts (Hymowitz and Weissman 76). According to Miriam Schneir, Wollstonecraft's "major work, 'A Vindication of the Rights of Woman,' … was the most important of a number of feminist works published in the latter part of the eighteenth century ... [and] concentrated on describing the state of ignorance and servility to which women were condemned by social custom and training" (Feminism 5-6).

Consider too, Judge John Stuart Mill, European essayist and Member of Parliament. He provoked many by his outspoken ideas and participation in the woman's suffrage movement, and by arguing "the larger question of woman's full social equality" (Schneir 162). Mill writes:

> The legal subordination of one sex to the other—is wrong in itself, and now one of the chief hindrances to human improvement; and that it ought to be replaced by a principle of perfect equality, admitting no power or privilege on the one side, nor disability on the other. … But so long as the right of the strong to power over the weak rules in the very heart of society, the attempt to make the equal right of the weak the principle of its outward actions will always be an uphill struggle; for the law of justice, which is also that of Christianity, will never get possession of man's inmost sentiments; they will be working against it even when bending to it.… ("The Subjection of Women," Rpt. Schneir 163, 177)

Finally, consider Sojourner Truth, "born into slavery [...freed] in 1827," who spoke against the sins of slavery committed against African-Americans, and aligned herself "with the feminist cause from the early years of the American woman's movement" (Schneir 93). At the 1851 woman's convention in Akron, Ohio, Truth spoke a heart rendering message, simple and unwritten (as she had never learned to read or write), yet recorded by Frances D. Gage, presiding chair (93-94).

> That man over there says that women need to be helped ... Nobody ever helps me … And ain't I a woman? … [T]hey talk about this thing in the head; what's this they call it? [Intellect, someone whispers.] That's it, honey. What's that got to do with women's rights or negro's rights? … Then that little man in black there, he says women can't have as much rights as men, 'cause Christ wasn't a woman! Where did your Christ come from? Where did your Christ come from? From God and a woman! Man had nothing to do with Him. If the first woman God ever made was strong enough to turn the world upside down all alone, these women together ought to be able to turn it back, and get it right side up again! And now they is asking to do it, the men better let them. (par. 2-5)

This historical survey, and personally chosen examples presented, reveals that while patriarchal leaders may determine it logically appropriate to contain females within the boundaries of their Edens, socially conscious members of a democratic nation will not tolerate absurd and illogical ideas that oppress its people. For, if leaders fail to recognize and value the dignity and rights of its citizens, someone will rise to the challenge of redressing the grievances they bring, charging them to change and, if necessary, overthrow the tyrant—male or female—because an American leader must be fit "to be the ruler of a free people" ("Declaration," Berkin et. al. A-7)

Works Cited

Adams, Abigail. "Correspondence with John." (1776). The American Reader: Words That Moved A Nation. Rev. 2nd ed. Ed. Diane Ravitch. NY: Perennial, 2000. 55-6.

Adams, John. "John to Abigail." (1776). The American Reader: Words That Moved A Nation. Rev. 2nd ed. Ed. Diane Ravitch. NY: Perennial, 2000. 57.

Anonymous. "Biography: Jean Jacques Rousseau," Internet Encyclopedia of Philosophy. http://www.iep.utm.edu/. Ed. James Fieser and Bradley Dowden. Accessed 15 Feb 2005. <http://www.utm.edu/research/iep/r/rousseau.htm>

Anonymous. "Anne Hutchinson. Trial at the Court at Newton: 1637." Accessed 26 Oct 2004. http://www.annehutchinson.com/anne_hutchinson_trial_001.htm

Berkin, Carol et al. "Constitution of the United States of America and Amendments." Making America: A History of the United States. Brief 2nd ed. Volume A: to 1877. A-8-18.

---. "Declaration of Independence in Congress, July 4, 1776." Making America: A History of the United States. Brief 2nd ed. Volume A: to 1877. A-7-8.

---. The Making of America: A History of the United States. Brief 2nd ed. Vol. A. Boston: Houghton, 2001.

Bradstreet, Anne. "In Honor of That High and Mighty Princess Queen Elizabeth of Happy Memory," The Tenth Muse, Lately Sprung Up in America. 1st and 2nd ed. (1650, 1678). Rpt. in The Works of Anne Bradstreet. Ed Jeannine Hensley. Cambridge: Belknap Press of Harvard UP, 1967. 195-198.

Demos, John. A Little Commonwealth: Family Life in Plymouth Colony. New York: Oxford UP, 2000.

---. Entertaining Satan: Witchcraft and the Culture of Early New England. Updated ed. New York: Oxford UP, 2004.

---. "Foreword to the Second Edition." A Little Commonwealth: Family Life in Plymouth Colony. New York: Oxford UP, 2000. vii-xii.

Doyle, James A. Sex and Gender: The Human Experience. Dubuque: Wm. C. Brown, 1985.

Ferber, Michael. A Dictionary of Literary Symbols. Cambridge: Cambridge UP, 1999.

Hymowitz, Carol, and Michaele Weissman. A History of Women In America. New York: Bantam, 1978.

Lengermann, Patricia Madoo and Ruth A. Wallace. Gender In America: Social Control and Social Change. Englewood Cliffs: Prentice, 1985.

McKay, John P. et al. "Gender Constructions." A History of Western Society: Volume II: From Absolutism to the Present. Boston: Houghton, 2003. 686-87.

---. A History of Western Society: Volume II: From Absolutism to the Present. Boston: Houghton, 2003.

McMichael, George, ed. et al. Anthology of American Literature. 8th ed. Vol. 1. Upper Saddle River: Pearson, 2004. 145-147.

Mill, John Stuart. "The Subjection of Women." (1861, 1869). Rpt. in Feminism: The Essential Historical Writings. Ed. Miriam Schneir. New York: Vintage, 1999. 162-178.

"Notes on Genesis: From the 1599 Geneva Bible Notes." The Geneva Bible 1599. Accessed 10 Feb 2005. <http://personal.pitnet.net/primarysources/geneva.html> <http://www.reformed.org/documents/geneva/genesis.html>

Ravitch, Diane ed.. The American Reader: Words That Moved A Nation. Rev. 2nd ed. Ed. Diane Ravitch. NY: Perennial, 2000.

Rich, Adrienne. Foreword. "Anne Bradstreet and Her Poetry." The Works of Anne Bradstreet. By Bradstreet. Ed. Jeannine Hensley. Cambridge: Belknap Press of Harvard UP, 1967. ix-xx.

Rousseau, Jean Jacques. "Emile ou de l'education (Emile; On Education)." (1762). Rpt. A History of Western Society: Volume II: From Absolutism to the Present. John P. McKay, et al. Boston: Houghton, 2003. 686-87.

Schlesinger, Jr. Arthur M. ed. "Introduction." The Almanac of American History. Rev. and Updated ed. NY: Brompton, 1994. 8-13.

---. "Tyranny is Tyranny." A People's History of the United States 1492-Present. NY: Perennial, 1999. 59-75.

Schneir, Miriam, ed. Feminism: The Essential Historical Writings. New York: Vintage, 1999.

Stanton, Elizabeth Cady. "Address to the New York State Legislature." (1854). Rpt. in Feminism: The Essential Historical Writings. Ed. Miriam Schneir. New York: Vintage, 1999. 111-116.

The Oxford English Dictionary. 2nd ed. On CD-ROM. New York: Oxford UP, 2002.

Wilson, Douglas. Beyond Stateliest Marble: The Passionate Femininity of Anne Bradstreet. Ed. George Grant. Nashville: Cumberland House, 2001.

Woodbridge, John. "Epistle To The Reader." The Tenth Muse, Lately Sprung Up in America. 1st and 2nd ed. (1650, 1678). Rpt. in The Works of Anne Bradstreet. Ed Jeannine Hensley. Cambridge: Belknap Press of Harvard UP, 1967. 3.

Zinn, Howard. A People's History of the United States 1492-Present. NY: Perennial, 1999.

Socrates and Individualism

Jave Galt-Miller

Men of Athens, I honor and love you; but I shall obey the god rather than you, and while I have life and strength I shall never cease from the practice and teaching of philosophy.
– Socrates[1]

Introduction

In 399 BCE Socrates and a small band of his friends gathered in a prison cell to discuss philosophy for the final time. One month previous, an Athenian court had charged Socrates with three crimes: failure to acknowledge the city's gods; the creation of new ones; and corruption of the youth.[2] A majority of the five-hundred man jury had found him guilty on all counts, and he was sentenced to death. Now, as sunset approached, it was time to carry out that sentence. When the jailer entered the cell carrying the cup of hemlock that would quench the philosopher's life, most of his comrades could not help but weep for the loss of such a friend. Socrates, however, upbraided them for their histrionics and accepted his cup. He cheerfully drank his death. Such was the end of Socrates who, as his greatest student Plato writes, "was of all those we have known the best, and also the wisest and most upright."[3]

This paper will seek to prove the following three theses: individualism, similar in essence to how we think of it today, was present and prevalent in ancient Athens; Socrates was the foremost representative of that creed; and, paradoxically, this supreme individualist – Socrates – was put to death by Athens – the most liberal and enlightened city of its age – precisely because of his individualism.

Individualism in Athens

Erich Fromm, the writer and psychoanalyst, has much to say about individualism and its effects on modern man. In his book, *Escape From Freedom*, Fromm describes not only individualism's positive, life-affirming aspects, but also the anxiety that grows out of the feeling of alienation which results when society's individual values apply only to exterior bonds, and not to the interior world of the self. This growth away from oneness with the world toward a knowledge of self and separateness From calls "individuation"; and it is a process that can be

[1]Plato, *Euthyphro, Apology, Crito, Meno, Gorgias, Menexenus*, trans. R.E. Allen, (New Haven and London: Harvard University Press, 1984), 92.
[2]*Ibid.*, 86.
[3]Plato, *Phaedo*, trans. G.M.A. Grube, (Indianapolis: Hackett Publishing Co., 1974), 155.

found not only in the personal history of every man as he grows from the womb into adulthood, but also in mankind's social history. It is the emergence from instinctual beast to thinking man. But this self-awareness has shone forth only during brief moments in history.[4]

Karl Popper, the philosopher of science who also wrote much on sociology and the evils of totalitarianism, recognizes a similar historical process in man's growth from tribalism, or the closed society, to individualism, or the open society. In tribalism the only value lies in the group or state. It is a mindset where the individual becomes insignificant.[5] Conversely we may define individualism as a trend in valuation where the individual takes precedence over the group. It is the belief that each man is an end in himself, that he is autonomous. Whereas in a collectivist or tribal morality the good is that which is in the interest of a group, tribe, or state, the good of an individualist morality is each person's separate happiness.[6]

Do we have any evidence that Athenian citizens thought of themselves as individuals rather than as "inseparable parts of a biologic organism"?[7] We certainly do. We can hear this sense of self in the words of Pericles, the famed Athenian statesman:

> Our constitution is called a democracy because power is in the hands not of a minority but of the whole people. When it is a question of settling private disputes, everyone is equal before the law; when it is a question of putting one person before another in positions of public responsibility, what counts is not membership of a particular class, but the actual ability which the man possesses.[8]

These are the values and ideas that Pericles expresses in his famed funeral oration of 430 BCE at the start of the Peloponnesian War. Even if we grant that Pericles was a career politician and prone to exaggeration and rhetoric, it does not detract from the fact that his words must have expressed the ideals toward which Athenian citizens had aspired. Later in his speech Pericles makes his point even clearer: "I declare that in my opinion each single one of our citizens, in all the manifold aspects of life, is able to show himself *the rightful lord and owner of his own person*, and do this, moreover, with exceptional grace and exceptional versatility. [Italics mine]"[9] Can there be a greater declaration of individualism than this?

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[4]Erich Fromm, Escape From Freedom, (New York: Henry Holt and Co., 1941), 19-25.
[5]Karl Popper, *The Open Society and Its Enemies*, (Princeton: Princeton University Press, 1962), 9.
[6]*Ibid.*, 107.
[7]*Ibid.*, 173.
[8]Thucydides, *History of the Peloponnesian War*, trans. Rex Warner, (London: Penguin Books, 1954), 145.
[9]*Ibid.*, 147.

Herodotus, considered by many to be the father of history, wrote in the mid-5th century BCE about Athens' heroics in the great Persian War that took place a generation before he was born. He relates that the Spartans had sent emissaries to their ally Athens in fear that the Athenians would join the vastly superior forces of the Persians. They begged their fellow Greeks to remain true to their homeland and stay in the fight, but the Athenians only took the Spartans' insinuation as an insult. "We know as well as you do that the Persian strength is many times greater than our own... Nevertheless, such is our love of freedom, that we will defend ourselves in whatever way we can."[10] In the *Histories*, Herodotus speaks of freedom or liberty thirty-one times. He considers the value so basic that he even attributes it to the Egyptians of ancient times. Writing of a king he calls Sesostris, Herodotus says that in subjugating the nations in his path, this king respected those peoples who fought valiantly for their freedom and erected pillars in his and their honor; but "if a town fell easily into his hands without a struggle, he made an addition to the inscription on the pillar... he added a picture of a woman's genitals, meaning to show that the people of the town were no braver than women."[11]

Twice during the Peloponnesian War, in 411 and 404 BCE, the democracy was temporarily toppled and replaced by an oligarchy. In speaking of these brief *coups*, both Thucydides, the famed historian remembered for his realism and rejection of superstition, and Xenophon, the aristocrat turned mercenary, as well as friend and possible student of Socrates, wrote about the long-standing traditions of freedom and self-rule in Athens. Writing of the oligarchy of 411, Thucydides says: "For it was no easy matter about 100 years after the expulsion of the tyrants to deprive the Athenian people of its liberty – a people not only unused to subjection itself, but, for more than half of this time, accustomed to exercise power over others."[12] And Xenophon has Critias, the leader of the Thirty Tyrants who briefly seized power after Athens' defeat by Sparta, say this about Athens: "Not only do we have a larger population than any other Greek city, but the citizens here have been bred up on liberty for far too long."[13] Not only had Athenian citizens lived by an individualist creed, but they had done so for quite some time.

According to Popper, Western civilization began with the Greeks. They were the first to break free from the chains of tribalism to humanitarianism, or, as we are calling it,

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[10]Herodotus, *The Histories*, trans. Aubrey de Selincourt, (London: Penguin Books, 1954), 574.
[11]*Ibid.*, 167.
[12]Thucydides, *Peloponnesian War*, 577.
[13]Xenophon, *Hellenica*, trans. Rex Warner, (Baltimore: Penguin Books, 1966), 71.

individualism.[14] "Individualism, perhaps even more than equalitarianism, was a stronghold in the defenses of the new humanitarian creed. The emancipation of the individual was indeed the great spiritual revolution which had led to the breakdown of tribalism and to the rise of democracy."[15] The pinnacle of this spiritual revolution occurred in the generation that lived just before and during the Peloponnesian War, a group of men that Popper calls the "Great Generation".[16] These included Pericles, the great democratic statesman, and Herodotus, the writer who glorified the democratic credo in his *Histories*. They included the materialist philosopher Democritus of Abdera, who believed that "every man is a little world of his own" and that the good citizen is he who "considers the whole world his fatherland"; the iconoclastic tragic playwright Euripides, who both questioned the religion of his day and displayed the horrors of war on stage; the skeptical comic playwright Aristophanes who saw no subject so sacred that he could not poke fun at it; sophists like Protagoras who believed that "man is the measure of all things"; and Gorgias who developed the fundamental tenets of anti-slavery and anti-nationalism. By the end of the 5th century BCE, freedom and self-assertion had become indispensable values to the Greeks, and especially to the Athenians. Men were now glorified not only as tribal heroes, but as autonomous, thinking individuals.[17] And just at this peak of humanitarianism and tolerance, Socrates, perhaps the greatest representative of this greatest generation, was killed for his individualism.

Socrates as Individualist

The prosecution at Socrates' trial could have used the following words to validate their charge that Socrates was corrupting the youth:

> When [a man] is refuted in argument, and when that has happened to him many times and on many different grounds, he is driven to think that there's no difference between honorable and disgraceful, and so on with all other values, like right and good, that he used to revere... when he's lost any respect or feeling for his former beliefs but not yet found the truth, where is he likely to turn? ...And so we shall see him become a rebel instead of a conformer.[18]

No enemy of Socrates could have stated the case against him any better; yet we see these words

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[14]Karl Popper, *The Open Society*, 171.
[15]*Ibid.*, 101.
[16]*Ibid.*, 185.
[17]*Ibid.*, 190.
[18]Plato, *The Republic*, trans. Desmond Lee, (London: Penguin Books, 1954), 291.

spring from Socrates' own mouth in Plato's *Republic*.

Before we can understand this contradiction, we must first examine the sources available that tell of Socrates' life and beliefs. Socrates never wrote anything himself, but there seems to have been a plethora of dialogues written by Socrates' disciples after his trial and execution. Fragments from one of these, written by Antisthenes, have survived, and in the annals of ancient historians can be found ambiguous clues to the existence of many others. But only two authors' works have survived in full into the present day: those of Plato and Xenophon.

The Socrates of Xenophon is hardly a philosopher. He walks about town conversing with his fellow Athenians with a supreme confidence in the knowledge he has accumulated. Rarely do we find in Xenophon the Socratic questioning with which we are so familiar. "Xenophon's Socrates is plainly more interested in conclusions than in the process of reaching them."[19] His morality is nothing new or shocking. For the most part Xenophon's Socrates spouts the aristocratic morality of his day. His idea of justice, so important in the works of Plato, is the echo of every Athenian citizen: "to do good to one's friends, and do harm to one's enemies."[20] In Xenophon's *Apology*, instead of giving moral integrity as his reason for not backing down at his trial, Socrates tells his friends that he is old and that it is better he should die at that moment than to suffer the pains of old age and senility.[21] This, however, is not to say that Xenophon's Socrates lacks charm. In his questioning of the wealthy courtesan Theodote,[22] and in the picturesque drinking party of the *Symposium*,[23] we find the humorist and ironist we have all grown to love. But the duration and quality of Xenophon's relationship to Socrates is uncertain, and it is clear that he lacks the subtlety of mind, and perhaps the desire, to delve into the depths of philosophy. If we hope to understand the historical Socrates we must look to Plato.

Plato had a longstanding relationship with Socrates and he was present at his trial.[24] From Socrates' short association with Plato's uncle Critias, and the longer friendship with his older cousin Charmides,[25] Socrates appears to have been a friend of Plato's family for some time. The question becomes, "Where in Plato's dialogues does Socrates end and Plato begin?" How much can we rely on Plato to mirror the precepts of his teacher?

It is generally agreed that Plato's dialogues may be split into three periods: the Early,

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[19]Xenophon, *Conversations of Socrates*, trans. Robin Waterfield, (London: Penguin Books, 1990), 8.
[20]*Ibid.*, 124.
[21]*Ibid.*, 43.
[22]*Ibid.*, 167-171.
[23]*Ibid.*, 227-267.
[24]Plato, *Apology*, 101.
[25]Xenophon, *Conversations*, 235-245.

Middle, and Late periods. In the Early period Plato tries to represent Socrates as he was, and this includes the *Apology*, *Euthyphro*, *Crito*, and *Gorgias*. During the Middle Period, Plato's own thought begins to flower, and he uses Socrates as his mouthpiece. This period includes the *Symposium*, *Phaedo*, and the *Republic*. Finally, in the Late Period, Plato drops Socrates as his protagonist altogether, and the *Laws*, the philosopher's last work, is especially representative of this trend. Since Socrates is only represented in Plato's Early and Middle periods, we will concentrate on these; and while there are many differences between these two representations of "Socrates", we will only focus on those that are pertinent to his individualism.

The first major difference between the Socrates of Plato's early and later works is on his conception of the "soul". Before Socrates there is no conception of the soul in Greek philosophy or religion. At most, when a person died, it was thought that his shade would wander aimlessly in the caverns of Hades for eternity. For Socrates, however, the soul is something within us, a thing special and valuable that encapsulates our personality and moral nature.[26] For the Socrates of the early dialogues, "our soul is our self – whatever that might turn out to be. It is the 'I' of psychological function and moral imputation – the 'I' in 'I feel, I think, I know, I act.'"[27] But this is a far cry from the modern notion of soul that has come down to us from our Christian heritage; it is a far cry from that same notion that the early Christian fathers hijacked from the middle dialogues of Plato himself. Listen to the Socrates of the *Phaedo* as he councils his disciples:

> Answer me then, he said, what is it that, present in a body, makes it living?
> – A soul.
> Whatever the soul occupies, it always brings life to it? – Of course.
> Is there, or is there not, an opposite to life? – There is: death.
> So the soul will never admit the opposite of that which it brings along, as we agree from what has been said? – Most certainly.
> [V]ery well, what do we call that which does not admit death? – Deathless.
> So we have proved that the soul is deathless.[28]

Nowhere in Plato's early works does Socrates make such a claim. The best he can do in the Apology is to counsel that one should not fear death because no one knows what lies on the other

[26]James Collaiaco, *Socrates Against Athens*, (New York: Routledge, 2001), 137.
[27]Gregory Vlastos, *Socrates: Ironist and Moral Philosopher*, (Ithaca: Cornell U. Press, 1991), 55.
[28]Plato, *Phaedo*, 144-145.

side, and if it is just an eternal sleep, then so much the better.[29] Socrates' idea of soul had no metaphysical or otherworldly connotation. It was a moral appeal that spoke to our autonomous nature and showed the individual value inherent in us all.[30]

Wrapped up in this mystery of the soul is the difference between Socrates' and Plato's conception of the essence of things. Everywhere in the early dialogues we find Socrates asking the same questions: What is piety? What is justice? What is virtue? Socrates believed that everyone has an incomplete knowledge of what these terms mean, even he; but he was certain that once complete knowledge could be found, men would live happier, fuller lives. Socrates called these complete definitions the "essence" of a thing, or the "form" of a thing. But in Plato's later works we get a vastly different view of these "Forms". To Plato they are no longer definitions but existents that reside outside of space and time.[31] They are the unchanging perfection out of which all the sensible objects around us take an incomplete part. No table is truly a table. Each empirical table is an imperfect copy of the metaphysical form "Table" of which only the philosopher may get a glimpse. This dichotomy between the perfect and the sensible has serious consequences in Plato's philosophy as Gregory Vlastos, a scholar who has spent much effort in the disentanglement of Socrates from Plato, so eloquently expresses:

> The ontology of non-sensible, eternal, incorporeal, self-existent, contemplable Forms, and of their anthropological correlate, the invisible, immortal, incorporeal, transmigrating soul, has far reaching implications for the mind and for the heart. In the heart it evokes the sense of alienation from "this" world where the body lives, a nostalgia for a lost paradise in that "other" world from which the soul has come and to which it longs to return. In the mind it arouses a hunger for the kind of knowledge which cannot be satisfied by investigating the physical world.[32]

One can hardly imagine an outlook more different from that of Socrates. Vlastos describes the peripatetic philosopher as one who ambles every day around the agora, barefoot, wearing only one tunic for the year. Socrates, because he cares little for money, or reputation, or anything else other than virtue or wisdom, is certainly unworldly. But he is not otherworldly, for he does not seek mystical union with a Being he can never know or understand. "For Socrates reality – real

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[29]Plato, *Apology*, 92.
[30]Karl Popper, *The Open Society*, 190.
[31]Plato, *Republic*, 257-261.
[32]Gregory Vlastos, *Socrates*, 79-80.

knowledge, real virtue, real happiness – is in the world in which he lives... The passionate certainties of his life are in the here and now."[33]

The next area of contention between Socrates and Plato is in the realm of knowledge and teaching. At his trial, the search for knowledge is uppermost in Socrates' defense: "The greatest good for man is to fashion arguments each day about virtue and the other things you hear me discussing when I examine myself and others... the unexamined life is not for man worth living."[34] Socrates believed that people do wrong only through ignorance; for him the search for knowledge was vital to happiness and harmony. Socrates, unlike the Sophists, rejected the idea that virtue could be taught. While a teacher may provide assistance to his students, an individual could find truth only through relentless self-examination, and it was necessary that each person find truth on his own.[35]

The word "philosopher" is derived from the Greek words "lover of wisdom". For Socrates, to love, to desire, is to seek. Those with knowledge and wisdom cannot be philosophers, nor can those who scorn or flee from it; thus, for Socrates, only gods and idiots are banned from philosophy. But he welcomes and applauds anyone who honestly seeks wisdom. "For you see that our argument now concerns what even a man of scant intelligence must needs be in utmost earnestness about, namely, the way one ought to live."[36] Not so with Plato: "Philosophy should be wooed by true men, not bastards."[37] It is incredible to find these words leaving the lips of the *Republic*'s Socrates. Plato's philosopher is no longer the humble man who is aware of his limitations and knows "only that he knows nothing." He is the Philosopher King. In Plato's later works, no longer do we find the modest seeker, but the proud possessor of truth.[38] The Philosopher does not only hold the key to knowledge, but he has a monopoly on it. And in Plato's ideal state, no one beneath the philosopher king will be allowed to question that authority. "Plato does not leave this as a matter of inference. He insists that critical discussion of the basic concepts of morality is prohibitively risky for the populace at large, and not only for them – even for the philosophers-to-be prior to the completion of mathematics."[39] There can be no greater clash between two sets of beliefs. The contrast between Socrates and Plato is that between a

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[33]*Ibid*, 80.
[34]Plato, *Apology*, 100.
[35]James Collaiaco, *Socrates*, 49.
[36]Plato, *Gorgias*, 289.
[37]Plato, *Republic*, 287.
[38]Karl Popper, *The Open Society*, 132.
[39]Gregory Vlastos, *Socrates*, 109.

rational individualist and a totalitarian demi-god.[40]

The final difference we shall discuss is Socrates' and Plato's idea of politics. I.F. Stone, the journalist turned Greek scholar at age seventy, writes: "[Socrates] and his disciples saw the human community as a herd that had to be ruled by a king or kings, as sheep by a shepherd. The Athenians, on the other hand, believed that man was a 'political animal'... endowed with reason... and thus capable of governing himself in a *polis*."[41] Stone is missing the vital difference between the Socrates of the early dialogues and that of the later. In dealing with Plato, however, he knows his man, as is exemplified in the following quote from the *Republic*: "It would be a sin either for mating or anything else in a truly happy society to take place without regulation."[42] Plato's feelings about his fellow men are made quite transparent in his last work, the *Laws*: "[T]hey will live the life that their own nature demands, puppets that they are, mostly, and hardly real at all"[43] For Plato, the individual has nothing to do with politics. Justice is a well-oiled state where the cogs don't matter. According to Popper's diagnosis of Plato, the inherent imperfection of the individual is exactly that which requires the city-state to be placed higher in value. Only the State can be self-sufficient and perfect.[44] This is the exact opposite of our definition of individualism. Socrates would never have survived seventy years had he lived in either of Plato's hypothetical city-states.

Socrates had no political agenda. He was a critic of his democratic government, as the best democrats often are, but he makes it clear by both his actions and his words that he believed Athens was the best government in existence during his lifetime. At his trial, Socrates does not offer exile as a viable penalty for his crimes; when his friend Crito comes to his jail cell to offer escape to another country, Socrates refuses and asks his friend what he would do in Thessaly when he got there, other than eat, "as if I'd exiled myself for a banquet."[45] Socrates is much more interested in individual morality than politics; and he knows that he knows too little to be developing the perfect government. Richard Kraut, a political and philosophical scholar, sums up what Socrates might have told his disciples had they wished to pursue a career in politics:

> If you want to pursue your own best interest, then you must try to become as virtuous as possible. And to do this, you must try to acquire knowledge

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[40]Karl Popper, *The Open Society*, 132.
[41]I.F. Stone, *The Trial of Socrates*, (New York: Anchor Books, 1989), 38.
[42]Plato, *Republic*, 179.
[43]Plato, *The Laws*, trans. Trevor Saunders, (London: Penguin Books, 1970), 292.
[44]Karl Popper, *The Open Society*, 76.
[45]Plato, *Crito*,128.

> of the virtues. But the only way to acquire moral knowledge – though of course this is not a method that guarantees success or even progress – is to discuss moral questions every day, as I do. Now, if you enter a political career you will have too little time, or none at all, to care for your own souls... So give up your political ambitions, turn yourselves into moral experts, and then, if you so choose, you can occupy yourselves with politics. Having completed the project of becoming a virtuous person, you can turn to the far less important task...'[46]

It is clear that the individual was of supreme importance to Socrates in his search for wisdom, and that the philosopher has a place in that great humanitarian generation of Golden Age Greece. But Socrates goes further than any of his peers. He realizes that there are different levels of freedom. There is freedom from the outward restrictions of the state and from the insatiable desires of the criminal, and these topics were very much in the Athenian air. But there is another freedom which is often overlooked by the most intelligent of people: freedom from false belief and self-deceit. We are, all of us, enchained by the various assumptions and axioms that we have inherited from our families, our cultures, our infirmities. The only way to break free from these chains is to examine everything, from the most basic, to the most sacred.

> [Socrates] demanded that individualism should not be merely the dissolution of tribalism, but that the individual should prove worthy of his liberation. This is why he insisted that man is not merely a piece of flesh – a body. There is more in man, a divine spark, reason... It is your reason that makes you human; that enables you to be more than a mere bundle of desires and wishes; that makes you a self-sufficient individual and entitles you to claim that you are an end in yourself.[47]

The Clash of Socrates and Athens

If Socrates had been the foremost proponent of this individualist humanitarianism, and if Athens had been the most democratic and enlightened city of its age, why did a conflict arise between the two? Before we can answer this question we must first examine the nature of the Athenian democracy.

Athens was an absolute democracy. Every one of the city-state's citizens that could make it to the monthly Assembly meetings had a chance to discuss and vote on all laws and proposals.

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[46]Richard Kraut, *Socrates and the State*, (Princeton: Princeton U. Press, 1984), 210.
[47]Karl Popper, *The Open Society*, 190.

The idea of free speech was vital to the workings of such a state, and, for the Athenians, such freedom was the essential difference between democracy and tyranny.[48] In his philological investigations, Stone found four words for free speech in the Attic dialect, more than in any language, ancient or modern.[49] And for Euripides, Athens' last great tragic playwright, true liberty is "when free born men, having to advise the public, may speak free."[50] But there is one major difference between Athenian freedom and our modern conception of the term.

> Athenian liberties were not founded on what were later called natural rights, existing anterior to the state, but were acquired through active participation in the public realm – the Assembly, law courts, and agora – the realm of speech and reason, discussion and persuasion. The purpose of Athenian law was not to guarantee rights but to preserve the *polis*.[51]

The Athenians had no Bill of Rights. Freedoms existed because of an absence of restrictive law, and those freedoms could be quashed whenever an individual was thought to be a threat to the *polis*.[52] Despite numerous advocates to the contrary, the state remained primary to the individual in ancient Athens.

The charges levied against Socrates were vague, but they came down to two crimes: impiety and corruption of the youth. To our modern ears, the existence of such crimes sounds like blasphemy against our most sacred democratic values; but to the men of 5th century BCE Athens, such acts were considered treason against the state. Even so, why did they go after Socrates at this particular time? Nothing about Socrates' actions or lifestyle had changed: he still walked the agora every day, drawing crowds with his debates and examinations of others; he still questioned the legitimacy of the flawed, Homeric conception of the gods, though he dutifully continued to make the proper daily sacrifices. At age seventy, with not much life left to live, why did Socrates' prosecutors bother to take the philosopher to trial after so much time? To understand this, we must place Socrates' trial in its proper historical context.

By 399 BCE, Athens had endured and lost a pan-Hellenic war that lasted some thirty years. Within ten years of Socrates' execution, Athens had endured three violent revolutions, events Stone calls "political earthquakes", that shook the city's security and created in its citizens

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[48]James Colaiaco, *Socrates*, 99.
[49]I.F. Stone, *Trial of Socrates*, 215.
[50]Euripides, *The Suppliants*, trans. Moses Hadas, (New York: Bantam Books, 1960), 74.
[51]James Colaiaco, *Socrates*, 100.
[52]*Ibid.*, 122.

a tremendous feeling of anxiety.[53] The first was an oligarchic revolution of four hundred men that lasted four months in 411; the second was the Spartan puppet-government of the Thirty Tyrants that lasted eight months in 404 at the end of the Peloponnesian War. While brief, each of these *coups* turned into a bloodbath as both sides, the democrats and the oligarchs, sought to get and keep the upper hand. The third "earthquake" occurred in 401 when the remnants of the oligarchic movement tried and failed to topple the democracy for a third time. By the time of Socrates' trial, the democratic government had regained its strength, but its citizens were still fearful of any threat against their security and their traditions.

Athens had witnessed the corrosion of its values by violence, plague, and revolution, and the average citizen was not about to sit by and watch as Socrates sowed the seeds of future instability with his reckless teachings. Many people around him saw Socrates' questioning of traditional values as destructive when he failed to offer any positive doctrine to take their place.[54] Even Callicles, Plato's representative of hedonism and realpolitik in the *Gorgias,* is taken aback by Socrates' views: "If you are in earnest and what you say is really true, our human life would be turned upside down. We would be doing exactly the opposite, it seems, of what we should."[55] The Athenian citizens simply wanted peace. They wished to be left alone to go about their daily activities; they wanted to enjoy their festivals and make the sacrifices to their gods that their forefathers had made before them. But more than anything, the Athenians wanted a rest from the critical thinking that Socrates and the Great Generation had thrust upon them – a questioning of values that many thought had led to the fall of their city. But Socrates refused to grant them their wish. This is how he describes himself to the jurors at his trial:

> [I am] a man who – if I may put it a bit absurdly – has been fastened as it were to the City by the God as, so to speak, to a large and well-bred horse, a horse grown sluggish because of its size and in need of being roused by a kind of gadfly. Just so, I think, the God has fastened me to the City. I rouse you. I persuade you. I upbraid you. I never stop lighting on each one of you, everywhere, all day long.[56]

When Socrates placed his search for truth and self-discovery above the traditions and values of his city, he became a threat to the safety and sanity of his peers.[57] And the Athenians, not

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[53]I.F. Stone, *The Trial of Socrates*, 140.
[54]James Colaiaco, *Socrates*, 43.
[55]Plato, *Gorgias*, 269.
[56]Plato, *Apology*, 93.
[57]James Colaiaco, *Socrates*, 104.

wishing to be roused from their slumber, swished the city's collective tail and crushed the gadfly under foot.

The trial and execution of Socrates is one of history's most tragic episodes, and a tremendous black mark on the legacy of an otherwise great city. It is hard to read Plato's *Apology* or *Phaedo* without brushing a few tears from one's eyes. Solon, the great Athenian lawmaker of the 6th century BCE, said, "Look to the end no matter what it is you are considering. Often enough God gives a man a glimpse of happiness, and then utterly ruins him."[58] But if we look at Socrates in his final living hours, we see all the markings of a happy man: he was surrounded by friends and family; revered for his honesty and integrity; confident in his never committing an unjust act against another. His students and disciples wrote about him and his beliefs for years after his death, and 2400 years later, the name Socrates is still a rally cry that inspires heroic individualism and uncompromising integrity. In conclusion, let us leave with these parting words from Gregory Vlastos, where he describes how this happiness is possible, not only to Socrates, but to every man who pursues that same vision of truth and integrity:

> If you say that virtue matters more for your own happiness than does everything else put together, if this is what you say and what you mean – it is for real, not just talk – what is there to be wondered at if the loss of everything else for virtue's sake leaves you light-hearted, cheerful? If you believe what Socrates does, you hold the secret of your happiness in your own hands. Nothing the world can do to you can make you unhappy.[59]

[58]Herodotus, *The Histories*, 53.
[59]Gregory Vlastos, *Socrates*, 235.

Bibliography

Primary Sources:

Euripides. *The Suppliants*. Trans. Moses Hadas. New York: Bantam Books, 1950.

Herodotus. *Histories, The*. Trans. Aubrey de Selincourt. London: Penguin Books, 1954.

Plato. *Euthyphro, Apology, Crito, Meno, Gorgias, Menexenus*. Trans. R.E. Allen. New Haven and London: Harvard University Press, 1984.

Plato. *Laws, The*. Trans. Trevor Saunders. London: Penguin Books, 1970.

Plato. *Phaedo*. Trans. G.M.A. Grube. Indianapolis: Hackett Publishing Co., 1981.

Plato. *Republic, The*. Trans. Desmond Lee. London: Penguin Books, 1974.

Thucydides. *History of the Peloponnesian War*. Trans. Rex Warner. London: Penguin Books, 1954.

Xenophon. *Conversations of Socrates*. Trans. Hugh Tredennick. London: Penguin Books, 1990.

Xenophon. *Hellenica*. Trans. Rex Warner. Baltimore: Penguin Books, 1966.

Secondary Sources:

Colaiaco, James A. *Socrates Against Athens*. New York: Routledge, 2001.

Fromm, Erich. *Escape From Freedom*. New York: Henry Holt and Co., 1941.

Kraut, Richard. *Socrates and the State*. Princeton: Princeton University Press, 1984.

Popper, Karl R. *The Open Society and Its Enemies Vol. 1 The Spell of Plato*. Princeton: Princeton University Press, 1962.

Stone, I.F. *The Trial of Socrates*. New York: Anchor Books, 1989.

Vlastos, Gregory. *Socrates: Ironist and Moral Philosopher*. Ithaca: Cornell University Press, 1991.

Rousseau, Kierkegaard, Frankl and Sartre: Shedding Light on the Existential Plight of Tolstoy's Ivan Ilych

By: Mona Lee

The crisis of finding meaning in life that many people in the world face today is also a major conflict in the lives of many characters in literature. One such character is Ivan Ilych in Leo Tolstoy's *The Death of Ivan Ilych* (1886). As the protagonist of the story, Ivan is the prime example of a prominent bureaucrat who believes that striving to earn more, living appropriately and pleasantly, and securing his "propriety" all according to society's values, will guarantee his happiness. Ivan is a man who watches "for everything that might disturb" pleasantness and propriety and who becomes "irritable at the slightest infringement of it" (Tolstoy 273). However, he struggles with an internal conflict from the time he falls ill to the time of his death. This conflict is centered in the artificial life that he has been leading and the consequences of leading this life, which leaves him alone and disconnected from the rest of the world. Ivan is ultimately left to contemplate his existence and the misguided choices that he has made in shaping his life as he painfully realizes that his "life was not real at all, but a terrible and huge deception which had hidden both life and death" (Tolstoy 299). As he nears death Ivan recognizes that "his professional duties and the whole arrangement of his life and of his family, and all his social and official interests, might all have been false" (Tolstoy 299) and "This consciousness intensified[s] his physical suffering tenfold" (Tolstoy 299). Ultimately, however, Ivan's acceptance of his inauthentic life enables him to die peacefully without feeling any more physical or mental pain.

The answer to the Tolstoyan question of what is real and meaningful in life may be found in the philosophies of existential thinkers such as Soren Kierkegaard, Viktor Frankl, and Jean-Paul Sartre, as well as earlier Romantic philosophers such as Jean-Jacques Rousseau. In *The Death of Ivan Ilych*, there are clear parallels to the ideas of all the above-mentioned philosophers, especially Rousseau, with whose works Tolstoy was familiar. As Richard Gustafson remarks in *Leo Tolstoy: Resident and Stranger*,

"Tolstoy's model of human cognition is…[similar to that of] Tolstoy's beloved Rousseau, [who] assumes a similar model of human knowledge" (Gustafson 221). It is important to note that both Tolstoy and Rousseau foreshadow issues later important in existential philosophy. This paper will explore the connections between Tolstoy's *The Death of Ivan Ilych* and the philosophical ideas of Rousseau, and the central tenants of existentialist thinkers, specifically Kierkegaard and Sartre. A consideration of these connections eventually helps explain the text's central question: does Ivan Ilych arrive at enlightenment before death, and if so, how?

The Death of Ivan Ilych is the story of Ivan Ilych's long fatal illness, which forces him to confront the reality of his artificial life and the consequences of living this type of life. Tolstoy's description of the anguish which Ivan goes through in enduring his illness is vivid and portrays the reality of death and illness; that it is a painful and difficult process to go through, especially if one has lived a life like Ivan's. Ivan's life and the way he refuses to live naturally and honestly is what makes it difficult for him to accept what is happening to him. He cannot accept the fact that he is going to die. He is fearful, and in the midst of his physical sufferings, his unwillingness to allow reality to sink in only makes him suffer longer and deeper.

Ivan's sufferings are actually happening on two different planes: the physical and the spiritual. Indeed, he feels physical pain, but he is suffering spiritually as well. Ivan's physical pain is evident through his "screaming [that] began [and] that continued for three days, and was so terrible that one could not hear it through two closed doors without horror" (Tolstoy 300-301). The cause of Ivan's illness is, a malfunctioning kidney or as the doctors describe it, a "floating kidney" (Tolstoy 271), which may be a symbol of his spiritual ailment. Ivan's kidney can no longer cleanse his body of poisons perhaps because it has been overwhelmed by the poisonous, inauthentic way Ivan lives. His body recognizes his hypocrisy long before he does. Jean-Jacques Rousseau, whose work influenced Tolstoy greatly, would no doubt support this interpretation of Ivan's illness, since Rousseau believed physical problems symbolize spiritual ailments. In *The Creed of a Savoyard Priest*, Rousseau claims, "Is not bodily pain a sign that the machine is out of order, and a warning that we must attend to it?" (252). However at first, Ivan does not attend to the discomforts caused by his illness; in fact he overlooks the

seriousness of his malady: "The pain did not grow less, but Ivan Ilych made efforts to force himself to think that he was better" (Tolstoy 272).

Ivan's life before his final realization at death is as meaningless and useless as his ailing body. According to Geoffrey Clive, author of the book *The Broken Icon: Intuitive Existentialism in Classical Russian Fiction*, "Tolstoy confronts us with three inseparable dimensions of inauthenticity; first, the horrendous emptiness of society masquerading as respectability; second, the frightening power of a man to deceive himself; and third, our adamant desire to conceal from ourselves what we abstractly admit to be indubitable truths" (Clive 107). Indeed all three of these dimensions may be seen in *The Death of Ivan Ilych* and in the character of Ivan.

Clive's first dimension of inauthenticity, in which society covers up its emptiness with a façade of decorum, is supported by Jean-Paul Sartre's philosophy that "we and not the world give meaning to our lives" (Solomon and Higgins 277), as noted in Robert Solomon and Kathleen Higgins's *A Short History of Philosophy.* Sartre reemphasizes the importance of finding happiness and meaning in life through self-recognition instead of in the identity with which society has labeled us. This is perhaps the main truth that Ivan is unable to realize through the course of his pretentious lifetime. Ivan is living in an empty society with no real identity and is unable to free himself because he is blinded by the "propriety" that encloses the emptiness in which he lives.

According to Sartre in *Existentialism and Human Emotions*, "...to say that we invent values means nothing else but this: life has no meaning *a priori.* Before you come alive, life is nothing; it's up to you to give it a meaning, and value is nothing else but the meaning that you choose" (49). Ivan indeed set his own values in life, yet according to society's standards. And because Ivan lived his life according to society's values, "all went well, without change, and life flowed pleasantly" (Tolstoy 269). However, Ivan does not recognize that his values, founded on worldly pleasures, are meaningless and he fails to understand that these values will soon corrupt him. Ivan is unable to find internal stability and true meaning in life because he is stuck in the false values that he has created for himself. Ivan does not even realize that living a life with false values is the main problem until he falls ill and starts to think to himself: " 'Maybe I did not live as I ought to have done,' it suddenly occurred to him" (Tolstoy 295).

Ivan's constant desire for more material goods is his primary way of finding meaning in his life. For example, he craves power and does anything to gain it, even to the point of leaving behind his own family and friends, which leads to shallow relationships and ultimately a deeper longing for a close bond that is missing. He later realizes this longing near his death. But before his illness, when "He was offered the post of examining magistrate, he accepted it though the post was in another province and obliged him to give up the connections he had formed and to make new ones" (Tolstoy 257). Leaving behind loved ones in order to pursue shallow goals is what Ivan does, and what he thinks will ensure contentment:

> The whole interest of his life now centered in the official world and that interest absorbed him. The consciousness of his power, being able to ruin anybody he wished to ruin, the importance, even the external dignity of his entry into court, or meetings with his subordinates, his success with superiors and inferiors, and above all his masterly handling of cases, of which he was conscious- all this gave him pleasure and filled his life, together with chats with his colleagues, dinners, and bridge. (Tolstoy 262)

It is clear that Ivan is mostly concerned with outer appearance and propriety rather than with inner reality. His attitude to his position in office reflects his desire to "move up" in society, and this desire is so strong that it overshadows real truth, real feelings, and real meaning in his life. Perhaps if Ivan had grasped earlier the fact that he is living a false life, and that he should be living harmoniously with the desires of his inner soul, he would not fear death to the extent that he does on his deathbed.

Many of the decisions that Ivan makes in his life show that he seeks moderate contentment and lives by society's standards. Because he lives this type of synthetic lifestyle, "All the enthusiasms of childhood and youth passed without leaving much trace on him; he succumbed to sensuality, to vanity", and Ivan "considered his duty to be what was so considered by those in authority" (Tolstoy 256). It is clear that Ivan did not aspire toward self-driven goals, yet toward goals already established by "those in authority." Ivan is unable to realize his potential of being truly himself because he does not rely on his own standards and judgments:

> At school he had done things which had formerly seemed to him very horrid and made him feel disgusted with himself when he did them; but when later on he saw that such actions were done by people of good position and that they did not regard them as wrong, he was able not exactly to regard them as right, but to forget about them entirely or not be at all troubled at remembering them. (Tolstoy 256)

Also, Ivan's constant desire for a "pleasant" life is unrealistic because he fails to understand that in reality, life is not always "pleasant," nor can one make it so that it is always "pleasant."

Psychiatrist Viktor Frankl, who is a survivor of Nazi concentration camps, explains his theory of existentialism using a concept he calls the "existential vacuum." According to Dr. C. George Boeree from the Psychology Department of Shippensburg University, "Frankl suggests that one of the most conspicuous signs of the existential vacuum in our society is boredom" (Boeree). Ivan's slow progression towards ennui and the eventual feeling of meaninglessness in his life show that he is living in an "existential vacuum." His recognition of his boredom first comes when he is arranging the furniture in his new home: "When nothing was left to arrange, it became rather dull and something seemed to be lacking…" (Tolstoy 266-7). And again, Ivan began to look for things to occupy his time and if he could not find anything to do, he would simply "retire into his separate fenced-off world of official duties…" (Tolstoy 261).

Ivan has been deceiving himself with his artificial lifestyle by indulging in wealth, the illusion of power, and the pretenses of society. In reality, he is dealing with an unconscious conflict: he feels empty inside due to the consequences of his decision to leave behind what should have mattered to him. Certainly Sartre would agree that Ivan's decision is the cause of his inner emptiness. According to Philip Wiener, in the Sartreian sense, what *should* have mattered to Ivan are, authenticity "the aim of life" (194), and faith in himself, so that the right "values [will be] chosen" (194).

However, this delusional life that Ivan lives also takes him further away from nature and the natural way in which humans ought to live. "The frightening power of a man to deceive himself" (Clive 107), which Clive sees as Ivan's second dimension of inauthenticity, can be seen in Ivan through the way he has lived most of his life. This

type of lifestyle leads to Ivan's unbearable illness and foretells his fatal destiny. Tolstoy's narrator emphasizes this point of turning to nature as the ideal way to live, simply and closely bonded with the emotional side of life. In *The Death of Ivan Ilych*, Gerasim, Ivan's butler's assistant, emblematizes the natural, ideal way to live, as defined by Rousseau. Solomon and Higgins note that Rousseau "elaborated his theory of human nature as 'basically good' and his conception of human society, in which we do not band together out of mutual insecurity…but rather realize together our 'higher' moral natures" (203).

Gerasim is different and stands out from the rest of the people in Ivan's life. For instance, "Health, strength, and vitality in other people were offensive to him [Ivan], but Gerasim's strength and vitality did not mortify but soothed him" (Tolstoy 285). Ivan even feels strangely different in Gerasim's presence. For example, when Gerasim is holding up Ivan's legs, "Ivan Ilych felt his [Gerasim's] presence such a comfort that he did not want to let him go" (Tolstoy 284), and when "Gerasim raised his master's legs higher Ivan Ilych thought that in that position he did not feel any pain at all" (Tolstoy 285). Perhaps more than the position in which Ivan's legs are being held, it is Gerasim's presence that allows Ivan's pain to vanish. Because Ivan is in the presence of a natural, authentic man, he is able to experience the soothing sensation of being close to nature.

Solomon and Higgins also remark, "Rousseau was adamant about the essential goodness of the 'natural' self in contrast to the 'corruption' imposed by society" (279). Tolstoy's narrator supports this idea by contrasting the "natural" man, Gerasim, to the man "corrupted" by society, Ivan. Even Gerasim's physical appearance as he speaks, "displaying his teeth-- the even, white teeth of a healthy peasant--" (Tolstoy 255), shows that he is the "natural" man. Gerasim's simple acceptance of nature and its processes is also what allow him to accept the reality of death. This can be observed when he speaks to Peter Ivanovich (one of Ivan's colleagues and closest friend) at Ivan's funeral, and when asked, "It's a sad affair, isn't it?" (Tolstoy 254), he answers, "It's God's will. We shall all come to it some day." (Tolstoy 254). It is clear that Gerasim is completely comfortable with death, as opposed to Ivan. A person like Gerasim could never fall into the "existential vacuum" because of the dramatic difference in his perception of life as compared to Ivan's. Further along into his illness, Ivan senses that Gerasim somehow

holds the key to his healing: "His [Ivan's] mental sufferings were due to the fact that that night, as he looked at Gerasim's sleepy, good-natured face with its prominent cheek-bones, the question suddenly occurred to him: 'What if my whole life has been wrong?'" (Tolstoy 299). Fortunately for Ivan, he comes to his senses before it is too late. He allows the real truth about his life to be revealed to him- but just before he dies:

> Ivan Ilych fell through and caught sight of the light, and it was revealed to him that though his life had not been what it should have been, this could still be rectified...And suddenly it grew clear to him that what had been oppressing him and would not leave him was all dropping away at once...He sought his former accustomed fear of death and did not find it. (Tolstoy 301-302)

Ivan's ability to overcome his fear of death results from "pure faith," as defined by the existential theologian Soren Kierkegaard. In *Kierkegaard and the Existential Philosophy*, Russian philosopher Lev Shestov remarks, "Faith and faith alone liberates man from sin...And faith alone gives man the courage and the strength to look death and madness in the eye and not bow helplessly before them" (Shestov 20-21). Shestov also notes that Kierkegaard believed that "the struggle of faith [was] a mad struggle for possibility. For only possibility reveals the way to salvation" (Shestov 21). In terms of Ivan's life, this possibility is the fact that "It occurred to him [Ivan] that what had appeared perfectly impossible before, namely that he had not spent his life as he should have done, might after all be true" (Tolstoy 299). Kierkegaard also claims that "to cheat oneself out of love is the most terrible deception"; and Ivan at last recognizes that he has deceived himself by refusing to love. Thus, in a Kierkegaardian sense, Ivan's acceptance of the possibility that his life has been inauthentic is what ultimately leads to his "salvation."

Kierkegaard also "stresses the particular character of a man as opposed to what he shares with all other men (Wiener 189)." The "particular character" which Gerasim displays is his positive outlook on life and death. He states, "We shall all come to it some day [death]" (Tolstoy 254). Gerasim's attitude is different from the attitudes of those in his society, including Ivan and Peter Ivanovich's (Ivan's close friend), who at the sight of Ivan's dead body was "suddenly struck...with horror...He again saw the brow, and that

nose pressing down on the lip, and felt afraid for himself" (Tolstoy 253). Gerasim's "divine" nature, perhaps from being close to nature, is what distinguishes him from the rest of the people in Ivan's worldly society.

Ivan's inauthentic lifestyle is what makes the final hours of his suffering and his ultimate realization of a higher truth more dramatic. Because one can only have so much, materialistically, there will always be a point where nothing else will do; nothing else will be able to suffice. The more Ivan gains in power in his official duties, the more he detaches himself from his inner life. His appearance-centered and propriety-focused life, in which, "...all went well, without change, and life flowed pleasantly" (Tolstoy 269), has only kept him from being able to enjoy what he does and from being fully human. And indeed after a while, this type of life gets boring, which relates to Frankl's explanation for the reason why people get sucked into the "existential vacuum."

Indeed, Ivan struggles with the existential vacuum because of the way he lives his life: desiring everything and everyone around him to be pleasant, and living up to society's standards of being powerful and materialistic. However, it may also be that Ivan lacks passion in everything that he does. In *The Journals of Kierkegaard*, Kierkegaard states that, "Passion is the real thing, the real measure of a man's power" (77). The way in which Ivan decides to get married shows that he is an emotionally indifferent man: "To say that Ivan Ilych married because he fell in love with Praskovya Fedorovna ...would be as incorrect as to say that he married because his social circle approved of the match" (Tolstoy 259). The only factors that Ivan takes into consideration in marrying Praskovya Fedorovna are that "marriage [would give] him personal satisfaction, and at the same time it was considered the right [action] by most highly placed of his associates" (Tolstoy 259). Ivan's dispassionate disposition towards marriage and many other aspects of his life, including his work, indicates that he does not have real power because he lacks passion.

Even though Ivan has a family, his relations with them do not bring him closer to his true self. In fact, his marriage and his relations with his children are built upon falsehoods. In observing Ivan's relationship with his wife and family, it is clear that each additional day into the marriage brings him closer to the "existential vacuum." Even before Ivan has any children he feels that his sense of security of pleasure and propriety

in life is somehow being threatened: "But from the first months of his wife's pregnancy, something new, unpleasant, depressing, and unseemly, and from which there was no way to escape, unexpectedly showed itself" (Tolstoy 260). Ivan is disinterested in his family as well as in his wife. The indifferent attitude that Ivan has toward his family only increases the falseness of his life.

In the face of death, however, Ivan finally confronts reality and realizes how pitiful his life is. When he asks himself, "What *is* the right thing?" (Tolstoy 301), he is finally able to start to pull away from the "existential vacuum" within him. This marks the beginning of a new perspective for Ivan on the inevitable situation of dying. The new perspective allows Ivan to suddenly feel "sorry for him [his son]...sorry for [them] too..." (Tolstoy 302), it allows him to think "How good and how simple" (Tolstoy 302) is this process of dying, and also allows him to see that "In place of death there was light" (Tolstoy 302). Ivan then finally exclaims aloud: "So that's what it is!...What joy!...Death is finished...It is no more" (Tolstoy 302). In this way, because Ivan accepts his mortal fate and experiences real "joy", love, and compassion for others, he conquers the fear of death and the "existential vacuum" simultaneously.

As mentioned earlier, Gerasim's lifestyle is the model way of living realistically and naturally according to Tolstoy's narrator. Rousseau would agree that people like Gerasim are less likely to become corrupted by society, and less likely to descend into Frankl's "existential vacuum." Rousseau says of someone like Gerasim: "[A] Man living in primitive simplicity, is subject to so few ills! He lives almost without sickness...he neither foresees nor feels death..." (Rousseau 252).

The Rousseauian "natural man" in *The Death of Ivan Ilych* is clearly Gerasim. Because Gerasim is the noblest character in *The Death of Ivan Ilych,* he is the answer to Ivan's "existential vacuum." According to Berlin, "Tolstoy repeats the lessons of Rousseau's *Emile*. Nature: only nature will save us. We must seek to understand what is 'natural, spontaneous, uncorrupt, sound, in harmony with itself...we must listen to the dictates of our stifled original nature..." (255). Berlin characterizes Tolstoy's stance as being similar to Rousseau's in his view that, "Men are good and need only freedom to realize their goodness" (256). This freedom is found in nature. In nature, one will be free from the constraints of society and be free to find true happiness, in oneself, not

through society's false image and then one will "suddenly become aware of the real direction" (Tolstoy 301) of living fully and with compassion.

Through the use of a train metaphor, Tolstoy's narrator shows that Ivan begins to go in the "right direction" as he approaches death, "What had happened to him [Ivan] was like the sensation one sometimes experiences in a railway carriage when one thinks one is going backwards while one is really going forwards" (Tolstoy 301). Perhaps Ivan feels as though he is going backwards when he is approaching "light" and truth because he is uncomfortable with a feeling of authenticity he has never experienced before.

Yet, Ivan's realization of his inauthentic life is reassuring because it offers him an opportunity to reevaluate himself, and to make potential changes for the remainder of his life. Berlin states, "Truth is discoverable: to follow it is to be good, inwardly sound, harmonious" (Berlin 249). Although Ivan discovers the truth, it is unknown whether or not he would have chosen to live his life differently because he dies shortly after his discovery. However, there are indications in the text that his transformation is permanent. Right before he dies, he feels no pain and senses that "There was no fear because there was no death. In place of death there was light" (Tolstoy 302). The fact that Ivan sees the light and no longer feels pain or fears death indicates that he has allowed himself to let go of his worldly values, which were only corrupting him and leading him towards death. But as Ivan dies, he perceives a bright light, and he experiences "joy." The "joy" that Ivan experiences is real and authentic and does not compare with the "pleasantness" he always sought after. As Ivan transcends to a higher and deeper level of understanding and realization, he experiences a higher and deeper "happiness" as well. This higher sensation of "happiness" which Ivan thought rested in "pleasantness" is now the "joy" that he experiences. Ivan is free to experience joy because his acceptance of the reality of death has finally given meaning to his life.

In *The Death of Ivan Ilych*, Ivan's transformation from a "false" identity to a "true" one is evident. Thus Ivan's illness starts him on a spiritual journey from an inauthentic life toward a more meaningful, authentic life. Near the moment of his death, he realizes what has been missing in his life, and is finally "free." Before he dies, he finally understands the goodness and simplicity that Gerasim displays. He also experiences love and compassion for others (his son, his wife) for the first time. And as

Ivan dies, he realizes what has been missing in his life, and this realization bridges the gap between an authentic way of life and his past actions. As those around him watch him die seemingly in agony, Ivan dies in peace.

Works Cited and Consulted

Berlin, Isaiah. Russian Thinkers. Ed. Henry Hardy and Aileen Kelly. New York: Penguin Books, 1981.

Boeree, C. George. Personality Theories. Course home page. Dept. of Psychology, Shippensburg University. 20 Nov. 2004 http://www.ship.edu/~cgboeree/perscontents.html.

Clive, Geoffrey. The Broken Icon: Intuitive Existentialism In Classical Russian Fiction. New York: Macmillan, 1972.

Dictionary of the History of Ideas. Ed. Philip P. Wiener. Vol. 2. New York: Scribner's Sons, 1973. 3 vols.

Gustafson, Richard. Leo Tolstoy: Resident and Stranger. New Jersey: Princeton UP, 1986.

Kamm, F.M. "Rescuing Ivan Ilych: How We Live and How We Die." Ethics 113 (2003): 32. Academic Search Premier. EBSCOhost. Montgomery College, Rockville Campus Library. 20 Feb. 2005 <www.epnet.com>.

Kierkegaard, Soren. The Journals of Kierkegaard. Trans. Alexander Dru. New York: Oxford UP, 1939.

Rousseau, Jean-Jacques. "The Creed of a Savoyard Priest." Trans. Lowell Bair. The Essential Rousseau. New York: New American Library, 1974. 233-300.

Sartre, Jean-Paul. Existentialism and Human Emotions. New York: Philosophical Library, Inc., 1957.

Solomon, Robert C., and Kathleen M. Higgins. A Short History of Philosophy. New York: Oxford UP, 1996.

Tolstoy, Leo. "The Death of Ivan Ilych." Trans. Louise and Aylmer Maude. Great Short Works of Leo Tolstoy. New York: Oxford UP, 1967. 247-302.

Young-Mason, Jeanine. "Understanding Suffering and Compassion." Cross Currents 51 (2001): 347. InfoTrac Expanded Academic ASAP. Gale Group. Montgomery College, Rockville Campus Library. 20 Feb. 2005 <www.galegroup.com>.

Bilingual Education for the Deaf: Facilitating Learning and Equipping Students to Reach Their Full Potential

By: Alison Niska

Facilitating Learning and Equipping Students to Reach Their Full Potential

Imagine a deaf first-grader going to an oral school and a hearing first-grader going to a mainstream school. The hearing child receives fifteen subtraction problems for homework in his math class, and when he comes to school the next day, class time is spent by the teacher to check the students' knowledge of the concept of subtraction and explain the homework. However, the Deaf child in the oral school receives only four subtraction problems for homework in his math class. When he comes to school the next day, his teacher spends the class time by having each student speak the problems out loud, focusing more on good pronunciation skills and less on the actual concept of subtraction. This story is the testimony of Prof. Carl Schroeder, a Deaf professor of American Sign Language at Montgomery College, who has experienced both oral and signing deaf schools first-hand.

Schroeder's success in his education is truly an exceptional case. While he received a Master's Degree, is a candidate for a Ph.D., and works at a college as a full-time professor and head of the American Sign Language (ASL) department, "40% of deaf adults are unemployed, and 90% are underemployed," according to the Northern California Center on Deafness (Siegel, 2000). The reason that these rates of unemployment or underemployment are so high lies in the relation of education to adult success rates. A good education clearly gives individuals the roots needed to work successfully in a good job and with society. However obvious this may be, in 2000, Attorney Lawrence Siegel (2000), director of the National Deaf Education Project, reported that "deaf [. . .] children graduate from high school with a grade level in reading skills of 2.8 to 4.5," while "hearing children graduate with 10th-grade reading skills."

These statistics and Schroeder's anecdote illustrate the grave need for schools for the Deaf to focus not on learning speech so much as grasping concepts. For Deaf American students, learning can be achieved best through a bilingual approach that uses American Sign Language

and written English; the effectiveness of this approach depends on early intervention and teacher preparation.

American Sign Language and Deaf Schools

American Sign Language is the effective and vibrant language of the Deaf in the United States and Canada. It may seem simple to the casual onlooker, but so would any spoken language which consisted of phonemes, or the smallest units of speech, so different and seemingly few compared to the onlooker's language. When one encounters a language that has such different phonemes than one's own, several that are entirely different can seem to constitute only one phoneme. English employs certain distinctive sound parts, or phonemes, to make words and a widely accepted syntax for creating sentences. Similarly, ASL signs are made up of visual parts, or *cheremes*: hand shape, palm orientation, location of the hands, movements of the hands and body, and non-manual (facial) expressions. When all these parts are broken down into their numerous subcategories, it is evident that ASL has plentiful raw material to make up an infinite number of possible sentences, one of the features that makes every "language" a language (Valli & Lucas, 2000, p. 8). ASL is certainly not without rules, a fact that every other language holds in common. This visual language has a syntax that is separate from and unlike the English syntax.

Since the syntax of American Sign Language is so different from that of the English language, one may wonder how learning and using ASL would positively affect acquisition of English. Cynthia Conflitti (1998), who works with the Michigan Protection and Advocacy Services in Special Education, asserts that "as children with hearing loss are exposed to ASL linguistic features, they gain the competency which helps them develop better English skills." Learning a full language will excite a child's brain to linguistic activity.

A Deaf child cannot fully partake of the English language since it is, in fact, a spoken language with a written form. Since ASL is a visual and manual language, a Deaf child who has capabilities of eyes and hands is not barred from any form of ASL and thus can participate fully in this language. Therefore, trying to teach a Deaf child the English language when the child still does not have a good grasp of the language he or she is fully capable of experiencing is analogous to asking him or her to jump from a feeble pillar onto a new pillar: the child has no

leverage in the first pillar and will not be able to jump far or completely, or solidly land on the new pillar. It is important to make the pillar of ASL sturdy in the Deaf child's mind so he or she will have solid knowledge to fall back on when lessons in English become confusing or frustrating. Strong ASL is also important to Deaf students so that they will have an outlet of expression for the frustrations that striving to achieve in school will create.

The purpose of Deaf schools with ASL classrooms is not to separate the deaf from the hearing students in mainstream schools, but to provide better opportunities for learning for the deaf through academic programs that are formulated around the needs of the deaf. Instead of interacting indirectly with teachers and classmates through interpreters in hearing schools, deaf students will share a common language with their peers, forming an directly interactive environment for all the deaf children. The students at a Deaf school will be much less likely to feel excluded by language differences than the deaf students at mainstream schools. As Siegel (2000) notes, "limited communication access [. . .] lead[s] directly to social and linguistic isolation and [. . .] academic failure." In addition to enhanced interaction, students at a Deaf school will learn through the visual language of ASL, which exactly fits their needs as Deaf individuals. Students will gain full knowledge of the classroom happenings; in mainstream hearing schools, deaf students miss out on much information, even with interpreters. In Board of Education v. Rowley in 1982, Amy Rowley, a deaf student, was in a hearing classroom and was not even entitled to an interpreter since she was passing her classes. However, she "missed 40% of classroom communication without an interpreter" (Siegel, 2000). Cases like Rowley's are unacceptable if deaf students are to reach their full potential. While an interpreter would have greatly helped a student like her, a deaf school might have helped even more. Admittedly, deaf schools are not the right answer for every deaf student. Some deaf students are comfortable at and do well in mainstream schools, and that type of school is perfectly acceptable for those students.

Early Intervention

Intervening early in a deaf baby's life by teaching American Sign Language to his or her parents and exposing the child to objects, feelings, and their meanings through language will

considerably boost the deaf child's ability to think, learn, and communicate throughout his or her lifetime. During the infant and toddler years, the brain is at a critical period for physical development, especially in regard to language. Hearing children learn a great deal from things they overhear, and that aids them in their cognitive development. Conflitti (1998) reminds, "It is [. . .] important to remember that [children with hearing loss] cannot overhear conversations among other children or adults in the same way hearing children do. This affects their cognitive development." Thus, deaf children miss out on the learning that hearing children acquire by listening to their parents converse and by listening to environmental stimuli like the news on the television and radio.

Since the deaf child's brain cannot receive, let alone process, messages through auditory means, they must be helped to train their eyes to receive information and their brains to process it. They will learn a visual language as well as cultural rules like visual turn-taking in conversation. As hearing children's parents are mostly responsible for teaching language to their children, so the deaf children's parents should not be left out or keep themselves out of their children's language acquisition. They should be given access to resources through which they can learn ASL so they can teach their children. If hearing parents would sign some conversations to each other when they are in the presence of their deaf baby, the baby would begin to understand how language is used and comprehended. The baby would also gain a source of information outside the small sphere of his or her own awareness and may be on par with hearing children by the time he or she is in preschool.

Otherwise, while a deaf toddler's hearing friends are talking and learning through a spoken language, the deaf child will be deprived of all auditory clues as to what is happening around him or her, and all visual clues that are not in the ever-changing line of vision. While hearing children can learn about the things around them because they hear and look in the direction of activity, deaf children must be pointed in the direction of the activity by their parents or playmates because they are unaware of what is going on behind them until they turn around; no child can see behind himself. Because of the sometimes-absent transmission of information from parents and peers to them, these deaf children frequently trail behind their hearing peers by

the time they are in preschool.

Therefore, infancy is a critical period for language development. Through early intervention, the first stage of language learning should be started soon after birth and continued though the third year of a deaf baby's life. Hearing babies are first exposed to language as soon as they are born. Inadequate exposure of a deaf baby to a full language, and the resulting lack of acquisition of a language, will cause serious drawbacks in the child's ability to use language and ease for learning language in later years. Thus, it is important that babies have access to a full language as soon as possible in infancy, regardless of their ability to hear or their deafness. According to Conflitti (1998), "A child who learns sign language in the toddler years will have better comprehension and understanding of why and how language is used.". It will be much more difficult for a toddler who had no language stimulation in infancy to acquire language than it will be for a toddler of the same age who had a full language presented to him from the earliest time. Miriam Magnuson (2000), a doctoral student in Education and Psychology at Linkoping University, Sweden at the time of her research, notes in her study entitled "Infants with Congenital Deafness: On the Importance of Early Sign Language Acquisition" that since 94% of deaf children have hearing parents, and "education in sign language can begin only when the hearing impairment is detected, . . . [d]uring the very important early period of language development, these deaf children thus do not receive any natural language stimulation." "Semilingualism," or failure to acquire proficiency in even one language, may result, "[preventing] the child from acquiring the linguistic skills appropriate to his or her original potential in any language," warn Dr. Philip Prinz (1998), a professor at the Department of Special Education, San Diego State University, and Dr. Michael Strong (1998), an associate professor at the Center on Deafness Department of Psychiatry, University of California.

This sad result of inadequate language exposure is difficult to undo, as illustrated in Magnuson's study which involved two profoundly deaf boys in a specialized sign preschool. The boys' deafness was detected at very different ages: Rasmus' at four months and William's at two years (Magnuson, 2000). While Rasmus had no difficulty communicating with his parents in sign language as a one-year-old, William communicated "by guiding his parents, by pointing,

pushing them, and pulling their arms to make them understand what he wanted," a technique that obviously would not be effective outside the family (Magnuson, 2000). The specialized sign preschool provided an opportunity for the children "to achieve sign language competence" and interact with their deaf and hearing peers (Magnuson, 2000). At the end of the study, Rasmus' abilities in sign language were on par with the linguistic abilities of a hearing child, and he was able to converse fluently at the age of 3 years, 5 months. While William improved greatly in the course of Magnuson's study, his teachers still recorded his linguistic and social development as "below average," and he retained at age 4½ years a difficulty in "using the language actively and taking part in dialogues." Clearly, the age at which sign language is first taught to a deaf child has the power to seriously impact the child's future linguistic performance, particularly since a young brain will physically grow around the centers that are activated and stimulated.

Bilingual Education in Deaf Schools

The most promising Deaf children have been found to be those with Deaf parents or with hearing parents who sign and allow their children to interact with the Deaf community. Since these parents use ASL constantly, their Deaf children are fully immersed in this first language. When Deaf children learn ASL first, written English becomes their second language, and they become bilingual. Bilingual children acquire a few advantages that monolingual children do not possess. Prinz and Strong (1998) assert, "Bilinguals develop a higher awareness of the arbitrary nature of linguistic forms and their referents in the real world."

Naturally, knowing ASL alone will not be sufficient for deaf children in a culture where the majority of people are hearing. Since ASL does not have a widely accepted written form, it is necessary for every Deaf student to acquire a good knowledge of written English so that he or she can communicate effectively with the majority population in this country. However, schooling in English need not take away from the student's Deaf culture or his or her usage or knowledge of ASL. The usage of both ASL and English in deaf schools provides for the bilingual environment, and a mutually respectful linguistic environment in the schools will provide for an explosion of learning involving, but certainly not limited to, language courses. "Deaf children who learn sign language as a first language usually have better skills in reading and writing than

deaf children who have only been exposed to the spoken language" (Magnuson, 2000). These more refined skills are the result of having a firm linguistic base to which the children can refer when exploring the English language through reading and writing. The linguistic centers in their brains have been well-developed; consequently, a second language comes more easily to the bilingual children.

Children in school should be exposed to ASL and English simultaneously through natural, everyday ASL conversations and printed English. According to Prof. Schroeder (2004), bilingual education is needed so that Deaf students will learn how "to articulate between primary ASL and its spoken and written counterpart, English." Ideally, the students will learn how to translate automatically from English to ASL, and back again. This will aid them in skills such as recognizing context clues in readings and learning concepts through either language and then explaining those concepts in the other language. After all, according to Dr. Marc Marschark, a professor at the National Technical Institute for the Deaf, "The best deaf readers appear to be those who receive early exposure to sign language and exposure to the language in which they will eventually learn to read" (qtd. in Siegel, 2000), and it has been stated that the reading skill grade level for deaf high school graduates is between 2.8 and 4.5 (Siegel, 2000). However, there is hope for America's deaf children because "as children with hearing loss are exposed to ASL linguistic features, they gain the competency which helps them develop better English skills" (Conflitti, 1998).

In order for children to understand how and why to use language, they must be taught concepts through the language. Eventually, they will be able to apply their conceptual knowledge of the world to a conceptual understanding of language. Children will soon realize that they are explaining and understanding their world through language, and they will understand the functions that different language processes serve. While they may not be able to put these processes into words, they will acquire skills in language usage. According to Prof. Charlotte Evans (2004) from the Department of Educational Administration, Foundations, and Psychology at the University of Manitoba, "these skills include conceptual knowledge, subject-matter knowledge, higher-order thinking skills, reading strategies, and writing composition

skills." The abilities of coherent ASL storytelling and discussion should be added to that list. Evans (2004) promotes going beyond the "surface level" of "pronunciation, grammar, and vocabulary" to the "deeper, conceptual level" for increased language proficiency. Conceptual, not superficial, learning in every subject in school is the key to forming astute, knowledgeable, realistic students. These qualities will pay off considerably throughout the student's whole life. It is best to start teaching students these faculties as soon as possible. Learning and being able to explain concepts in ASL and English is the most basic and important academic skill a Deaf child can, and should, acquire at an early age.

In order for the bilingual approach to teaching deaf students to be comparable to the success of teaching hearing students, the classrooms must be equivalent in resources. According to Prof. Richard Lytle (1997), coordinator of undergraduate teacher education at Gallaudet University, and Michele Rovins (1997), project coordinator at the Institute for Disabilities Research and Training, "time on task and exposure to content are important variables for the achievement of deaf students." In spite of this necessity, even though the content to which the deaf children are exposed should be equal to that of hearing students, teachers of hearing students would hardly accept the subject matter for the deaf students since it "is not of the same breadth or depth as that presented to their hearing peers" (Lytle and Rovins, 1997). The point of early intervention is tat young deaf students must be educated to their full potential so they will be prepared for the same expanse of material presented to their hearing peers.

Teacher Preparation and Teaching Theory

In order to have classrooms where Deaf students learn through ASL, teachers must be proficient in ASL. James Tucker, superintendent of Maryland School for the Deaf, said in an interview that Deaf students can comprehend 100% of ASL, but only up to 80% of spoken English with assistive technology (Tucker, 1997). Imagine a child consistently missing the first twelve minutes of every hour-long class he or she takes in elementary school. Any concerned teacher would take the necessary steps to change this child's behavior. However, deaf children miss this 80% of classes taught in spoken English through no behavioral problem or fault of their own. For deaf children who are unable to benefit from assistive technology such as hearing aids,

these figures are considerably worse. Thus, logically, teachers at deaf schools should teach in ASL so their pupils do not miss important lectures, homework, and other vital information concerning learning and tests. Like in all schools, teachers must be proficient in the language of the school: in the case of Deaf schools, ASL.

A hearing teacher's ASL proficiency can best be learned through language classes in ASL that are separate from any interpreting classes a school may offer in addition to the language curriculum. Rushing the acquisition of ASL by taking classes that simultaneously teach the language and interpretation between ASL and English is not something to be boasted of. Would-be teachers who are students of ASL as a language will have a deeper foundation in the language as a result of separate classes teaching the foundations and fundamentals of the language. Even though learning American Sign Language before learning to interpret is slower than learning both simultaneously, teachers of the Deaf will be better prepared to instruct if they have a firm grasp of the language in which they will be teaching.

Teachers' firm grasp of ASL will not only help the teachers communicate, but it will also help the students learn. Teacher-student interactions are highly important to the students' learning. According to Gary Long, an Associate Professor at the Rochester Institute of Technology's National Technical Institute for the Deaf, and others,

> Teachers with higher-level skills in both expressive and receptive sign language are beneficial to deaf students because teacher-student interactions are a primary means of learning. Students need comfortable, reciprocal communication with their teachers and other students if they are to actively participate in learning tasks and maximally benefit from course experiences (Long, Stinson, Kelly, and Liu, 1999).

Conversely, if teachers do not have good language skills and cannot communicate well with their students, stress and frustration will build up and school will become a burden for the students and teachers.

Teachers must also understand the language acquisition origins of the Deaf students. *Language acquisition origins* refers to how and when the student learned ASL and English, and in what circumstances the languages were taught and learned. These origins matter because a

deaf five-year-old who was not given either full ASL or full English will stand, linguistically speaking, far behind a Deaf five-year-old who learned ASL through early intervention. When Deaf children are entering school, their expertise in language should be assessed, and they should be placed in appropriate classes according to the assessment, even if the children need an extra year of preschool or kindergarten to get up to speed. Teachers who understand these acquisition origins will help prevent future failure in school for these youngsters that might have been brought on by inadequate language development.

Teachers of the deaf must recognize and appreciate the relationships between ASL and English so they can effectively teach the deaf. Especially in the early school grades, teachers of the deaf must be adept at ASL and English in order to teach, and teach in, these languages. Without good instructors, the very young Deaf will not rise into mastery of the concepts taught in the formative years of school and will be quite far behind their peers by the time they reach the beginning of high school. High school classes will do the students no good if they are not even competent in the most basic K–grade-three lessons. These lessons must include more than just ASL and English classes, and teachers must be competent in all the subjects they teach. "Often it is assumed that the low achievement of deaf children is solely attributable to the methods of teaching and not to the quality of the curriculum or to teachers' knowledge of the subject matter" (Lytle and Rovins, 1997). Lytle and Rovins found that the knowledge and skills of teachers in mainstream schools are better than those of teachers in deaf schools (1997). Nevertheless, required qualifications for teachers of the deaf clearly should surpass those of mainstream teachers since they have an extra language they must use and different visual teaching techniques that will benefit the students. Expectations should be high for Deaf children in elementary school, and they should be taught accordingly. When they are falling behind in classes, teachers and tutors need to be available to ensure that the pupils get the extra help they need. Extra help for those who need it is imperative to the educational atmosphere.

What About English and ASL Classes?

English is one of the most difficult subjects for Deaf students to master because it is a spoken language. Deaf people can only read written English, and see some on the lips. Only 30-

35% of English sounds can be speechread, according to trained speechreading instructor Neil Bauman, PhD. (2000). Mastery of English ideally relies on sound for maximum understanding and proficiency in reading and writing. Deaf students do not hear phonetics, and might not have an inner reading voice. They may struggle with reading, writing, and remembering rules like verb tenses that hearing students are more able to take for granted since they have heard what "sounds right" in English. Learning English carries a stigma for some Deaf people, partly because it is sometimes forced on Deaf children who are not provided with any visual language to augment it.

However difficult, knowledge of written English is essential for communicating with the majority (hearing) population in America. With this in mind, English must be taught effectively in Deaf schools. The most effective way of teaching English to Deaf students is through their native American Sign Language. ASL is the richest language of the American Deaf culture, and should be taught first, with English as the second language. Evans (2004), who worked for ten years as a school language specialist, notes, "Deaf children with Deaf parents consistently scored higher on tests of English reading than their deaf peers with hearing parents" because the children with Deaf parents "were fully immersed in ASL as their first language." So, as proposed earlier, the deaf students should first learn the visual language that virtually all Deaf people can understand so that they will have full expressive and receptive skills in one full language. Then, they should be introduced to written English, using ASL as the launching point of comprehension for this new language. Teachers must keep in mind that students who cannot hear will never be fully exposed to the spoken aspect of English.

English phrases or sentences that are new or confusing to the students need to be clarified in ASL. Therefore, teachers who can readily translate between ASL and English need to be employed in English classes. In an article by Evans (2004), a teacher contrasted ASL/English bilingualism with French/English bilingualism, saying that in the latter case, French can be taught through French: "[w]ith deaf children you can't teach English through English, you have to teach it through ASL." In English classes, ASL should be used as the "spoken" method of communication with English as the written method, just like in other classes taught in deaf

schools.

One would be right to wonder why, according to Schroeder, American Sign Language is not taught at deaf schools. Teaching ASL in a deaf school is as absolutely imperative to the success of the students as is teaching English in a hearing school. English language classes are so ingrained in American schools, and rightly so, that a hearing school without English classes for every grade level would be unheard of. Such should be the case with American Sign Language, in addition to English, in deaf schools. It is proven that the visual ASL aids greatly in the acquisition of the English language. If one is not convinced that deaf schools should be bilingual or that ASL is a good language with which to teach the deaf, then the one must at least support an ASL class in the deaf schools to help the students better understand English.

In conclusion, intervening early in deaf babies' lives to teach language skills will give the children the support they need to advance linguistically to the level of hearing children by the time they are in preschool or kindergarten. Even the 94% of deaf children with hearing parents can succeed in this, as Magnuson concluded in her study of Rasmus. American Sign Language and English are the two most important languages for deaf American children to learn, and they should learn them as soon as possible. With skilled teachers employed in bilingual deaf schools, deaf students have the best opportunities for academic success. The relationship between success in school and prosperity in work and adult life should not be forgotten. While people with less-than-advantageous experiences in school can certainly overcome the damages the early years of elementary and high school caused them, adult success generally begins in these formative years in school. Well-planned bilingual deaf schools will better prepare deaf children for college and success in life, and Deaf adults will be better equipped to find steady employment. All in all, Deaf people will be less wounded by the inequalities and lack of fairness that now exist in several deaf education programs. As both deaf and hearing first-graders receive congruent education in the concepts of subtraction and less class time is spent on the tedious task of voicing subtraction problems with little understanding of the idea, deaf students will rise up to meet their hearing peers as all reach closer to their full potential and prepare to make their marks in American society.

References

Bauman, N. (2000, March). Speechreading (lip-reading). Retrieved November 7, 2004 from the World Wide Web: http://www.hearinglosshelp.com/speechreading.htm

Conflitti, C. (1998, February). Early cognitive development and American Sign Language. The Exceptional Parent, 28 (2), pp. 40-41.

Evans, C. J. (2004). Literacy development in deaf students: Case studies in bilingual teaching and learning. American Annals of the Deaf, 149 (1), pp. 17-27.

Long, G., Stinson, M., Kelly, R. R., & Liu, Y. (1999, December). The relationship between teacher sign skills and student evaluations of teacher capability. American Annals of the Deaf, 144 (5), pp. 354-364.

Lytle, R. R., & Rovins, M. R. (1997, March). Reforming deaf education: A paradigm shift from how to teach to what to teach. American Annals of the Deaf, 142 (1), pp. 7-15.

Magnuson, M. (2000, March). Infants with congenital deafness: On the importance of early sign language acquisition. American Annals of the Deaf, 145 (1), pp. 6-14.

Prinz, P. M., & Strong, M. (1998, August). ASL proficiency and English literacy within a bilingual deaf education model of instruction. Topics in Language Disorders, 18 (4), pp. 47-60.

Schroeder, C. 2004, October 14. 2004, December 2. Personal interviews.

Siegel, L. (2000). The educational and communication needs of deaf and hard of hearing children: A statement of principle on fundamental educational change. American Annals of the Deaf, 145 (2). pp. 64-77.

Tucker, J. E. (1997, September/October). Language: The issue in deaf education. [Interview]. Perspectives in Education and Deafness, 16, 1.

Valli, C., & Lucas, C. (2000). Linguistics of American Sign Language: An introduction (3rd ed.). Washington, D.C.: Clerc Books.

Linking Reality to Fiction: The Biographical Connections to Escapism in *The Glass Menagerie*

By: Jill Manell

Tom: "I give you truth, in the pleasant disguise of illusion" (Williams 1.1. 656).

In 1944, after years of struggle and minimal success as a writer, Tennessee Williams, a young, talented playwright, penned *The Glass Menagerie*. This work, which Williams described as a "memory play," would come to be known as one of the greatest American plays. Its emotional power is largely derived from the underlying biographical family relationships in Williams' life, which are vividly portrayed within the play. With careful reading and analysis, a deeper understanding of Tennessee Williams, his sister Rose, mother Edwina, father Cornelius and the pain and remorse that Tennessee carried with him throughout his life are exposed; for it is through the fictional Wingfields that Williams shares the harsh realities of his own family life and the use of escape as a coping mechanism.

Lyle Leverich, states in his biography of Tennessee Williams, "Autobiography transmuted into fiction often becomes a form of therapy for the writer" (323). "*The Glass Menagerie* is such an example of this therapeutic sharing of truth enveloped within theater. The Wingfield family, particularly the character of Laura, represent far more to Williams than mere dysfunctional characters created for entertainment purposes; these characters possess his family members' distinct personality traits, flaws and torments, exposed in Williams' writing and shared as art. In sharing these family dynamics, Williams does indeed utilize his written creation as a form of penance and reconciliation. In a 1975 interview, he states that each of his works "reflect somehow the particular psychological turmoil I was going through when I wrote them" (qtd. in Berquist). This is strikingly apparent in *The Glass Menagerie*.

Tennessee Williams was raised in an unstable and often abusive household. Similar to the absent father in *Menagerie*, Tom's father Cornelius suffered from alcoholism and his outbursts were often focused upon his family. The instability in which Tom and Rose were raised led them to form a very close sibling bond, as is often the case in homes with family dysfunction and

abuse. Rose and Tom gravitated toward each other for guidance, support and comfort. This fact made it all the more heartbreaking for Tom, when in 1938 Rose underwent a prefrontal lobotomy, requiring her to spend the majority of her adult life in a sanitarium. The loss of his sister as a confidant was extremely difficult for him to bear. For Tom, it was an irreplaceable loss. Lady St. Just, a close friend to Williams, stated, "He felt he could have saved her. But he was too young" (qtd. in Rothstein 13). Throughout his adult life, Williams would suffer sadness over the fact that he could not assist his sister and that it was he, and not Rose, who was successful in finding the means to escape the dysfunction that existed in their family home. As Singleton writes in "Flying the Jolly Roger: Images of Escape and Selfhood in Tennessee Williams's The Glass Menagerie," Williams suffered guilt for having survived the familial tensions that ultimately destroyed Rose. Like Tom in the play, remorse was the price he paid for his escape" (qtd. in Single 70). This guilt he carried with him would be a catalyst for his creation of *The Glass Menagerie* and the character of Laura, who was modeled upon his sister Rose.

Rose played a vital role in the Williams family and in her brother's life. As the first born child, she was the focus of the hopes and dreams of parenthood for her mother Edwina. For Williams, she was the elder sibling he always admired. Even in his initial attempts at creative writing as a young boy, Rose served as a muse for his works.

Rose Williams longed for a significant relationship with her father. She "vainly sought their father's love" (Leverich 9). Throughout her youth, Cornelius Williams, a traveling shoe salesman, was rarely at home. The fact that Cornelius suffered from alcoholism, made the limited time he did spend with his family quite tumultuous. Rose, Tennessee, mother Edwina and younger brother Dakin were frequently exposed to violence, abuse and neglect at the hand of their father. Although Tennessee chose to reject his father due to this fact, Rose did not do so. She consistently looked for affection and love from her father. Her attempts were unsuccessful. The sadness and disappointment over this relationship served to deteriorate her already fragile mental state. Leverich writes, "The shock of outright rejection compounded by her disappointments in love gradually eroded her sanity, until finally she was diagnosed as schizophrenic and in 1937 admitted to a state asylum" (9).

Rose also had social difficulties as she entered young adulthood. Edwina Williams expected her daughter to attain life security through marriage. Although Rose did attempt to

socialize with young men, her painful shyness and insecurity hampered her success. In an interview, when recalling his sister Rose, Tennessee stated,

> Rose was a popular girl in high school, but only for a brief while. Her beauty was mainly in her expressive green-gray eyes and in her curly auburn hair. She was too narrow-shouldered and her state of anxiety when in male company inclined her to hunch them so they looked even narrower; this made her strong-featured, very Williams head seem too large for her thin, small breasted body. She also, when she was on a date, would talk with an almost hysterical animation which few men knew how to take. ([Leverich 87)

Disengaging from reality would serve as a coping mechanism and form of sanctuary for Rose's disappointments. Rose delved into a realm of made up stories and delusional thoughts. In time, as her condition worsened, she was unable to differentiate between fantasy and reality. Williams writes that it was as if "a shadow had fallen over her that was to deepen over the next four or five years" (Leverich 87). Alarmed over her daughter's steady decline, Edwina Williams made the fateful decision to institutionalize Rose in 1938. It was during this hospitalization that an unsuccessful lobotomy was performed that would leave Rose, aged twenty-eight, incapable of living outside a hospital for the duration of her life.

Tom: "She [Laura] lives in a world of her own—a world of—little glass ornaments" (Williams 661)

Williams stated, "*Menagerie* grew out of the intense emotion that I felt seeing my sister's mind begin to go" (Single 70). Certainly, the creation of Laura is Williams attempt to come to terms with the trauma caused by serving as a helpless witness to his sister's destruction, a witness unable to intervene. Leigh Gilmore notes that writing about trauma "explores wounds that are often beyond language, and the effort to name and articulate such experience serves as an act of therapy for the writer" (qtd. in Hobbs 5). Williams' preoccupation with Rose is also evident in the fact that *The Glass Menagerie* is not the first work that he wrote about her. Laura was developed from a character Tennessee Williams had previously created in 1943, in a tragic short story entitled "Portrait of a Girl in Glass," a work that served as a study for his play.

Williams exposes the underlying issues his sister suffered in the character of Laura. Although not detailed directly in the play, there is an understanding that Laura, too, was profoundly affected by the abandonment of her father. She longs for that lost relationship and

reminisces of a time when her father was present in her life. As the older of the two siblings, she undoubtedly has clearer memories of her father than Tom. It is also possible that the sensitive Laura might blame herself for her father's leaving the family as young children often do.

Crippled, sweet and terribly shy, Laura stands in stark contrast to the other characters in the play. Compassionate and selfless, it is she that bonds the Wingfield family, absorbing the terrible tension that flows between Tom and Amanda. This is clear in the first act of the play, when Tom and his mother quarrel offstage. Williams' stage directions call for Laura to listen "with clenched hands and panicky expression" (Williams 663). At the end of the scene, when Tom hurls his coat across the room in anger, it hits Laura's glass menagerie and ""there is a tinkle of shattering glass," symbolizing the inner pain caused Laura by their conflict. When Tom comes home drunk later that night, Laura is waiting for him, a confidant ready to hear his fantastic stories and receive the gift of the magic scarf, as well as shushing him so he won't wake Amanda . The next morning, Amanda keeps Laura in the middle of the dispute by using her daughter to communicate with Tom because she is not speaking to him. Laura begs Tom to apologize. The family tension is probably a contributing factor to Laura's slipping and falling on the fire escape when she hurries out to buy butter.

As her coping mechanism to her father's abandonment and the dysfunctions in her family home, Laura seeks escape in her collection of glass figurines and music played on her father's old Victrola. In essence, she has created her own fantasy world within her home, her prison. Unlike her brother, she does not seek escape in the outside world, for she is fearfully incapable of venturing into the unknown. Her contacts with the real world are markedly unsuccessful. Pressured by Amanda to attend Rubicam's Business school, Laura is so nervous that when the girls are given a typing test, she throws up from the stress and then is too embarrassed to return to class. To escape a confrontation with her mother, she walks for hours in the park in a thin winter coat and visits the bird houses at the zoo, so her mother will think she is still going to school. Upon visiting her teacher, Amanda finally becomes aware of Laura's deception. She returns home and berates Laura, exclaiming angrily, "Fifty dollars' tuition, all of our plans—my hopes and ambitions for you—just gone up the spout, just gone up the spout like that" (Williams 1.2. 660). Laura's reaction is to go the Victrola and start to wind it, almost compulsively; it is her attempt to escape the confrontation. She releases the Victrola only when her mother forces

her back to the conversation by demanding "What are you doing?" (1.2.660). Similarly, when Laura's hopes of romance with Jim are dashed, as soon as the door closes behind him, Laura "crouches beside the Victrola" (680). She is only comfortable in the safety of her home, escaping into her self-made sanctuary. It is when she is there that she can soothe her feelings of anxiety, her unresolved torment over her father's abandonment, her mother's domineering expectations of her, and the loss of romantic love.

Tom, like Tennessee Williams, is tragically aware of his sister's fragility and inability to cope with reality. He tells Amanda "Laura is very different from other girls. . . .in the eyes of others—strangers—she's terribly shy and lives in a world of her own and those things make her seem a little peculiar to people outside of the house" (1.5.674). Tom, like Williams, is unable to save his sister from her retreat into her own world. At the end of the play, Tom remains unaware of his sister's fate because Laura has not moved beyond Tom's memory of her on the day of his departure; she is frozen in time as the lobotomized Rose was probably frozen in Williams' mind as the sister he knew before the terrible operation made her someone else.

Amanda to Tom: "The future becomes the present, the present the past, and the past turns into everlasting regret if you don't plan for it." (Williams 1.5. 673)

Edwina Williams shares many of the characteristics of the Amanda Wingfield character in *The Glass Menagerie*. She also was a Southern girl who was raised and educated to marry well. Her unhappy marriage to Cornelius did not fulfill the expectations of the life she wished to lead. Like Amanda Wingfield, she sought escape from the reality in which she existed through reminiscences of her youth and "gentlemen callers." She also was a proud D.A.R. member. Although she was not physically abandoned by her husband, he was employed as a traveling salesman, which left Edwina to serve as the sole parent to Tennessee, Rose and Dakin much of the time. When he was home, Cornelius' alcoholism touched every member of the Williams family. Edwina faced the overwhelming burden of buffering the children from her husband's anger and abuse; very often she would take his wrath upon herself for the sake of the children. Almost constantly, Cornelius threatened to abandon his family, although he never did carry out the threat for an extended period of time. However, he placed the constant fear of abandonment upon Edwina and the children. The Amanda character represents the "what if" scenario had Edwina Williams and her family been abandoned by Cornelius.

Amanda Wingfield is a far more complex character than she first appears to be in *The Glass Menagerie*. On the surface, she is the faded Southern belle, who in her youth maintained the pedigree, distinction and beauty that could have enabled her to marry into a lifestyle far better than the dark apartment in which she finds herself in 1938 St. Louis. Most importantly, however, Amanda embodies hopes and dreams dashed. She finds herself an abandoned single mother of two, working as a telemarketer to make ends meet. Despite her reversal of fortune, she is hard working, strong willed and determined. Amanda's main focus, when not reminiscing about her youth, is to secure first a livelihood and then a marital union for her daughter. Similar to Laura, Amanda utilizes escape as a coping mechanism from the harsh reality in which she exists. When the present becomes too painful for her to bear, Amanda returns to her past memories for pleasure and comfort. As Tennessee had written in her character description, she is "clinging frantically to another time and place" (Williams 641). She is enraptured with the memories of her life in Blue Mountain, where she was graced by the company of "seventeen gentleman callers" in a single day. These memories and her D.A.R. meetings are what she considers to be her only fulfillment in life.

Tom on his father: "He was a telephone man who fell in love with long distances" (1.1.

656)

The absent father in *The Glass Menagerie* is far from absent in his family's life. His "larger-than-life-size photograph over the mantel" is the tangible representation of the force that has crippled a family (656). He haunts each of their lives, affecting them deeply. For, by his choice to abandon his family, he alone has predestined their lives, their hopes and their futures. His looming portrait and condescending postcard stating, "'Hello - Good-bye!'" mocks them (1.1.656).

Cornelius Williams did not abandon his family physically, but he was emotionally absent from their lives. As a traveling salesman, he spent the majority of his time away from the Williams home. Additionally, the fact that he suffered with alcoholism created an unstable environment when he was present. The household was wrought with fear, tension and abuse. Cornelius' connection to the father in *The Glass Menagerie* is in the fact that to Williams,

emotional abandonment was as damaging to his family as physical abandonment was to the Wingfield family. The effects of alcoholism upon both families are also evident, depicting the cyclical continuation of the disease throughout generations. Both Tennessee and Tom elect to abuse alcohol as their fathers, despite the damage it had imposed on their family life.
Character notes on Tom: "His Nature is not remorseless, but to escape from a trap he

has to act without pity" (Williams 654).

Tom in *The Glass Menagerie* is indeed trapped, but longing to escape. Abandoned by his father, he has had to set aside his aspirations to be a poet and merchant marine. For this reason, Tom has many repressed emotions. Although there is sincerity in his affection and concern for his sister Laura, he harbors resentment towards his mother for her expectations of him and Laura. Due to the dysfunctional nature of the Wingfield home, he feels unable to vent his frustrations. Tom seeks escape from his bitter reality in his writing, the movies and alcohol. Although he feels disdain for his father, there is irony in the fact that he embraces alcohol as a method of escape, as his father had. Boys are usually the most deeply impacted by a father's abandonment, and this appears to be the case in *The Glass Menagerie*. Although Tom is angered at his father, he also longs for his love; this torments him further. Compounded with the pressures and expectations in his home, Tom's ultimate escape is when he "descended the step of this fire-escape for a last time" and followed, from then on, in…[his] father's footsteps" (Williams 681).
Like his father, he abandons his mother and sister, telling Jim "I'm like my father. The bastard son of a bastard. Did you notice how he's grinning in there? And he's been absent going on sixteen years." (1.6. 680) In Tom's mind, physical escape is his only option, but one that gives him a negative self-image that is not easy to leave behind.

Tennessee shares more than his name with the Tom character in *The Glass Menagerie*. Growing up, Williams also sought escape from the difficult family life he had at home, in his writing. He also maintained a strong bond with his sister Rose that sustained them through their troubling youth. Although his bond with Rose was strong, he still felt the need to escape their dysfunctional family home to travel and experience life. He enrolled for classes at The

University of Iowa. It was during this time that Rose's condition deteriorated and her ill fated lobotomy was performed. Tennessee would be remorseful over the fact he had not been there for her for the duration of his life. Like Tom in *The Glass Menagerie*, Tennessee also had a volatile relationship with his mother, for he harbored bitterness towards Edwina for her decision to have the lobotomy performed on his sister. Edwina had robbed him of his sister, his best friend, his muse.

Williams' increasing alcoholism and constant travel was an effort to escape his guilt and unhappy memories. Tom also chooses a rootless life after making his physical escape from home. He states, "I run into the movies or a bar, I buy a drink, I speak to the nearest stranger—anything that can blow your candles out!" (1.7.694). Like Tennessee, Tom opts for a transient lifestyle to escape.

Tom: Blow out your candles, Laura - and so good-bye. (1.7.680)

In conclusion, although Tennessee Williams did not write *The Glass Menagerie* as an autobiographical piece, it is "accurate to the imaginative reality of his experience even when it departs from facts in detail" (Debusscher 57). The play was inspired by Tennessee's love for his sister Rose, and he uses the real life emotions, attributes and characteristics of his family members to create the fictional characters of Tom, Amanda, Laura and even the absent father in the play. When his sister Rose "blew out" her candles, Williams ensured to never let her light burn out through his tribute to her, *The Glass Menagerie*. Williams once stated, "You couldn't ask for a sweeter or more benign monarch than Rose, or, in my opinion, one that's more of a lady. After all, high station in life is earned by the gallantry with which appalling experiences are survived with grace" (quoted in Gussow 13). Williams' *Glass Menagerie* is the tribute to Rose and the lasting penance from which he and his family could never escape: the power of memories. Ultimately, no character in *The Glass Menagerie* or person in Williams' family truly escapes, "for memory is seated predominantly in the heart" (Williams 655).

Works Cited

Berkvist, Robert. "An Interview With Tennessee Williams." The New York Times 21 Dec. 1975. 12 Dec. 2004 <http://partners.nytimes.com/books/00/12/31/specials/williams-interview75.html>.

Debusscher, Gilbert. "Tennessee Williams's Dramatic Charade: Secrets and Lies in The Glass Menagerie." The Tennessee Williams Annual Review. 2000: 57-68. Google. 11 Nov. 2004 <http://tennesseewilliamsstudies.org>.

Gussow, Mel . "Rose Williams, 86, Sister And the Muse of Playwright." The New York Times 19 Sept. 1996, Final ed., sec. 1: 13-13. LexisNexis. 11 Nov. 2004 <http://0-web.lexis-nexis.com.sslopac.bergen.edu/universe/document?_m= 48cdfa6b070a6...>.

Hobbs, Catherine L. The Elements of Autobiography and Life Narratives. New York: Pearson, 2005

Leverich, Lyle . Tom: The Unknown Tennessee Williams. New York: W.W. Norton & Company, 1995.

Rothstein, Mervyn. "Remembering Tennessee Williams As a Gentle Genius of Empathy." The New York Times 30 May 1990, Late ed., sec. C: 13-13. LexisNexis. 11 Nov. 2004

Single, Lori L. "Flying the Jolly Roger: Images of Escape and Selfhood in Tennessee Williams's The Glass Menagerie." The Tennessee Williams Annual Review. 1999: 69-85. Google. 11 Nov. 2004 <http://tennesseewilliamsstudies.org>.

Williams, Tennessee. The Glass Menagerie. Literature and the Writing Process. Comp. Susan X. Day, and Elizabeth McMahan. Sixth Edition. Upper Saddle River: Pearson Prentice Hall, 2005. 654-695.

Chemiluminescence – "Light Sticks"

By: Brent Bridges

It is somewhat magical when you see a glow stick for the first time. By simply bending a plastic tube, you hear a cracking noise. A sudden glow of light appears before your eyes and in your hands. Surely, there is a lot of chemistry taking place in that plastic capsule, but I am inclined to wonder how many people know exactly what it is that is taking place before them. While I have been both entertained and perplexed by light sticks from a very early age, prying into the chemistry involved is an intellectual treat understood by few.

The light emitted from a flame comes about in very much different way than it does in the light stick. The process taking place both in the flame and in the light stick are of a luminescent nature. When chemical energy is first converted to heat before the heat energy is converted to light, the technical term is incandescence. On the other hand, there are processes that directly convert chemical energy into light without the need for intermediate heat energy.

When a firefly, more commonly called a lightning bug, lights up we see a very natural source of light that does not involve heat. Bioluminescence is the emission of light when it occurs naturally in a living organism. Although most of the organisms that possess this ability live in salt water, they are spread throughout a wide range of living creatures including bacteria, insects, and fish. Bioluminescence is studied by marine scientists to find out if and how it helps lower level creatures like fungi and bacteria. Otherwise, it is used as a way for species to recognize each other or as a defensive tool. Of the organisms that live in the ocean, up to 90 percent have the capability to produce light.

The most common source of bioluminescence occurs in Dinoflagellates, single celled protists that make up a large part of the ever so important oxygen producing phytoplankton. These organisms use light defensively. If a predator were to approach, the cell would disperse a brief flash of light lasting between .1 and .5 seconds. While this does not initially seem to be an effective defensive tool because it would attract attention to itself, the idea is to attract yet another predator that will be more interested in attacking the original aggressor. This startles and frightens the predator, and as a result it is less likely to attack the protist.

Living a mile or more beneath the ocean's surface, the Angler Fish has another interesting use for the "cold light" it produces. Above the mouth of the fish is a protruding organ that acts in a manner that is very much comparable to a fishing rod with a lure attached to the end of the line. This conveniently located bioluminescent lure lights up to attract various types of prey deep within the ocean. In a sense, these particular fish are actually fishing themselves.

Of course, it seems only natural for humans to try to replicate this natural phenomenon in the lab, as we truly are inquisitive by nature. This production of chemical light is known as chemiluminescence. By studying the natural reaction occurring in the firefly, scientists discovered the chemical reaction taking place within the organism. The research resulted in the discovery of a biochemical, luciferin. All instances of bioluminescence involve the oxidization of this biochemical. When luciferin is oxidized within the firefly, the result is light. It is also known that the oxidization of this biochemical is extremely efficient.

In theory, it would be possible for every single reacting molecule in such a reaction to produce a photon of light. The firefly is the most efficient example of such a reaction known to man. The reaction yields an impressive 80% to 88% efficiency, meaning that out of 100 molecules of reactant, 80-88 eventually produce a photon of light.

We have not yet been able to produce a chemiluminescent reaction in a laboratory that even remotely comes close to this level of efficiency. Edwin Chandross is credited with discovering the reaction that is commonly used in light sticks. His initial level of efficiency was a humble 0.1%. Currently, Omniglow, Inc., the leading manufacturer of chemiluminescent products, claims, "We have invented new reactions having efficiencies as high as 23%, and it is reasonable to anticipate that further research will produce reactions that will, at some point, rival the firefly" ("Student Resources" 9). Most commonly found commercial light sticks sold on the market have between 3.2% and 5% efficiency.

Although there are many different reactions that are capable of producing chemiluminescent light, I will focus on the most commonly used reaction in light sticks. In its simplest form, a light stick is comprised of three unique and important parts: a glass enclosed capsule filled with a diluted solution of hydrogen peroxide, a phenyl oxalate ester, and a fluorescent dye. The presence of the phenyl oxalate ester gives this particular chemiluminescent

reaction the name peroxyoxalate chemiluminescence. When these three ingredients combine, energy is released in the form of light.

When the plastic tube of a light stick is bent, the cracking sound is characteristic of the breaking of the glass vial, releasing hydrogen peroxide. As the unstable hydrogen peroxide is introduced, it reacts with the ester yielding a peroxyacid ester and phenol (2,4,6-trichlorophenol in the presented light stick reaction). The peroxyacid continues its decomposition resulting in more phenol and a unique intermediate, a highly energetic, cyclic arrangement of two Carbon and two Oxygen atoms. This intermediate molecule is called 1,2-dioxetanedione.

The crucial chemical in the reaction is the intermediate. The intermediate contains a great deal of energy, which is important in that a large amount of energy (at least 40 to 70 kilocalories/mole) is needed in order to produce visible light. Moreover, it is unstable due to excess ring strain associated with the structure of the molecule. In other words, it is ready and willing to release this energy as soon as it encounters something that will readily take it. When the energy is transferred, it breaks down into two relatively simple molecules of carbon dioxide. It is important to note that carbon dioxide is a small molecule and unable to take on energy; therefore, it cannot serve to aid in further decomposition of other molecules of the intermediate.

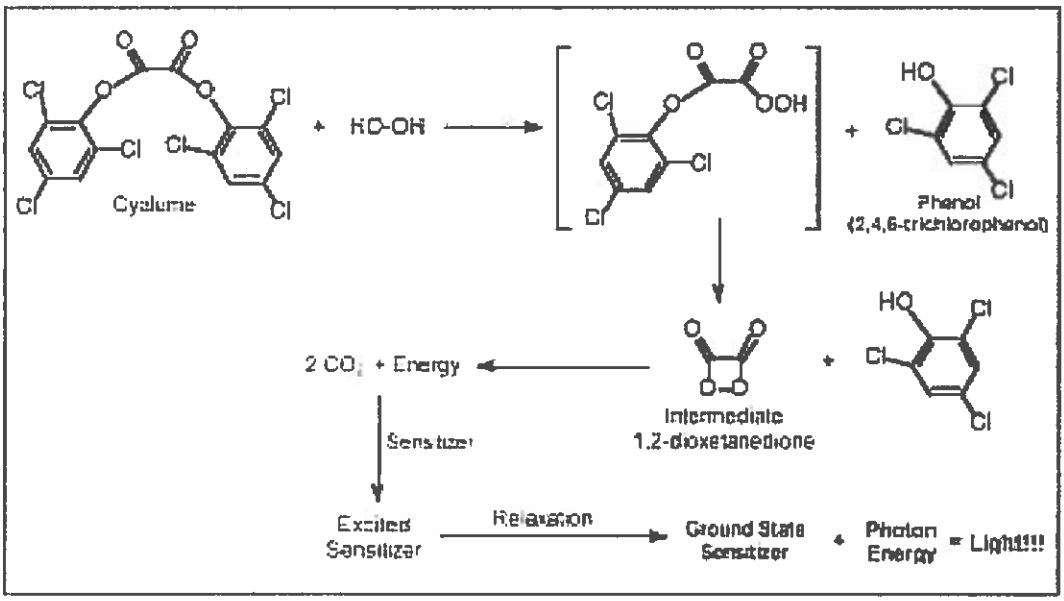
Until recently, the knowledge of the chemical compound 1,2-dioxetanedione as the intermediate was only hypothesized. This theory was initially put forth by Michael M. Rauhut, one of the first scientists to study the reaction mechanism. Although recurrently studied, direct evidence of the existence of the compound remained elusive for several decades. An article published in January 2004 in *Analytica Chimica Acta*, a chemical journal, claims, "A combination of Direct NMR [Nuclear Magnetic Resonance] spectroscopic evidence and ab initio calculations, have confirmed Rauhut's long held postulation that one of the key intermediates in the peroxyoxalate chemiluminescence reaction mechanism is indeed 1,2-dioxetanedione" (Bos et al 146-7). The study has also suggested that other, previously unknown chemicals may be present in the reaction. Further studies will be conducted to ascertain the composition and function of these chemicals.

The catalyst that serves to aid the intermediate in its decomposition is the fluorescent dye. The dye, acting to quench the intermediate, instantaneously takes on the released energy from the intermediate. As a result of this additional energy, the electrons in the molecule jump to their

excited state. As they relax back to their ground state, they emit the energy in the form of light. "Such luminescence is termed sensitized chemiluminescence, and the acceptor molecule is called the sensitizer of the emission" (Shakhashiri 130). Some chemiluminescent reactions are termed direct chemiluminescence because they lack an intermediate molecule. In such reactions, the molecules responsible for the emission of light are a direct product of the reaction itself.

"Peroxyoxalate chemiluminescence differs from most chemiluminescent reactions since the fluorescence spectrum of an added compound determines the chemiluminescence spectrum, independent of the reactants" (Shakhashiri 148). As the sensitizer is not involved with the energy forming reaction, it is interchangeable. There are many fluorescent dyes that are able to fill the role of the sensitizer. Using one dye instead of another produces different colors in the visible spectrum of light.

A graphic representation of a complete peroxyoxalate chemiluminescent reaction appears below. In this particular reaction, the chemical Cyalume is used as the phenyl oxalate ester. This chemical was developed by Rauhut in the early days of peroxyoxalate chemiluminescence. Four decades after its creation, Cyalume is used extensively in light sticks manufactured today.



Typically, red and blue are difficult to produce because some of the sensitizers used to produce these colors are not stable when they are stored with other chemicals in the light stick.

In response to this problem, a red or blue pigment is introduced to the plastic tube. When the chemiluminescent light is released in the tube, the pigment absorbs the light and emits it again as the desired color. In her article, "Light Sticks," Elizabeth Wilson states, "Purple, made from a combination of three dyes, is the most intractable color of all" (4). Green and yellow are typically the easiest colors to synthetically produce.

Light sticks are often used to demonstrate the effect of temperature on chemical reactions. It is easy to see exactly what is taking place by viewing effects on the intensity of the light being emitted from the reaction. When a light stick is submerged in cold water, or more commonly a freezer at home, the effect is to slow down the rate of the chemical reaction. This will serve to extend the life of the light stick, but it will lessen the intensity of the emitted light. On the other hand, warm temperatures will have quite the opposite effect and will serve to speed the rate at which the chemical reaction occurs. This will result in a brighter, more intense light emission for a shorter duration of time. However, freezing of light sticks is not recommended, as it can sometimes lead to leakage because the plastic may become damaged.

Light sticks have a wide variety of practical applications in everyday life. Anyone who has ever been camping can certainly attest to the value associated with having a light stick on hand, particularly in instances where adverse weather conditions are present. Since chemical light can be produced in a contained environment like a plastic capsule, it is not susceptible to elements like wind or water. Undoubtedly, there are advantages with respect to the use of chemical light in underwater situations like scuba diving, where light is limited. Furthermore, thanks to the flexibility of plastics, we have the ability to introduce chemical light into recreational products like bracelets and necklaces.

Moreover, light sticks are used extensively by the military for cockpit illumination, landing zone indicators, and even as personnel indicators. There are several other commercial applications that call for the use of chemical light ranging from the biomedical industry to commercial fishing. It seems fair to assume that many of the industries that continually affect our lives on a daily basis, either directly or indirectly, have found widespread uses for chemical light, creating a diverse market for products from companies like Omniglow, Inc.

As far as safety is concerned, the ingredients commonly found in chemical light products are non-toxic and non-flammable. However, it is recommended that the chemicals remain

contained within the vial because they can sometimes cause permanent stains to clothing or furniture. Even if mild discomfort is sometimes associated with skin or eye contact with the chemicals, the symptoms are short-lived in nature and have no permanent effects.

Chemiluminescence is a captivating subject in the field of chemistry that can mystify the mind at its sight. It is provocative in nature, as it has and will continue to rouse inquiry among those who see the magic of cold light. Ideally, such questions will inspire the pursuit of answers by those who speculate. This curiosity is at the foundation of our nature and is the very reason this essay was written.

Works Cited

Bos, Richard, et al. "Studies on the mechanism of the peroxyoxalate chemiluminescence reaction: Part 1. Confirmation of the 1, 2- dioxetanedione as an intermediate using ^{13}C nuclear magnetic resonance spectroscopy." Analytica Chimica Acta January 2004: 141-147.

Shakhashiri, Bassam Z. Chemical Demonstrations. Vol. 1. Madison, Wisconsin: The University of Wisconsin Press, 1983. 125-204.

"Student Resources" Omniglow Inc. 8 Nov. 2004 <http://www.omniglow.com/ omniglow/studentresources.shtml>.

Wilson, Elizabeth. "Light Sticks" Chemical and Engineering News vol.77 num.3 (Jan. 18, 1999): 65.

Works Consulted

"Chemiluminescence: Synthesis of Cyalume and Making it Glow" Minnesota State University 8 Nov. 2004<http://www.mnstate.edu/jasperse/Chem365/ Cyalume.doc.pdf>.

Corcoran, Matthew, Mary Kersten, and William Schneider. "Light Sticks", May 2001. U of Penn School of Arts and Sciences. 4 Dec. 2004 <http://www.sas.upenn.edu/~mtc/Lightstick.html>.

"How do Lightsticks Work?" About.com 8 Nov. 2004 <http://chemistry.about.com/library/weekly/aa040902a.htm>

Leland, Jonathan K., Laurette Nacamulli, and Hongjun Yang. "Chemiluminescence" 9 Aug. 2004 AccessScience@McGraw-Hill. 8 Nov. 2004 http://www.accessscience.com.

"Light Stick Colors Glowstick Chemistry" About.com 8 Nov 2004 <http:// chemistry.about.com/library/weekly/aa031703a.htm>.

The Key to Frost's Poetry

By: Susanna Fix

Every poet must draw on two major resources when he writes. The first is his own experience of life, both in the physical realm and the fantastical experiences played out in his mind or imagination. The second is his worldview--his outlook on life. Although this second resource is imbedded into his writing less consciously, it will nonetheless be woven through his writing, whether in subtleties or in more conspicuous ways. Therefore, two important keys to understanding a poet's works are the events of his life and his worldview.

In the case of Robert Frost, one could argue that his loosely existential worldview—his response to the many tragic events of his life—along with specific life experiences, is the key to understanding his poetry. As we shall see, when we examine some of his poems, his writing often portrays man in a godless universe or a world in which God is virtually unreachable and inexplicable, who is alienated from others. There is the recurring theme of a breakdown in communication between two people and the idea that ultimately we live and die alone.

Before examining his poems, however, we must explore two things. The first thing we must look at is his life. What would such key events, ones that might heavily influence his writing, be? Although he experienced some disappointments before, the chain of tragic events seemed to begin when his mother was diagnosed with cancer in 1899. In July of 1900, his three-year-old son Elliot died of cholera. His wife, Elinor, suffered severe depression after Elliot's death and Frost's health also declined. Five months later, Frost's mother died. In July of the next year, Frost's grandfather died, but left him with an annuity (Ketzle 1).

Frost felt liberated in some sense after the death of his mother and grandfather, because, for the first time, he was truly on his own. The loss of his son, Elliot, however, continued to be a source of pain (Parini 80). From 1902 until 1907, Frost and his family experienced a few years of relative emotional calm and financial stability. In June of 1907, he and Elinor lost their daughter, Elinor Bettina, only four days after her birth. Later on, in 1913, Frost began to develop a close friendship with a man by the name of Edward Thomas. Although this friendship was a blessing for a time, it also became a source of pain when Edward was killed in battle only five years later.

In 1918, Frost himself suffered from a severe case of influenza that lasted months. Only two years later, his sister, Jeanie, was pronounced insane and committed to a state mental hospital in Maine. Five years after that, Frost's daughter, Marjorie, was hospitalized for serious health problems. In 1929, his sister Jeanie died. Marjorie developed puerperal fever after the birth of her daughter, in March of 1934, and died in May of the same year. Four years later, his beloved Elinor died suddenly of heart failure. Only two years after that, in October of 1940, Frost's son, Carol, committed suicide (Ketzle 1). Throughout his life, Frost himself suffered many health problems, which often worsened during periods of depression (Parini 311). As tragedy after tragedy seemed to strike in his personal life, so success after success seemed to build up in his professional career. Towards the end of his life, Frost himself wrote in a letter to his daughter, Lesley, "Life has been a long trial," although he by no means indicated that he wished it to be over, but finished that statement with, "yet I mean to see more of it" (qtd. in Parini 446). Some of these events are more evident in their inspiration of his poetry than others. All of his misfortunes, however, seemed to foster a pessimistic view of the world, as he wrote again and again about isolation, pain, and miscommunication.

Now that we have a glimpse of his life, the second item we must explore is the existential worldview. What is existentialism? This is, to a degree, a difficult question to answer, since existentialism itself is not a specific school of philosophical thought, but more or less a tendency recurring throughout the history of philosophy (Cline 2). In its most concise form it is a worldview that stresses individual existence and man's freedom to become what he chooses. There are both religious and atheistic strains of existentialism, their primary difference being the existence of God and the nature of religion (Cline 2). The central themes are still the same, however. Man begins as undefined and through his freedom to choose, creates his own nature or identity. Along with this freedom, comes the responsibility for what he chooses. In atheistic existentialism, man's choices are not to be constrained by anything, neither conventional morality nor reason, but he must choose his life as he sees fit and commit himself to these choices (Eiermann). We live, we become what we make of ourselves, and then we die. Alienation and isolation from society or the rest of humanity are considered an inescapable part of the human condition (Eiermann). Essentially, man is alone in a universe devoid of God or any higher power and there is no predestined master plan or purpose for human life. Albert Camus, a famous French existentialist writer reflected on this: "But the man who likes to dig into ideas

finds that being face to face with this particular one makes his life impossible. And to live with the feeling that life is pointless gives rise to anguish." (qtd. in Eiermann).

In addition to writers like Camus, in the 1950s, there developed a group of dramatists, largely associated with existentialism, who originated what has come to be known as the "Theatre of the Absurd." Their various works, as well as those of other existentialist authors, reflected a belief that, in a godless universe, the human existence is without any purpose or real meaning, and because of this, communication breaks down (Eiermann).

When reading Frost's poetry, we can see some of these themes in what he writes, although certainly in the strictest sense, he could not be considered a true existentialist. While he seemed to have some belief in God, the nature and extent of which is unclear, his poetry often reflects themes of isolation, the breakdown of communication, and at times, man's freedom to choose. In his own life, he certainly reflected a certain individualistic attitude, as did some of his poetry. In Robert Frost: A Life, Parini observes, "[He was] a poet of isolation who sought a mass audience; a rebel who sought to fit in. Although a family man to the core, he frequently felt alienated from his wife and children…in a sense, Frost made himself a representative American by amplifying his individuality…" (446-447).

With all of this in mind, let us examine some of his poems. "The Road Not Taken" was inspired by a conversation Frost had with his friend Edward Thomas, who apparently often regretted the path he had chosen. Frost had been contemplating the image for some time already, but once said to his friend that no matter which road he took, he would always sigh and wish he had taken another (Parini 153). The poem begins:

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be the one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth; (1-5)

The speaker goes on to say that he chose one of the two "Because it was grassy and wanted wear," and yet goes on to say that really the roads were almost identical. He concludes with a reflection that some time, long afterwards, he will be telling about this choice with a sigh, saying:

Two roads diverged in a wood, and I—

I took the one less traveled by,

And that has made all the difference. (18-20)

Potter observes that this poem "reflects a desire for significant choice as well as the difficulty of achieving it" (78). The poem seems to highlight two central thoughts in accordance with the existentialists: that of the freedom of choice and individualism, and that of anguish as a result of ultimate meaninglessness. As Parini points out, there is an undercurrent of irony in this poem, as the speaker seems to desire to highlight his forging his own way and yet being confronted with the reality that really, his life could have gone either way, giving the last line an ironic twist (154).

"Home Burial" is an excellent example of Frost's repeated theme of communication barriers and isolation. This piece was clearly inspired, to a degree, by Frost's own painful experience of losing his son Elliot. Elliot's death was something Frost never fully recovered from, and, as Parini put it, "The death of Elliot gave Frost a bitter firsthand experience of loss that would pick away at him and be reconstituted in poem after poem, often coming out in ways a reader could never calculate." Parini also states, however, that one must be careful in using poems as if they were mere transcriptions of a poet's experience and that one should not view this piece as a biographical narrative in its particulars (69).

The poem, mostly dialogue, depicts a husband and wife, both grieving the loss of their child, who cannot understand each other and the way they each express and experience their grief.

He said twice over before he knew himself:

"Can't a man speak of his own child he's lost?"

"Not you!—Oh, where's my hat? Oh, I don't need it!

I must get out of here, I must get air.—(34-37)

As Parini points out, "Frost dwells on points of miscommunication, the fathomless depths of isolation inherent in all acts of utterance, the gaps that cannot be bridged by words" (70). Throughout the couple's dialogue is a repeated back and forth of accusation and misunderstanding:

"I do think, though, you overdo it a little.

What was it brought you up to think it the thing

To take your mother-loss of a first child

So inconsolably—in the face of love.
You'd think his memory might be satisfied—"

"There you go sneering now!"
"I'm not, I'm not!
You make me angry. I'll come down to you.
God, what a woman! And it's come to this,
A man can't speak of his own child that's dead."
"You can't because you don't know how to speak.
If you had any feelings, you that dug
With your own hand—how could you—his little grave; (62-73)

Clearly, such severe lack of communication also indicates isolation, but this concept is more concretely portrayed in something the wife says towards the end of the poem. Shortly before they reach a final impasse in their conversation, she declares:

No, from the time when one is sick to death,
One is alone, and he dies more alone.
Friends make pretense of following to the grave,
But before one is in it, their minds are turned
And making the best of their way back to life
And living people, and things they understand. (100-05)

Frost returns to this same idea in the poem " 'Out, Out—'," based upon a true story of a tragedy that befell his neighbors. This poem is about a boy whose hand is cut off by a buzz saw as he is cutting wood. In only thirty-five lines, Frost paints the picture of the boy whole and healthy, cutting wood. Within a few lines the saw has leaped towards his hand, as he cries out. Almost immediately, we are introduced to the doctor who cannot save his hand but puts him "in the dark of ether." And then, as suddenly as the initial tragedy struck, the boy dies. His family is depicted as responding very much in the way the wife in "Home Burial" suggests that people do. "And they, since they/Were not the one dead, turned to their affairs" (33-34). Marcus contends that although it is natural that the boy's loved ones would simply go on with their lives (for indeed, what else can they do?), the abruptness of their return "to their affairs" suggests that perhaps their investment in his life was minimal or that people are incapable of genuinely

registering the suffering of others (80). In any case, the reverberating sentiment is one of ultimate isolation and hopelessness.

"Stars" also seems to be very closely connected with Elliot's death, and indeed, was written right around that time. In this poem, Frost indicated his belief in a heaven that was indifferent and cold towards human suffering. Frost speaks of the stars or the on looking heavens as "Those stars like some snow-white/Minerva's snow-white marble eyes/Without the gift of sight." He himself rephrased the point of these lines by saying that there was no oversight of human affairs (Parini 68). The coldness and isolation communicated in these lines is almost tangible. As existentialist Jean-Paul Sarte claims, "Everything is indeed permitted, if God does not exist, and man is in consequence forlorn. For he cannot find anything to depend upon either within or outside himself" (32).

The sonnet "Acquainted with the Night," written in Ann Arbor, takes place in an urban setting and boasts "one luminary clock against the sky," which Frost once said was in the Washtenaw County Courthouse (Parini 246). Against this city background, Frost paints a lonely, isolated picture:

I have been one acquainted with the night.
I have walked out in the rain—and back in rain.
I have outwalked the furthest city light.

I have looked down the saddest city lane.
I have passed by the watchman on his beat
And dropped my eyes, unwilling to explain.

I have stood still and stopped the sound of feet
When far away an interrupted cry
Came over houses from another street,

But not to call me back or say good-by;
And further still at an unearthly height
One luminary clock against the sky

Proclaimed the time was neither wrong nor right.

I have been one acquainted with the night. (1-14)

This poem is haunting in its loneliness. The repetition of the first line in the last creates the sense of the speaker's own footsteps and thoughts echoing into the night, with no answer nor understanding calling back to him. Parini admits that he finds the poem overwhelmingly melancholy and yet oddly compelling. Through the rhythm and rhyme of the poem, as well as the well-defined images, it leaves a mark on the reader. "The protagonist is a solitary wanderer of sad city lanes, someone who averts his eyes from other human beings" (246). Marcus notes that some critics feel the alienation depicted in the poem reflects the despairs of modern existence as opposed to something distinctly personal (125). In any case, the speaker's alienation from the world and the people around him echoes the existentialist mentality of isolation from society.

Certainly in drawing biographical connections to the poems Frost wrote, one must be careful not to over-interpret or put too much emphasis on such connections. However, it is evident that certain experiences, both painful and good, are tied directly to some of his poetry, most notably, "Home Burial," "The Road Not Taken," "Stars," and " 'Out, Out—'." It is difficult to say to what extent the many tragic events of his life influenced an attitude of pessimism and existentialism. It is important, however, to understand the tragedies that befell him, as they do help shed light on his pessimistic view of life and also give insight into the content of his writing.

Although Frost was by no means a tried and true existentialist, it is helpful to understand this worldview when reading his works, as certain themes are found repeatedly in his poetry. Parini points out that Frost's poem are typically about a loner or a solitary man against nature and set against a dark and wintry background (213). He also asserts that for Frost, religion, like art, was a structure that allowed for the possibility of creation, beginning in emptiness but ending in wholeness and presence (266). This is precisely the starting point of an existentialist: man, undefined, "empty" so to speak, ending in some sort of wholeness or existence through his creation of himself. As we have seen, although Frost does not typify existential thought, his poetry certainly employs many themes common to existentialism.

Works Cited

Cline, Austin. "Introduction to Existentialism, Existentialist History, and Existentialist Thought." About.com. 30 Nov. 2004. < http://atheism.about.com/od/existentialism/a/introduction.htm>.

Eiermann, Katharena. "Basics of existentialism." DividingLine.com. 1994. 30 Nov. 2004. <http://www.dividingline.com/private/Philosophy/Philosophers/existentialism/existentialismBasics.shtml>.

Frost, Robert. The Poetry of Robert Frost. Ed. Edward Connery Lathem. New York: Holt, Rinehart, and Winston, 1969.

Ketzle, Jeff. "Biographical Information." Ketzle.com. 23 Apr. 2004. 28 Nov. 2004. <http://www.ketzle.com/frost/frostbio.htm>.

Marcus, Mordecai. The Poems of Robert Frost: An Explication. Boston: G. K. Hall, 1991.

Parini, Jay. Robert Frost: A Life. New York: Henry Holt, 1999.

Potter, James Lain. Robert Frost Handbook. University Park: Pennsylvania State UP, 1980.

Sartre, Jean-Paul. Basic Writings. Ed. Stephen Priest. New York: Routledge-Taylor & Francis, 2001.

"The Effect of Family Structure on Personality/ Case Study: Princess Diana, Princess of Whales"

By: Shariffa Ali

"First impressions last", this is a very popular phrase that we are all familiar with. Generally, when we meet someone for the first time we instinctively assess their personality, and this is what stays with us as our perception of this person. We especially do this when we expect that we will be associating with this person in the future, and we also expect that they will behave in conformity with our perceptions. But what about when you meet this person again and their behavior is quite different from the first time you met? Is it that their personality has changed? Or are we simply experiencing another aspect of their personality? This brings me to the question of personality.

Is personality simply a matter of a person being friendly as opposed to hostile, or reserved as opposed to outgoing? What factors come into play when a personality is shaped? Are we born with a personality, making personality a biological issue or is our personality shaped by our culture and environment, including our family structure?

What is personality?

Personality could be described as the nature of self, or as what makes us unique as individuals (Friedman & Schustack, 2003). There are many theorists who have studied the psychology or make-up of personality by studying how and why people behave the way they do and many theories as to what factors play the greatest role/s in influencing our personality (Friedman & Schustack, 2003). The book Theories of Personality describes these theories as:

- *The psychoanalytic approach* of unconscious influences and importance of sexual drives.
- *The neo-analytic/ego approach* looks at a person developing their self, while dealing with outside influences and the expectations of their culture and society.
- *The biological approach* focuses on genetics and how the shaping of a personality is dependent on the genes inherited.
- *The behaviorists* view personality as shaped by punishments and rewards and by behaviors being reinforced through these punishments and rewards.

- *The cognitive approach* looks at the mind and the processing of thought. A person's personality is a product of their thoughts and perceptions through learning processes.
- *The trait approach* is based on assessment of a person's abilities.
- *The humanistic approach* looks at the spiritual aspects of a person and their desire to be self fulfilled or self actualized.
- *The interactionist approach* looks at our multiple personalities in dealing with different situations (theories of personality).

The eight approaches listed above is merely a brief insight into the different theories on personality and it is certainly possible for a personality to be described by more than one concept.

Focus

This paper will use Karen Horney's Neo-Analytic theories of personality, to explain the personality of our case study Diana, Princess of Wales and how her personality was influenced by her family structure.

Karen Horney's Theory of Personality

Karen Horney proposed that neurotic needs are developed through basic anxiety which is experienced by an individual in childhood (Friedman & Schustack, 2003). This is usually experienced by a person who feels helpless and abandoned as a result of parental neglect (Friedman & Schustack, 2003). Based on our levels of basic anxiety we develop neurotic needs which lead us to adopting a coping strategy that is either, *compliant, aggressive or withdrawn.* Horney's theory suggests that we identify with three basic selves, the real self, the ideal self and the despised or false self. Our relationship with others determines our identification with our real, despised or ideal self . Her theory indicates that in order for a person to be mentally fit one has to be able to accept both one's despised and ideal selves and find a midpoint that one can accept as one's real self (Friedman & Schustack, 2003). If identification with this real self is not achieved, a person will experience neurotic anxiety. Neurotics develop coping strategies which will then shape the way they relate to others by moving toward, moving against or moving away (Friedman & Schustack, 2003).

This paper will now look at possible explanations based on Horney's theories, of how Diana's family structure initiated her feelings of basic anxiety. In addition, the paper will also look at how changes in her family structure created increasing anxiety causing her to struggle with her identity.

Definition of family structure

Family structure includes parents and children regularly living together. It also includes people outside the family, dead or alive, who psychologically affect any member within the family, through relationships or influences (Gerlach). This paper will explore Diana's perception of her self in relation to the dynamics of her family structure and how these dynamics influenced her life and her relationships.

Karen Horney's Theory of Basic Anxiety

Horney's theory describes the concept of basic evil or parental indifference. She suggests that the basis of the child feeling parental neglect is not necessarily because of anything the parent have said or done but rather the perception the child has of this act ((Women's Intellectual Contributions to the Study of Mind and Society). Horney's theory is that as a result of this feeling of parental neglect a child develops a defense of basic hostility to deal with the frustrations. The child moves away from this stage of basic hostility as he/she learns that this is not helping to foster relationships and basic anxiety starts developing because of feelings of helplessness and abandonment. From this experience, the child develops another defense mechanism to deal with this perceived abandonment. Diana defended against such feelings by developing a compliant personality. This compliant strategy starts to form by the child thinking "if I can make you love me, you will not hurt me." (Boeree).

Absent Mother

Diana, Princess of Wales was born Diana Spencer, she later acquired the title of "Lady" after the death of her grandfather. She could be described as a spoilt aristocrat, who liked having her way (Myers, 2003). Aside from the fact that she was a member of a very prominent English family, like every child, she still expected the umbrella of protection and support from her family (Clayton, 2001).

This expectation fell short as Diana's losses began at age six, when her parents began a trial separation which would end in divorce. Diana would then spend most of the time living with her father and having occasional visits with her mother. Although Diana's father remarried she did not like her stepmother and they did not have a relationship (Myers, 2003). The booklet, Negative Love Syndrome describes the "attachment theory" of British psychologist, John Bowlby, "Bowlby theorized that human infants are born with a brain system that promotes safety by establishing an

instinctive behavioral bond with their mothers. That bond produces distress when a mother is absent, as well as the drive for the two to seek each other out when the child is frightened or in pain" (Hoffman). Is it possible that this was the anxiety experienced by Diana when her mother was absent from her life after the divorce.

Neglect

The American Medical Student Association defines neglect as follows: "Neglect is defined as failure to provide a child with basic needs—minimally adequate food, clothing, shelter, supervision and medical care"(AMSA). It is assumed that these needs were all provided to Diana as there were no economic hardships which prevented these being accessible to her. Diana was very well supervised both at home and at school. At home she had a houseful of domestic workers which always included a nanny. She attended private and prestigious schools where she was supervised by her teachers and her school principal (Clayton, 2001). The American Medical Student Association says that "emotional neglect occurs when a parent.....does not bestow adequate nurturing....when the child witnesses extreme or chronic spouse abuse"(AMSA). Diana relates that her father had a drinking problem and as a result was very abusive toward her mother. She remembers "her mother and her younger brother crying himself to sleep" (Myers, 2003). This perceived neglect is another element of her family structure which caused great anxiety. This also brought awareness that she was helpless to protect her mother from her father's anger which resulted in the mother's abandonment of Diana.

Synopsis

Though some reports presented Diana as having a happy childhood, filled with birthday parties and other social events, the information presented above clearly shows that there was a lot of anxiety in Diana's childhood (Myers, 2003). There seems to have been real emotional neglect because of the absence of her mother as Diana did report that after her parents' divorce she felt rejected and alone (Myers, 2003). The basic hostility phase which Karen Horney spoke of can be seen in reports of Diana's behavior as a bully in school and her popularity as a troublemaker (Clayton, 2001). This hostility came from Diana's internal anger at her parents. As a result of this anxiety coming from within her family structure Diana developed neurotic needs which may explain her need to gain love by complying with others (compliant personality).

Karen Horney's Compliant Personality

"Neurosis is an attempt to make life bearable as an interpersonal controlling, and coping technique" (Friedman). This neurosis is a result of increased basic anxiety, and neurotic trends arises out of this neurosis which shapes personality (Boeree). The neurotic trends which describe a compliant coping style are:

- The need for affection and approval. To please others and be liked by them.
- The need for a partner. Someone to solve all problems.
- Undemanding and satisfied with little.

Diana's Need for Affection and Approval

Diana's teachers describe her as being very friendly and always willing to help, even if she had to do menial chores such as weeding the garden. Though Diana was initially given the chore of weeding the garden as a punishment in school, her teachers commented that she actually enjoyed this task and would specifically request this chore whether she was being punished or not (BBC Video). She seemed to please everyone and generally got people to like her by doing menial chores. Diana liked helping her teachers so much that they initiated a new award for helpfulness, which was presented to Diana at her school (BBC Video). To reiterate this Diana's nanny Mary Clarke always gushed about how good Diana was at keeping things neat and tidy so Mary didn't get into trouble with Diana's father (Clayton, 2001). This can be seen as her need to protect her nanny from her father's anger. By doing this she is defending against the nanny abandoning her, like her mother did.

Diana's Need for a Partner

Diana felt that she would marry someone who loved her and whom she loved and they will live happily ever after (Clayton, 2001). Nanny Mary Clark talked about Diana loving romance novels and dreaming about getting married and having lots of children. She also spoke about the fact that no one expected great scholarship from Diana, what was expected was that after she finished school she would simply pass time until she got married (Clayton, 2001). Diana's eye had always been set on Prince Charles as her suitor, and he certainly satisfied her requirement as she relished the notion

that there could never be divorce in a royal marriage. Diana's teachers report that the walls of her dormitory at school were covered with posters of Prince Charles.

Synopsis

Diana's compliant personality is seen here as it is shaped by the family dynamics seeking the constant love and approval, (which she didn't get from her parents), of people within her family structure, but who were not biologically related to her. She then sought to get this love and affection from her partner in marriage. Of course Diana's compliant personality was perfect for the future Queen to be as she could be shaped to the monarchy's liking because of her need to please others in order to be loved. The paper will now look at the perception of self.

Karen Horney's Theory of Self

Horney's theory suggests that a person identifies with three basic selves. *The Real self* is 'not a fixed entity but a set of "intrinsic potentialities" – including temperament, talents, capacities and predispositions....'(Paris). Therefore the Real Self is who we truly are and what we are capable of and that which will make us feel satisfied and fulfilled. *The Despised Self* is identified as one's negative thoughts of oneself through perceptions of what others think of us, it can be referred to as the "looking glass self" (Boeree). If a person thinks of the Despised self as everything one should not be, then a model is built of what we *should* be. Horney's theory discusses the Tyranny of the Shoulds for the compliant personality:

- I should be sweet
- I should be saintly
- I should be self sacrificing

Coming from this Tyranny of Shoulds is the Ideal Self. *The Ideal Self* is perfection. It is that perfect self which is modeled from our perception of our Despised Self. The Ideal Self would characterize grandiose and is usually based on standards which are too high to be realistic (Friedman).

Now the paper will discuss issues relating to Diana's perceptions of her self, which she formed as a result of her relationships and experiences within her family structure. Literature will be presented in discussing some of the issues which reflect Diana's personality and her eating disorder.

Self Esteem

In an article titled "developing your child's self-esteem", the author presents two definitions of self esteem, "Self-esteem is the collection of beliefs or feelings that we have about ourselves. How

we define ourselves hugely influences our motivations, attitudes, and behaviors" and "Self-esteem can also be defined as the combination of feelings of capability with feelings of being loved" (Rutherford, 2001). This article presents that self esteem is related to the way we handle conflicts, and that a person of low self esteem experiences great anxiety when presented with a challenge. Diana related that her "mind would go blank" when she was writing an exam (Myers, 2003). Certainly an exam is a challenge.

This self esteem is also shaped by children making many attempts at doing something and either failing or succeeding (Rutherford, 2001). Diana was not very good at academics. After failing her final exams at her high school, she made several other attempts to pass these exams but she failed again and again. After dropping out from high school because she couldn't pass her exams, she went to finishing school where cooking and skiing were the main concern but this was another failure under Diana's belt. The school was in Switzerland and all the business was conducted in French. Diana's French was not so good and she was shy to try speaking this language for fear of making mistakes. As such she had difficulty fitting in and subsequently appealed to her parents, for many months, to allow her to come home (Clayton, 2001).

The article also suggests that a person who has low self esteem generally speaks low about his/her self (Rutherford, 2001). Diana often made jokes about her lack of academic skill (Clayton, 2001). In one instance, after her marriage to Charles, Diana was invited to be a guest speaker at a function in her old school and in her speech she joked with her principal about her inability to pass her exams (BBC Video). She is reported to have made remarks from an early age about herself like, "brain the size of a pea, I've got" and "in the academic department you might as well forget it" (Clayton, 2001). Another article by the American Psychological Association (APA Online) addresses how the lack of parental support during childhood affects adults. This author states "early parental support appears to shape people's sense of personal control, self esteem and family relationships….". Kim Rutherford, MD, of "developing your child's self esteem", list the following as things parents can do to ensure their child's healthy self esteem:

- Help your child become involved in constructive experiences
- Create a safe, nurturing home environment
- Give positive, accurate feedback
- Be spontaneous and affectionate with your child
- Identify and redirect your child's inaccurate beliefs

- Be a positive role model

Neither Diana's mother nor father were a strong presence in her life. After her parent's divorce, she initially lived with her father but spent weekends with her mother. After Diana's father's remarriage she spent most of her time away at school. Diana often spoke about feelings of isolation because of the formal atmosphere in her family (Myers, 2003). These feelings of isolation may have been exaggerated by the fact that she did not have a very close relationship with her parents because of their absence from her life and neither Diana nor her parents were very demonstrative with their feelings (Myers, 2003). Given these fact, it can be assumed that her parents did not play a very big role in building Diana's self esteem.

Bulimia Nervosa

Bulimia Nervosa is an eating disorder and is sometimes just referred to as Bulimia. This disorder characterizes a person who eats excessive amounts of food (bingeing) and then purges themselves (Wrong Diagnosis) A person suffering from this disorder can also exhibit symptoms of non purging behaviors which include excessive exercising or fasting (Wrong Diagnosis). Diana suffered from bulimia (Myers, 2003). She would eat large amounts of food and then purge herself by vomiting. It is reported that her first instance of bingeing did not start until after the death of her Grandfather. At this time Diana's family was getting ready to change residences, as her father had inherited a house along with the title of Earl after his father's death (Myers, 2003). Shortly after Prince Charles and Diana got engaged, Diana's fiancée mentioned to her that she looked chubby and this is when she started purging herself after eating in an attempt to please her husband-to-be (Clayton, 2001). Again we see her acting out the neurotic need of the compliant personality, the need to please people in order to be loved.

Synopsis – Diana's Despised Self

Diana's despised self existed mainly through her low self esteem. Presented before were facts that Diana had negative thoughts of herself. Certainly her early feelings of rejection by her parents not only created anxiety but it added to her low self esteem and Diana referred to a number of instances where she felt isolated (Bashir).

The issue of her husband's relationship with Mrs Parker Bowles was a source of great stress for Diana. Ten days before her wedding she questioned members of the royal household about the relationship between the Prince and Mrs Parker Bowles. She was clearly distraught and even asked

advice of the staff about what she should do about this issue (Clayton, 2001). In the first interview which Diana and Prince Charles gave as an engaged couple, the reporter asked if they were in love, to which Charles responded "Whatever in love means" (BBC Video). Therefore, in addition to feeling that she was not good enough for her parents through perceived feelings of abandonment and neglect she also felt like she was not good enough to be loved by Charles, because he was in love with Camilla Parker Bowles.

The article titled Associated Mental Health Conditions and Addictions, deals with the issue of eating disorders and the related psychological illnesses. It cites eating disorders as "a reaction to a low self esteem and a negative means of coping with life and stress" (Amy and Tony Medina). The article goes on to discuss that as a defense mechanism people who suffer from eating disorders engage in harming oneself by self mutilation. This self mutilation creates physical pain which takes away from the emotional pain of one who suffers from an eating disorder (Amy and Tony Medina). Diana, in an interview for the BBC, admitted to cutting her arms and legs and she explains that she did this because she didn't like herself. She felt that she was not good at dealing with the pressures of the press and especially that she could not do it without her husband's support. At his time Diana and her husband were attending separate engagements and not meeting the public as a couple (Bashir).

Another aspect of Diana's despised self was her feelings of unworthiness of attention. Dana never liked to wear dresses and Nanny Mary Clark reports that she had a hard time getting Diana to wear a dress for formal functions. Nanny Clark reported that Diana would respond to her pleas to wear a dress by saying "no one's going to look at me anyway, so long as I'm there, it doesn't matter what I wear" (Clayton, 2001). This suggests that Diana felt invisible or that she felt no one paid attention to her.

This is also manifested in Diana's relationship with the press and the public. Diana was very popular for her down to earth approach of dealing with the public and she was given an extreme amount of publicity by the press. Diana expressed that she felt guilty because she seemed to be more popular than Prince Charles. She talks about the pressure this caused on her relationship with her husband, in the interview for the BBC. Diana cited one particular trip to Australia, where she and Prince Charles made a public appearance. The people who were not the side where she was greeting people was very disappointed and expressed their disappointment by saying "oh, she's on the other side" (Bashir).

Diana was identifying with her despised self through all these relationships in her family structure. All these aspects of her despised self were creating neurotic anxiety which were not living up to her compliant coping strategies. Diana was trying to please the Prince in an effort to be loved by him, but it was not working as her popularity seemed to get in the way. Because of this her need for a partner to solve her problems was not being fulfilled as her marriage seemed to be causing more anxiety.

This paper will now look at how Diana's despised self and low self esteem created an identity with her ideal self.

Horney's Theory on Low Self Esteem

Horney suggests that as a defense to the neurotic anxiety cause by identification with the despised self one starts to identify with the *ideal self.* She states that one has to "compensate for feelings of weakness, inadequacy, and *low self-esteem,* people develop an idealized image of themselves that they seek to actualize by embarking on a search for glory. The idealized image generates a pride system, which consists of neurotic pride, neurotic claims, and tyrannical shoulds." (Paris) This means that as an ideal self one makes grandiose claims and expects everyone to see them in this way. A compliant person would exhibit claims through actions of sweetness, saintliness, and being self sacrificing (Boeree).

Diana's Ideal Self

One of Diana's friends related that Diana had a sense of her own destiny as she was insistent that one day she "*would"* marry Prince Charles. She never said she "would like to" or "intended to" but that she "would" marry him (Clayton, 2001). This was the beginning of Diana's identification with her ideal self, *the Princess of Wales.*

Therefore, Diana felt that because there could never be divorce between she and the Prince, that they would love each other and live happily ever after. She would find her identity by fulfilling the duties of a Princess. In identifying with this ideal self, she felt that she was prepared for anything and was undaunted by the perceived responsibilities of the role of Princess and the fact that she would one day be the Queen. She expected that her husband would always be by her side and that together they would be able to handle anything (Bashir).

As Diana put it, "here is a fairy story that everyone wants to work" (Bashir). Indeed it did start as a fairy tale. Prince Charming meets the Lady in distress who always dreamed of marrying the Prince

and he swept her away from her idle life of not knowing who she was or what she was good at. He would take her to his castle and love her and protect her. She would never have to fear abandonment, rejection or feelings of unworthiness and the people of her kingdom would love her.

Mrs Robinson, Diana's former employer described her feelings, as she attended the ball at Buckingham Palace the night before the wedding. She said she was reminded of Cinderella because it was all so much like a fairy tale (Clayton, 2001).

Before getting married Diana had to deal with the fact that the Prince might be in love with someone else, his ex girlfriend, Mrs Camilla Parker Bowles. Diana voiced her concerns about the viability of the marriage to her sister, who advised her that it was too late to have doubts (Clayton, 2001). In identifying with her ideal self Diana accepted this advice because she wanted to be the Princess. This also showed her as being self-sacrificing as she was doing what seemed to be what everyone thought was good. By getting married to the Prince, she was also pleasing others and as a compliant personality, it would follow that if she pleased others they would love her.

The paper will now look at how Diana's Ideal and Despised selves were causing her great anxiety, and how these were integrated to allow her to identify with her Real Self.

Diana Princess of Wales-Battle of the Ideal and Despised Selves

Diana was now a part of this new family where she should identify with her *ideal self as Princess*. But though Diana was undaunted by what lay ahead, she found that things were not going to be as she expected. Her life would from that point be a battle between her despised and ideal selves in response to the increased neurotic anxiety which she experienced throughout her marriage and her reign as Diana, Princess of Wales.

Diana expected support and comfort from her husband, she expected that he would always be by her side but she found that his duties as Prince often took him away from her (Clayton, 2001). Diana also felt isolated because the Princess was being left to fend on her own, and according to Diana there were no guidelines about the responsibilities and expectations of a member of the Royal Family and she wasn't sure of what she was supposed to do (Bashir).

Her ideal self was quickly being taken over by her despised self as she tried to fit in with this new world into which she fell and in her words had to "swim or sink" (Bashir). At this point her despised self was becoming overwhelming. Her desired ideal self was that she was married to the Prince who she loved and wanted to share everything with, but this was being taken over by her despised self of an inability to be loved. Her Ideal Self was actualized for a short time with the birth

of her first son, William. Diana explained that she felt great relief when she found out that her first born was going to be a boy. There were great expectations by everyone that she should bear an heir for her husband. Most ecstatic was Prince Charles and for some time during her pregnancy and for a short time afterward she and the Prince were very close (Clayton, 2001). Of course to Diana, her son would love her unconditionally and as such her neurotic need of being loved was met. Unfortunately, if Diana expected that her second child would make Charles love her, she was to be disappointed. Charles wanted his second child to be a girl and when he found out that it was a boy he was very disappointed (Clayton, 2001). So there was her despised self again, she could not give Charles what he wanted and as such she could not be loved by him.

The press was using her as a "hot selling product", and she became the more popular of the two royals. Diana felt it was her fault because she was taking the attention away from her husband (Bashir). The attention of the press was a source of great stress for Diana, both on her personally and on her relationship with her husband (Bashir). Diana's despised self looked at the press attention as a deliberate effort on her part to be liked and approved of and she feels that she was unworthy of this attention, but her desired ideal self of being the Princess leaves her with no choice but to deal with the pressures of the press.

Again her desired ideal self as Princess and her compliant personality wanted to be loved and approved of by her subjects. Diana's experience with helping people who were sick started with a trip to Darenth Park, a hospital for the mentally and physically handicapped. This was a trip organized by her school after an appeal to get local schools to visit the inpatients. Diana was one of the first to volunteer and she enjoyed her time at the hospital, always very careful to follow the staff's suggestions and never having to be reminded of how to treat the patients (Clayton, 2001). This is where she would learn of the power of touching, of stroking and the comfort that these actions bring (Clayton, 2001). Diana stated that when she saw the reassurance that touch would give, she did it everywhere (Bashir). This is where Diana seems saintly because she is doing the work of healing and working with sick people. But her despised self was rearing its ugly head again as she was seen as overshadowing her husband because of the press attention and the public's preference of her over him.

Diana's self esteem was at an all time low. Her relationship with her husband was not what she expected, she was not being loved by him and instead of solving her problem it seemed that more problems and anxiety was being created. There was never any praise from the royal family and so

Diana often wondered if her work was approved of by the monarchy (Clayton, 2001). Her despised self was starting to feel rejected and she was losing this battle of acting out her ideal self, the perfect princess who was doing a perfect job and being accepted by her family, the Monarchy.

Diana was very sick from the combination of her suffering from Bulimia and her self mutilation. She was having problems with her marriage, and her work with sick and dying people was taking a toll on her, simply because she had no one to comfort her (Bashir). Her despised self was feeling isolation and self destruction, and she started to cut herself so this physical pain would take away from the emotional pain of being alone and of dealing with fears of abandonment.

But her ideal self felt that even though she was sick and she was having problems within her marriage that she was compelled to keep up the ideal by continuing with her engagements and her duties because she had to maintain the image of a successful Princess of Wales (Bashir).

Karen Horney's Real Self

Bernard Paris wrote an essay on Karen Horney's Vision of Self. In this essay, he states, "According to Horney, self-realizing people know what they really think, feel, and believe; they are able to take responsibility for themselves and to determine their values and aims in life." (Paris). Horney theory suggests that for a neurotic person to become healthy, that person has to realize who they really are and what they are really capable of. They have to be able to integrate elements of the despised self and the ideal self toward achieving a vision of the real self (Paris). Horney states that this can be achieved through psychoanalysis, "for Horney, the object of therapy is to help patients relinquish their defenses, accept themselves as they are, and replace their search for glory with a striving for self-realization. Insight is useful in leading patients to see that their defenses are self-defeating and cannot possibly work, but they must experience as well as understand the destructiveness of their solutions if they are to have a strong enough motivation to change" (Horney and Humanistic Psychoanalysis, 2002).

Lady Diana – The Real Self

Diana was suffering from depression and bulimia (Myers, 2003). She found it increasingly difficult to cope with the stresses of being in the royal family, the press, her unpopularity with the monarchy and her deteriorating health. Through conversations with friends about her condition she sought treatment from a number of therapists. At first the treatment did not seem to help but Diana continued to seek help from a number of different practitioners. A hypnotherapist, an astrological

counselor, a deep-tissue masseuse, an aroma therapist, an acupuncturist, a cranial masseuse, a practitioner of osteopathy, a clinician who gives regular colonic irrigations, and a new-age therapist (Myers, 2003). Some of these people agree that Diana was simply looking for a friend, someone to talk to, to be comforted by and even to look up to as a mother figure. This is not surprising given her compliant personality; again she is seeking to be loved.

Diana's work with the public was not very popular with the monarchy, and the press attention was causing a lot of conflict in her marriage. This aspect of her life however, helped her to gain her self confidence and to establish an identity. She was thrown into this new world where she had to "sink or swim", and her confidence was boosted by swimming. Diana had no guidelines for what she should do as "Princess" and so had to create her own identity based on her experiences. Her role as a mother also lent to her identity as her children's presence in her life was a source of love and fulfillment for Diana.

After Diana's separation from her husband, she continued her work and found great rewards in doing so (Bashir). This is where she found her real self, her intrinsic personality. Diana expressed the wish to be an Ambassador for England. She wanted to turn the negative pressure of the press into a positive thing by using their interest in her to relay a positive view of England in other countries and to highlight the plight of the suffering (Bashir).

Diana felt that "the biggest disease this world suffers from in this day and age is the disease of people feeling unloved". She wanted to fix this by reaching out to as many people as she could (Bashir). This was Diana's intrinsic potential, her talent, her predisposition and we know that in the years of her life this ability to reach out to people brought her the most comfort.

Conclusion

Diana's brother Charles, the 9th Earl Spencer, presented an oration at her funeral. He stated "Diana explained to me once that it was her innermost feelings of suffering that made it possible for her to connect with her constituency of the rejected" (Spencer, 1997).

This paper has presented how the facts of Diana's family structure contributed to her personality. Her thoughts and actions which made her who she was, the nature of her self.

The paper looked at Karen Horney's description of the neurotic needs of the Compliant Personality and demonstrated how these needs were sought after. These needs were manifested through Diana's experiences with her family, her perception of neglect and the absence of her parents in her life. Whether or not these needs were met impacted on the decisions in her life which further

influenced her behaviors. The paper examined how she fulfilled her need to be loved and how she dealt with the fact that her life partner did not solve her problems by providing her with support and an identity.

Diana's was what Karen Horney would describe as neurotic because of the split between her despised and ideal selves. This neuroticism was caused by the great anxiety experienced throughout her life, beginning with her parent's divorce and increasing through her other experiences within her family structure or experiences which came about as a result of her family structure. This paper examined how Diana's low self esteem was a result of her relationship with the people in her family structure. This lack of self esteem caused a great deal of anxiety in Diana's life which was manifested in her despised self. Her defense against her despised self created expectations in the form of an ideal self. This ideal self was not realistic and great anxiety was present as Diana struggled to merge these despised and ideal selves.

Diana's despised and ideal selves were eventually integrated and she was realing her real potential. That which she was capable of doing, and which gave her a sense of fulfillment and satisfaction. Her real self.

Works Cited

American Medical Student Association. Child Abuse and Neglect. Amsa. 12 Nov. 2004. <http:// www.amsa.org/programs/gpit/child.cfm>.

American Psychological Association. Lack of Parental Support During Childhood is Associated with Increased Depression and Chronic Health Problems. 2004. APA Online. 17 Nov. 2004. <http:// www.apa.org/releases/parental support.html>.

Bashir, Martin. BBC Interview. Princess Diana.com. 20 Nov. 2004. <http://www.princess-diana.com/diana/bbc.htm>.

Boeree, George C. Karen Horney 1885-1952. Ship.edu. 01 Dec. 2004. <http://www.ship.edu/~cgboeree/horney.html>.

Clayton, Tim, Phil Craig. Diana Story of a Princess. Great Britain: Hodder & Stoughton, Ltd, 2001.

Diana. 1961-1997 [video recording] : a celebration / BBC. written & produced by Gordon Carr. Beverly Hills, CA : CBS Fox Video : BBC Video, c1997

Friedman, Howard, Miriam W. Schustack. Personality Classic Theories and Modern Research (2nd ed). Boston: Allyn and Bacon, 2003. pps133-137.

Gerlach, Peter K. Stepfamily in Formation. Stepfamily help.org. 7 Nov. 2004. <http://www.sfhelp.org/09/map-str.htm>.

Hoffman, Bob. Negative Love Syndrome. Hoffman Institute. 7 Nov. 2004. <http://www.hoffmaninstitute.org/nls-online4.html>.

International Karen Horney Society. Horney and Humanistic Psychoanalysis. 18 June 2002. International Karen Horney Society. 20 Nov. 2004. <http://plaza.ufl.edu/bjparis/horney/fadiman/>.

Myers, Robert G. Case Studies in Abnormal Behavior (6th ed) Boston: Allyn and Bacon 2003. pps 176-182.

Paris, Bernard J. Karen Horney's Vision of Self. International Karen Horney Society. 11 Nov. 2004. <http://www.plaza.ufl.edu/bjparis/essays_self.html>.

Rutherford, Kim, MD. Developing Your Child's Self Esteem. September 2001. Nemours Foundation. 04 Dec. 2004. <http://kidshealth.org/ parentsemotions/feelings/self_esteem_p3.html>.

Something Fishy. Associated Mental Health Conditions and Addictions. Amy and Tony Medina. 11 Nov. 2004. <http://www.something-fishy.org/isf/ mental health.php>.

Spencer, Charles. Text of Funeral Oration by 9th Earl Spencer. 6th Sept. 1997. CNN. 21 Nov. 2004. <http://www.cnn.com/WORLD/9709/06/spenser.text/>.

Women's Intellectual Contributions to the Study of Mind and Society. Karen Horney. Webster.edu. 04 Dec.2004. <http://www.webster.edu/~woolflm/ Horney.html>.

Wrong Diagnosis. Introduction: Bulimia Nervosa. 01 July 2003. Wrong diagnosis.com. 15 Nov 2004. <http://www.wrongdiagnosis.com/b/ bulimia_nervosa/intro.htm>.

The Complicated Numbers

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Abstract

My goal in creating the Complicated Numbers (denoted $\tilde{\mathbb{C}}$) was to create an analogue of the surreal numbers (denoted $\tilde{\mathbb{R}}$ here) for the complex numbers. The reader should note that there is a trivial although not entirely elegant solution to this, in simply defining a *complicated number* as a pair of surreal numbers (a, b) corresponding to $a + bi$, with addition and multiplication being defined on them in terms of addition and multiplication on $\tilde{\mathbb{R}}$ exactly as addition and multiplication on $\mathbb{C}$ is defined in terms of addition and multiplication on $\mathbb{R}$. Note also that the complicated numbers are *four set surreal numbers*. Any even number of sets is possible, and the procedure of creating such is described.

1 Forming $\tilde{\mathbb{C}}$

The convention must be immediately established that if, in a statement, a set of complicated numbers is used in place of a lone complicated number, that statement holds true for all elements of the set. If a function or operation is given a set as its input, the output is the set of outputs for each input. Additionally, lower case variables denote elements while upper case variables denote sets.

Just as a surreal number is defined recursively by a pair of sets of surreal numbers, one on its left, the other on its right, a complicated number is defined by a set of four complicated numbers, one above, one below, one to the left, and one to the right.

Definition. *A* complicated number x *is defined by an ordered collection of four sets:* $x = \{X_d|X_u|X_l|X_r\}$ *such that all elements of* X_u *are not below (or* $\overset{i}{\nleq}$*) all elements of* X_d *and all elements of* X_r *are not left of (or* $\overset{l}{\nleq}$*) all elements of* X_l*.*

Note that there is no relation between the up-down sets and the left-right sets, and that most numbers may fit into either of the two sets. For example, i+1 is considered to be both to the right of and above 0.

Now, having already refered to it, we must define *above* and *to the right of*

Definition. *for complicated numbers* x *and* y*,* x *is said to be* below y *and* y *is said to be* above x *if:*

$$x \overset{i}{\leq} y \iff X_d \overset{i}{\ngeq} y \wedge x \overset{i}{\ngeq} Y_u$$

Definition. *likewise, x is* left of *y and y is* right of *x if:*

$$x \overset{1}{\leq} y \iff X_l \overset{1}{\not\geq} y \wedge x \overset{1}{\not\geq} Y_r$$

Note that these relations do not exhibit trichotomy in terms of traditional equality (as opposed to notions of *at the same height as* and *at the same distance over as*, and thus do not provide a linear ordering on the complicated numbers. However, they do provide a partial ordering.

2 Producing Numbers

Just as it is in $\tilde{\mathbb{R}}$ the first number you can create is $\{\emptyset|\emptyset|\emptyset|\emptyset\} = 0$, which is the simplest number.

The next generation, you can produce 8 more numbers: $1, 1+i, i, -1+i, -1, -1-i, -i$, and $1-i$. $1, i, -1$, and $-i$ are produced like $\{\{0\}|\emptyset|\emptyset|\emptyset\} = i$, and numbers of the form $\pm 1 \pm i$ are produced like $\{\{0\}|\emptyset|\{0\}|\emptyset\} = 1+i$.

The total number of complicated numbers that have been produced on or before the nth generation is the square of the number of surreal numbers that have been produced on or before the nth generation $= (2^n - 1)^2$, so the amount of numbers to keep track of quickly gets out of hand. It should be noted here, that all one really has to do is keep track of all the surreal numbers of the nth generation, since the complicated numbers of the nth generation are simply two surreal numbers combined together.

On the third generation, you can produce a total of 40 new complicated numbers, so no attempt will be made to list them here.

On the infinityth generation, just as they might be expected to, infinite-set numbers can finally be produced. These include all of $\mathbb{C}$, as well as a few extra terms involving $\epsilon = \{\emptyset|\emptyset|\{0\}|\{1, \frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \ldots\}\}$ and $\omega = \{\emptyset|\emptyset|\{1, 2, 3, 4 \ldots\}|\emptyset\}$, such as:

$$\omega + i\epsilon = \{\{0\}|\{1, \frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \ldots\}|\{1, 2, 3, 4 \ldots\}|\emptyset\}$$

3 Addition

Addition on $\tilde{\mathbb{C}}$ is defined recursively as:

$$\{X_d|X_u|X_l|X_r\} + \{Y_d|Y_u|Y_l|Y_r\} =$$
$$\{X_d + y \cup Y_d + x|X_u + y \cup Y_u + x|X_l + y \cup Y_l + x|X_r + y \cup Y_r + x\}$$

This is the compontent-wise analogue of addition based on addition on $\tilde{\mathbb{R}}$, so properties can easily be shown to carry over.

4 Multiplication

The clever bit is multiplication. If we were just working with pairs of surreal numbers, which almost is the case up to this point, then it would be easy to do the math and specify the result of any product. With the fully integrated complicated numbers, there has to be a method to get numbers out, do surreal arithmetic, and put them back in again. Getting the numbers out and putting them back in again requires several tricky recursively defined functions:

$$R : \tilde{\mathbb{C}} \to \tilde{\mathbb{C}} : \{X_d|X_u|X_l|X_r\} \mapsto \{R(X_l)|R(X_r)|R(X_u)|R(X_d)\}$$

$$\tilde{\Re} : \tilde{\mathbb{C}} \to \tilde{\mathbb{R}} : \{X_d|X_u|X_l|X_r\} \mapsto \{\tilde{\Re}(X_l)|\Re(\tilde{X}_r)\}$$

$$\tilde{\Im} : \tilde{\mathbb{C}} \to \tilde{\mathbb{R}} : \{X_d|X_u|X_l|X_r\} \mapsto \{\tilde{\Im}(X_d)|\Im(\tilde{X}_u)\}$$

$$\tilde{\Re}^{-1} : \tilde{\mathbb{R}} \to \tilde{\mathbb{C}} : \{X_l|X_r\} \mapsto \{\emptyset|\emptyset|\tilde{\Re}^{-1}(X_l)|\tilde{\Re}^{-1}(X_r)\}$$

$$\tilde{\Im}^{-1} : \tilde{\mathbb{R}} \to \tilde{\mathbb{C}} : \{X_l|X_r\} \mapsto \{\tilde{\Im}^{-1}(X_l)|\tilde{\Im}^{-1}(X_r)|\emptyset|\emptyset\}$$

Now, $x \cdot_{\tilde{\mathbb{C}}} y$ can be defined in terms of these functions and operations on $\tilde{\mathbb{R}}$. Note that $(a + bi)(c + di) = (ac - bd) + (ad + bc)i$:

$$x \cdot_{\tilde{\mathbb{C}}} y = \tilde{\Re}^{-1}(\tilde{\Re}(x)\tilde{\Re}(y) - \tilde{\Im}(x)\tilde{\Im}(y)) + \tilde{\Im}^{-1}(\tilde{\Re}(x)\tilde{\Im}(y) + \tilde{\Im}(x)\tilde{\Re}(y))$$

There, unfortunately, does not seem to be an easy way of doing multiplication on the complicated numbers without resorting to the use of funtions and multiplication on the surreals. However, as we will soon find out, the method here has its advantages when it comes to further extention.

5 Further extention

The nature of the multiplication operator is to simply take the surreal parts out, do the appropriate math, and put them back in again. Thusly, a greater generalization can be made for any space, such as the quaternions, octonions, or sedenions. In fact, given a set of units U and a multiplication operator between them, this method can be extended to create a surreal-space with U as its units.

A unit space $\{U, \cdot -\}$ is a set of numbers U equipped with a binary multiplication operator $\cdot$ and a unary negation property -, satisfying the following properties:

- $\exists 1 : \forall a : a \cdot 1 = a = 1 \cdot a$
- $\forall a : - - a = a$
- $\forall a : \forall b : -(a \cdot b) = -a \cdot b = a \cdot -b$
- $\forall a : (a \cdot a = -1 \wedge a \neq \pm 1) \vee (a \cdot a = 1 \wedge a = \pm 1)$

Define the *direction set* $\mathcal{D}(U)$ of a unit space U to be a subset of U containing 1 and such that $\forall a : a \in \mathcal{D}(U) \iff -a \notin \mathcal{D}(U)$. A number in U-based real space is defined as being:

$$\sum_{a \in \mathcal{D}(U)} r_a a; r_a \in \mathbb{R}$$

Constructing U-based surreal space can be done in a similar method (for the unit space of $\mathbb{C}$, this is the trivial construction of $\tilde{\mathbb{C}}$, as mentioned in the abstract), or in a method similar to this paper's construction of $\tilde{\mathbb{C}}$.

But are we limited to a finite, even number of sets? The answer is no. Unit spaces may be infinite. Suppose we had as our unit space $\{\tilde{\mathbb{R}}, \cdot, -\}$, for some reasonable $\cdot$ and $-$ defined on $\tilde{\mathbb{R}}$. It is conjectured that such definitions exist, although not necessarily simple definitions. Then, there would be a model for a surreal based surreal space. This space would have the interesting property of having as many dimensions as there are surreal numbers.

Dead Man Walking: The Silent Death of Progressive Multifocal Leukoencephalopathy and HIV/AIDS

By: Evette Olszyk

As I prepare my paper for the 2005 Beacon Conference, I am thinking of the many people who will read this, and I hope it will touch the hearts of everyone who does. I want my paper to be talked about; I want people to know what happened to my family and me. HIV/AIDS needs to be discussed openly. There are many people in the world who have the HIV virus but keep it a secret, like my husband, Patrick. They are afraid of being rejected by family, friends and people they meet. This stigma has been placed in our society by those who are uneducated about this disease.

I live in Monroe County, Pennsylvania and it is the third largest county to have HIV/AIDS. This disease knows no boundaries; it will continue to take the lives of men, women and children as long as people refuse to be responsible to themselves and others. I am very thankful that my children and I are not HIV positive, however it does not excuse my husband's actions as to why he did not tell me he was HIV positive. The experience of watching my husband die of AIDS has inspired me to be an advocate for this disease. I will do all that I can to make this a safer place not only for me and my children, but also for your family. As you continue to read my paper I want you to think of your children, grandchildren, nieces and nephews. I want you to think of them getting married starting a new life with the one they love and trust. Think of the wedding vows they would say and how they would look into each others eyes and seal it with a kiss. I will discuss my husband's illness, the progression of this disease, the death and dying experience as well as the grieving process I am still going through.

Progressive Multifocal Leukoencephalopathy is commonly known in the medical field as PML. The cause of PML is a common human polyomavirus known as the JC virus, "The JC virus is characterized by demyelination or destruction of the myelin sheath that covers nerve cells" (National Institute of Neurological Disorders and Stroke [NINDS], 2002). This virus only becomes active when the immune system has been compromised. In my husband's case, his immune system was weakened by the human immunodeficiency virus known as HIV. I will

explain how PML affected the four lobes of my husband's brain – frontal, temporal, occipital and parietal. I will also describe the emotional rollercoaster and grieving process that my family and I still go through.

On November 19, 2003, I came home from the hospital after giving birth to my daughter. I remember asking Pat, to go to the grocery store to pick up milk, bread, eggs and peanut butter. He said he would need to write a list. As he started to write the list, he asked me to spell milk. I thought he was joking. He got so frustrated trying to write what I needed from the store that he gave me the list he was writing and told me to write it myself. It was just then that I realized he was not joking and that he was very upset. I noticed the words that were on the list were all misspelled. This was the first noticeable sign of damage to his frontal lobe. In Karen Huffman's (2004) Psychology in Action, it states that the frontal lobe is located at the top front portion of the two brain hemispheres, which is located directly behind the forehead. The frontal lobe receives and coordinates messages from the other three lobes of the cortex and is also responsible for motor control, speech production and higher functions.

On December 13, 2003, my step-daughter, Katelyn, came over to visit. She later went to visit with her friend Chrissy a few houses down from our house. Pat and I decided to go to the mall to let Katelyn pick out what she wanted for Christmas. When we arrived at Chrissy's house, Pat got out of the car to ring the door bell. I noticed when he was going up the stairs that he could not determine where the next step was so he could put his foot down. He also had to put his arms out to get his balance. At this point his cerebellum, vestibular and kinesthetic senses were starting to deteriorate.

On December 14th, my husband complained to me that he felt numbness in his right hand and leg. I called for an ambulance. Pat had difficulty explaining what symptoms he was experiencing. I noticed he knew what words he wanted to say, but he could not say the words. This is known as Broca's aphasia. The Broca area is found close to the base of the motor control area in the frontal lobe (Huffman, 2004, p. 68). After several tests at the hospital the doctor told my husband he had had a stroke. He was admitted into the hospital, where they continued to run tests.

On December 15th, when I arrived at the hospital, Pat looked at me and said that he was not going to make it and that he would not be returning home. That was the last day that he would speak in full sentences. The following day my husband's ability to speak fluently

diminished. The only words he could say were "I want to watchamacallit". It was very difficult to see him in this condition and to watch him struggle during his speech and physical therapy. By the end of the week, Pocono Medical Center prepared Pat to be transferred to Gnadden Hutten Hospital where he would receive intense speech and physical therapy. At that time, Pat could no longer feel the right side of his body, he was unable to walk without assistance; he complained about headaches and his frustration was beginning to turn to anger. At this time, he was showing signs of damage to the front of his parietal lobe where the somatosensory cortex lies, and deterioration of all three major functions of the frontal lobe which are motor control, speech production and higher functions such as motivation and emotional behavior. Also, his peripheral nervous system (PNS), which is responsible for sending information to the central nervous system (CNS) and connects the brain and the spinal cord to the body's sensory receptors such as, the muscles, and glands, were becoming compromised (Huffman, 2004, p. 51).

On December 19th, Pat was transferred to the rehabilitation hospital. Over the first three days at this hospital he spent four to five hours a day in speech and physical therapy. When I arrived on the third day, he could no longer walk without assistance from two nurses, which meant that his cerebellum, which helps to control balance, was continuing to decline rapidly. His speech production in the left frontal lobe continued to worsen to the point where he could only say "yep" or "nope", and his occipital lobe was now deteriorating because he had difficulty seeing the television. Pat's aggressive behavior escalated and became more frequent. During my husband's two weeks in rehabilitation, I complained every day that his condition was worsening and that they needed to do another MRI (Magnetic Resonance Imaging). On December 31st, Pat's doctor ordered an MRI to be done. The next day I received a call from the doctor, and he told me that Pat had not had a stroke, but that he had a tumor in the brain, and that they needed to transfer him to Lehigh Valley Hospital, where a team of neurologists would evaluate him and confirm these findings.

On January 3rd, my husband was transferred to Lehigh Valley Hospital. That day, I met Dr. Camicci, and I asked him if Pocono Medical and Gnadden Hutten hospital had sent all of the MRI's and CT (Computed Tomography) scans to him. Dr. Camicci said no, but that he would order new MRI's and CT scans. Dr. Camicci was 95% sure that it was a Glemoblastoma tumor and that this tumor was fatal. He explained that a biopsy would need to be done in order to confirm his theory. Pat was scheduled to have his biopsy done on January 6th. Pat still had a

full understanding of what everyone was saying to him. He would laugh every time a joke was told, and he would nod 'yes' or 'no' when he was asked a question. I remember the day before his biopsy that I asked him if he was afraid and he nodded yes. I then asked him if he still thought he was going to die, and he nodded, again, yes. I asked him if he loved me and he nodded, yes, again. My last question to him was if he wanted to be buried, and if so, did he want to be buried with his father in Somerville, N.J., and he nodded yes. The day of the biopsy while Pat was waiting to go in for surgery, I told him his son, Nick, was going to call him. When Nick called, I put the phone to Pat's ear; I could hear Nick talking to him, and Pat just burst into tears. At this point of his illness Pat's temporal lobes were still functioning because he was able to comprehend language (Huffman, 2004, p. 70).

After the biopsy, Pat started to have seizures and he could no longer sit up on his own, feed himself, or hold my hand. As I waited for the results of the biopsy, Pat's condition continued to decline during that week. However, his sense of olfaction (smell), gustation (taste) and audition (hearing) were still functioning (Huffman, 2004, pp. 129, 133-134). At the end of that week, the pathology report was completed, and I met with Dr. Camicci for the results. Needless to say, I was devastated when he said they could not confirm that it was a brain tumor because the tissue that was extracted from my husband's brain did not meet the criteria of a Glemobastoma tumor, or any other tumor for that matter.

The doctor asked me to sign a consent form so they could test him for HIV. My first words were, "That's impossible. I just had a baby five weeks ago, and I was tested during my pregnancies with both of my children".

Dr. Camicci's assistant Claire explained to me that they needed to start the process of elimination, but before they could start they would need my written consent to test him for HIV. I signed all of the paperwork, and then was told that results would be available in three days. After reading and signing the consent forms, it finally hit me that Pat could be dying of AIDS. In my 34 years of life, I have never felt so much stress, helplessness and fear in the magnitude that I felt that day.

I went home and called my sister-in-law and told her what happened, and her first words were "Oh my God Evette, you don't know!" I said to her, "What is it?" She began to tell me that when my husband left his ex-wife approximately ten years ago, he left her for someone that was

HIV- positive and that he knew of this girlfriend's condition. He even went to her medical appointments with her.

I could not believe my ears. I felt like I was dreaming. It turned out that my husband's close friends, family, and ex-wife knew that he was with someone that was HIV positive and that he was at a high risk for this disease. The only thing I could think of was being with my children. After the initial shock, I felt angry, hurt and betrayed by my husband and those who knew about his relationship with someone who was HIV positive. I could not understand why they did not tell me, especially knowing that I was having his children.

I received a phone call from Claire letting me know that the results were in and that Dr. Cumicci would go over the results at his office. When Dr. Camicci uttered the words "your husband is dying of AIDS," I felt as if all the blood in my body just drained out of me. The only thing I kept thinking of was my children. I immediately called the pediatrician and my medical doctor. Words can not express the feelings I felt as I watched blood being taken from my children, especially my six-week-old baby. The day after our blood was taken, I received a call from my doctor and the pediatricians, informing me that my children and I did not have the HIV virus. I felt so blessed at that moment that I fell to my knees and prayed.

According to death and dying researcher Elisabeth Kubler-Ross, after spending many hours interviewing terminally ill patients, she discovered that there were five sequential stages of death and dying. The first stage is denial. Kubler-Ross (1969) says, "among the over two hundred dying patients we have interviewed, most reacted to the awareness of a terminal illness at first with the statement, "No, not me, it cannot be true." The second stage is anger followed by bargaining, depression and acceptance. I believe that my husband did go through these stages and in that sequential order because I am able to look back in hindsight and remember them as they happened. Pat's denial started when he chose not to be tested for the HIV virus after having a relationship with someone that was HIV positive. His anger started when she left him, and he started to date several different women and did not tell them he was at a high risk for this virus. I also believe that Pat showed tendencies toward Antisocial Personality Disorder, where little regard is given for others' lives. I think Pat's bargaining happened the day we were married. My husband was not a religious man, but the day we got married, he went to our kitchen and asked me to hold his hand while he lit a white candle and prayed. Pat said he prayed that our marriage would last, but I think his prayer was about him living the remainder of his life with

someone by his side before his death. I think his depression and acceptance both started when he was admitted to Pocono Medical Center because he was not going to be home for the holidays, and he knew he would never return home.

My experience with the five stages of death and dying are not in any order because I still go back and forth between all of these emotions. I started bargaining when I thought he had a brain tumor. I remember driving to the hospital crying and begging God to let him live and have a productive life with his children, especially our daughter, and in return, I would go to church every Sunday. Denial started when I was told he needed to be tested for the HIV virus. Anger started when I found out that he was with someone who was HIV- positive and he chose not to take care of himself, even knowing that we were going to have children. Although I have accepted his death, I have not been able to accept his actions towards me. It was not until after his funeral that I was sure that he knew he was dying of AIDS. At my husband's job, he had a locker that had several pictures of his older children from when they were babies and several work certificates that needed to remain at work. I found them hidden on top of our china cabinet after his funeral. At this point I became very angry again. Accepting that he did this to me and our children is a constant battle for me every day. I try to make sense of it, but it is difficult when I have so many questions that will never be answered.

For me the grieving process will never go away because of my children. He left behind a five-year-old son who just adored him, and a daughter who will never know him. Right now I am able to focus on my son, Anthony, because my daughter is too young. Anthony is also going through his own grief. The hardest thing for me as a mother is not having the ability to take his pain away. My son remembers every story Pat ever told him and he knows every place Pat took him. I feel like I have big shoes to fill because I always felt I had to be more of an authoritarian parent to compensate for my husband's permissive parenting skills. Now that Pat is gone I am more of an authoritative parent. Anthony sometimes likes to send his father cards; I guess this is how he feels he can express his grief. My mother took one of her angels and told my son that if he put the pictures under the angel when he went to sleep that the angel would take it up to his father in heaven. My son believes this to be true because he is in the preoperational stage of cognitive development. According to Piaget's research, the preoperational period has two stages, the preconceptual stage, which starts at age two to four and the perceptual thought period, which starts at age four to seven (Singer and Revenson, 1996, p. 33). I am very thankful that my

son is in the perceptual stage because he is animistic. I am very thankful that children are animistic at this age, because it puts me at ease to know that I am able to comfort him in order to bring him a sense of safety, love and comfort.

February 1, 2005, will mark the one year anniversary of Pat's death. Even though Pat's death was a tragedy and has been an emotional struggle for my son and me. I think it has made me a stronger person. My life has changed, but not completely for the worst. Pat's death has given a new lease on life for me and my children. Because of him, I am able to go to school and further my education, spend more time with my children and raise them myself, but most of all he enabled my dream of becoming a mother to come true. I will continue to be a positive role model for my children, teach them the meaning of life and keep my husband's spirit alive by telling my children about their father and the good things he did do. Although I will never understand my husband's choices, I will always remember him with loving thoughts. I dedicate this paper to him because he has made it possible for me to continue with my dreams and goals in life.

References

Huffman, Karen (2004). Psychology in action, seventh edition. Hoboken, NJ, John Wiley & Sons.

Kubler-Ross, Elisabeth (1969). On Death and Dying. New York, Collier Books.

Revenson, A., Tracey & Singer, G.,Dorothy (1996). A Piaget Primer How a Child Thinks. Revised Edition. New York, Penguin Books USA

The National Institute of Neurological Disorders and Stroke. NINDS Progressive Multifocal Leukoencephalopathy Information Page. Retrieved December 3, 2004, from http://www.ninds.nih.gov/health and medical/disorders/pml_doc.htm

The Effect of Stressful Events on Childhood Rheumatic Diseases

By: Melvina Evereklian

Abstract

Although the significance of environmental factors on rheumatic diseases is not clearly determined, stressful life events are believed to be one etiologic factor. However, data in children with systemic rheumatic diseases (SRD) does not presently exist. A questionnaire was devised to assess the effects of stressful life events in children with systemic rheumatic diseases such as juvenile idiopathic inflammatory myopathies, systemic sclerosis, systemic lupus erythematosus and rheumatoid arthritis. The Stressful Life Events Questionnaire, consisting of 76 questions, was provided to SRD subjects in two age groups and to their matched controls (Compas et al., 1987). Events perceived to be desirable or unfavorable were assessed with a quantity rating score using a good to bad rating scale. The questionnaire models of 9 matched pairs (SRD subjects and controls) were analyzed. The paper will concentrate on the results obtained after testing our null hypothesis which that states that there will be no difference in the quantity of stressful life events between subjects with a systemic rheumatic disease and their matched controls 12 months prior to the diagnosis.

Background

Rheumatic diseases are classified as "a group of painful and often disabling systemic diseases that usually become chronic" (Hermann, 2000). Systemic rheumatic diseases are considered to be autoimmune diseases since one's bodily structures such as the joints are mistakenly attacked, resulting in pain, swelling, inflamed synovial membranes and limited joint movements (Rheumatic, 2004).

There are various rheumatic diseases ranging from scleroderma, lupus and rheumatoid arthritis and various types and degrees of myositis such as dermenomyositis, adult/juvenile myositis and polymyositis. Myositis leads to muscle inflammation and the shoulders or hips are usually affected (Myositis, 2003). Although myositis can target both adults and children at any age, it is rarely diagnosed within the human population and "it is estimated that each year five to 10 out of every one million adults in the United States [is diagnosed with] one of the forms of myositis" (Myositis, 2003). Although researchers have not determined the definite causes of

myositis, some researchers have linked the onset of myositis to an individual's specific "genetic background being introduced to viruses, chemicals and drugs" (Myositis, 2003). However, some environmental agents including stressful life events, both major and minor in degree as well as ultraviolet light might also lead to myositis.

Since myositis gradually progresses, individuals do not recognize that their muscles are slowly becoming weaker each day. Even after an individual is diagnosed with one form of myositis, the disease can reoccur or the disease can enter into a state of remission where the symptoms of the disease stop (Myositis, 2003).

Systemic rheumatic disease subjects and matched controls who enrolled in the Twin-Sib study at the National Institute of Environmental Health Sciences were administered a Life Events Questionnaire with a reference date written on each page of the questionnaire. If the stressful event occurred, the respondent answered "yes." The data compiled from the "yes" and "no" responses, and desirability scores from the good to bad rating scale (if the responses were "yes") were organized and analyzed for illogical responses. If flaws or contradictory responses were noticed, the subjects and/or controls were contacted and the individual question(s) were reassessed.

Within the questionnaire, the condition of the subject's and or control's health twelve months prior to the diagnosis of a SRD was questioned. Specific questions such as if one were able to cut his or her meat were asked and the answer choices ranged from "no difficulty", "somewhat difficult", "much difficulty", "unable to" or "not applicable" (Compas et al., 1987).

Methods and Materials

The Stressful Life Events Questionnaire was used to examine stress in children with a systemic rheumatic disease (SRD). It inquires about life events that the subject experienced 12 months prior to the diagnosis of the SRD. Parents or subjects with a SRD and his or her matched controls were administered the questionnaire. The matched controls were either identical twins or siblings of the subjects with same sex, race, within proximate age and without any history of a rheumatic disease. A reference age is provided on all the questionnaires indicating the date when the affected child (subject) was diagnosed with an SRD. Each SRD subject and matched control had the identical reference date clearly marked on his or her questionnaire pages. Parents completed the questionnaire for subjects younger than twelve years of age, while both the parents and the subjects older than 12 years of age completed a questionnaire. A questionnaire

with 76 total questions was provided to children ages 0-11 years old while a slightly different questionnaire with 100 questions was administered to children 12-18 years of age. The older group had an additional 24 questions that inquired about events older children might experience. For instance, the older age groups are asked about, "Arguments between boyfriend/girlfriend?" All "yes" answers were quantified by a rating score (Compas et al., 1987). If the subject or control experienced an event 12 months prior to the subject's diagnosis of a rheumatic disease, the event was evaluated on a good to bad rating scale ranging from -2 to +2 for the younger pediatric age group. This scale ranges from -2 (very bad), -1 (somewhat bad), 0 (neither good nor bad), 1 (slightly good), 2 (very good). A comparatively similar scale was used for the 12-18 pediatric groups ranging from -4 to +4. The expanded scale was devised for the older subjects because their level of understanding is greater, and older children tend to describe experiences with more refined clarity, such as an experience might be "extremely good" rather than "very good."

The events are categorized as major such as "parents getting a divorce" or daily such as "going to church." A major event is classified as a high impact event and usually occurs less frequently. Contrarily, a daily event normally occurs on a continuous basis. These events have a lower effect, but occur more readily (Compas et al., 1990). Other events can be categorized into specific sub-domains including romance, family, peer events, academics or other miscellaneous matters (Williams et al., 1990).

The questionnaires were scored as follows: for each SRD subject and matched control, a total sum was computed for all questions that were answered with a "yes" response, indicating that the event occurred. For each SRD subject and matched control, the total number of events perceived to be positive and the total number of events perceived to be negative were scored. In addition, the rank sum test was performed to test for any significant difference between the subjects and their matched control's "yes" responses. On a statistical software program, a rank sum test was conducted, which is similar to a t test that provides the mean, range, standard deviation as well as variance of a data set. A rank sum test is a statistical analysis test which calculates the mean, quartiles and standard deviations of data sets (Moore 420).

Results

The younger pediatric age group (0-11 years old) was comprised of a total of 7 SRD subject and 7 matched controls. The older pediatric group consisted of 2 SRD subjects and 2 matched controls. The biological mother primarily completed the questionnaires. The range of responses appeared to be similar between siblings, and no profound difference in the quantity of positive responses was apparent among the SRD subjects and matched controls. No significant difference was recognized between the SRD subjects and controls which are indicated by the average mean between the two groups.

Statistical Analysis

SRD Subject and Matched Control Demographics

If the individual was a control, the diagnosis was recorded as a healthy twin or sibling. Rheumatic Diseases ranged from Juvenile Dermenomyositis (JDM), Juvenile Myositis (JIIM) and Juvenile Rheumatoid Arthritis (JRA). The positive responses represent the total number of events in the questionnaire that were answered with a "yes" response (Table 1). All of the matched controls and subjects were siblings or twins, therefore a strong correlation was perceived among the subjects and controls. The first healthy twin in the chart corresponds to the first SRD subject diagnosed with JDM. The date in the Table 2 is referring to the number of stressful life event questions the subjects answered with a positive response. As seen in table 2, the mean and standard deviation for both the SRD subjects and controls were fairly close. The mean is the sum of the total positive responses divided by the quantity of events that were answered with a "yes." The standard deviation determines the spread of the data by observing individual data points of the total number positive responses and the distance of these points from the mean's value. Variance is defined as the standard deviation squared (Moore 42).

The Total Number of Positive Responses for Individual SRD Subjects and Controls

Table 1

Sex	Diagnosis	Race	Number of Positive Responses	Age		Sex	Diagnosis	Race	Number of Positive Responses	Age
M	JDM	W/N	25	13		M	Healthy Twin	W/H	21	13
F	JDM	W/AA/AI	43	8		F	Healthy Sibling	W/AA/AI	34	6
M	JDM	W	24	7		M	Healthy Sibling	W	23	9
M	JIIM	W/H	13	8		M	Healthy Sibling	W/H	14	8
M	JDM	W	34	5		M	Healthy Sibling	W/H	37	7
M	JRA	W	36	9		M	Healthy Twin	W/H	40	9
F	JDM	W	13	5		F	Healthy Twin	W/H	11	5
M	JIIM	W	44	14		M	Healthy Twin	W/H	52	14
F	JDM	W	36	18		F	Healthy Sibling	W/H	37	20

Subjects and controls self identified their race.

Key for Race

W = White
H= Hispanic
AA= African American
AI= Asian Pacific Islander

Table 2

Combined Statistics for Pediatric Subjects: 0-11/12-18 Age Groups					
SRD Subjects			Matched Controls		
Mean	Variance	Standard Deviation	Mean	Variance	Standard Deviation
24.33333	124	11.13553	23.75	134.214286	11.5850889

As seen in figure 1, the number of "yes" responses to both positive event and negative event questions are similar for both age groups. Figure 2 refers to the sum of positive responses between both age groups. The average and standard deviation were determined for all positive responses and the bars in figure 2 represent the mean of both the subjects and controls in both age groups. The values of the mean and standard deviation are seen in table 2.

Figure 1

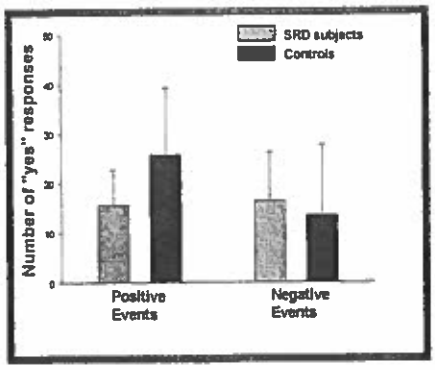
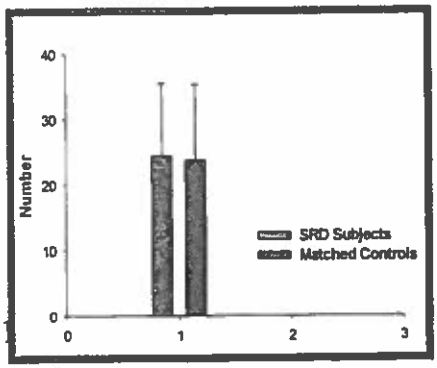


Figure 2



Conclusion

A method was proposed to delineate whether stressful life events trigger the onset of rheumatic diseases. By using a life events questionnaire, the data of 9 SRD subjects and matched controls was analyzed. When the data was statistically tested, no differences were found among the two groups within their questionnaire responses. It is hypothesized that no differences existed because of a small sample size. Over a five year period, additional subjects will be recruited and it is anticipated that the differences among the two groups will be apparent with a larger sample population of SRD subjects and controls.

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References

Myositis. (2003). Arthritis Foundation. Retrived January 17, 2005, from http://www.arthritis.org

Compas, Bruce E. et al. (1987). Adolescent perceived events scale. *Journal of Consulting and Clinical Psychology*, 55, 534-541.

Compas, Bruce E. et al. (1990). Daily and major life events: a test of an integrative model of psychosocial stress. *Clinical Psychology Review*, 7(3), 275-302.

Compas, Bruce E., & Williams, Rebecca A. (1990). Stress, coping, and adjustment in mothers and young adolescents in single- and two-parent families. American Journal of Community Psychology, 18, 525-543.

Hermann et al. (2000). Stress and rheumatic diseases. *Neuroendocrine Mechanisms in Rheumatic Disease*, 26, 737-757.

Moore, David S. The Basic Practice of Statistics. New York : W. H. Freeman and Co., 2003.

Rheumatic Disease. (2004). Amsterdam Kliniek. Retrived January 18, 2005, from http://www.amsterdam-clinic.com/reueng.htm

The Expression of Oppression: Art that Emerged from Apartheid South Africa

By: Erin Jones

Over the years there have been many wars and periods of turmoil. These vary in cause, duration and aftermath. While many of these occurrences have caused bloodshed and great tragedy, one of the most heartbreaking and cruel is when a human being rules another inferior. One that has occurred recently and is still healing is the Apartheid in South Africa. In this period of history black Africans were labeled inferior to white European immigrants. They were discriminated against, persecuted, and thousands were killed. Out of this time of turmoil, many attitudes and emotions emerged. Messages of hope, outrage, and grief were expressed in many different forms, including art. Art is the means by which a people, repressed in many aspects, can express themselves and their feelings. Just what were the attitudes and emotions expressed through art in reaction to the Apartheid? The answer to that lies in three examples of post-Apartheid art: a painting, a sculpture, and a major motion picture.

Paintings typically show images that make a statement. However, a painting can also be abstract and convey a message through other means. One example of this is *Maasai Steppe Ascending—Convective Displacement* by Georgia Papageorge. This painting can be found at the Smithsonian's National Museum of African Art in the exhibit entitled "Insights". At first glance, the image is vague and jumbled. The basic view of the painting is two vertical grey lines and two horizontal grey lines. Vertically there is what looks like a plethora of swirls, almost like abstract figure 8s stacked one on top of the other. At the base of the painting there is a rock, and down the middle of the entire canvas is a painted red line. Upon closer examination one can make out the form of the outlines of continents towards the bottom of the canvas, almost as if it were a world map. This already reveals the author's view of the world, that it is a grey jumbled mess. However the real insight into this work of art comes upon delving into the artist herself.

Georgia Papageorge, a white South African native, is more than painter, she is also a naturalist. As she created this painting she did not use typical pencils and drawing implements, but rather she used all natural materials, especially igneous rocks and ash—the residue of a

volcano. The rock at the bottom is also a direct emission from a volcano. She used these materials to draw the analogy between the geologic separation that occurs from the earth's plates pressing against each other, and the social separation that occurs from racial hatred, of two races and cultures colliding. The red line down the middle divides the painting in perfect symmetry, illustrating the division between black and white. In speaking about this painting Ms. Papageorge says,

> My work over the last 15 years has explored the idea of social and geologic rift in Africa through the concept of a mutating barrio symbol. [I've used] vertical lines and circles within an early Judaic Christian Cross symbolism, and a red and white chevroned barrier…to explore varying concept of sacrifice and transcendence within specific African environment. (Papageorge—2003)

Although this work of art is effective as a visual argument, it has its limitations. For one thing, the deep meaning hidden behind it is not apparent until further research. Another limitation is that her bias as a white individual comes through. Although it is obvious she hated the Apartheid, it is clear that because of her position in society, she viewed the conflict as two equal and opposing forces, rather than one race oppressing another.

A sculpture is another means to make a statement. One example of this is Sue Williamson's *The Last Supper Revisited.* This can also be found in the Smithsonian's National Museum of African Art in the exhibit entitled "Insights". This sculpture takes up an entire room and makes use of many different means, namely audio, visual and three dimensional. Hanging on the wall in this room are three poster-sized photographs of a family eating and laughing together. The photographs have a bluish tint with a yellow screen coming down partway over them, almost giving them the feel that they are stained glass. In the center of the room there is a circle, like a table and a tiny shrine set up with objects encased in resin. The faux stained glass, and the shrine, coupled with the name of the artwork gives the room a religious feel, as if entering the room is meant to be a holy and cathartic experience. One thing that takes away from the religious atmosphere is the jarring presence of a speaker overhead. The speaker alternates between people talking in a conversational tone and the grinding of a bulldozer.

The various aspects of the room and the exhibit are like pieces of a jigsaw puzzle and when put together they all make sense. The family in the pictures was celebrating the Muslim holiday of Eid Al Fitr, when their home was bulldozed. The pieces on the table are objects found in the rubble after the bulldozing occurred. Upon closer examination the objects become recognizable: a Barbie shoe, a bottle cap, a hair piece, jewelry, broken china to name a few. What Williamson does in this exhibit, is give life to the numbers. So often people hear of these kinds of atrocities occurring in large number but fail to take into consideration what that actually means. Williamson refuses to let this occur. In this sculpture she gives meaning to the phrase "thousands lost their homes". Rather than letting that statement descend on deaf ears she says, "Here is the family, here are the things that they lost. They are just like your family." She adds humanity to what would otherwise be a statistic.

Aside from the horror of any family's home being bulldozed, this family's story is particularly ironic. They lived in a multiracial community called District Six in South Africa. On the official South African website today, there are even tributes to this town.

> When the Apartheid government swooped on District Six, Cape Town in 1965, forcibly removing its occupants and declaring the area a "whites-only" zone, the rich fabric of an impoverished but vibrant community was torn to shreds. (www.southafrica.info)

The people of District Six had lived together, combining their different races in peace. The pictures in the exhibit portray that sense of peace and community that the town possessed. When the government imposed the label of "whites only" on the town, it destroyed more than houses and lives; it destroyed that sense of community and brotherhood. The pieces encased in resin in the museum represent more than someone's home destroyed; it is the peaceful intertwining of lives that has been broken and scattered apart.

Finally, arguments can be made through cinematic art, and one example of this is the movie *Cry Freedom. Cry Freedom,* which came out in 1987, was directed by Richard Attenborough. This movie stars Denzel Washington as Steven Biko and Kevin Kline as writer Donald Woods, and follows the story of their friendship during the Apartheid. The theme or argument of the movie can best be summed up in a quote from the movie itself. The context is a scene in which Biko calls Woods to tell him that one of their friends and fellow activists died. Woods says, "Steve, I don't know what to say…" Biko replies, "Just say that someday justice

will be done, and let's hope it's not visited on the innocent." The underlying purpose of this movie is to reveal the injustice of the apartheid and how the innocent have suffered as a result.

When examining this movie, it is important to take into consideration the context behind it. In 1987 Apartheid was still going on. Although there were some things known to the general public, many of the horrible truth had been kept under wraps by the South African government. Around the time this movie was made, a poll was taken, presumably in the US, and only 12% of people had ever heard of Apartheid. (Brode—50) Attenborough, born into a well-educated, politically aware family, had followed Apartheid since it began in 1948. It had always intrigued and repulsed him. In speaking about making the movie he said,

> The suppression of a people is a global problem, but in South Africa prejudice and racism are legislated. The *law* says you may not have a passport, and the *law* says you may not go into that part of town. Something had to be done.
> (Attenborough, as quoted by Brode—42)

The action he took was to make this movie. *Cry Freedom* was done to raise awareness about Apartheid and make sure that the stories of Biko and others would be told. In this way justice would be done for them. There are two basic means that Attenborough used to bringing this about: contrast and irony.

Attenborough used contrast a great deal as a tool to make his arguments with. The open scenes of the movie show a small, peaceful settlement in South Africa. People are going about their business, and despite the apparent poverty, it looks like a very pleasant place to be. Then a small boy sports a convoy of troops approaching the town. People run screaming in all directions as the troops come beating people, chasing people with growling dogs, and it is implied raping local women. The town is bulldozed and everything is in utter chaos. This scene follows a pattern often repeated in this movie of the black people's life being orderly and peaceful, and then once the white government comes, chaos and hell break forth. Similarly, at the end of the movie there is a scene that provides great contrast and does so in a highly effective way. This scene chronicles the Soweto Massacre at which 700 hundred children were killed because they were protesting. A long, nearly unbroken shot shows the children joyfully singing as they gather.

They come from neatly organized settlements and visually there are many patterns as the children converge. The thousands of children come to a blockade. There the government gives them two warnings to leave and then opens fire on them. The singing turns to screaming and the order turns to a scattering of terrified children running for their lives. Small children are gunned down, and others try to help each other escape. The manner in which they leave is in direct contrast to the manner in which they come. It is contrast of hope verses horror, order verses chaos, and in many cases, dead verses alive.

Contrast is also used with the theme of color. In many different shots, Attenborough subtly uses black and white as a direct contrast. For example, in the scene where Donald Woods goes to meet Steven Biko for the first time, he parks his car directly in front of an identical make of his car except that his car is white and the other car is black. The two cars are perfectly centered in the frame—two identical cars with the only difference being their color. This provides a metaphor and even foreshadowing for Biko and Woods' meeting. They are equal in make and value, only different in color. Similarly in Biko's house the walls of his house are painted black on the top and white on the bottom. This provides the contrast of black and white again, and on a metaphoric level, provides contrast to the society, which valued white as on top and black as on the bottom. This issue of color has great importance on an artistic level, as well as a social one.

Finally, abrupt scene transitions are also used to provide contrast. There is a very poignant scene when Steven Biko dies, in which Biko's wife is sitting alone in their kitchen holding their two small boys crying. Immediately the scene changes to the local white leader saying "Biko's death leaves me cold!" A room of white men begins cheering, and the ensuing scene contains the men making light of him and his death. These scenes make a profound statement of the inhumanity and injustice of the system at that time.

Attenborough also uses irony to convey his theme. In the grand scheme of things all injustice is irony, but Attenborough uses irony artistically multiple times throughout the movie to reveal injustice. In the beginning of the movie after the opening scene mentioned before, the scene immediately changes to a lady waking up in the morning. She turns on the radio to hear the announcer describing the raid that has just taken place. He states that the raid occurred because of poor health conditions. Then he says, "No resistance had to be used in the raid, and many voluntarily gave themselves up to officials." Of course, they have just shown the actual raid a

scene earlier, and in light of how horrendous the raid actually was, this scene shows the irony of the lies that the government was feeding the people.

This movie also reveals some of the ironic injustice of the society at the time. A black doctor approaches a white secretary in a scene in the beginning and demands to see Donald Woods. The secretary is rude to her and looks at her scornfully before finally taking her to see Woods. This is ironic because the black lady is a doctor with probably triple the secretary's credentials and education. However, because she is black, the secretary scorns her as being inferior.

Finally, the movie uses irony in its use of text. Throughout the movie texts momentarily appear at the bottom left corner of the screen to set the scene or lay the context. However at the end it is the most powerful. The movie supposedly ends on a fairly uplifting note with Donald Woods and his family flying away to escape from South Africa. However, while they're on the plane he has a flashback of the Soweto Massacre, and remembers talking with Biko about it. It's as though the movie is telling you that the time has come to be uplifted, but you won't be uplifted because of the horror of it all. Then, as the plane carries the Woods family to safety, when the credits would usually be rolling, a list of people who died in the custody of the Apartheid government and their official causes of death appears. The list continues for hundreds of names with the causes of death being things like, "fell in the shower", "suicide", "fell off a chair", "self strangulation" after that a list of ten or so that say "no official explanation." After that the text says, "Since the re-imposition of Emergency Regulations on 11 June 1987, no further information regarding political detainees has been forth coming." The message that the movie leaves you with could not be clearer. It's as if Attenborough is challenging the audience by saying, "I gave you an uplifting ending by letting the Woods family escape, but as you sit in the air conditioned movie theater, these monstrosities are still going on!" In 1987, they *were* still going on.

Although from three different genres, three works of art similarities. They all share a common goal: expressing feelings for and raising awareness of Apartheid. All the artworks are fueled by feelings of disgust for what occurred and seek to portray those feelings. They have different approaches to way in which the present those ideas, but the ideas share an anti-Apartheid sentiment. They also have similar audiences. The first two pieces discussed can both be found in the "Insights" exhibit of the Smithsonian National Museum of African Art. The

audience then would be the kinds of people attracted to a museum, and particularly interested in African art. If they were drawn to that exhibit in particular they would have an interest in South African history. Although *Cry Freedom* was initially released for a large audience of mainstream moviegoers, today its audience is very similar to that of the first two pieces. Today it is a rather obscure movie, and difficult to get a hold of, so the audience watching it would also have a particular interest in South African history. People interested in obscure films tend to like them for their art, so a similar group of people would watch *Cry Freedom* that would be at a museum.

Overall I was quite affected by these works of art. For the first work of art, *Maasai Steppe Ascending—Convective Displacement* by Georgia Papageorge, I was amazed to discover how much meaning can be put into a simple painting. Art should not be taken at face value, and that is something this painting illustrates. The last two works of art mostly filled me with horror at what I didn't know existed in Apartheid. Apartheid was more than segregation; it was a racial holocaust filled with injustice and murder. Immersing myself in this topic by visiting the museum and watching the movie several times, brought me to tears more than once. This is evidence that the artists were successful in making their arguments. They sought to not only express their feelings, but also raise emotions in their audience, which they successfully did.

The tragic period of history known as Apartheid affected many lives and kindled emotions which have been expressed in countless means, but specifically through painting, sculpture and movie. Much was lost during this time of history, but the most costly were human lives and human spirit. The damage of this is still being healed today. One way that this healing can take place is through the feelings and spirit expressed in art. Many eras of history have been particularly tragic. The worst thing that people can do is turn their backs on them and pretend they never happened. Through the means of expression art provides, people can begin to build bridges of reconciliation, seeking to understand one another and the feelings shared. By refusing to forget the things that have happened, societies can learn from their mistakes and keep from repeating them. In this way art helps bring humanity one step closer to peace.

Works cited:

Barker, Brian Johnson et all. Illustrated History of South Africa: The Real Story. Cape Town: The Reader's Digest Association Limited, 1992.

Brode, Douglas. Denzel Washington and His Films. Secaucus: Birch Lane Press, 1997.

Connolly, Sean. Apartheid in South Africa. Austin: Raintree Steck-Vaughn Publishers, 2003.

Cry Freedom. Dir. Richard Attenborough. Perf. Denzel Washington and Kevin Kline. Universal, 1987.

"Georgia Papageorge". The National Museum of African Art. Retrieved 14 October 2004. <http://www.nmafa.si.edu/exhibits/insights/index2.html>

"Recalling District Six". South African Tourism Official Website. 13 October 2003. Retrieved 19 October 2004 <http://www.southafrica.info/ess_info/sa_glance/history/districtsix.htm>

"Sue Williamson, the Last Supper Revisited". The National Museum of African Art. Retrieved 14 October 2004. <http://www.nmafa.si.edu/exhibits/insights/index2.html>

Dreams versus Reality:
The Condemned Worlds of Emma Bovary and Blanche DuBois

By: Heidi Feichtinger

During the rise of the French middle class, Gustave Flaubert (1821-1880) created the beautiful, vain adulteress, Emma Bovary in Madame Bovary (1856). On the other side of the Atlantic Ocean almost one century later, the sensitive and fragile Blanche DuBois was born of the imagination of Tennessee Williams (1911-1983) in A Streetcar Named Desire (1947). The surface differences between the two heroines are clearly evident. Blanche is a refined southern belle who has lived through great loss, and worries over her fading beauty. Emma, on the other hand, is an excessively sentimental and bored wife of a country doctor in Normandy, whose desire for a grand life is both vain and unrealistic. Although the time, physical environment, and overall setting of both Emma and Blanche are different, the inner world experienced by both characters is strikingly similar. And in the end, both Blanche and Emma are ultimately condemned for their excessive romanticism and inability to accept reality.

At the beginning of both A Streetcar Named Desire and Madame Bovary, Blanche and Emma are shown to be distinctly different from the other characters and almost alienated from their surroundings. In the first scene of A Streetcar Named Desire, Blanche DuBois' uniqueness and incompatibility with her humble environment is clearly shown. The narrator explains that "her appearance is incongruous to this setting. She is dressed in a white suit with a fluffy bodice, necklace and earrings of pearl. . .looking as if she were arriving at a summer tea or cocktail party" (SND 5). Her choice of wardrobe is fine and flashy, which gives the impression that she has "raided some stylish shops in Paris" (SND 37). Elia Kazan, a literary critic, and both producer and director of the 1951 film of A Streetcar Named Desire, comments that Blanche is the type of woman who embodies a deep concern for her "notion of what a woman should be" and remains fixated on this ideal (22). Blanche perceives her physical beauty as her only asset and deems herself powerless without it. In the beginning of Scene two, Stella instructs Stanley to "admire her dress and tell her she's looking wonderful. That's important with Blanche. Her little weakness!" (SND 31).

Emma Bovary's appearance also seems at odds with her immediate world. When Emma visits her baby at the wet-nurse's home, Leon mentally notes the "strange sight, this elegant lady in her nankeen gown here among all this squalor" (MB in Lawall 905). Not a moment later, the narrator reinforces this observation through Baby Berthe, who suddenly vomits all over the collar of Emma's dress. Emma is depicted as being estranged from the small town of Yonville in which she lives, and the care she affords to her appearance is evidence of her fervent desire to attain lofty elegance.

Emma's attention to herself is narcissistic to the point of sheer vanity. Her mother-in-law considers her "too grand in her tastes for the kind of people they were" (MB in Lawall 875). Emma compulsively buys fine scarves, a blue cashmere dress, and even lemons to blanche her fingernails. And at the ball at La Vaubyessard, she "devoted herself to her toilette with the meticulous care of an actress," and refuses Charles' attempted kiss, shrieking, "Don't! You're rumpling me!" (MB in Lawall 879). Emma's care given to her image is just one of the many facets of her attempt to create the reality about which she dreams. Emma, like Blanche, is trying to live up to some preconceived yet unattainable "ideal" (Brombert 83).

Both characters are very romantic and sentimental. Blanche's emotional and dreamy side is evident in her general mannerisms, language, and perception of life. Emma, also a true sentimentalist, tries to inspire passion in Charles as she sings to him "soulful sighing songs" (MB in Lawall 876). Emma's desire for romance and her "sensuousness and propensity to dream" infuses the entire novel (Brombert 46). Peculiar enough, both romantics cherish a special chest in which they store their love letters and poetry, to preserve their long-lost affections and special moments.

Both Emma and Blanche were deeply affected by profound events that had everlasting consequence upon their lives. The catalyst for Blanche DuBois' downward decline was the traumatic death of her beloved husband Allan. Her love for Allan was so great that she practically worshipped him, but in discovery of his secret homosexuality, she mercilessly tells him of her revulsion. It was Blanche's cruelty that wounded and destroyed her husband, as he shortly thereafter committed suicide. Blanche was incapable of dealing with this harsh tragedy, and in her blindness she ironically tells Stanley that "deliberate cruelty is not forgivable. . .and it is the one thing of which I have never, never

been guilty"(SDN 157). Blanche reacted to Allan's death by retreating to a safe and secure world of fantasy. But whenever she replays Allan's suicide in her mind, she hears the Varsouvianna polka music, which is ended by the gunshot. While the shot serves to snap Blanche back into reality, it is the Polka music that holds great significance, communicating to the audience Blanche's waning mental stability and her withdrawal into fantasy.

Like Blanche, Emma Bovary also experienced events that had significant influence upon her life. She was born on a lone country farm, and in later years attended a religious convent school. In search of excitement, Emma turned to the world of romantic novels and to the inner dimension of fantasy to satisfy her restless yearning. But this indulgence in fantasy results in great consequence -the corruption of Emma's soul. Emma has no interest in stories about "low-class heroes and their down-to-earth concerns, the sort of thing the real world's full of" (MB in Lawall 899). Instead, the literature that enthralls and intoxicates her are "lurid novels full of orgies and blood shed" (MB in Lawall 1025). These books embody an idealistic impossible love that Emma becomes determined to find. Emma's experience at La Vaubyessard is a critical turning point, and its "exotic setting became the very symbol of a yearned for bliss" (Brombert 60). A whirlwind of illusion and a desperate desire for the impossible is set into motion by her dance with the Vicomte. The dance makes a permanent imprint upon her, and that night "she forced herself to stay awake in order to prolong the illusion of this luxurious life [that] she would so soon have to be leaving" (MB in Lawall 882). Just as the Polka music that Blanche once danced to with Allan becomes the symbol of her decreasing grip on reality, likewise, the recurring whirling Emma experiences throughout the novel is the result of her waltz with the Vicomte and an indicator of her increasing insanity.

Because Emma and Blanche devote themselves to the pursuit of romance and the extraordinary, they show noted disgust for ordinary life and common men. Blanche's aversion is shown by her shock and shame when she arrives at the Kowalski residence, and by her intolerance of Stanley. Blanche strongly disapproves of him, for his primitive nature and sub-human characteristics. Stanley himself openly admits to Stella "How right you were baby. I was common as dirt" (SND 137). Not only is Stanley the object of Blanche's revulsion, but he is also the object of her fear, as he represents a frank

and brutal reality. The narrator explains that "animal joy in his being is implicit in all his movements and attitudes . . . [Stanley shows] the power and pride of a richly feathered male bird among hens" (SND 24-25). He is the sheer opposite of Blanche, who lives in a gentle and pastel-colored fairyland. Although Blanche tries to transform her environment into a softly glowing haven, the futility of this desperate pretense is destroyed by reality and by "a man as direct and powerful as the primary colors" (Bigsby 46).

Emma's repugnance is due to her corruption by romantic literature, and the bulk of her frustration is directed towards her husband Charles. Charles is described as infinitely dull and boring, one whose personality "inspired neither laughter nor dreams"(MB in Lawall 874). By the end of the novel, Emma angrily complains that Charles never seemed "so repulsive, so thick-fingered, so heavy-witted, so common" (MB in Lawall 963). She laments the fact that Charles' love and expressed affection was never very extraordinary, and that it "had become a habit like any other –like a dessert that could be counted on to end a monotonous meal" (MB in Lawall 876). Emma's distaste extends to "everything immediately surrounding her –boring countryside, inane petty bourgeois, the mediocrity of daily life -[it all] seemed to her the exception rather that the rule" (MB in Lawall 885). In actuality, the object of Emma's discontent is, essentially, reality.

Interestingly enough, both Miss DuBois and Madame Bovary desperately need men in their lives. Since the death of Allan, Blanche has looked to the male sex for security, love, and protection from a brutal and frightening world. She just "can't be alone!" (SND 17). Elia Kazan compares Blanche to "a butterfly in a jungle looking for just a little momentary protection" (23). When she meets Mitch, she thanks God for him, as he "seemed to be gentle –a cleft in the rock of the world that [she] could hide in" (SND 147). Unfortunately, the quest for "love and security in a hostile world turned Blanche eventually into a nymphomaniac" (daPonte 55). In her confession to Mitch, she explains that intimacy with strangers "was all [she] seemed able to fill [her] empty heart with. . .it was panic, just panic that drove [her] from one to another, hunting for some protection" (SND 146). And although Blanche tries to maintain the image of a prim and proper southern belle, her truth is revealed by no other than Stanley, who tells Stella with venom that "sister Blanche is no lily" (SND 119). Indeed her sexual history is impressive, including her regular stays at the Flamingo, her entanglement with a seventeen-year-old boy, and flirting with everyone –

including Stanley. Blanche even admits this to Stella one evening "Yes, I was flirting with your husband!" (SND 45).

While Blanche DuBois looks to men as a means of protection and security, Emma Bovary is dependent upon men for excitement, rapture and freedom. After all, in Emma's mind, "a man is free. . .to range the passions of the world" (MB in Lawall 902). Emma's warped mind is forever yearning for the fulfillment of unattainable and unreasonable ideals. She dreams of a lover who "might have been handsome, witty, distinguished, magnetic. . . [and her sole companion in experiencing] cities, busy streets, buzzing theatres, brilliant balls [all with] deep emotions and exciting sensations. But her life was as cold as an attic facing north; and boredom, like a silent spider, was weaving its web in the shadows, in every corner of her heart"(MB in Lawall 876).

Throughout Madame Bovary, Emma tries to free herself through men and experience the wonderful emotions and feelings about which she has read. But the very town of Yonville that she moves to reflects the inescapable sameness and unrelenting constriction from which she seeks escape. According to Victor Brombert, Emma's "sexual frenzy, which reaches climatic proportions during her affair with Leon, is probably the most physical manifestation of her need to 'liberate' herself" (58). Emma's unrelenting craving for excitement and her illusions about love and happiness are illustrated by the way she "kept casting desperate glances over the solitary waste of her life, seeking some white sail in the distant mists of the horizon" (MB in Lawall 887). This perception is a perpetual motif that drives her throughout the entire novel. To Emma, it appeared that "certain portions of the earth must produce happiness –as though it were a plant native only to those soils and doomed to languish elsewhere" (MB in Lawall 874). Due to the futility of her endeavors, Emma becomes increasingly desperate towards the end of the novel. Similar to the promiscuous Blanche, Emma, in her wild abandonment, actually unconsciously begins "prostituting herself" (MB in Lawall 1037).

Neither Blanche nor Emma is capable of accepting reality; both choose and need to live in illusion. Literary critic Durant DaPonte declares that "the problem of withdrawal from reality and ultimate retreat into the private world of insanity is best illustrated in the character of Blanche DuBois" (54). Her intolerance of reality is paralleled by her inability

to handle bright light. While the obvious reason for placing a pretty paper lantern over the unforgiving light bulb is to hide her fading beauty, there exists an even greater, more significant reason: to soften and alter the essence of reality. Perhaps the most illustrative exclamation of this point occurs when Blanche cries to Mitch "I don't want realism. I want magic! Yes, yes, magic! I try to give that to people. I misrepresent things to them. I don't tell truth, I tell what ought to be truth. And if that is sinful, then let me be damned for it – Don't turn on the light!" (SND 145).

To support her life of fantasy, Blanche relies heavily on liquor and lying. She uses alcohol as an avenue of escape, and despite her proclamation that she rarely touches it, Stanley observes that she's "been lapping it up all summer like a wild cat!" (SND 143). Blanche denies reality and lies about everything, manipulating the truth to fit her fantasy of how her life should be. When Blanche explains to Stella her reason for leaving her teaching position in Laurel, she nervously chatters that she was "on the verge of –lunacy" due to exhaustion and broken nerves, when in truth, she was fired for her involvement with a school-boy (SND 14). Blanche believes her fabrications are harmless and insignificant. When she sings "It's only a paper moon, just as phony as can be –but it wouldn't be make-believe if you believed in me!,"(SND 121) she is essentially commenting that illusions are made real if they are believed.

Deception and falsehoods also play an enormous role in Emma's life, and in her rapid whirling into a self-made abyss. But Emma is more brilliant than Blanche at executing her lies, and she regularly uses them to help her manipulate people and situations to suit her fancy. Even in the beginning of the novel back in Tostes, her capacity for manipulation is strongly evident. As soon as Emma learns that Charles believed that their current living situation was to blame for her nervous condition, "she began to drink vinegar to lose weight, acquired a little cough, and lost her appetite completely" (MB in Lawall 890). For Emma, "lying became a need, a mania, a positive joy" (MB in Lawall 1014). She successfully covers up the truth concerning her piano lessons, Berthe's injured cheek, and, for quite some time, her husband's increasing financial ruin. Her denial and delusions run deep, and Victor Brombert notes Emma's "ability to create for herself a world of make-believe" is extremely powerful (85).

Both Emma and Blanche indulge in fantasy travel, and, oddly enough, they share the same destination –Paris. Emma purchases a map of this city, and "with her fingertips" she strolls around stopping here and there, taking in every detail of this fantastical experience, completely losing herself in this daydream" (MB in Lawall 884). Strikingly similar is Blanche's imaginary journey while on her date with Mitch. She tells him "we are going to be very Bohemian. We are going to pretend that we are sitting in a little artist's café on the Left Bank in Paris!" (SND 104).

Emma and Blanche both become more and more clouded mentally as their illusions interfere with their ability to reason. Blanche is so involved in her foggy fantasy world that one afternoon she exclaims, "Oh, let me think, if only my mind would function!" (SND 75). She palpably suffers from a nervous, frail condition. Although she tries to soak all her worries away in her beloved baths, the constant battle between reality and fantasy is too much for her to bear. Likewise, Emma also suffers a mental fog, and "the more she tried to concentrate, the more confused her thoughts became" (MB in Lawall 974). With the passage of time, Emma becomes increasingly exhausted and sickly, as her "rapturous love-dreams drained her more than the greatest of orgies" (MB in Lawall 1026).

Over time, increased dependence on illusion for sustenance and a diminished grasp on reality destroy both Emma and Blanche. The night of the ball when Emma sees the peasants peering in through the palace windows, she remembers her not so far-gone past, though "she was beginning almost to doubt that she had lived it" (MB in Lawall 881). Later on in the novel, Emma's detachment from reality and increasing insanity are poignantly illustrated by her imaginary experience at the opera in Rouen. While fantasizing about the tenor, Emma was seized by a mad idea - "he was gazing at her now! She was sure of it! She longed to rush into his arms and seek refuge in his strength [and] she longed to cry: 'Ravish me! Carry me off! Away from here! All my passion and all my dreams are yours!' " (MB in Lawall 987). As critic Erich Auerbach maintains, Emma has become "completely submerged in [a] false reality" (138). As for Blanche, up until the very moment the doctor leads her away, she is certain that Shep Huntleigh will come and save her. In the view of critic Ruby Cohn, "Blanche is the victim of her own southern-belle fantasy" (49).

Both women desperately try to change and transcend their current existence, but in utter futility. Emma's dreamy romantic self wants an idealized life, and as stated by Harry

Levin, her life became a state of "perpetual fusion of illusion and reality" (107). Forever comparing her true surroundings to the utopia of her imagination, Emma incessantly tries to synthesize into her life some of the beauty about which she read. In vain she tries to transform her home into a palace, find passion in her affairs, attain satisfaction in her hobbies, and find meaning in her life. Yet ultimately, Emma despairs "thinking of the velvet gowns she didn't own, the happiness that eluded her, her unattainable dreams, her entire cramped existence" (MB in Lawall 914).

Similarly, Blanche is equally unable to change her life in any meaningful way. While Emma tries to transmute her fantasies into reality, Blanche tries to remain in a fantasy world and avoid reality all together. The uselessness of her determination and effort is evident in everything she has tried to do, even in her attempts to save Belle Reve. She cries to Stella "I stayed and fought for it, bled for it, almost died for it!" (SND 20). She wants so badly to transcend the reality of her existence, telling Stella that she is going to "Get hold of myself and make myself a new life" (SND 73). But as fate would have it, everything is already all "mapped out" for Blanche (SND 127).

For Emma, life is inescapably the "same mournful melancholy, the same, torpid despair"(MB in Lawall 923). Victor Brombert explains how Emma's "chronic expectation turns to chronic futility. . . [in which her] daydreams of movement and flight only carry her back to a more intolerable confinement within her petty existence and her unfulfilled self" (59). Emma cannot escape her self-imprisonment, and until the moment she dies, she "continued to cling to [her illusions], out of habit, or out of depravity; and everyday she pursued them more and more desperately" (MB in Lawall 1026).

In spite of Emma's relentless attempts to achieve her mind's desire, she is trapped and condemned repeatedly by the reality of life. When Emma's whirling mind contemplates suicide from her attic window, life suddenly springs up from behind her and calls her down to another monotonous meal. The "hallucination is dissipated and she is brought back to reality with a shock by the sound of Charles' voice, the hand laid on her shoulder, and the matter-of-fact remark about the soup" (Turnell 108). Emma's disappointment with life and the fatigue she suffers is due to a "hunger which can never be satisfied, [and] her longing for the inaccessible ultimately leads to dehumanization, to madness and to an inescapable attraction to the ultimate absolute, death" (Brombert 40).

Blanche intuitively knew from the very beginning that Stanley would ruin her. An unforgiving realist, he rejects and condemns Blanche for her imagination and deceit. In a moment of clarity, Blanche explains how "the first time I laid eyes on him I thought to myself, that man is my executioner! That man will destroy me..."(SND 111). And in fact, whenever Blanche crosses Stanley's path, her gay and light air is quickly transformed into fear and anxiety. Stanley is the brutal realistic force that slams shut Blanche's playful fairy-tale book of a world. This dynamic between Blanche and Stanley is reflected in Scene two when "she sprays herself with her atomizer; then playfully sprays him with it. He seizes the atomizer and slams it down on the dresser" (SND 41). Sadly, in spite of her efforts to defend herself from Stanley, and her phone call to Western Union, crying "In desperate, desperate circumstances! Help me," she really is doomed, and, in the truest sense, "caught in a trap" (SND 100).

As hard as Blanche tries to avoid reality, she cannot hide from it forever. It catches up with her when she is raped by Stanley, who menacingly clarifies, "we've had this date with each other from the beginning" (SND 162). This unwanted intrusion of such a forced reality only proves to her what a brutal world it really is, and its worthiness of her fear. Blanche, after her rape, has no choice but to completely turn away from the world, retreat into her safe little shell, never to look out again. Reality defeats fantasy, and she is led away to the insane asylum.

Similarly, Emma's demise is due to her spinning out of control, and she compulsively decides a quick romantic death to be the best solution to her life. After all, "dying doesn't amount to much. . .I'll fall asleep and everything will be over" (MB in Lawall 1042). But the power of reality remains sovereign over Emma's thoughts, and she dies a long, grotesque, and painful death. The narrator similarly illustrates that Emma's "distant memories and present day events, experiences actual and imagined, her starved sensuality, her plans for happiness, [were all] blown down like dead branches in the wind. . ." (MB in Lawall 924). Emma is ultimately "tried, judged, and together with the entire world in which she is caught, condemned"(Auerbach 139).

The condemnation of romantic ideals is reinforced by the world that survives each of the heroines. Eunice tells the hysterical Stella that "Life has got to go on" (SND 166). In the same way, once Emma is nailed shut in her coffin, "the house was thrown open and the

Yonvillians began to flock in. . ."(MB in Lawall 1053). Soon thereafter, her daughter Berthe gradually forgets her, as does Charles, who laments that he felt "desperate realizing that her image was fading from his memory, struggle as he may to keep it alive" (MB in Lawall 1060). Victor Brombert concludes that even "more ironic is the victory of existence over tragedy itself: life simply continues, mediocre and indifferent" (52).

Both Blanche DuBois and Emma Bovary are condemned for trying to escape reality. These two women are destroyed by their inability to accept life for what it is and are damned for living in illusion. Being complex characters with whom all readers can identify, Emma and Blanche hold universal appeal for people of all ages and cultures. Who does not try hard in life to create a desired reality? Many people desperately seek transcendence, and perhaps many more retreat, at least occasionally, to the private world of the imagination, safe from the harshness of reality. Unfortunately, excessive indulgence in illusion can be a self-destructive trap that leads to dissatisfaction and self-imprisonment. But as Blanche and Emma so painfully illustrate, it is only human nature to try to live and chase after dreams –however futile the pursuit may be.

Works Cited

Auerbach, Erich. "Madame Bovary." Giraud. 132-140.

Bart, B.F., ed. Madame Bovary and the Critics. New York: NYUP, 1966.

Bigsby, C.W.E. "Tennessee Williams: Streetcar to Glory." Bloom. 41-47.

Bloom, Harold, ed. Modern Critical Interpretations: Madame Bovary. New York: Chelsea, 1988.

--- . Modern Critical Interpretations: Tennessee Williams' A Streetcar Named Desire. New York: Chelsea, 1988.

Brombert, Victor. The Novels of Flaubert: A Study of Themes and Techniques. New Jersey: Princeton UP, 1966. 40-85.

Cohn, Ruby. "The Garrulous Grotesques of Tennessee Williams." Stanton. 45-60.

DaPonte, Durant. "Williams' Feminine Characters." Miller. 53-56.

Flaubert, Gustave. Madame Bovary. In The Norton Anthology of World : Masterpieces: The Western Tradition. Ed. Sarah Lawall et al., New York: Norton, 1999.

Giraud, Raymond, ed. A Collection of Critical Essays. New Jersey: Prentice, 1964.

Kazan, Elia. "Notebook for A Streetcar Named Desire." Miller. 22-27.

Lawall, Sarah, et al. The Norton Anthology of World Masterpieces: The Western Tradition. New York: Norton, 1999.

Levin, Harry. "The Female Quixtote." Bart. 106-131.

Miller, Jordan Y, ed. Twentieth Century Interpretations of A Streetcar Named Desire. New Jersey: Prentice, 1971.

Stanton, Stephen S., ed. Tennessee Williams: A Collection of Critical Essays. New Jersey: Prentice, 1977.

Turnell, Martin. "Madame Bovary." Giraud. 97-111.

Williams, Tennessee. A Streetcar Named Desire. New York: Penguin, 1947.

Feminization of Fish in the Cacapon and Potomac Rivers

By: Roy Gordon

This paper presents an introduction to a new, emerging class of pollutants in American waterways that includes endocrine disrupting chemicals (EDCs) that are suspected of causing a phenomenon called "Intersex Fish" or "Feminization of Fish." These same pollutants may be contributing to a reduction in human male fertility in the United States and other industrialized countries. Historical background and environmental impact are considered, and hypothesized causes and solutions are examined.

Recent discoveries of male smallmouth bass in the Cacapon and Potomac Rivers exhibiting a condition called intersex fish (fish with both male and female reproductive tissue) have biologists searching for answers and environmentalists suspecting a potential new class of pollutants referred to as "Emerging Contaminants." While no absolute definition for the class of pollutants exists, the U.S. Department of the Interior, U.S. Geological Survey, Toxic Substances Hydrology Program lists 95 different chemicals under the title – Target Compounds for National Reconnaissance of Emerging Contaminants. Chemical categories listed include 1) veterinary and human antibiotics, 2) human drugs, both prescription and non-prescription, 3) industrial and household wastewater products, e.g. insecticides, plasticizers, detergent metabolites, fire retardants, polycyclic aromatic hydrocarbons (fossil fuel and fuel combustion indicators), antioxidants, others, and 4) sex and steroidal hormones including biogenics, pharmaceuticals, and sterols. Specific names of the 95 chemicals listed can be found at the web site: http://toxics.usgs.gov/regional/contaminants.html.

The intersex fish condition in the Cacapon and Potomac Rivers was discovered by accident in July 2003 when a study by West Virginia's Division of Natural Resources (DNR) and the U.S. Geological Survey's National Fish Health Research Laboratory (NFHRL) collected between four and fifty five smallmouth bass from each of seven sites along the South Branch of the Potomac River to investigate reports that fish in the area were developing lesions and dying en masse.[5] The Potomac River provides about 75 percent of the water supply to the 3.6 million residents of Washington D.C. and its Maryland and Virginia suburbs.[18] No immediate cause for the lesions and deaths was determined. However the study revealed that 42 percent of the male

smallmouth bass had developed eggs in their sex organs.[5] A subsequent study by the U.S. Geological Survey of 66 male smallmouth bass from the same area found that about 79 percent had developed eggs in their male testes.[5] Studies conducted to assess the amount of male fish exhibiting the intersex fish condition in other waterways found development of the female duct which leads eggs to the oviduct, in addition to eggs in testes.[1]

The intersex fish condition has been identified in other species of fish in various locations in the United States, including waterways in Minnesota, Washington State, and Colorado. Fish in Canadian waterways have also been found demonstrating the intersex condition and occurrences have been identified in Europe and Great Britain. A study by British researchers found feminized fish in eight rivers throughout Great Britain that are considered typical in terms of pollution.[2] "The incidence and severity of inter-sexuality…is both alarming and intriguing," researchers from Brunel University and the British government reported in the journal Environmental Science and Technology.[2] A study of the phenomena by the University of Southern Denmark and the Danish Environmental Protection Agency was conducted in response to the detection of feminized fish over the past ten years in several European countries, Japan, as well as in the United States.[1]

The intersex condition in fish raises multiple concerns. Reduced fish fertility, due to lower sperm density, has been observed in studies of fish with the intersex condition. Timing of sperm production relative to female spawning may also be a problem. Feminization of male fish may also cause damage to other organs, such as the liver and kidneys, leaving the fish more susceptible to disease.[6] Implications of the effect of intersex fish on other species is not known, but reduced fertility may lead to population reductions that could effect the food chain and possibly the entire ecosystem. Based on present knowledge, it is not yet possible to know whether the fertility or reproductive capacity of fish observed with the intersex condition is reduced or in danger of population decrease.[1]

Another concern is what effect, if any, might the cause of the intersex fish condition have on human fertility? "An issue that is contested is whether there is a global decline in sperm count among males in industrial nations."[11] A 1992 study by the University of Copenhagen "found that sperm density in men had fallen by 50 percent between 1938 and 1990. In 1999, a reanalysis of the controversial study by Shanna Swan, Ph.D., a professor at the University of Missouri-Columbia, confirmed the findings and concluded that the decline may be more than 50

percent."[7] Endocrine disrupting chemicals (EDCs), specifically synthetic chemicals that mimic the female sex hormone estrogen, are suspected of being a potential cause of both the intersex fish condition and the decline in human male sperm density.

Xenoestrogens (chemicals that act like estrogens) are a group of EDCs known to affect the endocrine system, which includes the pancreas, pituitary, thyroid, and reproductive organs. "These organs produce a variety of hormones such as insulin to control the body's level of blood sugar and estrogen and testosterone to control the development and functioning of reproductive organs."[10] "Exposure to these chemicals -- endocrine disruptors -- may have such potentially serious consequences that the federal government has begun studying their effects even before scientific confirmation that they may cause health problems in men."[7] "Estrogens, indeed all hormones, are chemical signals, and as such are important links in the body's internal communication system, helping cells in various organs to sense and respond to changing physiological circumstances."[11] Research done at the University of Illinois at Urbana-Champaign may provide insight to the relationship of EDCs and the decline of average sperm density in males in the United States and Western Europe. "Researchers discovered that estrogen, which has long been known to regulate female reproduction, was also essential to reproduction in males. Working with laboratory animals, the researchers found that estrogen was vital to the production of healthy sperm"[7] "The research suggests that environmental estrogens may be contributing to declining sperm counts by disrupting the normal function of the hormone system that governs reproduction."[7] The species of fish observed with the intersex fish condition found in our waterways may be serving as indicator species, providing early warning that our ecosystem is being contaminated with a new group of chemicals that may be increasing infertility across a wide range of species, including humans. Vicki S. Blazer, a scientist overseeing the research on the intersex fish found in the Cacapon and Potomac Rivers said fish are good indicators of subtle changes in water quality – changes perhaps caused by the introduction of natural and synthetic hormones.[19] Still, the exact cause of the sex-changed smallmouth bass remains unclear.[19]

Research into the cause of the intersex fish condition is inconclusive, but biogenic chemicals such as, 17*beta*-estradiol, 17*alpha*-ethinylestradiol, estrone and estriol are major suspects within the larger group of chemicals referred to as EDCs. The structures of these chemicals are very similar to naturally occurring estrogens in the body. The U.S. Environmental

Protection Agency (EPA) task force on endocrine disruption (EDSTAC) defines endocrine disruptors, or EDCs, as: "an exogenous chemical substance or mixture that alters the function(s) of the endocrine system and thereby causes adverse effects to an organism, its progeny, or (sub) population."[3]

A hypothesis for the intersex fish condition offered by Kara LeBeau M.A, from the Geological Society of America, in an article titled "A Fish Named Wayne/Wanda?" is that endocrine disruptors originating from the active ingredient in birth control pills (ethinylestradiol) and natural female estrogen (beta estradiol), as well as metabolites of that compound excreted by women and released into waterways from sewage treatments plants, may be the cause.[17]

A study by Chris D. Metcalfe of Trent University in Peterborough, Ontario, with a laboratory fish, the Japanese medaka (*Oryzias latipes*), found that some of the male fish became intersex after exposure of 0.1 ppt (parts per trillion) ethinylestradiol or 10 ppt estrone over a period of 100 days. All the fish tested became intersex with exposures of 1,000 ppt of either of the estrogens. "Though not a North American fish, the medaka models the reproductive responses of native fish well," Metcalfe says. A 1998 nationwide survey of sewage-treatment effluent by Environment Canada detected some sites having 14 ppt of the hormone ethinylestradiol from birth control pills, and 400 ppt of estrone.[8] Metcalfe said, "Ethinylestradiol is the active ingredient in the birth control pill."[17] "The other compounds are the natural female estrogen (beta estradiol) and metabolites of that compound excreted by women."[17]

Another study conducted from 1997 through 1999, with subsequent sampling through 2002, in the Puget Sound waterway in Washington State found a significant number of male English sole with the abnormal production of vitellogenin. Vitellogenin is a yolk protein which is usually found only in sexually mature female fish developing eggs. Elliott Bay, one of the study areas sampled within the Puget Sound waterway, reported 58%, 38%, 24%, 18%, and 17% of fish were affected from five different site locations within the study area.[13] The Elliott Bay site location with the highest reported percentage, 58%, was near three major sewage and combined storm water/sewage outfalls.[13] It is important to note however that while a significant number of the English sole sampled in this study did exhibit the abnormal production of yolk protein and were exposed to xenoestrogens in the waterway, especially near sewage treatment discharge areas, findings of this study stated "we have no information on what contaminants are responsible."[13]

The study done by the University of Southern Denmark and the Danish Environmental Protection Agency, however, cites estrogenic compounds in sewage effluent as the probable cause for the intersex condition in male fish. Specifically, the study states as part of summary: "Further, chemical analysis of the composition of sewage effluent and determinations of concentrations of estrogens and estrogenic compounds in the effluent have in a large number of cases demonstrated the natural estrogens, 17ß-estradiol, estrone and the synthetic estrogen, ethinylestradiol used in contraceptives as likely candidates for the observed disturbances in fish species from the sewage effluent receiving rivers."[1]

Another hypothesis suggests that endocrine disruptors found in poultry and cattle manure as well as pesticides and herbicides used for agriculture may be contaminating waterways from ground water runoff and causing the intersex fish condition. "Significant concentrations of estrogens and androgens have been reported in ponds or streams receiving runoff from fields fertilized with chicken litter (Finlay-Moore et al. 2000; Nichols et al. 1997; Shore et al 1995)."[12] "In fact, depending on application rate, concentrations in runoff have been measured as high as 1,280ng/L (Nichols et al. 1997)."[12] Surface water runoff from high intensity poultry and beef cattle operations using implanted growth promoting hormones has been linked to "significantly reduced testis size" in fathead minnows found in downstream waterways.[15] In the case of the Chesapeake Bay watershed, which includes the Cacapon and Potomac Rivers, there are 185 million livestock animals which include dairy cows, beef cattle, pigs, egg production, broilers (chicken meat), and turkeys which combined produce 44 million tons of manure each year.[16]

Old landfills are another point source under scrutiny. Surface water runoff and infiltration from ground water containing polychlorinated biphenyls (PCBs) and dioxins, both known to cause endocrine disruption, may be another contributor to the intersex fish phenomenon.

The prevalence of EDCs and their concentration levels in U.S. waterways was studied during 1999 and 2000. The study, conducted by the Toxic Substances Hydrology Program of the USGS, investigated 139 eastern streams in 30 states and found that more than 80 percent of streams sampled contained detectable levels of hormones, pharmaceuticals, and other organic compound contaminants. The report stated that the concentration levels found were generally very low. However, the report also acknowledges that "little is known about the potential health

effects to humans or aquatic organisms exposed to the low levels of most of the chemicals or the mixtures commonly found in this study."[9]

Additional research in the U.S. is needed to determine the potential risk to fish, human, and other species presented by the presence of EDCs in waterways. While the intersex fish condition has been documented in a number of field studies, endocrine disruptors in waterways do not appear to be effecting large populations of fish.[4] Also, while 17*beta*-estradiol, 17*alpha*-ethinylestradiol, estrone and estriol discharged from sewage treatment facilities are suspected to be linked to the intersex fish condition, discharge of wastes from pulp and paper mills have also been associated with endocrine disruption in fish.[4] Further analysis of potential cause and effect factors such as the impact of various mixtures of endocrine disrupting chemicals and (chemical concentration to exposure-time-impact) ratios are needed to assess best strategies to deal with the presence of these chemicals in our waterways.

A potential solution to one of the hypothesized causes of the intersex fish condition is to treat the discharge of effluents from sewage treatment plants and other suspected point sources to reduce or eliminate chemicals identified as endocrine disruptors from entering waterways. Conventional sewage treatment for contaminants such as estrogens and xenoestrogens are not effective.[1] Pilot scale studies of more advanced treatment processes using both ozone/hydrogen peroxide and reverse osmosis effectively reduced estrogenicity of secondary effluent.[1] However, gaining support for a federal mandate to perform advanced treatment (sometimes called tertiary treatment) on wastewater to reduce or eliminate endocrine disruptors would be a major political challenge and virtually impossible until more research is done and conclusive evidence is available on the cause of the problem and risk to human health.

Composting may be an approach to solving high levels of EDCs from poultry and cattle operations contaminating waterways from ground water runoff. A study conducted by the Department of Agriculture Biosciences Research Laboratory in Fargo, North Dakota, found that concentrations of testosterone and estrogen from the manure of egg-laying chickens could be reduced significantly by composting. Mixing the chicken manure with hay, straw, decomposing leaves, and some starter compost, and then adding water and heaping the mix atop impermeable pads in long compost piles reduced the starting concentrations of testosterone and estrogen averaged parts per billion (ppb) from 187 ppb and 95 ppb to 13 ppb and 16 ppb, respectively, over a 19 week period.[14]

In summary, the intersex fish condition found in the Cacapon and Potomac Rivers is not a unique environmental phenomenon. Studies in the United States, Canada, and Europe have identified contaminants called endocrine disruptors, or endocrine disruption chemicals (EDCs), that may be causing the abnormality. Reports of intersex fish conditions have been occurring in various waterways in North America, Great Britain, and Europe. Concerns raised by the occurrence of this phenomenon include: 1) reduced fertility in the species found exhibiting the condition, 2) damage to other organs within the species, 3) effects on the overall food chain, and 4) potential effects on human fertility. Significant reductions in human male average sperm density over the past 50 years and the occurrence of the intersex fish condition in both the United States and Western Europe may be associated with EDCs in waterways that provide habitat for the fish and are a source for drinking water for humans. Discharge from sewage treatment plants and surface runoff and ground water contamination from high intensity poultry and cattle operations are both suspected of being point sources of contaminants causing the intersex condition. Pulp and paper mills, and other industrial operations discharging a broad range of chemicals also known to act as endocrine disruptors are suspects as well. Little is known about the long term affects of low concentrations of endocrine disrupting chemicals on fish, humans, or the overall ecosystem. While there is no evidence that large populations of species are being affected with reproductive abnormalities, various studies suggest that additional research should be conducted to determine the cause and environmental impact associated with the intersex fish phenomena.

References:

1. Lisette Bachmann Christiansen – University of Southern Denmark, Magrethe Winther-Nielsen and Christian Helweg - DHI Water & Environment, Feminisation of Fish - The effect of estrogeneic compounds and their fate in sewage treatment plants and nature, Danish Environmental Protection Agency, Environmental Project No. 729 2002 Miljoprojekt,
   Available at: [www.mst.dk/udgiv/publications/2002/87-7972-305-5/html/default_eng.htm]
   Accessed November 21, 2004.
2. Marla Cone – Times Environmental Writer, September 22, 1998, River pollution study finds hormonal defects in fish: Discovery in Britain suggests sewage plants worldwide may cause similar reproductive-tract damage, Copyright 1998 Los Angeles Times,
   Available at: [www.safesoil.com/hormone.htm] Accessed November 21, 2004.
3. J. Lintelmann, A. Katayama, N. Kurihara, L. Shore, and A. Wenzel, 2003, Endocrine Disruptors in the Environment, International Union of Pure and Applied Chemistry (IUPAC Technical Report), Division of Chemistry and the Environment /Commission on Water and Soil, Pure Appl. Chem., Vol. 75, No. 5, pp 631-681, 2003, ©2003 IUPAC,
   Available at: [www.iupac.org/publications/pac/2003/7505/7505x0631.html]
   Accessed November 21, 2004.
4. Anthony S. Pait, Judd O. Nelson, 2002, Endocrine Disruption in Fish, An Assessment of Recent Research and Results, NOAA Technical Memorandum NOS NCCOS CCMA 149, Silver Spring, MD:NOAA, NOS, Center for Coastal Monitoring and Assessment 55pp,
   Available at: [http://www.nccos.noaa.gov/documents/techmemo149.pdf] Accessed November 21, 2004.
5. David A. Fahrenthold, 2004, Male Bass in Potomac Producing Eggs, Washington Post, Friday October 15, 2004 – Page A01, Available at: [www.washingtonpost.com/wp-dyn/articles/A33850-2004Oct14.html]
   Accessed November 19, 2004.
6. N. Gillies, undated, Intersex?, Cacapon Newsletter, Cacapon Institute, Volume 13, Number 1, March 2004,
   Available at: [www.cacaponinstitute.org/cacapon_newsletter_march_2004.htm#INtersex]
   Accessed November 19, 2004.
7. Rochelle Jones, 2003, Is the environment hurting men?, WebMD, January 3, 2000, Copyright 1999, WebMD,
   Available at: [www.cnn.com/2000/HEALTH/men/01/03/men.estrogen.wmd]
   Accessed November 21, 2004.
8. Janet Raloff, 2002, Excreted Drugs: Something Looks Fishy, Science News Online, Week of June 17, 2000; Vol. 157, No.25, Available at: [www.sciencenews.org/articles/20000617/fob1.asp]
   Accessed November 21, 2004.
9. Herbert T. Buxton, Dana W. Kolpin, 2002, Pharmaceuticals, Hormones, and Other Organic Wastewater Contaminants in U.S. Streams, U.S. Geological Survey (USGS), USGS Fact Sheet FS-027-02, June 2002,
   Available at: [http://toxics.usgs.gov/pubs/FS-027-02/] Accessed November 29, 2004.

10. Dore Hollander, Environmental Effects on Reproductive Health: The Endocrine Disruption Hypothesis, Volume 29, Number 2, March/April 1997,
Available at: [http://guttmacher.org/pubs/journals/2908297.html] Accessed February 15, 2005.

11. Sheldon Krimsky,An Epistemological Inquiry into the Endocrine Disruptor Thesis, Department of Urban and Environmental Policy Planning, Tufts University, Medford, Massachusetts, undated,
Available at: [http://www.tufts.edu/~skrimsky/PDF/Annals_nyas.PDF] Accessed February 21, 2005.

12. Edward F. Orlando,[1,2] Alan S. Kolok,[3] Gerry A. Binzcik,[1] Jennifer L. Gates,[1] Megan K. Horton,[3] Christy S. Lambright,[4] L. Earl Gray, Jr.,[4] Ana M. Soto,[5] Louis J. Guillette, Jr.,[1] 2004, Endocrine-Disrupting Effects of Cattle Feedlot Effluent on an Aquatic Sentinel Species, the Fathead Minnow, [1]Department of Zoology, University of Florida, Gainsville FL, USA; [2]Biology Department, St. Mary's College or Maryland, St. Mary's City, MD, USA; [3]Department of Biology, University of Nebraska at Omaha, Omaha NE, USA; [4]U.S. Environmental Protection Agency, Research Triangle Park, NC, USA; [5]Department of Anatomy and Cell Biology, Tufts University School of Medicine, Boston, MA, USA; Endocrine-Disrupting Effects of Cattle Feedlot Effluent on an Aquatic Sentinel Species, the Fathead Minnow, Environmental Health Perspectives, Volume 112, Number 3, March 2004,

13. Daniel Lomax, Further survey Results on Xenoestrogen Exposure of Benthic Fish in Puget Sound, NOAA-National Marine Fisheries Service, undated,
Available at: [http://www.psat.wa.gov/Publications/03_proceedings/PAPERS/ORAL/3e_lomax.pdf]
Accessed February 19, 2005.

14. Janet Raloff, Composting cuts manure's toxic legacy, Science News, Volume 160, Number 18, November 3, 2001, page 285, Available at: [http://www.sciencenews.org/articles/20011103/note14.asp] Accessed February 21, 2005.

15. Janet raloff, Hormones: Here's the Beef Environmental concerns reemerge over steroids given to livestock, Science News Online, Volume 161, Number 1, January 5, 2002,
Available at: [http://www.sciencenews.org/articles/20020105/bob13.asp] Accessed February 25, 2005.

16. Manure's Impact on rivers, Streams and the Chesapeake Bay, A Report by the Chesapeake Bay Foundation, July 28, 2004, Available at: [http://www.cbf.org/site/News2?page=NewsArticle&id=9141] Accessed February 25, 2005.

17. Kara LeBeau, A fish Named Wayne/Wanda, Chronic Neuroimmune Diseases, February 27, 2004, Available at: [http://www.anapsid.org/cnd/hormones/estrogen5.html] Accessed February 25, 2004.

18. Male fish bear eggs in Potomac, CNN.Com, December 21, 2004,
Available at: [http://www.arlingtoninstitute.org/futuredition/fe_archive/fe_08_1archive.asp on 2/21/04]
Accessed February 25, 2005.

19. William Cocke, Male Fish Producing Eggs in Potomac River, Nat'l Geographic News, November 3, 2004,
Available at: [http://news.nationalgeographic.com/news/2004/11/1103_041103_potomac_fish.html]
Accessed February 25, 2005.

"Uncle Sam is Newspeak for Big Brother"

By: Easter Wood

The war is waged by each ruling group against its own subjects, and the object of the war is not to make or prevent conquests of territory, but to keep the structure of society intact. (Orwell, 164)

George Orwell wrote this passage referring to the ruling groups in *Oceania,* the dystopian world he created in his novel, 1984. A group called *Ingsoc*, also known as the *Party*, controls all that takes place in this totalitarian society: what foods people eat, what clothes they wear, what books they read, when they wake up and when they go to sleep. The *Party* even finds a way to control people's thoughts, at least "as far as thoughts are dependent on words" (Orwell, 246), by developing a hybrid language called *Newspeak.* Based on regular English, which is known in the book as *Oldspeak*, *Newspeak* was formed by removing many words and combining others. *Newspeak* was devised "not only to provide a medium of expression for the world-view and mental habits proper to devotees of Ingsoc, but to make all other modes of thought impossible" (Orwell, 246); in other words *Newspeak* was intended to make it impossible to commit *thoughtcrime*, which is defined as having any thoughts or opinions against the *Party* or its policies.

In Orwell's fictional *Oceania*, watching television is not a luxury or leisure activity: It is a requirement. The *telescreen*, as it is called in the book, is an integral part of life: It wakes people up in the morning for the "Physical Jerks," a mandatory exercise routine, and constantly reports the events of a seemingly never-ending war between *Oceania* and *Eurasia*, among other functions. The *telescreen* must be kept on at all times and, as people watch it, it watches them, waiting to report any *thoughtcrime* to the *Party's* Thought Police, or *Thinkpol* as they are known in *Newspeak.* Those found guilty of *thoughtcrime* are removed from society, presumably killed, and never mentioned again. In fact, according to the *Party's* ever-changing records, by tomorrow it will be as though they never existed.

The *Party's* public representative comes in the form of an icon know as *Big Brother*. Everywhere in *Oceania* are large posters of BB, as he's known in *Newspeak*, "which are so contrived that the eyes follow you about when you move" (Orwell, 5) and which bear the

warning: BIG BROTHER IS WATCHING YOU. *Big Brother* is, essentially, the personification of the *telescreen; Big Brother* is the eyes and ears of the *Party*; *Big Brother* is the big brother who's there to make sure the younger siblings behave when mom isn't looking.

The only people who are allowed to live without as much interference from the *Party* and *Big Brother* are those members of the out-group, or outcast set, known as the Proletariat or the *Proles*, in *Newspeak*. Although the *Proles* are 85% of *Oceania's* population, and thus outnumber the *Party* members, they are segregated from the *Party* members and allowed to live more "freely" because they are seen as inferior. As such, the *Party* does not fear that the *Proles* will rebel, or try to change the structure of society, because they don't feel the *Proles* are capable of rebelling. As an added precaution, the *Party* restricts the *Proles'* access to resources, rationing out only what they need to live, and takes every measure to shirk their desire to rebel using *Prolefeed*: "rubbishy entertainment and spurious news" (Orwell, 252) designed to keep the *Proles* complacent and focused on nonsense issues rather than on the actual problems of society. The most important fact that *Prolefeed* is aimed at keeping "under wraps" is the fact that although the *Proles* think they are "free", they are actually the *Party's* slaves, "working breeding and dying, not only without impulse to rebel, but without the power of grasping that the world could be other than it is" (Orwell, 173).

Central to the *Party's* control over its members and the *Proles* is a technique called *doublethink* and 3 oxymoronic tenets: *War is Peace, Ignorance is Strength*, and *Freedom is Slavery*. *Doublethink* is defined in the book as "the power of holding two contradictory beliefs in one's mind and simultaneously accepting both of them" (Orwell, 176); using *doublethink*, the *Party* is able to claim to be right on all accords even when it presents ideas that are directly opposed to one another. Using the 3 tenets, the *Party* justifies never-ending war claiming it is the only way to peace, justifies denying people's freedom claiming that the free are actually slaves and justifies keeping people in ignorance claiming that their ignorance is actually their strength.

Winston, the main character of the novel, is a *Party* member who does not believe in the *Party's* tenets and who fears that he is to be removed from society any day because he has committed several *thoughtcrimes*, even going so far as to write DOWN WITH BIG BROTHER over and over again in his diary (this is not to mention that even keeping a private diary is considered *thoughtcrime*). Most condemningly, Winston has contacted the *Party's* number one enemy, a man by the name of Emmanuel Goldstein, and has secured a copy of Goldstein's book,

known only as *the book*. *The book* gives evidence that the *Party's* tenets are propaganda designed to keep themselves in power and the rest of *Oceania's* population under control, and it is considered the worst contraband any *Party* member can possess. Eventually, Winston is caught, and he finds out that *Party* defectors are not killed, but are brainwashed into loving the *Party* and *Big Brother* and are then returned to the outskirts of society amongst the *Proles*. Thus, the *Party* wins the war against all those who oppose it and the structure of *Oceania's* society remains in tact.

I believe that America is deeply engaged in attempting to keep the structure of its society in tact, and that some of its methods are frighteningly similar to those used by *Ingsoc* in Orwell's fictitious country. I believe that techniques resembling *doublethink* and an iconic, *Big Brother*-like figure known as Uncle Sam are the major weapons in this pseudo-war that has been waged by the ruling American Capitalist Party against its own Proletariat: So-called "Urban America". While there is much racial and ethnic diversity among the multitude referred to under this heading, the majority are African-American and Hispanic[1] and, regardless of race, the majority are economically disadvantaged and undereducated while the vast majority of those in power are rich and White. I believe that the individual battles of this war take many forms and that the ultimate goal is to ensure that impoverished minorities continue "working breeding and dying...without impulse to rebel [and] without the power of grasping that the world could be other than it is", like the *Proles* of *Oceania*. From attacks on access to education to attacks on physical well-being, the United States government has taken several specific steps to keep its underclass from advancing – all while giving the impression of being helpful and supportive.

In 1984's *the book*, Emmanuel Goldstein states that "from the point of view of the low, no historic change has ever meant much more than a change in the name of their masters" (Orwell, 167), and this has certainly been the case in American society: No matter who has been in power – Democrats, Republicans, the North or the South – African-Americans have consistently been on the bottom rung of society's ladder and remain there to this day. Blacks earn an average of $15,000 less than their White and fellow minority counterparts for the same positions at the same educational levels[2] and, surprisingly, the disparities grow as the level of education increases; although Blacks make up approximately 12.5% of the total U.S. Population,

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[1] Supported by statistics obtained from *U.S. Census Bureau: Statistical abstract of the United States:2000*
[2] Figure compiled from statistics obtained from *U.S. Census Bureau: Statistical abstract of the United States:2000*

even at higher educational institutions with Affirmative Action policies Blacks generally represent 6%, or less, of the institution's total population[3] and Whites continue to fight Affirmative Action; many Blacks were disenfranchised and prevented from voting at several polling locations in various states during the 2000 presidential election[4]. The evidence of inequality is plentiful, and the literally hundreds of books and thousands of articles that have been written on the topic still have not detailed it all.

There are those who, when confronted with this information, will cite "rags to riches" stories and say that everyone has an equal chance in America – that those who don't succeed are simply "lazy" or "letting opportunities pass them by". I believe that those "rags to riches" stories and suggestions of mere "laziness" as the cause of non-advancement are a type of "spurious news" distributed by America's *Party* to try and make the masses believe that there is no injustice in the world; that each person's economic situation is solely based on their individual effort and has nothing to do with the structure of society, nothing to do with their race or social class and most importantly, nothing to do with history. Such stories and suggestions overlook a very important fact: History does not happen in a vacuum; everything that has happened in the past affects what is happening right now. In fact, the system used to "break" Africans during slavery was *guaranteed* by its author to control their descendants for "at least 300 years" (Lynch, 2) and it's only been about half that time since slavery ended.

Regardless of one's opinion on the previous ideas, there is a plethora of evidence of the American *Party's* war against its *Proles* that cannot be ignored or denied. One of the most compelling pieces is the informal adoption of the *Ingsoc Party's* tenets: *War is Peace, Ignorance is Strength*, and *Freedom is Slavery.* At this very moment, the president of the United States is justifying a war with Iraq saying it is the only way to bring about peace and national security. Although Iraq never directly threatened the United States and Iraq's leader, Saddam Hussein, who were told was the real threat, has already been removed from power, the president says *War is Peace*, and so he continues with the war – and those who oppose his decision have generally stayed quiet for fear of being charged with the *thoughtcrime* of being unpatriotic. Similar situations have occurred during several American presidencies; the U.S. has become involved in war in the name of peace at the opposition of many of its people on more than one occasion, and

[3]Figure compiled from visits to several institutions' websites (including University of Michigan, Ohio State University and Florida State University) and from the National Center for Education Statistics

[4] Several networks reported these happenings including ABC, NBC, CBS, FOX and CNN

who has always personally invited them to fight? Uncle Sam. His likeness has been, and still is, prominently displayed in most armed forces recruiting offices on large posters with the ominous caption UNCLE SAM WANTS YOU.

The *Ignorance is Strength* tenet is ironically to some extent true in American society: The ignorance of the masses has largely been and still is Uncle Sam's strength and he knows it – this is why I believe he goes through great lengths to keep his urban *Proles* ignorant of true facts. As noted in the book, Lies My Teacher Told Me, "rich capitalists control all three major TV networks, most newspapers, and all the textbook-publishing companies, and thus possess immense power to shape the way we talk and think about current events" (Loewen, 275). I believe they chiefly use that power to present events in a distorted light. Their sensationalist style of reporting, exclusion of some facts and "accidental" inclusion of others is designed to get the masses to rally behind whatever Uncle Sam says they should.

During one of his recent national addresses, U.S. president, George W. Bush, "accidentally" uttered the false statement that Saddam Hussein was attempting to procure nuclear materials from Africa even after several intelligence agency reports advised him that this fact was erroneous ("Truth"). I don't believe this to be any mistake. I believe that Bush knows, as others before him knew: The less people know, the stronger their belief in whatever you tell them. Although he later rescinded the statement, Bush *wanted* everyone to believe this falsehood to be true so he could continue to justify his *War is Peace* stance.

Aside from this one incident, the news media was highly instrumental in helping Bush get people "fired up" about going to war. From stating over and over that another devastating terrorist attack was "imminent," to consistently pointing out the shortcomings in our national defense system, mass media did a great job of scaring people into "fight or flight" mode. Since most people aren't ready for flight, in the form of leaving the country, the only option left is to fight. Right? The panic incited by constant media reports of unfounded threats pushed many Americans to the point where they were ready to go and fight Saddam themselves in the name of "American Freedom" – even though our freedom was never actually threatened. The public's fear and ignorance was the president's strength in starting the war and their continued ignorance allows it to trudge on. As people learn more of the truth about the war, they become less enthusiastic about it – a logical explanation for wanting to keep the masses ignorant.

The perpetuation of ignorance is not relegated to the media and current events. The *Party* states several times throughout Orwell's 1984, "who controls the present controls the past" (Orwell) and since it controls *Oceania's* present, it also controls *Oceania's* past: the presentation of its history. Since we have recognized that "rich capitalists" control the present in America, for all intents and purposes, it also stands to reason that they control the past: the presentation of American history.

The books that supposedly teach the history of the United States are riddled with errors, both of omission and commission. James W. Loewen, historian and co-writer of the first integrated state history textbook, believes that these errors are allowed to go uncorrected from edition to edition in part because "textbook authors seem to believe that Americans can only be loyal to their government only so long as they believe it has never done anything bad" (Loewen, 235). He even had his own book rejected by several school districts because, in being more accurate than many others, it was considered "too negative". He and I ask: How can the truth be "too negative"? Truth is only negative when it's ignorance you seek.

As it was in *Oceania*, the result of these actions in America – the deferment of funds to war, the perpetuation of ignorance – is the continued subjugation of the underclass and, for all intents and purposes, their slavery. Slaves worked hard and were only provided with enough food and clothes to survive; many urban Americans work more than 40 hours a week and only earn enough to survive. Who is really reaping the fruit of their labor? Although they are technically free, in a twist of fate, their *Freedom is Slavery*. Unfortunately, I believe Uncle Sam wants it to stay that way: He defers precious manpower and equipment to the military while public schools are severely understaffed, under funded and desperately in need of supplies. He spends billions in Iraq while even the president's own wife appeals to the nation to donate money to feed the 2.6 million American urban youth that go hungry daily (Second Harvest). He spends billions more a year on producing "rubbishy entertainment" to keep urban youth focused on sex and materialism and away from consciousness because he realizes the oxymoron that Orwell presents in reference to the *Proles*: "until they have become conscious they will never rebel, and until after they have rebelled they can't become conscious" (Orwell, 61).

I believe that Urban Youth need to do what Public Enemy said and "Fight the Power" – the power that funnels their money and opportunity away from them, the power that goes to such great lengths to keep them ignorant, the power that keeps them "working, breeding and

dying…without impulse to rebel" - because I believe, as 1984's protagonist Winston believed of the *Proles*, that "if there is hope, it lies in [them] because only there in those swarming, disregarded masses could the force to overthrow the Party ever be generated" (Orwell, 60).

Works Cited

America's Second Harvest – Current Hunger & Poverty Statistics. <www.secondharvest.org/site_content.asp?s=59>

Loewen, James W. Lies My teacher Told Me. New York: Simon & Schuster, 1996.

Lynch, William. "Let's Make a Slave". 1720. The Black Arcade Liberation Library, 1970.

Orwell, George. 1984. New York: Signet Classics, 1950.

Public Enemy. "Fight the Power". Fear of a Black Planet. CD. 1986.

"Truth, Lies, and Consequences." Frontline. PBS. WNET, New York. 9 October. 2003.

2005 Beacon Conference

Participation Information

Montgomery College, Rockville, Maryland

Student Submissions

College	Papers Submitted	Students Submitted	Mentors
Bergen Community College	2	2	2
Bronx Community College	3	3	3
Brookdale Community College	3	3	3
Dutchess Community College	5	3	3
Erie Community College	1	1	1
Manhattan Community College	2	2	2
Montgomery College	37	35	19
Northampton Community College	9	9	8
Northern Virginia Community College	2	2	2
Ocean Community College	12	12	4
Prince George's Community College	5	5	3
Reading Community College	5	4	3
Rockland Community College	29	24	7
Sullivan Community College	1	1	1
Westchester Community College	7	7	3
Totals	123	113	64

Students Presenting

Bergen Community College	2
Bronx Community College	1
Brookdale Community College	1
Dutchess Community College	2
Manhattan Community College	1
Montgomery College	15
Northampton Community College	2
Northern Virginia Community College	2
Ocean Community College	2
PG Community College	2
Reading Community College	3
Rockland Community College	7
Sullivan Community College	1
Westchester Community College	3

Readers

Bergen Community College	3
Brookdale Community College	3
Dutchess Community College	4
Erie Community College	4
Lehigh Community College	10
Montgomery College	1
Northampton Community College	5
Northern Virginia Community College	1
Ocean Community College	2
Prince George's Community College	2
Rockland Community College	3
Ulster Community College	5
Westchester Community College	2