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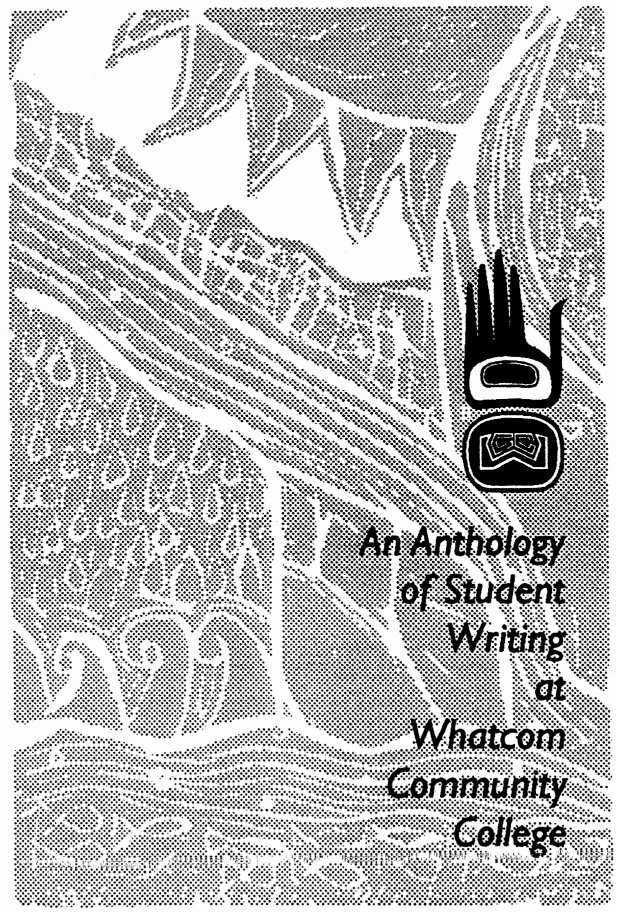
# A GATHERING OF VOICES 1996

An Anthology of Student Writing at Whatcom Community College

# A GATHERING OF VOICES 1996




This anthology is the product of an Outcomes project to assess student learning and critical thinking.

Cover art:

**Leann Sanders**
*The Sea*
Linocut, 6" x 4"

Artist's Note:

*Most of my past experience has been with paint--acrylics and pastels. This was my first linocut print. My objective was to practice utilizing various kinds of lines in the block to discover what I could do with them. I didn't pay attention to the eight shapes. There was a pattern developing, and I responded to it.*

*The basic landscape of my linocut includes fish, waves, a crescent moon and stars, dolphin, sun and mountains.*

***Leann Sanders, student***

# FOREWORD

This year marks my twelfth year at Whatcom Community College and twenty-ninth year in education. During this period one of my biggest challenges has been to find appropriate uses of technology in the classroom. Undoubtedly, the ability to bring to the classroom up-to-date materials in "living color" has provided me with information that was difficult to illustrate effectively through the use of traditional textbook and classroom lecture material. Within the short time span of less than thirty years, I have participated in an evolution, perhaps even a revolution, that has had a very significant impact on how I teach and how students learn.

Twenty something years ago, as a teacher of biology, I prepared for my classes in a way that teachers had done for decades. My accumulated knowledge was a result of my own education and the collection of notes and textbooks I kept conveniently on a shelf in my office. I taught as I had been taught. The teacher was the center of the class, the fountain of knowledge, or as some have said, "the sage on the stage." The approach worked for me and my students as well. The emerging technology certainly aided my endeavors. I could, on occasion, supplement my lectures with a 16mm film or a film strip. The invention of the carousel slide projector made it simple to show a whole collection of slides instead of trying to load one slide at a time into a cumbersome machine. The remote control cord was the greatest invention since sliced bread. My biggest concerns were worrying whether or not I had loaded a slide backwards and/or upside down and hoping I had threaded the film projector right so the machine wouldn't tear the celluloid strip to shreds halfway through the film. I think teaching was a lot easier then.

I'm not sure when things changed. Looking back, I can recall that through the late 1960s and most of the 1970s the biggest change in the classroom appears to have been the increased access I had to information. Video tapes and VCRs made showing "films" a lot easier. Overhead projectors meant I didn't have to spend most of my time with my back to the students. Better duplicating equipment meant better quality presentations and handouts. Still, the traditional lecture prevailed. The written word was the major source of information, and new information reached the classroom through texts and professional journals generally available only to the teacher.

If evolution is a gradual process and revolution is an upheaval, then perhaps the education evolution of the 1960s and 1970s turned into a revolution sometime in the 1980s. The increased availability of information as a result of the introduction of the computer, and most recently the development of the Internet and World Wide Web and such contraptions as Laser Disc and CD ROM, have created a new dynamic in the classroom.

Information is no longer a commodity that resides on an office shelf or in a library collection. Information is more readily available to all. It comes to us across a wire through space. We see and learn information on a screen as well as on a page. Some say we are in the "Information Age." Is a better term "information onslaught"?

Reading screens leads us to look for visual clues in learning more than ever before. In a time when communication seems to be moving away from the hard print format and we seem to do less reading and more watching, it is nice to see a journal such as this produced each year at the college. While a "moving picture" can certainly provide us with important information, the written word can give us insights into thoughts and actions that video only alludes to. Video forces us to guess the motives, conflicts and compromise buried beneath the picture before our eyes, while books give us the opportunity to know the meaning. While I enjoy the video world, I have often remarked, "You need to read the book. It's a lot better than the movie."

If our challenge ten years ago was to find information, then our challenge today is to sift through the information and select the relevant material for incorporation into our own understanding of the world around us. In the past we counted on others to do the sifting, and we felt secure that what we read in professional journals and texts had been scrutinized, verified, and substantiated in some systematic and credible way. Today we know we must question, analyze, and test information for ourselves, both as students and teachers.

As an administrator today, I am encouraged to see that the new technology allows teachers and students to better share information. I am pleased to see that the lecture room is becoming a place to work in groups, to discuss issues, and to learn how to evaluate the information we receive. I am challenged to find ways to utilize the technology around me in ways that complement the use of written language; to emphasize those skills that will allow students to communicate understandings, thoughts and feelings in writing; and to foster the ability to read between the lines, or pictures, in a way that allows students to draw logical conclusions from the overwhelming amount of information we have access to. Teaching is harder now.

The revolution continues. However, as long as students and teachers can produce journals such as this, its course will be influenced by the valuable contributions to our knowledge contained in sometimes but a few paragraphs of well written prose or poetry.

***Bill Christopher, Dean for Instruction***
***May, 1996***

# PREFACE

Whatcom Community College student and instructor voices come together in *A Gathering of Voices* to share with you, our readers and partners in discussion, our pleasure in learning across disciplines. With this second edition of *A Gathering of Voices*, we extend the circle of our conversation to include voices from administration and images from art. We gain two valuable perspectives with these additions: an awareness of the increasing importance of technology in education, and a sense of appreciation for observation and process in our work habits.

You may read this anthology as various conversations. First, you may read the student work in celebration of writing and art well done, created and refined in fulfillment of class assignments. Second, you may see the work here as you would various pieces of art that are distinct from each other, yet when perceived as a whole you may see the picture as one of a denser, more intricate texture where ideas and skills are inter-related. Third, you may read commentary from students and instructors as assessment tools. In recognition of knowing what they are about, instructors state their objectives when designing assignments. Students explain what they have learned and how the assignments have helped them to develop skills in critical thinking, problem solving, and communicating, in developing a sense of identity or a unique perspective in response to problems.

In my experience with *A Gathering of Voices* this year, I've learned many things about writing across the curriculum. Sometimes, I've learned, instructors use different terminology to talk about the same qualities of writing, and sometimes instructors ask students to use various and sundry ways to cite sources. There are differences across the disciplines in the ways we see writing, yet all instructors who assign writing want to assist students in developing skills in communicating content, strengthening organization and mechanics, enabling students to write clearly and purposefully.

As we approach the twenty-first century, educators are being called to publicly set goals and assess the job we're doing, to state our objectives and evaluate the actual outcomes of our practices. Our goals are, simply, to help students to develop skills in creativity, enterprise, purposefulness, sense of responsibility to community, and sense of unique individuality. As educators we want to help produce graduates who embrace broad perspectives, not teacher-dependent individuals, but life-long self-confident, self-sufficient learners with the ability to tackle challenge and embrace change. *A Gathering of Voices* represents this ideal.

I want to thank the many who continue to support WCC's student writing anthology with encouragement and assistance, especially Karen Blakley, Cathy Barnes, Debra Lancaster, Cathy Hagman, Rick Stewart, Jennifer Bullis, Barbara Hudson, Sherri Winans, Margaret Bikman, Steve DeRoy, Readene Wallace, Linda Ruthrauff, and the students and instructors published here.

***Vikki Ryan, Coordinator***

## ACKNOWLEDGMENTS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## A lab report from Biology 270

*The following paper is an example of a laboratory report for Anatomy and Physiology (Biology 270). The students in this course are required to turn in three of these laboratory reports during the quarter. This particular report dealt with an investigation of the lever systems of the human body. The students performed these movements and then consulted their textbook and other sources in order to learn more about lever systems. Erin Dyer did a nice job of presenting (1) the background information, (2) the procedures, and (3) the results, as well as presenting a well thought out interpretation of these results in a broad context. Erin also followed the format for literature citations that I require in my Biology courses. Consequently, this paper is a good example for students in any of my classes.*

***Debra Lancaster, instructor***

## Levers

**by Erin Dyer**

**Summary**

The body has mechanical devices called levers. There are three classes of levers, categorized by the positions of the fulcrum, the resistance, and the effort. My group investigated six movements in the body and found that most levers in the body are third class levers and thus function at a mechanical disadvantage. We found plantar flexion to have the greatest mechanical advantage, and flexion of the thigh to have the greatest mechanical disadvantage. There are advantages to the body working at a mechanical disadvantage, such as the range of motion this type of movement allows.

**Introduction**

Whenever body parts move, bones and muscles interact together as mechanical devices called levers (Shier et al., 1996). A lever is made up of four parts: a rod, a pivot or fulcrum, an object or resistance that is moved, and a force that is the source of energy that moves the bar. There are three classes of levers, which are categorized by the position of the weight, the force and the fulcrum. First-class levers have their fulcrum between the weight and the force. An example of such a system is a seesaw. Second-class levers have the weight between the fulcrum and the force. An example of this type of system is a wheelbarrow. Finally, third-class levers have the force between the weight and the fulcrum. Tweezers are an example of this type of lever system (Shier et al., 1996).

In the human body, the rod is a bone (Shier et al., 1996). The pivot or fulcrum is the point where the bone is rotating or a joint. The resistance can be the weight of a limb, the weight of the body, or the control of movement. Although the resistance may be the weight of an object, it is measured in length. The force is usually the contraction of a muscle. Body movements, as well as lever systems, are also characterized as operating at mechanical advantage or disadvantage. This is determined by looking at the lengths and positions of the force and resistance and it is mathematically computed by dividing the length of the force by the length of the resistance. A value of one or greater indicates a mechanical advantage, and a value of less than one indicates a mechanical disadvantage (Cunningham, 1994).

In terms of the movement of a body part, the muscle which acts as the prime mover, or the force, is called the agonistic muscle (Shier et al., 1996). The muscle that acts in opposition to the agonistic muscle is called the antagonistic muscle. For example, when the forearm is flexed the agonistic muscle (the biceps brachii) contracts, allowing the movement to take place. While the biceps brachii is contracting, the antagonistic muscle (the triceps brachii) is relaxed (Shier et al., 1996).

**Methodology**

We looked at six different movements in the human body and analyzed the following: the four components, the type of lever class, the mechanical advantage/disadvantage, and the agonistic and antagonistic muscles. These movements were: the flexion of the forearm, the abduction of the upper arm, plantar flexion while standing, thigh flexion, thigh adduction, and thigh abduction. Using our own bodies, and charts and tables (Shier et al., 1996), we were able to determine the force and resistance, and the agonistic and antagonistic muscles. To determine the mechanical advantage or disadvantage, we estimated the length of the force, or the distance from the fulcrum to the point of attachment of the agonistic muscle, in relation to the resistance of the movement.

**Results**

Flexion of the forearm: We found that the flexion of the forearm is a third-class lever system. The fulcrum is the elbow, the resistance is gravity and the weight of the arm, and the effort is the contraction of the biceps brachii and the brachialis. This lever system operates at a mechanical disadvantage. The agonistic muscle is the biceps brachii and the antagonistic muscle is the triceps brachii (Shier et al., 1996).

Abduction of the upper arm: We found that this is a third class lever system. The fulcrum is the shoulder joint, the resistance is the weight of the body and gravity, and the force is the contraction of the supraspinatus and deltoid muscles. This lever system operates at a mechanical disadvantage.

The agonistic muscle is the deltoid, and the antagonistic muscle is the triceps brachii (Shier et al., 1996).

Plantar flexion while standing: We found that plantar flexion while standing is a second class lever system. The fulcrum is the ball of the foot, the resistance is the metatarsal and the force is the contraction of the gastrocnemius and the soleus. This lever systems operates at a mechanical advantage, meaning that the effort arm exceeds the resistance arm. The agonistic muscle is the gastrocnemius, and the antagonistic muscle is the tibialis anterior (Shier et al., 1996).

Thigh flexion: The flexion of the hip is a third class lever system. The fulcrum is the hip joint, the resistance is the weight of the leg, and the force is the contraction of the psoas major, and the iliacus. This lever system operates at a mechanical disadvantage. The agonistic muscle is the psoas major, and the antagonistic muscle is the gluteus maximus (Shier et al., 1996).

Thigh adduction: We found that the adduction of the hip is a third class lever system. The fulcrum is the hip joint, the resistance is the control of the leg velocity, and the force is the contraction of the adductor longus, adductor magnus, and gracilis. This lever system operates at a mechanical disadvantage. The agonistic muscle is the adductor magnum and the antagonistic muscle is the vastus lateralis (Shier et al., 1996).

Thigh abduction: The abduction of the hip is a third class lever system. The fulcrum is the hip joint, the resistance is the weight of the leg and gravity, and the force is the contraction of the tensor fasciae latae and the gluteus medius. This lever system operates at a mechanical disadvantage. The agonistic muscle is the tensor fasciae latae, and the antagonistic muscle is the adductor magnus (Shier et al., 1996).

**Discussion**

Of the preceding lever systems, plantar flexion while standing had the greatest mechanical advantage. In actuality, it was the only lever system that we dealt with that had a mechanical advantage. In this situation, the effort arm spanned from the foot to the posterior surface of the calcaneus, and the resistance is the metatarsals (Shier et al., 1996).

The lever system that had the greatest mechanical disadvantage was the flexion of the thigh. The distance of the effort, spanning from the hip joint to the lesser trochanter of the femur, is compared to the resistance, the weight of the leg (Shier et al., 1996).

One of the advantages to working at a mechanical disadvantage is the range of motion that it allows. In order for a being to have the range of motion that we as humans do, it is necessary for that being to have an endoskeleton. The majority of the lever systems that go along with having an endoskeleton, operate at a mechanical disadvantage. Thus, the advantage to operating at a mechanical disadvantage is the range of motion that it allows. In other words, it is worth the extra energy that it requires to carry out a motion at a disadvantage, in order to have that full range of motion that organisms with exoskeletons are lacking. Another advantage to operating at mechanical disadvantage is the extent of the motion it allows. Most lever systems that operate at a mechanical advantage allow only a small movement, such as the flexion of the plantar while standing. Yet a lever system that operates at a mechanical disadvantage, such as the abduction of the thigh, allows for much greater movement.

From our results, I do not feel that working in the direction of gravity versus working against gravity affected the mechanical advantage or disadvantage. Because the mechanical advantage is measured in length, it does not seem that gravity would have an effect on the mathematically computation of the advantage/disadvantage. But logically, if a movement is working with gravity, it seems that the body would have to put out less energy than would be required without that extra force. In the same sense, working against gravity seems that it would increase resistance. Yet in some situations, it seems as if working in the direction of gravity can even hinder a movement. For example, in adduction of the thigh, gravity plays a part in resistance in that the muscles must use extra energy to control the rate of velocity of the leg as it returns to standing position. So in this case, it actually draws more energy from the muscles than would otherwise be necessary. Even so, since mechanical advantage/disadvantage is measured as the length of the effort (from the fulcrum to the point of muscle insertion on the bone) against the length of resistance, this extra energy is not figured into the computation.

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Shier, D., J. Butler, and R. Lewis. 1996. Hole's Human Anatomy and Physiology. William C. Brown Publishers, Dubuque, IA, USA.

*At this point, I have had the opportunity to write a number of laboratory reports. Taking the time to further explore the topics that we cover in the laboratory has enabled me to increase my understanding and comprehension of the human body. Writing these laboratory reports reiterates the material that we cover in lecture, as well as reinforces the complex physiology of the human body.*

***Erin Dyer, student***

## Response to *The Color Purple* from Biology 270

*The following essay is an example of an extra credit paper for Anatomy and Physiology (Biology 270). The assignment involved reading the Book of the Quarter (The Color Purple by Alice Walker) and discussing one or more correlations to Biology. The goals of the assignment were: (1) to participate in the college-wide reading, (2) to show that it is possible to relate biology to what might appear to be an unrelated book, (3) to facilitate learning by researching a topic, (4) to further develop writing skills, and (5) to cite references using a scientific writing style that differs from the conventional MLA format. Shelly Sytsma has done an excellent job of meeting the goals of the assignment in her paper dealing with the relationship of homosexuality to biology.*

***Debra Lancaster, instructor***

## The History and Implications of the Scientific Proofs for Homosexuality

**by Shelly Sytsma**

### Introduction

The Color Purple is a story which takes place in the early twentieth century. It is seen through the eyes of an African-American woman. The main character, Celie, struggles through life as a child exposed to incest and as an adult exposed to physical and mental abuse. Yet in some way, she knows what it takes to survive. Her husband's lover, a flamboyant blues singer, shows Celie how to laugh, to play, and most of all -- how to love. However, she struggles with this love because the remainder of the world tells her it is not "natural". Even in the popular and scientific cultures of today, this homosexual behavior is considered to be "abnormal" and consequently it requires an explanation. Because of this, biological explanations have been widely accepted over the last century.

Biological theories of homosexuality fit into the views of reproduction and sexuality that began in the nineteenth century. With the classification of homosexuality as a distinct category, homosexuals were excluded from the "norm". Biological explanations can be categorized as genetic, physiological, and endocrinological. On one hand, these explanations are used in the struggle for homosexual rights. Yet on the other hand, they could be used to "cure" homosexuals, because commonly "abnormal" conditions with biological causes promote the development of specific "therapies".

The belief that biology can explain homosexuality must be accepted carefully. As is the case with any scientific research, some of these theories and scientific methods have been taken completely out of context. Some studies imply that homosexuality can be reduced to the same-sex sexual behavior. Most of these explanations scarcely differentiate between male and female homosexuality. Moreover, homosexuality is poorly defined and researchers use a variety of behavioral measures to study the causes of it. The sample sizes are often too small and recruitment of subjects is sometimes biased.

**History**

The search for biological explanations of homosexuality began around 1865 when Ulrichs considered homosexuals as "female" souls in "male" bodies (Ulrichs, 1898). It appears that between the 17th and 19th centuries the one-sex model, in which the male was the only sex socially defined, was changed to a two-sex model that is still held today. The differences between the sexes were no longer understood as graduated differences in the same thing, but rather as two separate entities. Woman and man became completely distinct beings with regard to sex, body, sexuality, and their abilities.

Ulrichs (1898) based his understandings on "naturalness". His assumption that "male homosexuals" have female characteristics and that "female homosexuals" have male characteristics was an attempt to naturalize what was held to be "against nature". His works founded a tradition which became the thesis of later biological theories of homosexuality.

**Heredity**

Heredity (or genetic) models of homosexuality have been studied for 120 years. Since that time, they have been brought up to date, and today these theories are still present in both traditions. These theories were based on heredity studies by Ulrichs (1898) and later studies by Krafft-Ebing (1903). However, Ulrichs understood homosexuality as "natural", but Krafft-Ebing considered it pathological. Studies involving twins, which have also been applied to research into intelligence and schizophrenia, were used for support of the inheritance of homosexuality (Lewontin et al., 1982). In cases where monozygotic or identical twins are compared to dizygotic or fraternal twins, if one of the genetically identical twins is homosexual, then it is more likely that the other twin is also homosexual compared to the likelihood that both fraternal twins are homosexuals. This method has been strongly criticized. For example, twins reared together are also exposed to the same environment and this may limit the value of studies involving twins.

Evidence for a genetic basis for homosexuality has recently been published which claims to have found a locus on the X chromosome which is associated with homosexual men (Hamer et al., 1993). Researchers state that they have found five markers on the X chromosome that are linked to homosexuality. However, this evidence has been criticized and several scientists question the methodology and the conclusions drawn from the study (Hogan, 1993). The populations studied were not representative of the general population. One of the populations consisted of 76 men from an HIV clinic. It was difficult to obtain family data for these men. The second sample consisted of 38 pairs of homosexual brothers who were recruited through an advertisement and this may have resulted in the utilization of a non-random sample.

**Physiology**

As early as the 18th century, members of the field of psychiatry were preoccupied with the functioning and malfunctioning of the homosexual brain. This preoccupation originates from the psychiatrist Forest Gall (1791). He believed that different parts of the brain were arranged for distinct mental functions. He also asserted that sex drive began at birth. Although his theory was controversial and rejected in its extreme form, the concept was not. The American psychiatrist, Kieman (1884) built on Ulrichs' thesis (see above) and concluded: "It becomes necessary to ascertain whether the brain which determines the action of the mind can be so transposed that the female brain shall occupy the body of the male and vice versa.

Studies to date show evidence for the physiological basis for homosexuality because there are anatomical differences in the size of particular parts of the brains of homosexual males as compared to these same structures in heterosexual male brains (LeVay, 1991). The brain region in question is a small cluster of neurons in the hypothalamus and is alleged to be slightly larger in heterosexual males than in homosexual males. A similar study showed that the nucleus is approximately eight times larger in males than in females (Allen and Gorski, 1992). However, another study claimed that the size of that particular section of the brain does not vary with sexual orientation (Swabb and Hofman, 1990).

It is difficult to make anything of these new data. All of these studies involved a small number of subjects (about 16 to 19) and with these studies, there are conflicting results. In addition, it has been suggested that LeVay's studies may be biased due to his sexual orientation. Many gays admit that it would be easier to accept being gay if it was shown that their sexuality was inherent and unchangeable.

## Endocrine

According to the Viennese physiologist, Eugen Steinach (1919), the sexual object choice is determined by the proportion of the secretion of male and female hormones. Steinach based his theory on animal research in which female gonads were implanted in males, and male gonads were implanted in females. Animals with such cross-sexed gonadal assignments showed sexual characteristics and behaviors that corresponded to the implanted gonads. Steinach believed that he had proven the question of a biological (specifically endocrinological) basis of homosexuality.

Steinach then attempted to replicate his research in homosexual men. He searched for "female tissue" in their testicles. He reported that he found, especially in older homosexuals, signs of degeneration of the testicles and complete atrophy of the glands.

The Steinach tradition of research was passed on to his co-worker, Walter Hohlweg and then on to his pupil, Gunter Dorner. Since about 1967, Dorner investigated the hormonal causes of homosexuality. His research, which involved studies of rats, was based on the assumption that a sexual center in the brain is sexually indifferent in the embryo, but is hormonally different before birth. He believed that due to an excess of male sexual hormones during pregnancy, the sexual center of the female embryo is programmed in the male direction and through a surplus of female sexual hormones, that of the male is programmed in the female direction in homosexuals. He concluded that: "Neuroendocrinologically determined male homosexuality can be brought to far-reaching regression (reversal) in adult animals through surgical lesions of a female erotic center localized in the central hypothalamus (Dorner, 1972).

Like Steinach, Dorner also made suggestions for therapy, in the form of prenatal injections of hormones to correct the imbalances. He would like to allow women to "decide" whether they would prefer a homosexual or a heterosexual child.

## Conclusion

The nineteenth century conception of homosexuals established them as different from "normal". Subsequent works continue today, inspired by the attempts to confirm the homosexual as the "other". This attempt is reinforced by the media as "new results" about biological causes continue to make headlines. However, with these headlines, which explain homosexuality as genetically, physiologically, or endrocrinologically based, there is literature produced both for and against these explanations. It is difficult, at the present time, to determine which theories are to be accepted and which ones refuted.

Scientific explanations promise an advantage because the "hard facts" are accepted quicker than social explanations. However, these theories bring about attempts for cures or preventions and raise questions: Who will receive these preventions or when will the cures be performed? And if the cure is not chosen, will the individual be stigmatized further? It may be that the social acceptance of homosexuality may not necessarily be found in science and if it is, then we may not be prepared for the outcome.

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*My goal in writing this paper was to make an association between The Color Purple and my Anatomy and Physiology class. The main character in The Color Purple was told that she could not love another woman because it wasn't "natural". Homosexuality has been studied for years. As a society, it is easier for some people to accept homosexuality with a biological proof rather than accepting it as a social difference. However, I wonder if we are prepared as loving and caring individuals to properly deal with these proofs once we find them?*

***Shelly Sytsma, student***

## Responses to "Think and Communicate" problems from Business/Office Adminstration 107

*My objectives in assigning "Think and Communicate" problems from our text were: to increase opportunities for students to be involved with writing activities; to help students practice writing skills to explain concepts; to stimulate problem solving abilities so students develop critical thinking skills through the process of writing about a business problem; and to allow students to participate in a business related activity through a business case study.*

***Jane Gordon-Ball, instructor***

### Posting

**by Mary-Laure Bollini**

Writing the page number of the journal in the ledger account and the account number of the ledger in the journal is called a cross-reference. The posting reference column is the verification that all the steps have been done. If the bookkeeper writes the account number directly and he makes an error, it would be a lot longer to find the error. You cannot use his posting reference column to find it because it does not reflect what he really did. Another advantage of writing the ledger account number last is that it reduces the errors. First, when you write the number, it makes you think about the transaction and you are also able to verify that you have the same amount in debit and credit. Second, it insures you that the critical information is not missing.

*The best way to complete this exercise was for me to read the chapter and the exercise question before going to class. Once in class, when the teacher spoke about the exercise topic, I took as many notes as possible. Thus, I had three points of view: the book, the teacher, and me. After class, it was easy to arrange the elements together and write a solution.*

***Mary-Laure Bollini, student***

## The Mechanics of Compound Entry Bookkeeping/Accounting

**by Dallas Smeaton**

In order to explain the mechanics of what is known as a compound entry in bookkeeping/accounting, it is necessary to review the fundamental accounting equation. The fundamental accounting equation is the foundation or ground-level-rock principle of all bookkeeping and accounting rules. It uses the language of mathematics to state the balanced relationship that MUST ALWAYS exist between its elements of: assets, liabilities aid owner's equity, i.e., Assets = Liabilities + Owner's Equity.

This simply means that the left hand side of the equation must equal the right hand side of the equation.

How is this balance/equality maintained when it is necessary to record entries which involve more than two accounts on both sides of this equation? Is there a name for this procedure and how does it work?

As beginning students in bookkeeping we must be aware that there is probably no limit to the number of accounts that may be included/involved in the recording process of just one business transaction, and, therefore, no limit to the number of accounting entries. This event/happening of multiple entries on multiple accounts is called a Compound Entry.

How does a compound entry work and still maintain the necessary balance of the total amount of all accounts debited equaling the total amount of all accounts credited?

The example of how this works is as follows: A business bought equipment for the total price of $5,000.00, paying $2,000.00 down in raw, cold cash, and charging the remainder of the price amount of $3,000.00 (i.e.., the business went in debt to the tune of $3,000.00 dollars).

In analyzing this business transaction, we see three accounts are involved as follows: Asset/Cash, Asset/Equipment, and Liabilities/Accounts Payable.

Therefore: Cash is credited (decreased)............ $2,000.00

Equipment is debited (increased)........................$5,000.00

Accounts Payable is credited (increased)...........$3,000.00

Now, when the Asset/Cash credit of $2,000.00 is subtracted from the Asset/Equipment debit of $5,000.00 this then equals the Liabilities/ Accounts Payable Credit of $3,000.00.

Voila, the Fundamental Accounting Equation remains in balance.

*I wrote this assignment in response to a "Think and Communicate" question. I spent lots of time thinking. I gathered books in the library and read. Then I put my thoughts together and started to write, rewrite, and rewrite again. I am a serious student, and I want and need to understand the material thoroughly. If I understand it, I can put it down for others to understand.*

***Dallas Smeaton, student***

## General Ledger Posting

**by Carol Weremchuk**

The method that was used by this bookkeeper raises many questions! How does he know that everything has been posted? When does he record in the General Ledger? How does he prove to the owner of the business that all transactions have been posted?

In the steps of the accounting process, after the source documents have been journalized in the General Journal, the amounts are transferred to the General Ledger. After an entry is posted into the General Ledger the page number of the General Journal is recorded in the Posting Reference column of the General Ledger and the ledger account number of the entry is recorded in the Posting Reference column of the General Journal. This cross referencing gives evidence of where the amount came from. The numbers in a Posting Reference column represent a statement from the bookkeeper: "I have completed the posting of this entry." If it is blank, it means something is missing. The account number entry to the General Journal should be the last step and means that everything has been transferred. It acts as a verification of all the steps of the posting process.

Posting to the General Ledger should be done every day. When a number appears in the Post Reference column, it indicates that a series of steps have taken place to ensure that mistakes are limited. The completion of the posting allows you to know the status of the account which is critical information for a business.

*To me accounting is an exciting science. The systems within the generally accepted accounting principles establish the methodical manner in which information is analyzed, recorded, reported, assessed, organized and evaluated. Perhaps the most critical part of the problem presented is owning the consequences of your actions.*

***Carol Weremchuk, student***

## Drawings from Art 111

*It is possible to teach drawing skills, but not art. Embracing the creative process requires an effort and courage that goes beyond the fundamentals of acquiring skills in a basic drawing class. I commend the students whose work is presented here for their commitment and their openness in exploring the artistic process.*

***Caryn Friedlander, instructor***

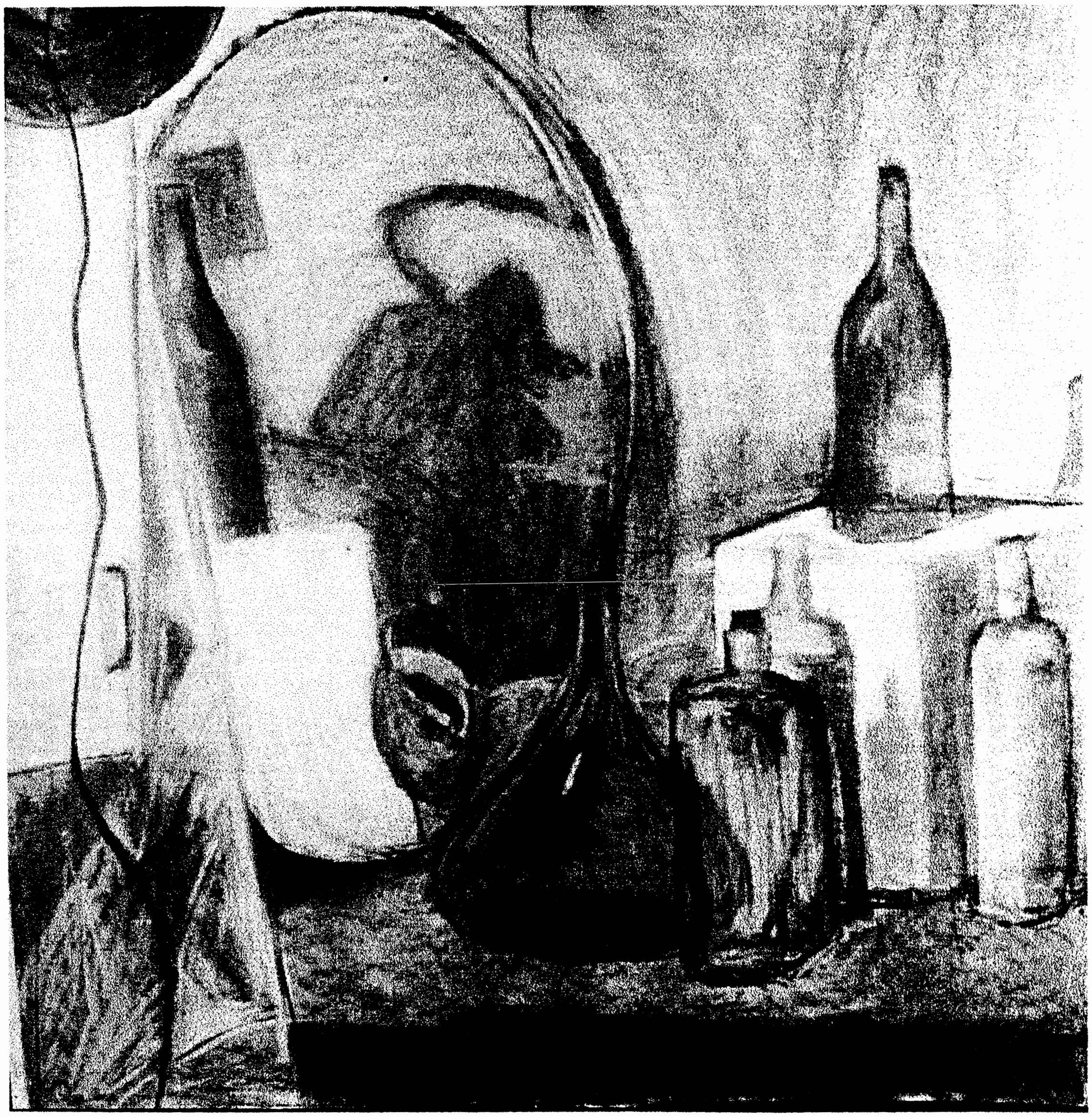
## Linocuts from Art 175

*Printmaking is one of many "voices" a visual artist can take. As artists and students, we explore the tools of the print medium with the goal of being able to integrate those discovered print qualities—the cut line, the layering of the inks, the texture of the paper—into the imagemaking process.*

*Some of the linocuts in this anthology are a response to an assignment in which the linoleum block was to be divided into eight sections. Each section was then to be filled with incised marks (using a variety of tools) to discover ways of creating tone, texture, and variety of line and form that are intrinsic to the relief print.*

*Some of the linocuts are personal statements—derived perhaps from an experience, a thought, or a fleeting moment of some seen event.*
*All of the prints are a merging of the medium with the student's own vision and the creative impulse.*

***Karen Blakley, instructor***



**Jordan Lawson**
*Untitled*
Charcoal, 38" x 35"

Artist's Note:

*The objective of this piece was to bring all of the objects in the picture closer to the viewer. This was achieved by distinguishing dark areas more than lighter halftones. This process allows the viewer to move through the entire picture rather than focusing on one individual object.*

***Jordan Lawson, student***

## "Learning to Speak the Language" for Business 195/ Introduction to Accounting

*In the Introduction to Accounting course, students respond to information given by the instructor about a fictitious business. Students are encouraged to discuss the information and to respond in writing to questions about the business. The information presented would be similar to a short case study and requires a student to think critically about the facts and to propose suggestions for improvements.*

***Richard Samples, instructor***

### Notes on Internal Control

**by Billie Jo Harvey**

October 9, 1995

Bellingham Floral Shopp
Attn: Jan Wheeler
1234 Alphabet Ln
Bellingham, WA 98225

Dear Mrs. Wheeler,

With any size business, large or small, it is essential to have a strong internal control process. A strong internal control process provides efficiency in operations, reliability of financial reporting, and shows compliance with applicable laws and regulations (Pincus, p. I-2-75).

I have looked over the procedures you follow at the Bellingham Floral Shopp, and have found both strengths and weaknesses in your internal control process. There seem to be far more weaknesses than strengths. But there is good news. The weaknesses can be made into strengths with a little effort and a few changes. Let me explain.

I'll start with the strengths. (1) Although Teri is allowed to write the checks for company expenses, she is not authorized to sign the checks. That means that you have the opportunity to oversee all expenses paid out with checks. By having the check writing process dealt with by two individuals, rather than one, it helps to eliminate theft or unintentional errors. (2) Another strength is found in keeping the cash receipts locked in your desk until they are deposited. Since the office is left unlocked during business hours, keeping the cash locked up helps prevent theft from employees and customers.

Now let me point out some of the weaknesses. (1) Since you, Teri, and Sharon all use the same cash register, it is very difficult, if not impossible, to determine who is responsible for any errors made or cash shortages found. To strengthen this procedure, you may want to consider one of the following options: having only one employee a day use the cash register, get a new cash register that requires the use of employee pin numbers to sign on with each transaction, or get two other cash registers and make sure each person works out of only one register. (2) You also mentioned that cash is used, from the cash register, to pay for small expenses like postage and delivery. A receipt is then filled out by the cashier, being either you, Teri, or Sharon, and placed into the cash register. This poses some potential problems. Employees may take out cash and make up a fictitious receipt. This possibility could be eliminated by requiring an original receipt for the purchase or expense to be attached to the back of the hand written receipt. It is also a good idea to make a petty cash fund and keep that money separate from the cash used for business purchases. Petty cash funds should be operated by only one employee and the funds should be locked up at all times. When cash is removed, it is replaced by a written receipt. And the original receipt is always attached to the back of the written one. (3) You mentioned that Teri is allowed to write checks which are located in your office. It is definitely not a good idea to keep blank checks in an unlocked office during business hours. People could steal the blank checks and forge them for money. Sharon could also write out checks, or type them, and you would probably think it was Terry. I would strongly recommend that you keep your office locked during business hours, and keep the checks locked up in your office. (4) I also recall reading that the checks were not written in consecutive number order, and sometimes the stubs weren't even filled out. This makes it very difficult to track any checks in case of an error or if a stop payment is needed. Writing them in consecutive order and filling out the stubs each and every time a check is written makes it easier to balance the accounts and lets you know what each check was written for. What if Teri wrote out a $100 check for cash, cashed it herself, and just didn't fill out the stub? It would be very hard to detect. I suggest that you require the checks to written in consecutive order and the stubs to be completed. Then when you sign the checks, you can look at the stub and be sure the money is going to the right place. You can also tell much easier if a check is missing.

There are several things you could do to make your internal control process much stronger. Keep these things in mind: limit physical access to assets, separate duties between employees, make vacations mandatory, number all documents (in consecutive order), and independently check the accounting records. I know it sounds like a lot of change, but believe me--it will be for the better. And I would be happy to have lunch with you sometime to go over my suggestions in more detail.

Good luck with your business. I hope to hear from you again soon.

Sincerely,

Billie Jo Harvey
6789 Whatcom St.
Bellingham, WA 98225

*I began preparing for this assignment by reading the appropriate chapter in my text and developing a good understanding of the concept of internal control. Then I took the understanding and applied it to the problem by identifying the strengths and weaknesses of the business. After organizing my thoughts and conclusions, I wrote a letter to the owner, from myself, as If I were the accountant.*

***Billie Jo Harvey, student***

## An investigative paper from Chemistry 251

*How many times have we looked at the contents of commercial products and wondered what all the ingredients are or what they do? In my organic chemistry survey course, I have students investigate an organic compound of interest, as long as it is available in a commercial product. In addition to finding out more about that compound, they also learn how to use reference sources other than their text and more important, to evaluate the information from those sources to determine the accuracy of that information. Inger's paper on aspartame (Nutrasweet) had information that even I did not know.*

***Steve DeRoy, instructor***

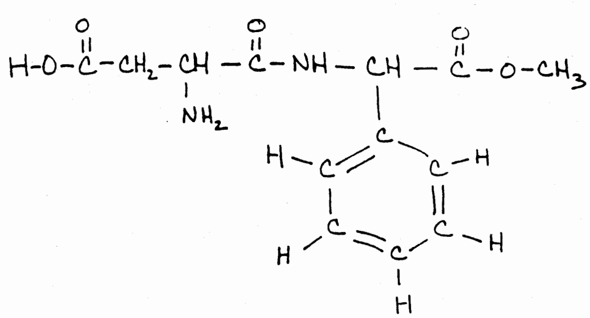
### Aspartame

**by Inger Gjovaag**

Aspartame is an artificial sweetener that is used in many "diet" foods and drinks under the brand names "NutraSweet" and "Equal." Since its approval by the U.S. Food and Drug Administration in 1974, aspartame has been used widely in an increasing number of food and drinks. It is found in (among other things) soft drinks, cereals, table top sweeteners, sugarless gum, gelatin desserts, pudding mixes, frozen yogurt, jams, jellies and salad dressings. The widespread use of aspartame behooves the consumer to learn more about this compound's chemical structure, how it is used by the body, and the safety of this artificial sweetener.

<u>Structure and Properties</u>

Aspartame is made by combining two amino acids, aspartic acid and phenylalanine, into a dipeptide that is then methylated into a methyl ester (McRae 1989 p.283). This molecule contains three carbonyl carbons: an amide, a carboxylic acid and an ester bond. It also has a primary amine on the third carbon and an aromatic ring attached to the sixth carbon.

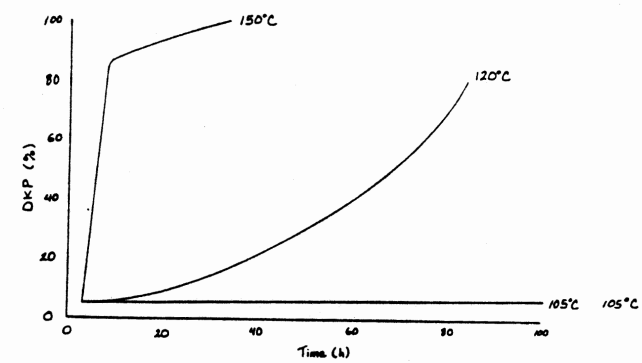


In its dry state, aspartame is a white, odorless crystalline powder that is slightly hydroscopic. Its appearance resembles sugar, but it is many times sweeter.

The stability of aspartame depends on moisture, heat and pH. Even in its most stable form, anhydrous and at room temperature, aspartame undergoes some cyclization into diketopiperazine (DKP) ( Mc Rae 1989, p. 281).

Since aspartame is a food additive, it is more interesting to us to know about its stability at higher temperatures and/or in aqueuos solutions. At higher temperatures, aspartame cyclizes into DKP at a much faster rate (ibid. p 281).

Heat sensitivity makes aspartame most useful for products that don't undergo an intense heating process.




In an aqueous solution, pH plays a determining role in the stability of aspartame. Between pH 3-5 aspartame is most stable. At pH levels below three, aspartame hydrolyzes into a dipeptide. At pH levels above 5, it cyclyzes into DKP (ibid. p 282).

<u>Sweetness</u>

The sweetness of aspartame was impossible to predict since neither aspartic acid nor phenylalanine is sweet on its own. Aspartame was in fact discovered accidentally in 1965 by researchers trying to synthesize medicine for ulcer therapy. It appears, however, that L-aspartic acid is responsible for the sweetness of aspartame. Since aspartame's discovery, researchers have been able to synthesize several other sweeteners that use the L-aspartic acid group. The sweetest substance ever reported, Aspartylaminomalonic acid methyl fenchyl diester, is an L-aspartic acid derivative 33,000 times sweeter than sugar (ibid. p 281). None of these other sweeteners have been FDA approved.

Aspartame itself is 225 times sweeter than sugar. Aspartame is effective not only because of the strength of its sweetness, but also because of the quality of its sweetness. It does not have a bitter aftertaste like saccharin, but it does have a lingering sweet aftertaste which may not be to some individuals' liking. Aspartame is also useful as a flavor enhancer or extender, especially for citrus flavors.

Metabolism of Aspartame

Aspartame is metabolized as a protein by our bodies. The dipeptide is broken down into aspartic acid and phenylalanine and absorbed in the small intestine. Individuals with the metabolic disorder phenylketonuria (PKU) cannot metabolize phenylalanine and should avoid products containing aspartame. However, should a small amount, such as a 12 ounce can of diet cola, be ingested by an individual with PKU, it is not enough to harm the person (RN p71). Although aspartame is a "diet" food additive it provides the same amount of calories per weight as sucrose. However, since significantly less aspartame is needed to do the same job as sucrose, the calorie contribution of aspartame is insignificant.

Safety of Aspartame

According to the U.S. Food and Drug Administration, aspartame has been thoroughly researched and is safe for human consumption. The acceptable daily intake for humans is 50 mg./day per kilogram of body weight. A can of diet soda has 433 mg. of aspartame. So one would have to drink more than 8.5 cans of diet soda every day for his entire life before showing any "appreciable risk" (ibid. p 284).

Some scientists, however, question both the interpretation and authenticity of the data in the studies that support the safety of aspartame. A pharmaceutical company, G.D. Searle, owned the patent for aspartame, and applied for FDA approval to market it as a food additive in 1974. The application became a concern when the FDA discovered suspicious discrepancies in safety reports done by Searle for other products.

The FDA established a task force to examine 15 studies on the toxicity and safety of aspartame. Twelve of these 15 studies were reviewed by an independent review company which was under contract to Searle. They reported all twelve studies to be authentic. However, the audit of these 12 studies did not evaluate the thing that most concerned the critics of the study: the quality of the design of the experiment and the researchers' procedures (Millstone 1994).

Of the three studies that the FDA examined, two involved the effects of aspartame on reproduction in rats and the other looked at the carcinigenicity of DKP. The FDA task force found some conclusions in the study that did not match the data. In other places it was impossible to determine if the conclusion matched the data because the data had been changed and summarized to the point that it was impossible to interpret. In the DKP test, it was impossible to tell if the rodents even ate the chunks of DKP that were added to their food. But for what one task force called “administrative rather than scientific reasons” (Millstone p. 72), the task force was not to evaluate the validity of the studies but “figure out what the conclusions would have been had they been fully and completely reported” (ibid.). The task force concluded that these errors would not significantly change the conclusions of the study.

In 1980 a public board of inquiry investigated the effect of aspartame on brain damage and carcinigenicity. This board of inquiry was unable to rule out the possibility of aspartame causing brain tumors. It recommended that aspartame not be permitted as a food additive until it was tested further. The board of inquiry's role was merely advisory. The FDA commissioner chose to go against the recommendation of several FDA scientists and approve aspartame as an artificial sweetener (ibid.).

Since then the use of aspartame has ballooned. However, many independent researchers have raised questions about aspartame's toxicity, especially its effect on brain function (ibid. p.73). The three studies originally examined by the FDA have not been repeated.

Aspartame has revolutionized the diet food industry, and made many calorie conscious people very happy. However, consumers should be aware that the scientific community does not unanimously endorse the safety of this product. If one chooses to use aspartame, he may want to do so in moderation.

Works Cited

McRae et al. eds. <u>Encyclopedia of Food Technology and Nutrition.</u> 1989. Academic Press, New York.

Millstone, Erik "Sweet and Sour: Unanswered Questions about Aspartame" <u>The Ecologist</u> Vol 24, No. 2 pp 71-74.

## An observation essay from Early Childhood Education 105

*Observing children in real-life situations brings textbook information alive for education students. Through these direct observations students gain a depth of understanding of developmental norms and individual differences in children. After studying typical age-level characteristics in the various developmental areas as well as variations in children's development, this assignment asked the student to observe two children of the same age in an educational setting and compare their apparent characteristics in two developmental areas. This required collecting and analyzing observable data and evaluating this information. Assignments of this nature combine direct experience in the education arena with written communication skills. Education students like Corinna develop a realistic view of their future career as well as learn the importance of skillful writing in communicating observation data and inferences.*

***Luanne Lampshire, instructor***

### Analyzing Variations

**by Corinna Hopley**

My observation took place at an elementary school. I observed a class of 28 third graders. The classroom was set up in a really interesting way. The desks were configured in pods of six. All the students' desks faced each other in these small groups. The two students that I observed were both female six year olds. In observing them I took note of these children's physical and social characteristics and compared them. I then compared these similarities and differences to developmental norms of this age group.

Student "A" was the first student I observed for her physical development. Student "A" was generally a little more reserved than student "B". Student "A" was fully developed in her physical coordination; she displayed no trouble with any fine motor skills. I noticed right away the difference between the two posture of the two students. Student "A" sat in a proper position with both feet on the floor and sitting upright. Outside on the playground student "A" was very active and enjoyed letting off steam. At this age it is very important for children to have time to be very active and use their energy. Student "A" seemed to really value her physical competence and this was used as a key to socializing. On the students' recess children began to play a game of tag, and this attracted about 15 other students. Student

"A" was very actively involved in this and ran until she was exhausted. I noticed that she stood close to the playground aide when resting and catching her breath. There seemed to bean imaginary safety zone around the playground aide. Children, including student "A", clustered around her in order to feel grounded and protected. The need for adult comforting seemed to be evident among this age group. This type of behavior is normal and healthy at this age, as long as it is offered in small doses and the children do not rely on it too much.

Student "B" displayed many of the same physical developmental characteristics as student "A". Student "B" seemed a little more daring and wanted to test the limits of her own body a little more. Student "B" was smaller and more slender than student "A", this may have accounted for her different physical abilities. In the classroom student "B" sat at her desk with one leg tucked under her, and moved around a lot in her seat. She displayed the same motivation and excitement when playing outdoors as student "A". Student "B" was more aggressive and daring. She did tricks on the bars in front of her peers, and encouraged student "A" to join in. She clearly enjoyed the physical challenge of the bars. She displayed more socialization with boys than student "A". Maybe student "B" had had more experience with boys because she seemed more adjusted to boys her age. She also liked to rough house with them and show her physical strength. Student "B" showed an amazing appetite at after recess snack time and ate most of her lunch on this short break. This probably is a sign of a growth spurt this child is experiencing. Between student "A" and student "B" there are more similarities than differences in their physical development; they both seem right on target for their age group and show strong signs of normal physical growth.

Socially these two students displayed a lot of similarities and differences. Student "A" seemed to be able to work for longer durations of time than student "B". She displayed the desire to talk less and to work independently. For example, the students were asked to write in their journals (which is a daily assignment); while doing so, student "A" diligently worked on her journal and student "B" wanted to chatter about the topic she had chosen to write about. Student "A" worked thoughtfully for at least twenty minutes with no interruptions in her concentration.

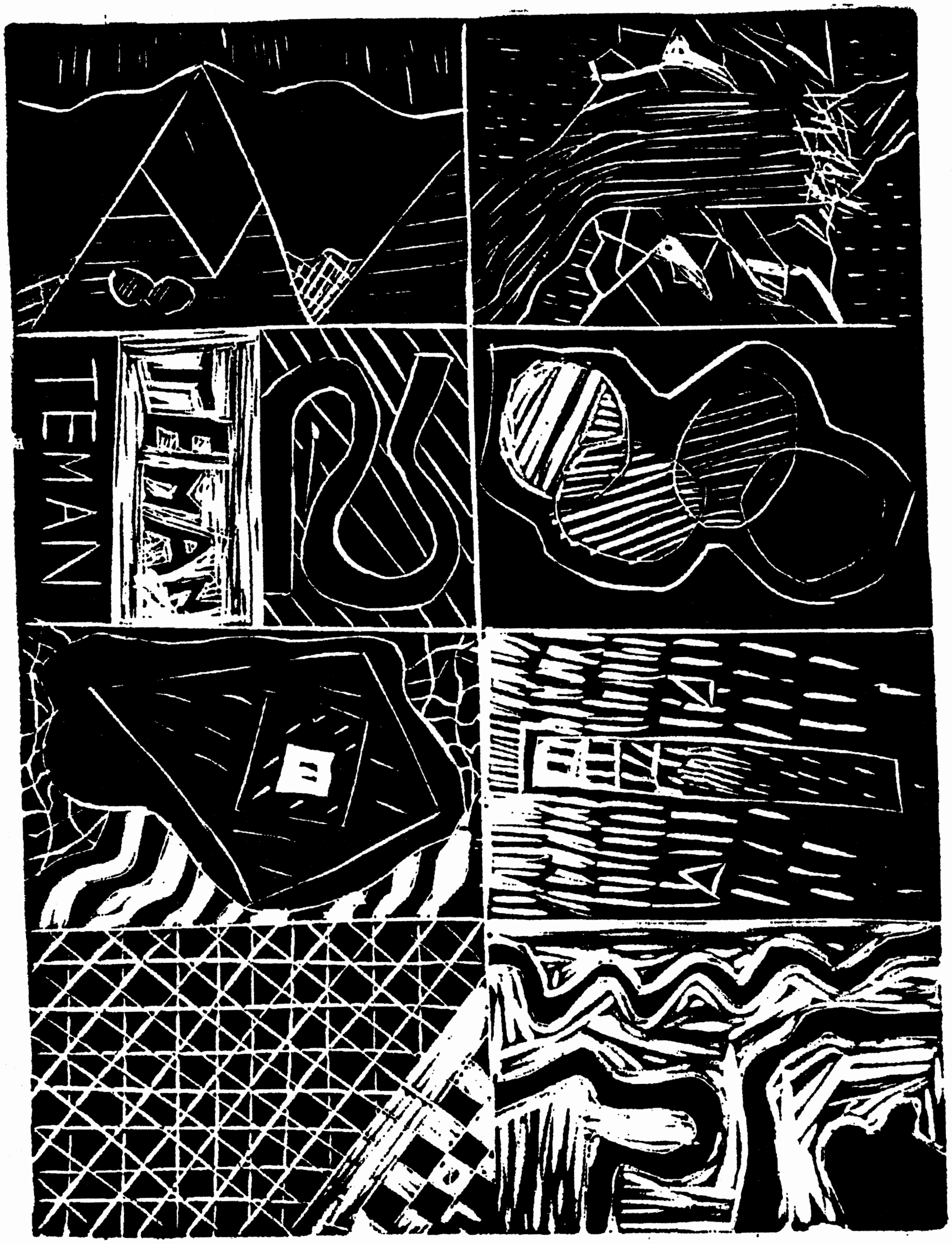
Student "A" had lots of friends (all females) in the class. This is socially normal for this age group--to make friends with the same sex. Student "A" showed respect for the teacher and had no problem abiding by school rules. Student "A" went far enough to tell students in her pod as to stay on task and work harder! It is obvious at this age children are still learning from each other.

Student "B" showed more of an outgoing personality than student "A". She spoke out in class and was involved. Student "B" volunteered to read her journal entry to the class with no hesitation or embarrassment. She also displayed the ability to work in short spurts of time. She had a little shorter attention span than student "A". Student "B" thrived on interactions with teachers and peers. She also showed respect for the teacher and the rules of the school. Student "B" had several friends in her class and was very socially outgoing. She had friends of both sexes, which differed from student “A".

Through these observations I learned that these children are on the right developmental track. Most of the characteristics matched up with the developmental norms displayed in their age level charts. Knowing little about these children's backgrounds, it's difficult to draw fair conclusions about their different social behaviors. At this age they seem to have distinct personality differences and this definitely accounts for many behavioral differences. As far as their physical differences go, they seem to be right at the same pace. Through this observation I learned a lot about similarities in children the same age. This class was exciting to be part of for one day. I think a lot of things are changing for the better in education. This classroom displayed a distinct respect for children and their different learning styles. It is exciting and encouraging to witness this type of learning going on in our schools.

*In this writing assignment I was assigned to observe students in a classroom and then draw conclusions from these observations. I compared two students of the same age group and then compared them with the developmental norms of their age group. While observing I took notes on the children's behaviors and physical abilities. I then took these notes home and made a paper out of them. I organized my paper in a way I thought would be a clear, concise way of delivering what I wanted to say. I first made a list of the physical and social characteristics of each child. I then began to build on these thoughts as I started to write my first draft. After making lists of characteristics of each child it was a lot clearer to me what I wanted to say in my paper. This assignment was really interesting and I really enjoyed being able to be out in the school system.*

***Corinna Hopley, student***




**Teman Clark-Lindh**
*Untitled*
Linocut, 8" x 6"

Artist's Note:

*In creating this work of art I wanted to experiment with the medium using varying thicknesses, and lines, and crosshatching, making different widths of cuts throughout to make it as varied as possible. I wanted to achieve a nice gradient. Speedy cut, the medium I was working in, was softer than linoleum, and much softer than wood, so I had to think about how this material needed to be worked. I went from square to square, idea to idea, and as I worked I saw a sequence develop by itself as I went along. After a certain point I began to consciously try very different things.*

***Teman Clark-Lindh, student***

## A philosophy statement from Early Childhood Education 105

*At the end of the quarter I ask Introduction to Education students to synthesize what they have learned throughout the quarter into a personal philosophy statement. The objective is for students to consider the knowledge they have gained through the course through their textbook, their observations, and their own personal reflections and develop the beginnings of their philosophy on education. This requires combining analysis of the most relevant concepts with the process of personal evaluation to create an original statement with sound educational theory and personal meaning. In doing this, Bobbi and her educational peers begin the process of articulating their knowledge and feelings in their chosen professional field.*

***Luanne Lampshire, instructor***

## My Personal Philosophy

**by Bobbi Siguaw**

To find my personal philosophy about education, I will reflect on the following statements:

1. I believe children are...
2. I believe a good child care facility or educational program should...
3. It is very important that children...
4. When a center or program neglects, or overlooks...
5. The issues that concerns me the most are...
6. In the future, I hope to be able to...

I believe children are all different from one another. Each child develops differently and thinks differently. Children are alike at certain stages of development, but may reach those stages of development at different times. Some children will walk before others, and some will grow hair before others. Genetics affects the rate of growth and development. It affects hair color, eye color and body shape. These are all things that make children different from each other.

The environment a child is surrounded by also makes children different from each other. Attitudes of adults, culture, and different styles of the caregivers also make up who the child is and who he will become. The different values and beliefs a child is taught will make him different from every other child either in a slight way, or in a major way.

With this in mind, I believe a good child care facility educational program should treat each child as an individual. It's important for staff to understand the differences in each child. Some children learn by watching others first then attempting the material on their own, and some children like to jump in with both feet. Children learn at different rates and by different methods. All staff members in educational programs and child care facilities need to respect each child's individuality and be aware of these differences. There are also cultural differences and social differences that staff need to take into consideration when working with children.

It is very important that teachers understand these differences and see things from the child's perspective. In educational settings a staff that is able to see from the child's perspective will be able to construct a solid curriculum and comfortable environment that caters to all the different individual styles. If the staff is able to see the child's view of the world, they will be able to have a large variety of activities and a well-rounded curriculum that are unbiased and allow each child to learn in his own comfort zone.

Part of a well-rounded curriculum allows children to learn through play. When a center or program neglects or overlooks the importance of play, it could affect the child's growth and development a great deal. Play is beneficial to a child's development because it allows the child to develop social skills by interacting with others. Children learn problem solving through play and they also learn about themselves. They learn their boundaries and how to understand the basics of life through experimenting, role playing, trial and error, and they learn how to share. They also learn team work through play which is very beneficial throughout life. When centers overlook or neglect the importance of play it becomes an issue that concerns me.

Play is an issue that concerns me because sometimes adults refuse play as punishment. If a child doesn't finish his homework, he isn't able to go to recess. Recess is just as important as classroom work. As an adult, social skills, problem solving skills, and knowing the basics of life are just as important as knowing math and language, and these skills are learned through play a good part of the time.

In the future I hope to be able to construct a well-rounded curriculum that allows a child to be his own individual person and allows him to feel good about himself. I hope to be a very positive influence on children by using positive reinforcements, and allowing children to participate in class decisions. It is very important that children learn through play and open ended materials as they grow and develop. Children should be able to create their own projects out of a variety of materials and be able to form their own opinions and learning styles. Having a well-rounded curriculum will obtain these goals and allow the program to have an unbiased atmosphere. This kind of classroom would cater to each individual child and his uniqueness, allowing the child to become a well-rounded individual.

*This paper was an assignment for Education 105, Introduction to Education. At the end of the quarter, I was given a list of partial statements, and I was asked to complete the statements. The objective of the assignment was to pull together everything I had learned in this course and find my own feelings and motivations for studying early childhood education.*

***Bobbi Siguaw, student***

## A narrative from English Composition 100

*In English 100, we read narratives written by professional authors from the Transitions text. We also discuss narrative techniques. One of these techniques is "showing versus telling."*

*I ask students to choose a significant experience in their lives and to write a narrative helping us to "see" that situation. Steve chose to share with the class a moving experience from his time as a medic in the military. He helps us to feel the Sinai desert with its intense heat and imagine ourselves in a difficult situation.*

***Wendy Borgesen, instructor***

### The Gettysburg Address:
### A Walk in the Park

**by Steve Allison**

In 1988, I was assigned to northern Africa, to a small peace-keeping force composed of eleven different nations. Specifically, we were located in the Sinai desert, a few hundred miles from any town, village, or organized community. At our fire-base, we saw the occasional nomadic Bedouin tribesmen moving or following their goats or camels from some unknown mysterious point to another, but their presence didn't constitute any degree of continuity in terms of community. One day or hour they'd be there, and then like a small wisp of wind, they'd be gone. Our job was to patrol the Sinai desert, keep peace between the Egyptians and Israelis, and stay out of trouble. I was there for a year

A person knows an hour before sunrise what kind of day it's going to be in the Sinai. A small breeze means soon there will be a major wind storm. The positive part of that is that when the wind blows, the swarms of biting flies are hiding somewhere. With no breeze on the rise, there's a hot day coming, real hot. The positive thing about that is if it's too hot, even the flies won't be out. If hot chow is on the way, which is rare, maybe it can be finished without the pesky bugs eating half of it. It seems that only the intense heat or a big wind will keep the flies away. When it's hot like that, everything seems to stand still; even words move slowly the intense heat. Sweat comes freely. Even in the early morning hours a person can feel his sweat running down his neck, his back, finally collecting in the belt-line, and eventually soaking socks inside already heavy combat boots.

It was on this type of morning that our squad set out on its mission: to clear landmines left over from someone else's war. Whose war it was, we didn't know. They had all been there in the desert: Russians, Egyptians, Israelis, Czechs, Saudis, Germans, British and even American forces. They all had left mines in place without telling anyone where they were, not even the peace keeping force. The squad had a medic and leader (me), three riflemen, a radio-operator, and an EOD (explosive ordinance disposal) specialist. The team had been together for a few weeks and had been out a few times training together, but this was the first time it was for real. A leader is supposed to know all his people, but my experience was mostly with Specialist Billy McCarthy.

Billy was a fortunate guy. He had grown up in a family with a time-honored tradition of serving in the military. He was nineteen years old, always talking about a girl named Judy, and was about as naive as could be. He claimed that he wanted to join the Army to please his dad, but you could tell he was in it for the long haul. He said he volunteered to be in Explosive Ordinance Disposal because he failed to qualify for airborne training due to bad feet. It was obvious he was jealous of those of us who wore the beret. His dad was in the airborne and went to Viet Nam; he even got injured and lived to tell about it. One could tell he was proud of his dad and was maybe in some way wanting to live up to "living on the edge." The airborne paratroopers were known for living on the edge.

The EOD guys lived on the edge. They did the real thing. In peace-time, if one can call it that, they were risking their lives. Absolutely no one bothered these guys when they were doing their thing, and no one made a hassle for them once they returned back to the fire- base. Perhaps we all understood, or pretended to anyway, what it was like for them. People tried to believe they knew why the EOD guys drank at night. We were trying at the same time to comprehend why they shook or jumped when someone dropped a plate. Many people were mystified when at times, even over the smallest, most insignificant things, how they would go ballistic. It was tough for them and everyone knew it, and no one talked about it. The EOD folks kept their own counsel.

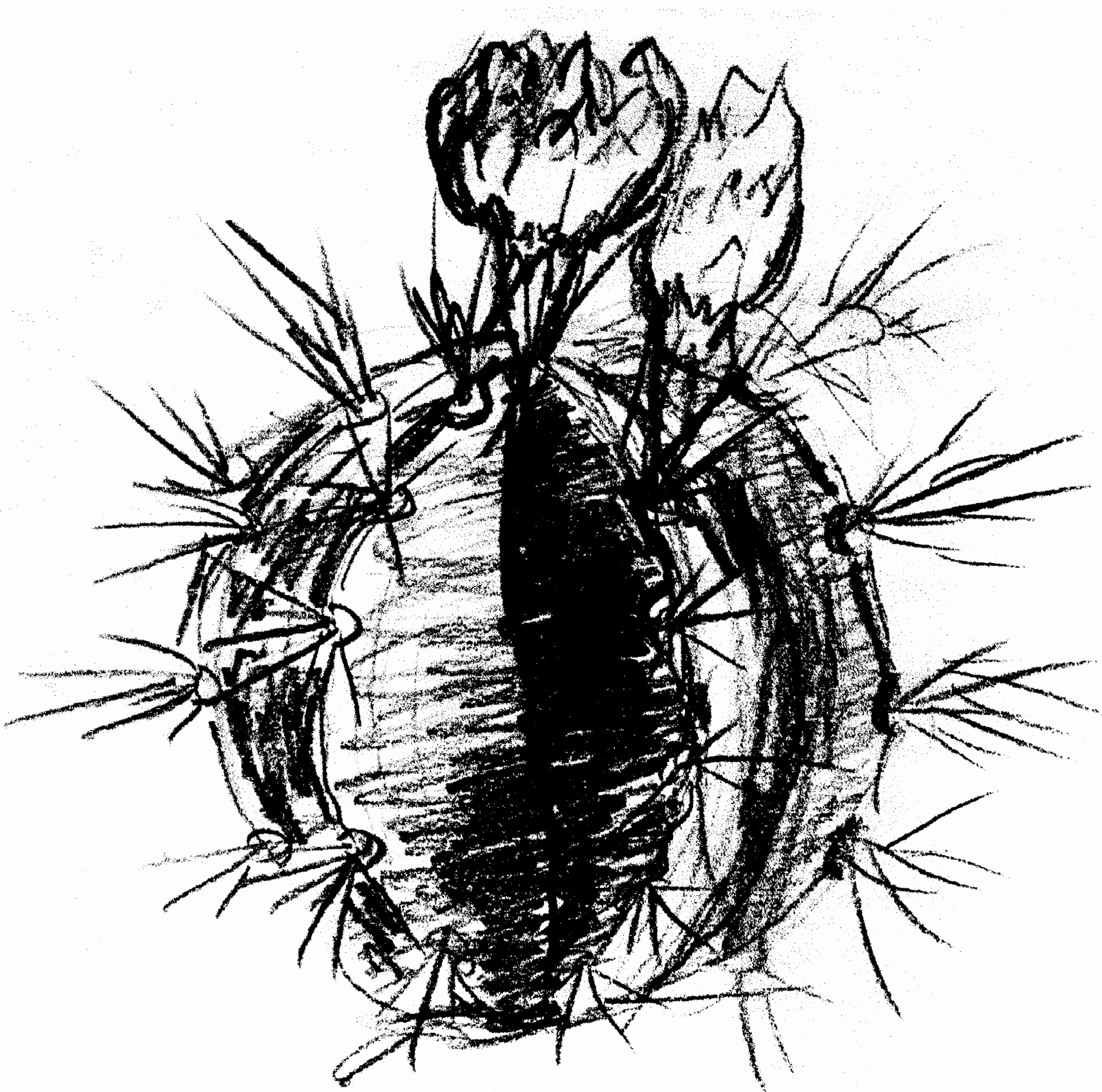
Billy had completed the third de-activation procedure on some antique land mine when we heard first the explosion and then the screams. It's hard to think that a man, even if he was only 19, could make such high-pitched screams. After ducking to avoid flying debris, it's odd how quiet it is after an explosion, in the heat. The silence was broken only by the screams. The cries sounded hideous and the screams were pitiful. Because I was the leader and medic, and just quicker than the others, I applied the tourniquet to his left leg below his crotch. 1 saw the ripped shirt, showing his open chest. I saw his heart still beating. There was nothing that could be done: not there, not at that time, and not by me, and I was the "doc."

The screams and cries stopped, or at least the volume went down. It was tolerable. Perhaps the two shots of morphine did their thing. The others were gathered around, those that could take looking at him. I've never been one to hold secrets from those who should know what I know, and thank God, here, there were no secrets. Billy knew, in his own way of understanding; he knew. Shit, we all knew. He was dead. The whole team focused on me and Billy, and just what the hell were we supposed to do now? How long was this going to take? What were we supposed to do in the meantime? What does one do while waiting for one of his brothers to die?

"Sarge, can you do me a small favor?" said Billy, coughing, blood oozing from his mouth. Said I, "Sure, man. Whatever you ask." I was hoping it would be something like praying, holding his hand, telling his mom or this Judy girl that he was tough to the last or something like that. Maybe his request would be something typical that would make his ol' man proud. "Sarge, can you say the Gettysburg Address for me? Come on man, it should be a walk in the park for a guy like you." In the heat, reinforced by the silence and stillness, the death rattle almost echoes. Almost like thunder, like an explosion it comes. Flies were buzzing now, sweat running in my eyes, down my back soaking my shirt. I made feeble attempts to make him comfortable. I don't know why he asked me to do that. Maybe it was the morphine. I now know the Gettysburg Address by heart, but I won't say it out loud.

*Prior to writing this essay I determined my purpose. I wanted to bring to light, to a younger audience, an experience of mine that was very meaningful. I didn't want to relive the experience. I wanted to convey to younger people a sense of belonging to something that they are in fact distanced from. I wanted to present this in a factual way without emotions being involved in its interpretation. Two days prior to making up my mind about the subject for the essay I had been talking with an individual and describing my current situation, one of being recently retired from the Army after 22 years, and now being a student. I realized during this discussion how connected to my past I really am and how readily I can draw upon it.*

***Steve Allison, student***



**Linnea Spitzer**
*Cactus that looks like an atom bomb*
Pencil, 8.5" x 11"

Artist's Note:

*<u>Cactus</u> was a frantic attempt to draw a plant quickly. I found a copy of an interesting subject in a magazine. I used charcoal to draw the plant with a first, second, and third line, dark to light, to make the shadows and spikes stand out to make it look three-dimensional.*

***Linnea Spitzer, student***

## Three narratives and an examples essay from English Composition 100

*Wayne DeLaronde, Delaney Farmer, Heather McCarty, and Jesse Unick wrote these essays winter quarter for my English 100 class. These four pieces are all out-of-class essays that were revised and then submitted to the English 100 reading panel at the end of the quarter. Three of the essays use narration and description as the mode of development (the means of developing the main ideas), and the other uses examples. All of the essays passed the panel. I am particularly pleased that these essays are published because these four students did not consider themselves "writer"; they all were able, however, to write successful essays because they chose topics that mattered to them and they revised their work, most of them several times. I believe they all discovered that they could learn how to write well--and that writing well, though it takes hard work, can be a very satisfying experience.*

***Sherri Winans, instructor***

### My First Three Months with the United States Navy

**by Wayne DeLaronde**

"The Navy.... It's not just a job; It's an adventure," a Navy recruiter named Edward exclaimed as he handed me a thirty page questionnaire. Edward was sitting across from me at a Navy recruiter's office in Detroit, Michigan. "The work ain't that tough, and you'll be able to visit foreign countries for free," he said as though his hearing was about to fail. "All you have to do is sign your name on the dotted line."

Those were the last moments of freedom that I experienced before signing my name to a four-year contract of imprisonment. My freedom to think, choose, or even hope was brushed away by the stroke of a pen. My mother had to sign her name on the paper as well; I was only seventeen at the time and needed parental consent to make adult decisions. I had enlisted in the United States Navy, and there was no turning back. Excited to begin my great adventure, I asked Edward when could I leave. He replied with a smile, "Tomorrow, kid! Tomorrow you head for San Diego." I could hear him mumble something about a monthly recruit quota as he disappeared into the next room. He reappeared minutes later and handed me a commercial plane ticket bound for San Diego, California.

The plane ride lasted nineteen hours, making eight stops along the way. I arrived at the San Diego airport and called the phone number the recruiter had given to me for the military base. Oddly enough, the phone number turned out to be a home of someone who did not speak English. The man on the other end of the phone was upset, perhaps because I had called at three o'clock in the morning. It was clear he didn't want to talk with me when he hung up abruptly. My great adventure was already not going well.

I searched the airport and found a phone book. I finally spoke to someone on the phone who sounded like military personnel. He assured me that a car would pick me up at the airport within an hour. Two hours later a white van labeled "Property of the US. Navy" arrived. A young man, not much older than I, opened the van door and yelled, "You must be the new guy! Get in, and let's go!" Five minutes later we arrived at the Recruit Training Center military base, which was walking distance from the airport.

The military base reminded me of prison movies I had watched when I was younger. A ten-foot, barbed-wire fence surrounded the complex. Armed guards were posted at each of the entrances. Every building was solid concrete with very few windows. Large airplanes thundered a few feet overhead as they landed and took off from the San Diego airport. The entire place had a chilly feel to it despite the eighty-five degree weather.

I was escorted to a desk where a large man in a black uniform was watching television. "Sign here to get your blanket, sheets and pillow," he grunted as if I were an annoying distraction from the television show he was watching. I took the bedding and asked my escort where to go next. He instructed me not to go anywhere, even within the confines of the base, without prior written approval. I would need permission to eat, sleep, talk, or use the toilet. If I had any questions, I would address the drill instructor by shouting, "Sir, I have a question, sir!" Thinking for myself would not be permitted without prior consent. His lecture became an incomprehensible mumble as a jet airplane roared overhead.

I spent the next three months of basic training living under these conditions. I started having second thoughts about the military. Maybe the United States Navy was not the correct choice for me. It was already too late for me to change my mind. I was considered property of the United States Government. My personal freedom to experience life had been signed away by the stroke of a pen, and there was no turning back.

## The Day at Mt. Baker Vista

**by Delaney Farmer**

BUMP! DING! SLAM! We felt like balls inside of a pinball machine while venturing up the gravel road full of pot holes. "How much longer?" I kept asking myself. I started starting to get sick from all this up and down and side to side motion. Thump! The car hit the paved portion of the road. Soon after, parking lots started to appear before our eyes. A sigh of relief came from within me as I saw a log cabin in the distance; we were there.

My friends and I got out of the car to breathe the brisk, cold morning air. We got out our backpacks and put on our hiking boots. We locked the car and were ready for our hike to begin. We started down the dirt trail until we reached a wooden post with a lid on it; it was the sign-in station. We all took turns signing in our names and departure time. We were soon headed down the trail as our adventure began. As it was still morning and we were shaded by the trees, the looming shadows over us made for a chilly hike. We were intrigued to see the surroundings; the ferns and the mushrooms which sprawled along the forest floor, the dead, decaying trees which laid along the ground. If we looked hard enough, we would see that the insects and forest creatures made use of the dead, fallen trees for their homes and food supply. In the unseen distance we could hear the sounds of birds and other forest creatures. We would not really have noticed these things if I had not taken the time to look around and listen. We normally don't experience these surroundings; it was a nice change. We were at peace here. There wasn't any noise or air pollution, just a clean environment.

The trail kept winding up as we kept moving on. Soon we heard rushing water in the distance and as we kept on traveling, it got louder and louder until we reached a decent size stream. Before us stood a wooden bridge with two ropes for the railings. At first it did not look appealing to cross, but as others crossed, so did I. After we crossed the river and headed further up the trail, our bodies grew fatigued, so we found a place to sit and rest. I could feel the stress starting to build within my legs. Taking off my backpack, full of food, a first-aid kit, and extra clothing, was a relief. Time passed quickly, for the next thing I knew, we were all getting up to go.

Now and then we would see other groups traveling down the trail; most of them had just finished camping overnight and heading home. One person from one of the groups cautioned us as he traveled past us, "Watch out for that stream up there, it's pretty violent." We acknowledged his warning and kept on moving. The forest foliage was gradually getting less dense and the surroundings were getting more visible. Soon we heard rushing water up in the distance. It was yet another stream. This time it was going to be much harder to cross because it had no bridge, just wet rocks to hop on. The water wasn't moving too fast, but I didn't want to fall and get wet. A hop, skip and a jump, one by one we crossed the stream; fortunately no one got wet. We still had to cross it when we came down. I was wondering, "That couldn't be the stream that the guy was warning us about, could it?"

Soon we were out in the open, where there were just rocks, grassy hills, and trees spread out here and there. At one point, while crossing this steep hill, we could look down and see for miles out across a valley of trees which seemed to go on forever. Looking up, we could see looming over us the magnificence of Mt. Baker. We continued alongside the hill and through the grassy path. We were so high in elevation, patches of snow were lying on the ground; it was kind of weird making a snowball in the middle of spring. It was just past mid-day, with the sun beating down on us; it felt warm and relaxing. We were soon starting to sweat from all the clothes we had on. Once again we stopped to take a rest and to shed some clothing. I took off my backpack to find my back was soaked with sweat from all the clothing and the backpack. We were all relaxing in the sun, but we weren't the only ones enjoying the comfort of the warmth. Above us on the rocks were these little creatures that resembled gerbils, but much bigger. They looked so cute, just laying there sleeping in the sun on the warm rocks. Occasionally one would roll over to embrace the warmth of the sun on the rest of its furry little body, or one would look up and just stare at us. Some would even move away, probably afraid that we were crowding in on their territory.

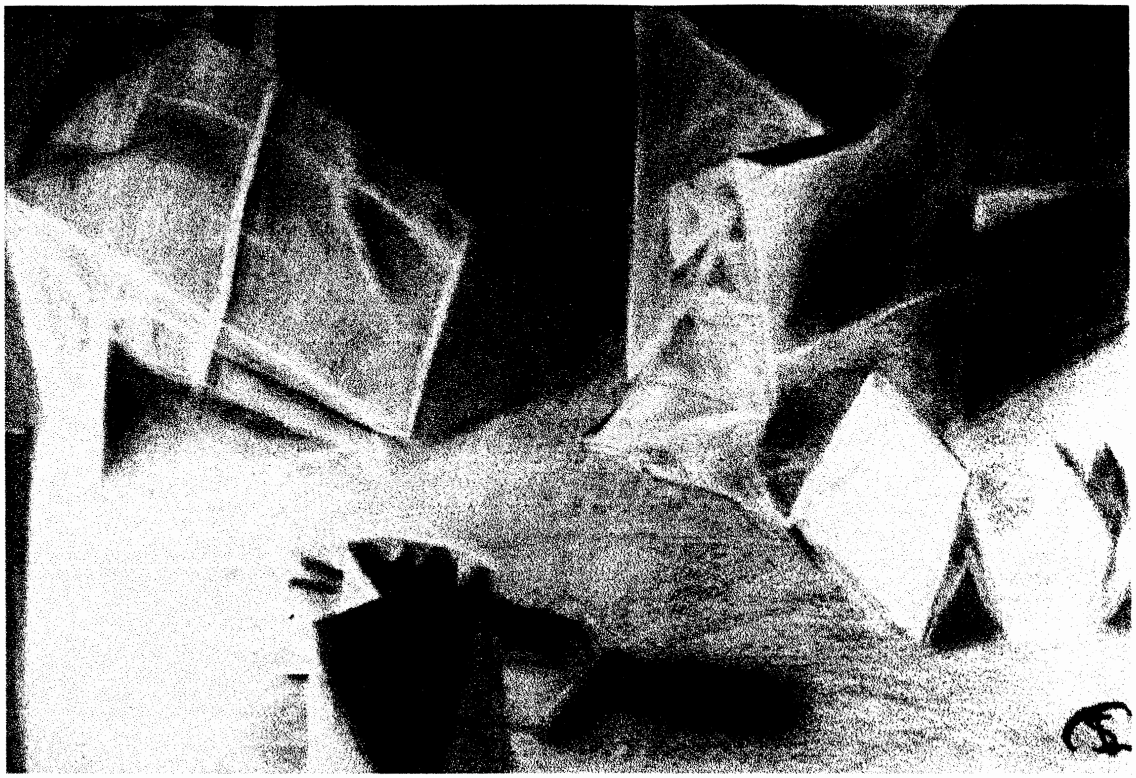
We were soon ready to continue on our upward trip. I was told by one of the other members of the party, who had previously been on this hike, that we were almost there. Up ahead of us we heard rushing water once more, but as we traveled closer, this rushing water sounded different. As we approached the sound, the water was much louder than the ones behind us. We traveled a few yards over a hill and there before our eyes was a huge, rapid stream. My first impression was that this had to be the stream that the guy had warned us about, and now I knew why. There were no bridges to be seen and only a few rocks, but far apart. I couldn't see anywhere to cross, at least not from this point. One of the members of the group said that right over that hill is our destination; all we have to do is cross this stream. Half of our group split up; a couple of the people went down the stream looking for a place to cross, and I and some others traveled upstream. After traveling about half a mile up, we finally found a place that seemed easier to cross. It wasn't the best, but it was the only place that we had encountered. Looking down the steep incline at the other part of our group, we could see that they had succeeded at crossing the stream and had continued onward. Part of my group was a little hesitant to cross, for the rocks were wet, and they were afraid of slipping. Even though the rest of my group was a little slow crossing, it didn't stop me from hopping right across. Since we were so high up the hill, we had to travel downward to get back onto our original path. I decided to proceed on a steeper approach down the hill while the others moved on a different path. In the end, however, we would intersect. I was hopping from one dry rock to another making some good time; but my luck was soon to change. Skipping from one rock to the other, and with the help of gravity, I soon found myself descending to the ground with a huge THUMP! I sat there pondering to myself, "all morning I've been skipping across wet rocks, but when I jump on some dry rocks, I slip?" I slowly got up, to notice two things. First, my butt was very sore from the harsh and sudden impact. Second, my left hand felt very warm. I lifted my hand to find it covered in blood. I must have been in some sort of shock, because I wasn't in a state of hysteria. I just looked at it and said, "Whoa!" Without thinking, I brought my hand to the stream and rinsed it off. That's when I felt the pain of the cold glacier penetrating the incision of my wound. I didn't think until later that the water could have been contaminated and I could have infected my hand. I took off my pack, unzipped it with one good hand, and took out my first-aid kit. I took out some gauze to wrap my hand to stop the bleeding. By this time, the other group that I was with caught up to me and were amazed to see what had happened. I told them I was fine and that I would take care of it when I got home. So they helped me with my mess and off we went to rendezvous with the other group.

We reached the other group to find that they had been there for a good fifteen minutes and had already sat down for lunch. We quickly joined them. I told them what had happened and we all giggled over my misfortune. I didn't realize until later that our lunch spot was in a really nice location. It was overlooking a gigantic glacier valley. The glacier was massive. Sitting down felt great but my legs, hand, and butt did not feel too well. My legs were sore and fatigued from the long hike. My butt was still sore from the impact with the rocks, and my hand had started to throb since I was starting to get some feeling back into it. We sat there for about 45 minutes, just relaxing and enjoying the peaceful surroundings. Mt. Baker still loomed over us like a father to an infant protecting his child; It was a site to see.

The day was coming to an end and we packed everything up and worked our way downward. We crossed the rapid stream where the other group crossed, finding out that crossing the streams was not a problem at all. We were finally at the end of our hike. We arrived at the sign-in station. We all took our turns crossing out our names and proceeded to the car. What a relief it was to see the car; we were back. Taking off our unnecessary clothing and our boots, which was the best part of the trip, we then changed into more comfortable attire and headed for home. Once again, BUMP! DING! SLAM! We were once again like balls inside of a pinball machine, going down the gravel road full of pot holes; we were heading back to civilization.

*Out of all the essays I had to write, I believe writing a descriptive essay was one of the most enjoyable. I've always enjoyed describing things rather than listing them or comparing them. I wanted this essay to be one of my best, so I had several people proofread it, and then I had more people proofread it a month later. To me, the end result was something that I was proud of.*

***Delaney Farmer, student***



**Steve Leland**
*Untitled*
Charcoal, 18" x 24"

Artist's Note:

*Paper bags are very interesting subject matter. They seem like they would be extremely boring and easy to draw, but the subtle shadows and creases make them a landscape for the imagination. I truly enjoyed my exploration of their surfaces.*

***Steve Leland, student***

## What Does God Look Like?

**by Heather McCarty**

Is God a man or a woman? Is he or she black, white, yellow, or red? Perhaps there is not and never was any God at all. Regardless of religion, people have an everlasting wonder about the being who is listening to their prayers (if any). I think that people who call themselves true Christians or "believers" have just as many doubts and/or questions about God as do the people who lack religion. Many may be like me, spending hours at a time pondering creation and death, and never feeling for sure that they know the truth. In Alice Walker's novel The Color Purple she uses God as one of her central topics. She offers the best universal definition of God that I have ever come across. She presents a God who loves all people equally, no matter where they live or what color they are.

In the latter part of the novel Celie and Shug, two of the main characters, are discussing what God looks like. Celie's version of God's image is very traditional, while Shug's description is new and unusual. Celie describes her God as being "big and old and tall and gray bearded and white. He wear robes and go barefooted." Shug responds by saying that this is the same God that she used to imagine. I was very surprised to discover that I too share this old white man as my God image. Shug goes on to say that white men wrote the Bible and that is why God is thought of to be white. I wonder, how could God be white if he has so many children that are brown, black or other shades? The more I thought about it, the more ridiculous it seemed that God would be or look like a person at all.

It would make more sense to say that God is the universe, the planets, and the people combined. The following is the quote from the novel that changed my perception of God from an old white man, to a more spiritual, unbiased entity. Shug says, "My first step from the old white man was trees. Then air. Then birds. Then other people. But one day when I was sitting quiet and feeling like a motherless child, which I was, it come to me: that feeling of being part of everything, not separate at all." The following sentence has deep meaning for me: Shug says, "You ever notice that the trees do everything to get attention we do, except walk?" This statement is significant because I have felt God in the trees before. It is as if God is the earth and everything in it or on it. I have never been able to state my religious beliefs before, but now I can say with conviction: I believe that God is the earth and the people. There is Heaven or Hell only where people create it for themselves while they are alive on the earth.

The most important piece of knowledge that I have absorbed from this novel is that it is not necessary to go to church (or to feel guilty for not going) to find God because God is within us all. People go to church to share God. Perhaps when there are many people together, searching for a sign from God, the presence is strongly felt because, there is strength in numbers. Perhaps Shug was right when she said that God loves everything that we love and would like it if we just sat back and admired "its" beautiful art work.

If everyone would believe that people are connected spiritually by the God of our universe, the world would be a happier place. Most likely, we would be more serious about stopping pollution and would therefore stop killing our God. To me, this seems so simple and true. I wish the whole word would see God as Alice Walker and I do. It is amazing to imagine the overwhelming amount of people killed due to religion. Many people want to prove that theirs is the real God. I wonder about the Bible and always have. Could it be just a book some white man wrote a couple thousand years ago? Does it name all the different religions and different Gods in the world? Does it say who is right? I'll agree with Shug one more time. Why waste your life worrying about doing this or that to go to heaven when this earth may be the only heaven available? All the people of the world should open their eyes and enjoy being alive!

*I wrote "What Does God Look Like" to fulfill the requirements for English 100. In the process of writing this essay, I learned much about my personal beliefs. I was relieved to learn about Shug's perspective about God and decided to write about it so it might have an impact on my readers. I thought, maybe, people who read this essay would agree with me and, therefore, learn to accept people for who they are.*

*As for the structure of the essay, it is unified by quotes from Alice Walker's novel The Color Purple. I follow the quotes with my personal ideas and the beginning of a possible solution.*

***Heather McCarty, student***

## Grandma

**by Jesse Unick**

As my grandma lay there in the hospital bed, unconvinced that her life was coming to an end, our family wept over her, praying for a miracle. Grandma was in her late 70's and had lived a rough and disturbing life. My grandma was now taking her last few breaths, and my family was completely devastated. Throughout these days, one thought had been running through our heads. Who gives the word to allow the suffering to end for our beloved grandma?

This day did not come as a shock to many of us because we had seen it coming for many months and even years. Grandma's first stroke had been about three years ago, and it was the starting point of her rough and heart-sickening time that was to come. Some of the things my grandma loved were animals, sewing, church and most of all her family. Her heart being so strong and her smile so bright, she made things seem like normal. Grandma didn't fuss about her pain or complain to us about her problems. She kept on ticking and made the best out of everything she could.

Everybody really had tried to forget about the stroke, but we could see in each other's eyes fear of what could come next. Unfortunately, what we feared happened, and Grandma had another stroke a year and a half later. After this stroke, my grandma could not see color, and it also affected much of her brain. Grandma never was the same after that stroke, and it affected the lives of everyone in our family very much. Although the stroke took much of my grandma's will power, she still tried to live her life to the fullest and did what she could to help the world we live in. She still went to church every Sunday and would do her best to take in every stray animal in the neighborhood. Finally, the last and final stroke had come and had taken everything that was left of my grandma's fighting spirit.

As the days progressed, the minutes seemed like hours, and the days seemed like weeks. It was now the last remaining days of my grandma's life, and it seemed as if it came so fast. My family was exhausted and stressed out, for it caused much tension in the hospital room. My father was so devastated that he drifted away from our family. He looked very pale and was not eating very much. He did not speak for many days and only sat around weeping. I felt sorry for my dad because until now he had not accepted that his mother could pass away at any time. My grandpa was even worse because he is a stubborn man who will not believe in anything but his own ways. He was in a severe depression that left a hole in his heart that will never be filled. My mom and I had seen Grandma's death coming and were ready for the circumstances ahead.

My family stood in the little hospital room, hoping for the best and waiting for what would happen next. There was a smell of sadness and despair that floated above our heads. Only one important question was running through our minds. Do we let Grandma suffer on a machine, or do we give her the freedom to float up to God and his angels in heaven? There were many opinions on what to do, but the decision ultimately was my grandpa's, and, because of the depression and loneliness he was feeling, he would not let my grandma pass on. My opinion was that he was making a tragic mistake and only making Grandma suffer more. Then, as if carried away by an angel of mercy in the night, my grandma passed away in her bed, asleep and peaceful.

My grandma had lain in that bed for many days not knowing if her life would come to an end any minute, and my family had watched praying every second for her. A death is a very tragic experience in life that everyone must encounter. Death of a love one can be a life changing episode or the start of severe depression. My dad and Grandpa are still not the same after what had happened, and I believe that they may never be the same. We all must go sometime, some sooner than others. But our fond memories of Grandma will remain with us all, forever.

*I would have to say three words would best describe the way I wrote the story "Grandma," and they would be the following: reality, critical thinking, emotional perspective. I first used reality by examining life experiences that could possibly be used for a topic to write about. After finding one, I examined it thoroughly. Then I used critical thinking to analyze ways of breaking down the topic and putting it into an organized outline. Finally, I added some emotional perspective to the final draft and organized it into a nice neat essay.*

***Jesse Unick, student***

## A narrative from English Composition 101

*In order to develop their own stories, students in English Composition study professional writers. This class read Maya Angelou's "Champion of the World" and George Orwell's "A Hanging." Both writers speak from their personal experiences in these well-known pieces.*

*Students observed that Angelou reveals telling details about her characters to give them life and help readers to feel the emotion of the situation she describes. Orwell's strength is in his carefully chosen words that sketch vivid pictures of his characters and their behavior.*

*For this assignment, students were asked to emulate the storytelling qualities of Angelou's and Orwell' s writing in order to describe an incident in their lives that was a revelation, a situation that caused them to re-think their values, their relationships, their place in the world.*

***Vikki Ryan, instructor***

### Bitter-Sweet Dreams

**by Carolynn Elliott**

The footsteps were muffled by the plushness of the carpet. The "cush" sounds of footsteps were getting nearer and nearer. My ears strained to hear just how near they were. I snuggled deeper down into my goose down pillow and drew the blanket tighter to my chin. I closed my eyes feigning sleep. Quietly the bedroom door opened. The only way I knew the door had opened was the light-beige glow that comes through closed eyelids. I heard my father's deep, low whisper saying, "Sweet dreams baby girl." A hint of a smile came to my lips as my father closed the bedroom door gently. I could rest in peace. Dad was home. Our family was complete with his arrival home.

Many years have passed since my girlhood dreams of sweet. As I lie in my bed I hear the sounds of keys searching for a lock and my husband's curses in a slow, slurred manner at the top of his lungs. His keys have fallen from his thickened fingers as they do every night he comes home drunk. He has been out on the town with his "Road Dogs." Road Dogs is a term he uses to call his pack of friends who are always around from morning till late in the night. I glimpse at the fluorescent green numbers on the clock. He's home early. It is only three a.m. Something must have interfered with his having a "good time". Perhaps he drank too much and got belligerent. Tonight is just another night where his alcohol-temper is out of control.

As I lie there in our bed, I hear the front door open, then close. The peace that I felt before his homecoming is gone. I try to relax as my muscles tighten up. I sense what is sure to come with him being home. I can hear his heavy footsteps staggering down the hall. He is muttering to himself in unintelligible English. The sudden "crash" as he stumbles against the wall makes my already tense muscles tighten to knots. As he leads himself to the bathroom, I hope remembers to lift the seat. I know this hope is made in despair. It's just another wishful thought that is added to all the others of my marriage. I hear the commode flush. It is a signal to close my eyes and feign sleep.

I don't want to see the one I call husband. In his blood-shot eyes I see my death. I lie there on my side of the bed in a tight fetal ball. As the door clicks open a waft of air flows to my nostrils I smell his most common smell. It is always the some smell, a mixture of beer, Thunderbird, and stale cigarette smoke. The weight of his body collapses to his side of the bed. I wonder when he will turn his attention to me on the other side. In a booming voice that breaks the odious air, he says, "Give me a cigarette." Feigning the game of sleep, I lie there with my back to him. I can't see what's to come. With the ease of a two hundred pound, lumbering ox he snatches me up by length of my hair. Again he asks, "Where's a cigarette?" With a jerk I pull my hair free, not wanting to succumb to him. I pick up the cigarettes off the night stand and toss them to him. I turn on the night-light. I want to see what's to come next. As if I know how to read his mind, or just use to this routine his left arm swings around with intense force and makes contact with my face. I stand there, my face pounding with the heat of his contact. A string of profanities comes from his mouth. He says I treat him "like an animal." And my throwing the cigarettes to him is like, "throwing a dog a bone." With another slap, I sink to my knees. I refuse to show him my hurt, so I watch and wait for more. I know I could break down into tears, but I won't allow him that power over me. His assault of anger continues in physical and verbal abuses. I still won't allow any pain to surface. He can ravage this physical being in which I reside, but he will never hurt the true spirit inside of me. This spirit I call pride. After what seems like hours he carries himself to bed. With no realization of his actions, he passes into a clouded, intoxicated sleep.

I lie back into the corner where I have landed from his assault. My muscles hurt from tension and the contact of force. I taste something on my lip. It has the familiar taste of blood. Even if I wanted to, I can't cry. I take this to be a sign of mind over matter. I am exhausted and lie my head on my knees. I drift off into sleep. My dream is waiting there for me. I see the light-beige glow through closed eyelids. My father's deep, low whisper, "Sweet dreams baby girl." A hint of a tear comes to my eye. In my dream I feel the peace and security of family that I have left so many years ago.

Two years have passed since my marriage to this man ended. My mind wanders to a time ten years earlier when my heart found love in this man. His possessiveness assured my heart that he too was in love. I felt honored that a man could care so much as to take note of the clothes I wore. I could see the jealousy in his eyes when another of his gender noticed me. I never flaunted my female attributes and everyone knew I was his. I thought I had found what was truly love. I had always been the apple of my father's eye and I relished the fact I had found a man just like dad. It didn't matter that his skin was mahogany or that my love for this man was unacceptable to my family. And to this man I was wedded. In my doing so I was disowned by my family.

Three years into my marriage a doctor informed me that I was pregnant with our first son. I was elated to tell my husband that our love had grown an offspring. My elation was soon turned to concealed hate when he asked, "Who's the father?" The years that followed my husband's possessive, jealous behavior increased along with his alcoholism. Three more children were born during our marriage. The financial responsibility was solely on my husband's shoulders.

By the time our last child was born I had given up on any reconciliation of our marriage. All the love I had inside of me was tendered upon my children. As for my husband, I had imagined one hundred and one ways to murder him. My children were the only ones that stopped me from committing this act of violence. Their big, brown, deer-like eyes always sought me out after their dad fell into his intoxicated sleep. Their little arms hugged me. They felt it was their responsibility to comfort their mother. I would shy away trying to hide the disfiguration and blood on my face. At that time their father's drinking and abuses had become a routine.

I tried to escape to a "Battered Women Shelter." There my children and I shared a room with other women and children of similar pasts. I found it hard to look and talk to these women. It was terrifying to see myself in the faces of other women. Women who had been so severely beaten that they would need reconstructive surgery. I felt grateful that I had went to the shelter with only a swollen, discolored eye and a shattered eardrum. I stayed less than a week at the shelter. There too the supervisors tried to control me. The supervisors set up rules for the security of the women in the shelter. The rules were: an eight p.m. curfew for the boarders, a duty roster for each woman, and a wake-up call of six a.m. These rule made me feel even more imprisoned. Even by escaping my husband I was still not free. Accepting these rules were hard for a woman who was emotionally scarred, physically sore and mentally anguished. The last thing I wanted was to have someone tell me what to do. I had a husband for that. On the fourth day at the shelter my money was depleted. With no other option, I went back to my husband.

Through the years of my marriage, a hundred times or more, I had called my parents' phone number. I knew they would pick up the phone on the third ring. Their "hello" on the other end was all I needed to hear. These phone calls became part of my lifeline to a future. My pride would never allow me to speak. I couldn't allow myself to admit to the defeat of my marriage. I had married for better or worse and was committed to my vows. I felt deep down where my soul and heart resided as one that when the time came for me to admit defeat I could call on my family.

That day came when the night before had been like so many in the past. I looked down at my children and realized that their mom was a maimed, frightened animal. Worst of all, they-were suffering--just as much as I was. It was then that my defeated pride surfaced and I dialed the memorized phone number. I looked down into my children's tear-filled eyes and knew we needed help. As the third ring came my nerves tingled. The deep, low voice of my father came over the phone, "Hello?" My own voice was barely audible as I whispered, "Daddy, I want to come home."

The eight years of hell that I had lived with my husband ended with the confrontation of family. My husband came face to face with my family of five brothers and my father. My husband knew that any physical attempt to keep me with him would cost him his life. My brothers made it perfectly clear that this physical contact was what they wanted him to do. My youngest brother, who is well over six feet tall, and weighs over two hundred and thirty pounds, warned my husband, "You ever come near my sister and her kids again and you're dead."

Our new life began when we reached the home where I was raised as a child. With this return home my children are being taught what true family love is. They are learning that love is not the physical, mental, and emotional assault that their father had shown, but the unconditional, supportive love that years apart from family can't take away.

Now as I lie in bed at night, I can hear my father make his way to his grandchildren's bedroom. As I hear their door open, I know that we are safe. I feel peace once again.

**Gayle Salisbury**
*Black Velvet*
Linocut, 9.5" x 5"

Artist's Note:

*I chose the subject matter "black velvet" because I thought it would lend itself well to what I like about linocuts—the contrast of dark and light. I enjoy working with different papers to enhance the qualities of the print. I used a handmade gampi paper to help convey the silkiness of the velvet. The fine lines in the dress also help to illustrate the fine quality of the fabric, whereas the contrast of the blunt-rustic strokes in the background show the difference between delicate and rough. I hoped all of this would help the viewer feel and "see" the elegance of black velvet.*

***Gayle Salisbury, student***

## An analysis paper from English Composition 101

*Sheryl Loya responded to an English 101 assignment with the following essay. This was the third (out-of-class) paper for the quarter, an option which allowed her to perform a written analysis of an advertisement of her choosing in print (as opposed to broadcast) media. Assignments such as these encourage students to exercise several abilities. In terms of communication process, Sheryl first determined the purpose of her communication, which was to separate a subject into parts, describe each part, then discuss each part's contribution to the whole. She has also "analyzed audience characteristics" and the "occasion" of the essay by understanding college writing expectations and the role of analysis in communicating. Because this was the third out-of-class paper of the quarter, Sheryl also considered feedback in peer review addressed specifically to paragraph coherence and sentence effectiveness, sections studied in the Little, Brown Handbook.*

*Sheryl's communication skills are evident. She has performed a critical "reading" of her print-media ad, examining both the visual images and written copy, identifying main ideas and broader cultural, historic, and personal implications. Her writing is the product of good thinking abilities, employing both critical thinking and problem solving skills in order to accomplish her purpose.*

***Judy Collins, instructor***

### Interpreting

**by Sheryl Loya**

In the June 19, 1995 issue of Newsweek, Lincoln National Life Insurance sponsored this harvest-hued academial promotion featuring two fresh-faced student debaters. The advertisement uses three basic elements: text, setting and students, to communicate to the reader. Through this triad we are reminded of President Abraham Lincoln's legacy and we learn of the advertiser's commitment to education, youth and non-violence.

"Lincoln always believed the word was mightier than the sword" reads the boldface text under the photograph. This sentence stands out as the thesis for the remaining text and perhaps the entire ad itself because it clearly communicates the advertiser's message. Reading the remaining text reveals a connection between Lincoln National Life Insurance and President Lincoln's dedication to truth and straight talk. We are asked to believe this life insurance company embraces the same values as our beloved President because it cosponsors the Lincoln Life Lincoln-Douglas debates for thousands of American high school students.

One hundred thirty seven years ago Abraham Lincoln was thought to be bold but foolish when he challenged brilliant, influential incumbent Stephen A. Douglas to a seven-part debate series in Illinois' Senate race. Little-known, Lincoln won the debates by asking simple questions which Douglas could not answer without offending either the North or the South. Though Douglas did win the senatorship, he lost the support of Southern democrats, which cost him the presidency in 1860. Plain-speaking, tall and homely, Lincoln won the peoples' hearts and the election.

The text also aligns the issues facing Abraham Lincoln and Stephen Douglas with today's social problems. Certainly the words "significant moral and value issues" can apply as easily to the rapid growth, taxes and slavery of 1860 as to the issues of welfare reform, national defense and racism today. One example is that of "squatter sovereignty," the main focus of the Lincoln-Douglas debates. This term meant new territories could decide the slavery issue for themselves, without Congressional input or authority. This parallels the recent debates in Congress regarding individual state rights and funding in the highly emotional abortion issue.

Finally, the text advocates the use of word power as the solution to solving today's problems. In our violence-ridden society, the idea of peaceful conflict resolution is wonderfully refreshing. The middle paragraph suggests this is something Lincoln Life Lincoln-Douglas Debate participants already know. By participating in the debates, the sponsors and students can change the focus of problem-solving from swords to words, and build character besides.

President Abraham Lincoln was born into poverty and minimally educated, yet he rose up to lead America through the painful division of civil war and became the "great emancipator." Lincoln is famous for his simplicity and straightforward manner in speaking the truth. In subtle ways, this advertisement's set design reminds us of these traits. The austere surroundings in the classroom echo Lincoln's plainness. All interior lines are clean, straight and unadorned. Like Lincoln's physique, the windows are tall and towering; even the individual panes are uncharacteristically narrow. No curtains or wallpaper here; there is nothing to hide. These windows and walls are honest. Even the hinged shutters outside are pure and functional. Unlike the thin decorative imitations nailed to siding today, these Confederate blue shutters can be closed and fastened to provide secure protection from storms.

Other factors in the scene hint that "Honest Abe" himself would be comfortable in such a room. The lectern and nearby table are built from sturdy timbers; polished, but free of decoration, much like the furniture Abe may have grown up with. One look through the left classroom window reveals the school's Federal architecture, familiar in the capitol during President Lincoln's term.

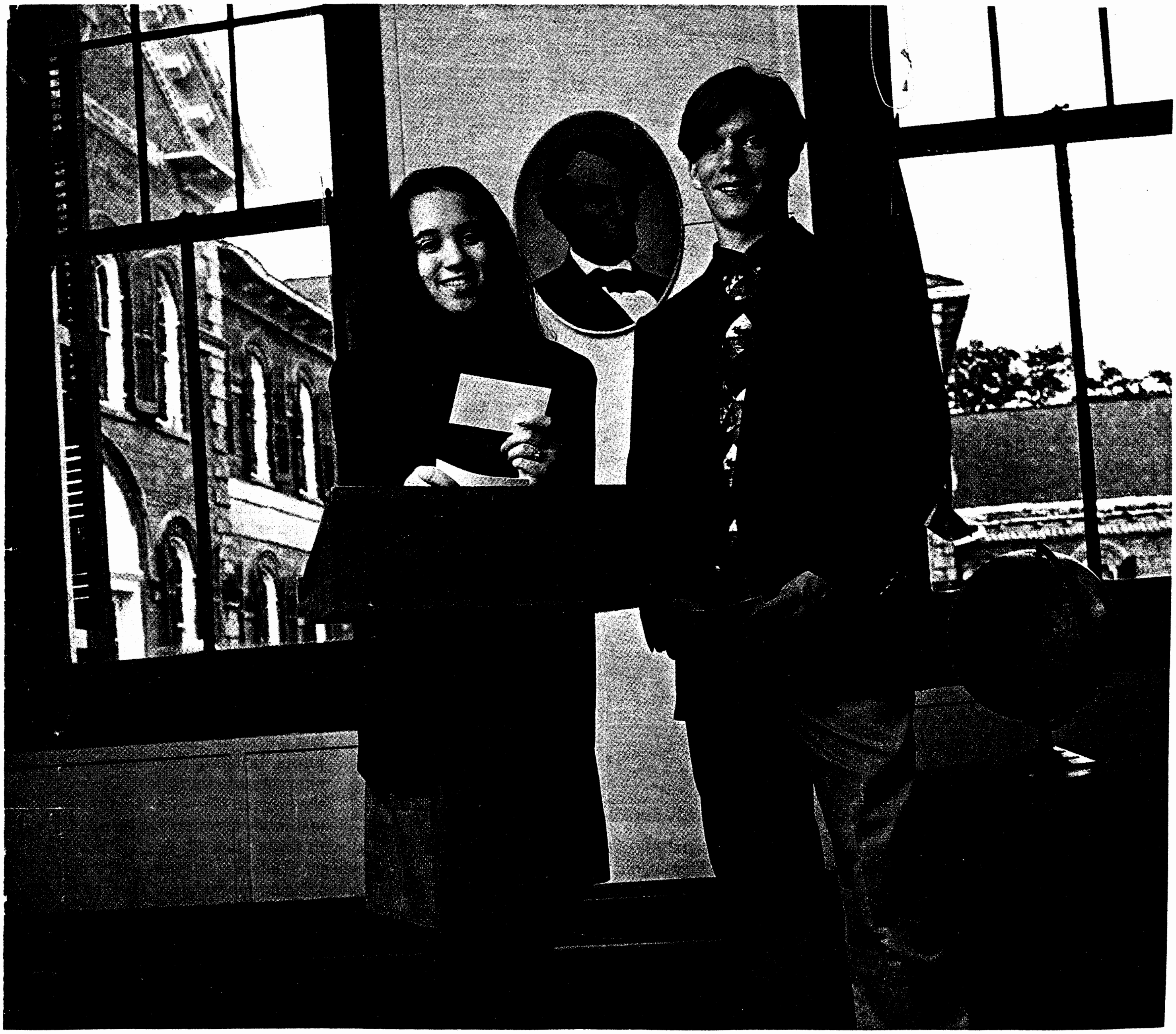
Now take a close look at the student debaters. Christened "Nate" and "Alicia" here for clarity, they seem to represent the children of current or potential policy holders. Their apparent enthusiasm and clean-cut good looks appeal to a parent's hopes and dreams. It might be difficult for some consumers to remember that they are professional models.

The teammates have gathered in the classroom to polish and perfect their arguments. Each holds a set of notecards, lest they appear over-confident. Each stands in front of their own window of opportunity. Together they form a cupped frame around Lincoln's portrait, and a straight line drawn from Alicia's face to Nate's would include the President's, creating a threesome. The two debaters appear to be in their late teens. Some of our best-loved stories about Lincoln tell of incidents at this same age. It was at eighteen Lincoln earned the nickname "Rail Splitter" for his strength and skill in the woods. At nineteen, a six-foot-four Abe played a boyish joke on his stepmother when he held some of his younger siblings upside down inside the family home, enabling them to track muddy footprints across the ceiling. It is easy to imagine Lincoln smiling at Nate's or Alicia's similar pranks.

I think Lincoln would associate himself more with Alicia than Nate. From her place behind the lectern, Alicia appears to be speaking first. The entire photograph is tipped downward on the left side, like a poorly hung landscape. This slant causes Alicia to look shorter than she actually stands. Her position in the advertisement suggests the liberal left, but she is at Lincoln's right. Alicia's features and black hair indicate her possible minority status at the school. Some readers may assume affirmative action played a role here: others might make a dark connection with the word "sword" in the text. Shoulders slightly hunched and legs close together, Alicia looks less confident than Nate. History books tell us that Lincoln looked uncomfortable and out of place in the public eye. Alicia is well-groomed but it seems her appearance is not her greatest interest. The below-knee length of her plaid skirt and her dark jacket are rather unfashionable and indicate a private school's uniform. Her innocent countenance suggests a kind, gentle soul, like we understand Lincoln was. Childlike pudginess remaining in her chin and cheeks hint that she is younger than Nate. All factors considered, she seems to be the underdog in this contest.

Notecards in hand, Nate waits his turn. His appearance and position in this ad indicate he represents the brilliant Douglas Lincoln faced. As the tallest of the three, he has a definite advantage height-wise. Most obvious is the illusion that he is the focus of the President's gaze. The yellow-ochre of the wall lightens around Nate's head and forms a natural spotlight which contributes a healthy glow to his face. This tanned glow, combined with his strong features and confident expression exudes a Kennedy-like style. Nate stands in the righthand portion of the photograph but his clothes are less conservative than Alicia's. He too wears a classic blazer; however his is more casually cut and embellished with shiny brass buttons. The English hunting scenes on his necktie are a contrast to his informal black denim shirt. His relaxed shoulders and casual stance cause Nate to look genuinely at ease as a member of this team. He appears to be experienced and confident, but like Douglas, perhaps that is not going to be enough.

Is there anyone more appealing than a bright, hard-working teenager committed to learning all she can? Is there any idea more encouraging than the concept of non-violent resolution of society's conflicts? Whatever it may require of us, is there any venture more rewarding than education? As an institution apparently committed to all three, is there any other company you would rather pay your life insurance premiums to than Lincoln National?



*My analysis of this advertisement began with two questions: What is the advertiser's message? Is the ad effective in delivering this message? Dividing and subdividing each segment of the ad and disconnecting the parts from each other allowed me to see how each ingredient stood on its own. As I gathered the pieces together again, the significance of the symbols and relationships emerged.*

*For me, writing is an extension of grace, like discovering a mound of sweet violets in my vegetable patch. Each composition teaches me more about myself. And always my joy in writing lies in the journey, rather than the destination.*

***Sheryl Loya, student***

## An argument paper from English Composition 101

*In my English 101 class we covered a lot of challenging and controversial topics, including censorship, pornography, the media, gender roles, gay and Native American issues, and racism. The final argument paper asked students to choose a topic related to class readings, take a stand on it, and support their position using at least three sources. One of the strengths of Camye's paper is that it synthesizes several issues in its discussion of the lack of heroines in children's movies; not only does it examine the impact of media and gender roles on children, but it takes on the additional consideration of racial stereotypes, contrasting the movie Pocahontas with the recollections of a well-known Native American writer.*

***Tara Prince-Hughes, instructor***

### Where Am I?

**by Camye Phillips**

For one year my sister reviewed kids' movies for The Bellingham Herald as "the Kid Critic." During her year term she critiqued 13 movies, only 4 of which featured girls as main characters. Every time my mom and sister came back from a movie, I remember my mom saying, "All these movies are about boys. Where are the girls?" In the present moment, movies have an overwhelming effect on America's children, so when half of the population is misrepresented, it is time to take notice. Just as Paula Gunn Allen struggled to reconcile her Indian heritage with the messages of modern American society, which she chronicles in her article "Where I Come From Is Like This," so the young girls of today search for their identities within themselves and in relation to the rest of the world. Unfortunately, in American society the "rest of the world" is enormously influenced by the media, which in turn is largely focused around the motion picture industry. In order to give young girls and young boys, of all cultures and backgrounds, an equal chance to build an identity in this complex atmosphere, children's movies need to feature a broader range of female characters.

At first glance, the relevance of movies in our lives seems minor, yet for children, movies provide more than just the allotted two hours of entertainment. Movies influence all aspects of "the media." Television programs, like The Mighty Morphin Power Rangers, have recently crossed over into children's films. Similarly, the popular comedy, The Mask, has been made into a children's cartoon TV program. The animated film Aladdin underwent the same transition. Movies also enter TV programming through news shows like Nickelodeon's Bing, which are made especially for kids and sometimes feature stories about kids' movies and their stars. The crossover continues. Through advertising, movies reach beyond television and into our daily lives. Movies like The Lion King and Pocahontas, and movie/TV shows like The Power Rangers, have made their way into the lives of children across the country. Clothes, toys, dishes, backpacks, books, Halloween costumes, and countless other items bear the trademarks of these films. Kids play with Batman action figures, go to bed in nightclothes proclaiming The Little Mermaid, and pretend to be Ace Ventura with their friends. Kids play video games based on their favorite movies, like Aladdin, and watch movies about their favorite video games, such as Mortal Kombat. Even the fast-food industry has joined the craze by offering free toys based on popular kids' film characters with the purchase of a "Kid's Meal." The onslaught does not stop there.

Films and children's books also have an ongoing relationship. Two books turned movies released in 1995 were The Indian In the Cupboard and The Babysitters' Club. And with each new kids' movie released, a barrage of movies turned-books hit the school book orders. These quickly-made books usually consist of pictures from the movie and summaries of the action. Newspapers and magazines for kids, like Nickelodeon Magazine, often feature interviews, profiles, or wacky facts about the stars of new kids movies and articles about the movies themselves. From movie to book to TV program to magazine to shirts and toys: the influence of movies is endless. Movies are not an isolated phenomenon; they touch every part of life in modern America and their effects can be far from positive.

After reviewing the current release section in back issues of The Bellingham Herald, I found that out of 51 kids' movies made from October 1994 to August 1995, only 14 starred girls (see appendix for listing). One main reason for this is that much of the motion picture industry believes that boys won't go to "girls' movies." A "girls' movie" is one that stars a girl or girls. An article in the May 22, 1995, issue of Newsweek characterizes this opinion when part of its headline reads: "For the first time in memory, Hollywood is bucking conventional wisdom by producing a lot of kids' flicks where the hero is a heroine" (Shapiro and Chang 56). "Conventional wisdom" in the movie industry is that boys appeal to everyone, whereas girls entertain only other girls. Later in the article this sentiment is expressed again in a quote from Mark Johnson, "producer of...'A Little Princess'" (Shapiro and Chang 56). He recalls that "one Disney executive said we should make her a boy instead of a girl" (Shapiro and Chang 56). In another instance, Johnson claims that "Some people said, 'What about introducing a boy into this story, for romantic purposes?'" (Shapiro and Chang 56). New York Times reviewer Anita Gates reviewed the movie Tank Girl, stating that it was not appropriate for children, but that kids would go anyway. Later she concedes that at least "girls will see a female action hero for a change" (27). Even those films actually starring girls, though, tend to feature strictly Caucasian actresses.

In the last years, what has the film industry offered to girls, especially the daughters of Paula Gunn Allen's "Modern American Indian woman" (43), to show them that they are a valuable part of the world, on and off screen? Pocahontas. Pocahontas is an "Americanized" Native American. She is the first and only Disney heroine from a cultural background other than white European, yet she suffers from the same unrealistic image of women as her equally stereotypical white sisters, Ariel (The Little Mermaid) and Belle (Beauty and the Beast). What qualities does she possess that all girls can relate to? She is strong, brave, adventurous, and scantily clad. Pocahontas spends the entire movie running around, ample chest proud, ultra-slim waist enhanced by the body-hugging hide dress, perfect hair always blowing perfectly in the wind. Her beautiful voice echoes through the countryside. She enchants her European explorer boyfriend-to-be with her attractive looks and her clear reasoning. Though she is Native American, Pocahontas is able to magically acquire a total knowledge of the English language in only minutes. This is not real.

Paula Gunn Allen's Indian heritage taught her that women should be "strong and balanced" (48). Her "ideas of womanhood" (44) came mainly from her "mother and grandmothers, Laguna Pueblo women, (and) are about practicality, strength, reasonableness, intelligence, and competence" (44). All of these are characteristics which Pocahontas could arguably entertain. Yet the positive, realistic qualities Pocahontas possesses are overwhelmed by a stereotyped image of women as somehow above "human" flaws. In contrast, Allen does not deny the humanness of her Native American experiences. She remembers "tired women, partying women, stubborn women, sullen women, amicable women, selfish women, shy women, and aggressive women" (45). Most of all, though, she recalls women who were strong and steady and loving. These images are absent in the world of Pocahontas. Pocahontas is daring and brave, yet her support systems, which proved so crucial in Allen's Native American upbringing, are weak, embodied solely in a talking "grandmother" tree. Nevertheless, Pocahontas can still offer the world something which rarely occurs naturally: her well-endowed chest, narrow waist, shapely hips, beautiful voice, and enormous, flowing hair.

Some may claim that the place for kids to learn about themselves and discover their values is in the home, that the media is not responsible for educating today's children. This is partly true. The media is not "responsible" for "educating," but nevertheless, the media profoundly affects everyone in

America. Parents have little control over their children's exposure to the messages portrayed in movies and the media. Children are immersed in these messages without choice. Sadly, most of the messages they receive are negative, or negative in their potential impact. In her book Reviving Ophelia: Saving the Selves of Adolescent Girls, Mary Pipher, Ph.D., writes that America today is a girl-destroying place. ...girls are encouraged to sacrifice their true selves. Their parents may fight to protect them, but their parents have limited power...(44).

Once girls and boys begin to become aware of the world around them, with all of its pressures and expectations, parents lose their power to influence and protect them. Girls search for a viable representation of themselves, yet instead, what do they find? Nothing. There are few children's movies with strong female roles. Almost no realistic representations of diverse female personalities or physical appearances show up in ads or TV. America's children are constantly lied to by the media as it presents them with unrealistic, stereotyped ideals of what people should be. These imposed images affect everyone.

The modern American Indian woman, or the modern American Black, Hispanic, or Asian woman, is not the only person who suffers from the dilemma of reconciling many different images of who she should be. What people, all people, need is a society that revels in differences, that celebrates individuality in all aspects. They need a media that represents fat women, short women, ethnically diverse women and men, with far-ranging abilities. Since movies have become so influential in the lives of modern children, many of whom will grow into these diverse women, they should work to provide kids with a realistic image of the people of the world. Boys need to know that girls are equally powerful and intelligent, and girls must learn this too. Children deserve to be exposed to positive ideas of women, like those Paula Gunn Allen received from her Native American heritage. For my sister, I want the movies she sees to support her self-confidence instead of denying it. She should be able to go see a movie and come back saying, "Wow, that girl was so strong. I loved it when she..."

## Appendix: List of Children's movies

* Denotes a "leading girl."

**October** 1994
*Princess Caraboo, The Mask ,Camp Nowhere, *Little Giants, Squanto

**November** 1994
Double Dragon, The War, *Miracle On 34th Street, The Santa Clause, *The Swan Princess, The Lion King, Pagemaster, Junior

**December** 1994
The Jungle Book, Dumb and Dumber, Richie Rich, *Little Women, Street Fighter

**January** 1995
Houseguest, Far From Home: The Adventures of Yellow Dog

**February** 1995
Heavyweights, Billy Madison, *The Brady Bunch Movie

**March** 1995
Man of the House, Roommates, Tall Tale, Major Payne, Born To Be Wild, Tommy Boy

**April** 1995
A Goofy Movie, The Pebble and the Penguin, The Cure, Jury Duty, Stuart Saves His Family

**May** 1995
*Casper, *A Little Princess, The Flintstones

**June** 1995
*Batman Forever, Tom Thumb, *Pocahontas

**July** 1995
The Indian in the Cupboard, *Mighty Morphin Power Rangers, *Clueless, Dumbo Drop, Free Willy 2

**August** 1995
*The Babysitters' Club, *Mortal Kombat, Magic in the Water, The Amazing Panda Adventure, A Kid in King Arthur's Court, Babe, Arabian Knight

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Pipher, Mary. Reviving Ophelia: Saving the Selves of Adolescent Girls. New York: Ballantine, 1995.

Shapiro, Laura, with Yahlin Chang. "The Girls of Summer." Newsweek 22 May 1995: 56-57.

*This essay required me to not only prove my point, but also to draw connections between seemingly unrelated topics. Even after I had established that there actually are less children's movies starring girls than boys, I still had to answer one crucial question: With all of the important issues in American society, like racism, discrimination, justice, education, and oppression, who really cares about kids' movies anyway? Everyone does: kids, parents, grandparents, brothers, sisters, actors, directors, teachers, and baby-sitters.*

*My second major challenge was how to connect children's movies to an essay we had read in class. I chose Paula Gunn Allen's essay. I had a feeling it might fit. Of course that was before I actually tried to figure out how it all related. I almost gave up the whole essay and was heading to the library to find another topic when Pocahontas pranced into my thoughts. Much like the validity of the topic of children's movies, the love triangle of Pocahontas, Paula Gunn Allen, and kids' movies seemed precarious at first. The more I considered the ties, however, the more solid the connections appeared. So I finished the essay. I hope that someone, besides me, might learn something from it.*

***Camye Phillips, student***

## A synthesis essay from English Composition 102

*This assignment called for students to write an essay synthesizing at least five sources. My goals for this assignment were for students to summarize the sources in an accurate and sophisticated manner--a manner in which the final product is not just summary, in fact, but synthesis of ideas from the sources. Furthermore, Brandi chose to use this synthesis to fulfill the revision assignment, in which students revised their essays for structure, effectiveness, and sentence variety.*

***Jennifer Bullis, instructor***

## Who Says Boys Are Better than Girls?

**by Brandi Berwick**

Does this scenario sound familiar? A group of ten-year-old boys are gathering in an empty lot, ready *to* begin an informal game of baseball. Up walks Jimmy, his little sister in tow. "Hi Jimmy! Wanna play ball?" shouts one boy. Another boy shouts, "That's not fair! The teams won't be even!" A murmur of disappointment flows through the crowd. Jimmy's sister says, "If you let me play the teams will be even." Jimmy's team shouts agreement while the other team recoils in horror. "Oh man, we don't want some stupid girl on our team! Girls can't do anything."

There are many ways that society grooms children to step into such stereotypical roles. As children grow up, they are steadily exposed to messages that give the impression that girls are not as good as boys. These messages are presented in many media such as fairy tales, cartoons, and television programs.

The most beloved fairy tales in our society are all variations on one main storyline: The lovely princess, trapped in a horrible situation, is rescued by a handsome prince. From a very early age girls are taught they should be pretty and helpless; boys are taught they should be rich and handsome. Madonna Kolbenschlag, author of *"A Feminist's View of 'Cinderella,'"* believes that

> The personality of the heroine is one that, above all, accepts *abasement* as a prelude to and precondition of *affiliation.* That abasement is characteristically expressed by Cinderella's servitude to menial tasks, work that diminishes her. This willing acceptance of a condition of worthlessness and her expectation of rescue . . . is a recognizable paradigm of traditional feminine socialization (Kolbenschlag 525).

Jane Yolen, author of *"America's 'Cinderella,'"* agrees with Kolbenschlag. Yolen states, "The mass-market American 'Cinderellas' have presented the majority of American children with the wrong dream....The 'insipid beauty waiting... for Prince Charming"' (Yolen 535).

These two authors believe the image of Cinderella waiting patiently to be saved from her life of manual labor is not an image that young children should be exposed to. When children constantly see the princess rescued by the prince, they begin to believe that girls are able to get out of bad situations only with the help of boys. Girls see themselves as the princess, who is less valuable than the prince; boys see themselves as the prince, who is more valuable than the princess. This is how negative stereotyping begins.

In cartoons, the messages sent to children are almost identical to the ones portrayed in fairy tales. Many cartoons feature an all male cast. One example is the popular *Bugs Bunn.y* cartoon. Once in a while a female character is presented in a story. These female characters are usually presented as a potential girlfriend for one of the male characters. This type of episode focuses on the rivalry between the two male characters and their fight over who gets the girl. The female character doesn't even get a chance to voice her opinion; she sits there passively accepting gifts from each male character. Whoever brings the best gift gets her. Finally, rather than break up the friendship between the two male characters, the female turns them both down. The male characters bond over the incident by saying, "Who needs her anyway?" Young boys see this exchange, and the negative stereotype of women being worth less than men is further reinforced. Katha Pollitt, author of 'The Smurfette Principle," agrees. Pollitt says, "Contemporary shows are either essentially all-male, like 'Garfield,' or are organized on what I call the Smurfette principal: a group of male buddies will be accented by a lone female, stereotypically defined" (Pollitt 583). Later in her essay, Pollitt goes on to say, "The message is clear. Boys are the norm, girls the variation. . . Boys are individuals, girls are types" (583). Children grow up and realize their concept of the world is nothing like it really is. Boys see that girls can do just as much as they can; girls see they can be strong and don't have to be weak. They both see the need to change their perceptions of what the real world is all about.

The stereotypical messages on television give children a false image of what life is about. In the real world, most women can't afford to rely on a man to help them out of trouble. Many men grow up thinking they should be able to conquer any situation that comes along. When they need to ask for help they can't. The messages sent to them via fairy tales and cartoons have told them a real man doesn't ask for help. Most television shows depict a happy family in which the husband goes off to work and the wife stays home to raise the children and keep house. The husband is always successful enough so that the family can live quite comfortably on one income and still enjoy all the modern conveniences. This is not always the case. In the real world, people lose their jobs and both parents must work. Ian Harris, author of "Media Myths and the Reality of Men's Work," believes that

> The dominant image of the American male portrayed on television, in film and magazines depicts a white-collar gentleman living in the suburbs in affluent circumstances. These individuals own American Express credit cards and buy the latest model cars. From Ozzie and Harriet to Bill Cosby, these images occupy a powerful place in the American psyche and set standards for male behavior (Harris 586).

Children see these images on television and wonder why their own situation is different. They see the mother staying home on the television programs and they wonder why their own mother has to work. TV makes life look so simple and easy. Children can't understand why there is such a big difference between life on a sitcom and real life.

It is not just TV shows that perpetuate stereotypical messages. TV commercials targeted towards women focus on domestic chores. TV commercials for men focus on sexual fantasies and escaping from the hectic workday. These types of commercials lead young children to believe that women are interested only in house and home, while men are interested in sex and sports. R. Stephen Craig, author of "A Gender Analysis of TV Commercials," agrees. Craig states,

> Daytime ads, generally aimed at women homemakers, focus on the traditional stereotypical images associated with the American housewife. Products and settings were found to be those identified with home and family life, and generally involved cooking, cleaning, child care, or maintaining an attractive physical appearance (Craig 601).

Craig's essay goes on to say, " The large percentage of weekend ads for alcoholic beverages. . . typifies the exploitation of male fantasy and escapism.... Women who appeared in weekend ads were ... generally seen in roles subservient to men. . ." (601). The images children see give them a false sense of what the world is like. If men drink a certain kind of beer, beautiful women are going to think they are attractive. If a woman buys a certain brand of detergent, her husband will spend quality time with their children. When children take commercials at face value, they begin to believe the stereotypical messages that are bombarding them.

In today's society children are being exposed to many different sources which present negative stereotypical messages about the opposite sex. Parents and educators need to look closer at the messages being sent to children via fairy tales, cartoons, and television programs. Children need to see the princess rescuing the prince, and the father staying home to raise the children and keep house. Children will grow into happier adults when they realize that both men and women can be successful in non-traditional roles.

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*For me, the synthesis was the most challenging essay assigned in English 102. I found myself overwhelmed by the prospect of picking my own topic. First, I began by analyzing each topic individually to see if it contained enough information. Next, I framed my possible topics as broad questions and used the answers to these questions as my possible thesis statements. Finally, I picked my topic. I outlined how I would present my ideas and where I would put my quotes. By following this pattern, I found my essay seemed to flow in a logical pattern and was easy to write.*

***Brandi Berwick, student***

## An argument synthesis from English Composition 102

*This assignment called for students to write an essay synthesizing at least five sources. My goals for this assignment were for students to draw from sources to support an argument; to read, think about, and write about those sources critically; and to engage in controversy while maintaining respect for the ideas and opinions of others. In addition, John chose to use this synthesis to fulfill the revision assignment, in which students revised their essays for structure, effectiveness, and sentence variety.*

***Jennifer Bullis, instructor***

## The Decline of America

**by John J. Cox**

Has the American Dream become so important that people are willing to do almost anything to achieve their goal? According to Charles Derber, a professor of sociology at Boston College, "America has become a society in which people have perverted the American Dream using it as pretext for acting selfishly and, in extreme cases, committing heinous crimes" (410). After World War II the United States was a super power, with vast amounts of wealth and influence (Carter 387). But since this time the United States has been on a descending spiral due to downward mobility, the inability of our government to maintain social order, and rising crime rates in urban and suburban areas. Americans need to find a way to stop this slide and re-establish morality in our culture.

Many Americans today are finding themselves and their families in a state of decline. Blue collar and white collar workers are losing their jobs due to increasing technology and downsizing of major corporations. Even those who haven't lost their jobs are unable to keep up with the rising costs of living and are therefore incapable of supporting their families. These people enjoyed what was once called the "American Dream," but that dream has dissolved. Katherine S. Newman, professor of anthropology at Columbia University, views the fading of the American dream as downward mobility, a term used to describe "men and women who once had secure jobs, comfortable homes, and reason to believe that the future would be one of continued prosperity for themselves and their children" (405). These Americans find their careers, life styles, and peace of mind disintegrating. According to Newman, "Lacking social and cultural support, the downwardly mobile are stuck in a transitional state, a psychological no-man's-land. They straddle an 'old' identity as members of the middle class and a 'new' identity as working poor or unemployed" (408). "Catastrophic losses create a common feeling of failure, loss of control and social disorientation" (409). People caught in this no-man's-land are unsure of the future and are afraid their lives will never return to the level they had once known.

Although we hear very little about downward mobility, this misfortune happens to approximately one in five American men (Newman 406). TV newscasters and magazine journalists would rather focus on upward mobility, the rich and famous, or ordinary middle class Americans whose lives continue to get better year after year. An example of this is Donald Trump, a visibly wealthy American, who authored The Art of the Deal. He built luxurious condos in a city teeming with homeless. "We positioned ourselves as the only place for a certain kind of very wealthy person to live-the hottest ticket in town. We were selling fantasy" (Derber 417-418). However, this is a false perception because many middle class families are headed in the opposite direction.

Downward mobility is often confused with poverty, but there is a difference between the two. People at the poverty level are already at the bottom of their class, but the middle class who are experiencing downward mobility had a comfortable lifestyle at one time. Newman says that most of our media attention focuses on upward mobility, and that "downward mobility is relegated to footnotes or to a few lines in statistical tables" (407).

Perhaps foreigners have seen the portrayal of upward mobility, and this is why we still see an influx of immigrants into our country. However, Natwar M. Gandhi, an immigrant from India and a tax policy analyst, does not agree that downward mobility is a concern. According to Gandhi, "America is a promised land" (427). He contends that it offers a high standard of living to the majority of its people and a chance for people to make something of themselves. They can achieve what they believe to be the American Dream without experiencing the burden of poverty, which exists in many other parts of the world.

Although Americans were feeling good about life after World War II, we have been on a slide ever since. In President Clinton's Inaugural Address, he supports Newman's views on downward mobility: "Raised on unrivaled prosperity, we inherit an economy that is still the world's strongest but is weakened by business failures, stagnant wages . . . " (446). The growing number of Americans spiraling downward due to these social misfortunes is, without question, a problem in our society. This trend doesn't appear to be ending anytime soon, and therefore it is helping to drive our country into its present state of decline.

Another force contributing to the decay of America has been our growing inability to maintain social order and to preserve the security and happiness of our people. In the past, we have been able to sustain law and order through ordinary police protection, but with the rising growth rate of cities, combined with budget cuts from the local and national governments the American people no longer have the protection they once relied upon. James Q. Wilson, a professor at the Graduate School of Management at University of California, argues that the inner cities have always had problems with crime, and that crime is increasing because "when the middle class moved out to the suburbs they took with them the system of informal social controls that had once helped maintain order in the central cities" (433). As employers began to see workers moving to the outer city, many of the employers relocated their businesses to the suburbs as well. When this occurred, the crime in the inner cities grew. Wilson also believes that the police cannot maintain order because they must follow more precise procedures in stopping, arresting, and questioning suspects. "Gangs, vagrants, panhandlers, rowdy teenagers and graffiti painters were once held in check by curbside justice: threats, rousts and occasional beatings" (434). However, today these forms of law enforcement are forbidden.

In the past we relied on schools to help maintain order, but they too have lost power due to the increasing rights of students. "Disorderly pupils can still be expelled, but now with much greater difficulty than once was the case. The pressure to pass students without demanding much of them has intensified" (Wilson 434). Schools are used as a baby sitting tool for the parents because they need someone to care for their children while they are at work. Frequently, both parents in a household choose to work in order to afford the material items that they need to achieve their American dream. Their children, unfortunately, are being deprived of a good solid environment and proper supervision. They are more tempted, with no adult role models around, to use drugs, join gangs or commit crimes. Parents are needed to ensure a good solid foundation, and teachers ought to be used solely to help children acquire knowledge and develop thinking and reasoning skills.

A third important piece that has led to the decline of our country is the growing rate of violence and death we see every day. When we pick up a newspaper, we are no longer surprised by the fact that there was another drive-by shooting that left one man dead and another paralyzed, or that a woman jogging in Central Park was attacked, raped, and left for dead. Each one of these types of crimes is causing America to decline--not because of the crimes themselves, but because people have grown accustomed to these acts of violence. They no longer care about what is happening in the streets, and instead worry only about their own problems.

Many of these crimes can be referred to as "wilding" (Derber 411). According to press reports, wilding was a term used by youths to describe their behavior. These youths are looking for thrills, mischief, and adventure. One youth was quoted as saying the mugging and raping of the girl in Central

Park, "was fun and it gave us something to do" (Derber 411). Police reported that the youths had shown signs of smugness and no remorse. The attack of the girl had been no big deal, a source perhaps of temporary gratification and amusement. They were mindless bandits seeking a thrill. "The story of wilding quickly became tied to the race and class of the predators and their prey" (412). The predators were black inner city youths, and the prey were white educated middle class people.

Although wilding began by referring to black-related acts of violence, it soon evolved into a term used to describe other types of crime not related to race or social class. One example of this new type of crime occurred in New York. A man named Charles Stuart and his pregnant wife were leaving a birthing class when they apparently were attacked and shot by a black gunman. However, it was discovered later that Stuart had actually been the one who committed this hideous crime. He allegedly killed his wife in order to collect her life insurance policy, open a restaurant and finally live his American Dream. Stuart's brother uncovered the truth and went to police to expose his brother's violent act. Once Charles Stuart had been exposed for committing this heinous crime, he then committed suicide.

Even though the term "wilding" is used to classify acts of violence in our society, Americans are still trying to draw larger conclusions from these senseless tragedies. Many say it is violence on television, or possibly the breakdown of the family that causes these brutal crimes. Americans try to pin the blame on any social disorder in order to define why a person would perform any act of violence. I believe it is impossible to connect any of these actions with causes. Americans know that crime and murder are a part of life, and they know that the present climate of anger and disrespect is, if nothing else, a contributing factor that we must work together to overcome.

Although America has been descending rapidly due to downward mobility, the inability of our government to maintain social order, and rising crime rates in urban an suburban areas, America can return to what it once was. In President Clinton's Inaugural Address, he says that America needs to change, "not change for change's sake, but to preserve America's ideals--life, liberty, the pursuit of happiness" (445). Clinton says, "It is time to break the bad habits of expecting something for nothing from our government or from each other" (445). I agree that Americans need to quit thinking about their own personal gain and strive to bring this country back to what it once was: a positive, powerful country that can secure prosperity for all.

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*During the time I began work on this essay, Our class was reading and discussing material on America's Crisis of Confidence. After reading the required eleven essays, I began to evaluate the various authors' ideas and found that many of the arguments had an impact on my view of America. My first step was to sort out the ideas and views that would be critical to my paper. Once I had these ideas I began to freewrite which enabled me to piece and join all the ideas into a tentative structure. When the structure of my paper became more clear, I wrote a thesis statement which helped me see the direction I was going.*

*Although I thought the rest of the paper would be easy, I found that the hard part was yet to come. The task of interweaving each writer's quotes and views with my thesis statement and examples became a somewhat aggravating task. But after much work, each of the pieces began to fall into place. I found myself revising and clarifying all my main points until finally I was satisfied with the end result. I then used all the resources available to me for final editing. I suggest other writers use all available resources too, such as writing groups, the Writing Center, friends and family members to help critique and offer suggestions on a final draft.*

***John Cox, student***

**Jordan Lawson**
*Untitled*
Charcoal, 8.5" x 11"

Artist's Note:

*This assignment was comprehensive—intended to show the skills I had learned over the quarter in working with charcoal, especially highlighting dark areas. I wanted to focus attention on a certain part of my picture so that my audience would be drawn to a particular point of interest. My first self-portrait at the beginning of the quarter had been a straight on kind of mug shot. For this piece I chose to draw myself in my natural surroundings, at home in a favorite chair. I looked in the mirror hanging on the wall as I worked.*

***Jordan Lawson, student***

## A persuasive synthesis paper from English Composition 102

*Since a synthesis depends on the ability to infer relationships among sources, students must move beyond initial reactions toward a new understanding of ideas. Students must observe details in their readings, establish connections, infer relationships, and create new meanings. It is pleasing when students can do all that and also write with authority, with a strong personal voice. Jih-Jen King's essay "Bilingual Education" demonstrates that when students connect the readings to their experiences and translate thoughts, elusive by nature, into concrete language, they develop their voices and promote understanding.*

***Betty Scott, instructor***

### Bilingual Education

**by Jih-Jen King**

I have been in the U.S. for almost six years since I moved from Taiwan. I am still taking English classes and I think I will keep on taking English classes until I can fluently read and write. English is a language I can't afford not to master. I was afraid of English in school in Taiwan because I was never good at it, and I tried to avoid using it. Now, as a resident of Washington state I have no choice but to study and become proficient. If I improve my English, I will make more friends and find a better job. From my experience learning English in Taiwan and the U.S., I believe bilingual education is wasting money and time.

Bilingual education is designed to help Hispanic children in school. They teach children in their native language and in the meantime teach English (Chavez, 99). However, many educators believe as I do that bilingual education slows a student's progress. Linda Chavez writes in "Why Bilingual Education Fails Hispanic Children," that "In Boston, half of all Hispanic junior high students enrolled in bilingual classes have been there for more than six years and still can't pass basic English-proficiency tests. In Los Angeles, some Hispanic youngsters in bilingual programs spend only 40 minutes a day receiving instruction in English" (Chavez 99). Unfortunately, the government and the educators who try to help bilingual students and make learning English easier are actually slowing down the speed of learning for these bilingual children when not enough time is spent reading and writing in English.

In Taiwan I took English classes from junior high through two years at a university. Even after I graduated I still took some English classes once in a while. However, at work in a garment exporting company, I spoke stiff English to my American, European and Japanese clients and only wrote simple faxes to their offices. English was just not natural to me. After I moved to the U.S., I thought I could pick up English by watching TV or listening to the radio, but it didn't work because only a small portion of my time was spent with English. I still spoke Chinese at home and read Chinese newspapers. I decided that I should take English seriously; otherwise I would never improve. I started with ESL classes. Unfortunately, I found some Chinese students, so we sat together and talked Chinese most of the time. After several quarters of ESL classes, my English was still poor because I was not really using it. Two hours a day in class with some of that time speaking Chinese is not enough I still thought in my Chinese ways, spoke my Chinese English and made my Chinese friends. It wasn't until I worked in my husband's restaurant that my English improved rapidly. My husband and I were the only two Chinese in the store. I had to speak English to my customers and the employees. I spoke English almost twelve hours a day, and it was the only language I heard. I began to learn and to feel better when speaking English, although at times I knew people still were confused by my English. Finally, I could laugh when people told me jokes instead of staring at them. I felt much better and was willing to talk.

On the other hand, my sister-in-law had problems with her children learning Chinese. She married an American. They speak English at home. She tried to teach her two children to speak Chinese. They even bribed the children with a car if they would speak Chinese when they were sixteen years old. It never worked. It didn't matter how much time and money the parents spent; the children could not speak a whole sentence of Chinese because of no practice. She gave up finally. A lot of second or third generation Chinese in the U.S. cannot speak Chinese at all if the parents don't force them to speak Chinese at home. Anyone who has struggled to learn a foreign language knows that the only way to learn it is by intense exposure--literally immersing oneself in the language" (Chavez 100). Without a Chinese-speaking environment, the children won't remember Chinese words. Environment is very important for children to learn language.

Bilingual education has similar problems. Educators try to use students' native languages to teach them English. This reminds me of the way I learned English in Taiwan. As Jeffrey W. Kobrick says in "The Compelling Case for Bilingual Educational": Language carries all the meanings and overtones of home, family and love; it is instrument of his thinking and feeling..."(Kobrick 92). Since my Chinese teacher spoke Chinese to teach English, English became a kind of knowledge to me instead of a language for communication. Learning English became hard and slow. In my classroom experience, there were not enough chances for me to be familiar with the tone and sound of English. I didn't feel comfortable listening or speaking English. I couldn't connect myself with English. So I know, from my experience, how difficult it is for bilingual students eager to learn English to be successful, when then can speak their own language naturally and easily. This is the problem for a lot of Chinese in the U.S. Even those born in China towns throughout the U.S., when they don't have to speak English in their daily lives, they never learn it. When bilingual education teaches students in their native language, it puts students in the wrong place but expects them to learn the right things. It wastes students' time and also the teachers' time. It wastes the government's tax money and therefore the parents' hard-earned money.

On the other hand, I do agree that at the beginning of school bilingual children need some help in their academic and social lives. But I believe as Yolanda T. De Mola says in "The Language of Power," that "Bilingual classes should be few and seen only as transitional rather than as a crutch to discourage maximum use of English" (De Mola 96). To put bilingual students in an English-speaking class helps them more by making them learn faster. My husband's nephew moved to the U.S. when he was 5 years old. He could not speak or understand English at all. They put him in a regular school where only English was taught. The school had a program to help non-English speaking children after regular school time. Teachers would help them with homework and answer the questions they had. In just one semester he caught up with the class and could also communicate with his classmates. Nowadays, a lot of Taiwanese and Japanese students come to America to learn English because they know this will be the fastest and easiest way to learn English while Americas travel to Taiwan to learn Chinese. People know the right environment that surrounds the students with the language is very important. Like S.I. Hayakawa said when he was interviewed by the U.S. News & World Report, "...when you have a classroom in which, say, three quarters or more are English-speaking children and one quarter are Hispanics, Hispanic children learn English very fast (Hayakawa 137). Foreign students need a lot of help and the right environment is the first step.

Learning a different language is not easy. However, if we can get the right help, our learning process could speed ahead and build our confidence. I appreciate the efforts the U.S. government and educators put into bilingual education. But, I believe an efficient way of language immersion will save a lot of money and time and is good for students and Americans who pay taxes.

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## A critique from English Composition 102

*The assignment for this English 102 essay was to write a critique in which students practice "criticism" in the sense of its Greek derivation: to separate the subject into its parts, discern how the parts work together, and judge the subject's quality and value (to paraphrase The Little, Brown Handbook, pp.1-2). My goals for this assignment were many: to have students continue to refine their summarizing skills; to give them an opportunity to focus specifically on critical reading, thinking and writing; and to have them engage in controversy while maintaining respect for the ideas and opinions of others. Moreover, Joyce chose to use this critique to fulfill the revision assignment, in which students revised their essays for structure, effectiveness, and sentence variety.*

***Jennifer Bullis, instructor***

## In Appreciation of America

**by Joyce R. Lee**

Presently, according to a significant number of American citizens, America is in a state of decay. Rather than recognizing the numerous benefits they receive as a result of being American citizens, many Americans focus their attention mainly on the negative issues facing our country. To discover the prevalence of American self-pessimism all one has to do is turn on one's television or radio; pick up a book, magazine or newspaper; or simply listen to family members, friends, or acquaintances. Typical complaints Americans have concerning their country relate to inadequacies within the American government and economy, the increasing crime and drug abuse rates, the demoralization of America, problems with racial unrest, and environmental protection issues. Fortunately, there are some Americans who perceive their country in a more favorable light. Natwar M. Gandhi, author of the article "Still the Promised Land," maintains an optimistic view of America. In addition to his optimistic view of America Gandhi argues that all the negative feedback directed at it is undeserved. Like Gandhi, I also have an optimistic opinion of America and believe that the members of the America-bashing bandwagon are overzealous in their pessimistic perception of the state of our country.

Gandhi begins his article by quoting George F. Kennan's and Edmund Wilson's derogatory assessments of the status of America. Although Gandhi deeply respects and admires both Kennan and Wilson, he nonetheless finds their assessments of America to be very dismaying because, despite its flaws, he still perceives America as the "promised land." Gandhi reasons that Kennan and Wilson have an unfavorable view of America because they mourn the differences between their concept of the American ideal and the American reality. Consequently the energy Kennan and Wilson spend on lamenting America's inadequacies precludes them from perceiving any favorable advancements that America has accomplished. On the other hand, Gandhi argues that more emphasis should be focused on the affirmative consequences of America's tireless efforts to fulfill the mandates of the American ideal.

Despite America's problems with demoralization and the rising rate of crime, substance abuse and homelessness, Gandhi still believes America is a "triumphant nation" (429). He reasons that America's unprecedentely high standard of living and freedom of expression" outshines its discrepancies, especially when compared to the extensive amount of poverty and political unrest plaguing the rest of the world (429). Moreover, Gandhi emphasizes that America's achievements are even more impressive because they have occurred over a period of only two hundred years. According to Gandhi, America never ceases to evolve. It is an ever improving, ever-improvising process (428). He also highlights how America benefits by welcoming immigrants because they vitalize at by bringing new strengths and fresh ideas which keep it from "stagnating." Gandhi specifically implicates Asian immigrants as America's renovators because they bring the traditional values of a strong work ethic, powerful family and social ties, and effective entrepreneurial abilities. Gandhi concludes by accentuating the fact that many Americans under-estimate the benefits they're privileged with as American citizens. However, because Gandhi immigrated from a less fortunate country than America, he can only view "America as the promised land" (429).

During the last two decades, I have grown weary of the barrage of ultra-pessimistic assessments of America. Therefore, I found Gandhi's optimistic viewpoint of America to be extremely refreshing. It is high time for Americans to stop wasting their energy on bemoaning the inadequacies of America, start appreciating the benefits they receive as American citizens, and begin focusing their efforts on improving the issues facing their country

I particularly appreciated how Gandhi avoids the fallacy of *ad hominem* in his argument. He repudiates the idea that Kennan and Wilson are "modern-day revolutionaries" or frustrated old men" (427). Indeed, Gandhi is very generous with his compliments and amount of respect towards both Kenna and Wilson. He is quick to establish that Kennan and Wilson are both very patriotic men who represent the cream of America's intellectual crop. Another favorable aspect of Gandhi's article reveals itself when he submits that Kennan and Wilson have become disenchanted with America because of the differences between their American ideal and the American reality.

Therefore, I find Gandhi's appraisal of Kennan's and Wilson's negative perceptions of America to be not only accurate, but also very understanding and insightful.

Gandhi recognizes America's rapid and extensive rate of beneficial change; thus he argues that one important aspect of America is not its failed promises to its citizens, but its continuous efforts to fulfill these promises. I concur with him on this issue and agree with him that past improvements in race relations are an example of Americans persistent attempts to better the lives of its citizens. However, I proffer that Gandhi could have included more evidence that America is forever changing for the benefit of its people. The attitude toward and treatment of women, children, Native Americans, animals, and the environment are additional examples of America's tireless efforts to improve the quality of life of its citizens.

Gandhi indicates that presently, the reshaping of America is primarily being accomplished by immigrant Asians and their children. I also acknowledge that Asian Americans provide invaluable contributions towards reshaping America, but I feel that Gandhi neglects the vast number of contributions from people of other ethnic origins. The contributions from Americans such as Martin Luther King Jr., Caesar Chavez, Barbara Jordan, Gloria Steinem, David Sue, and Jimmy Carter have all served to enhance and reshape America.

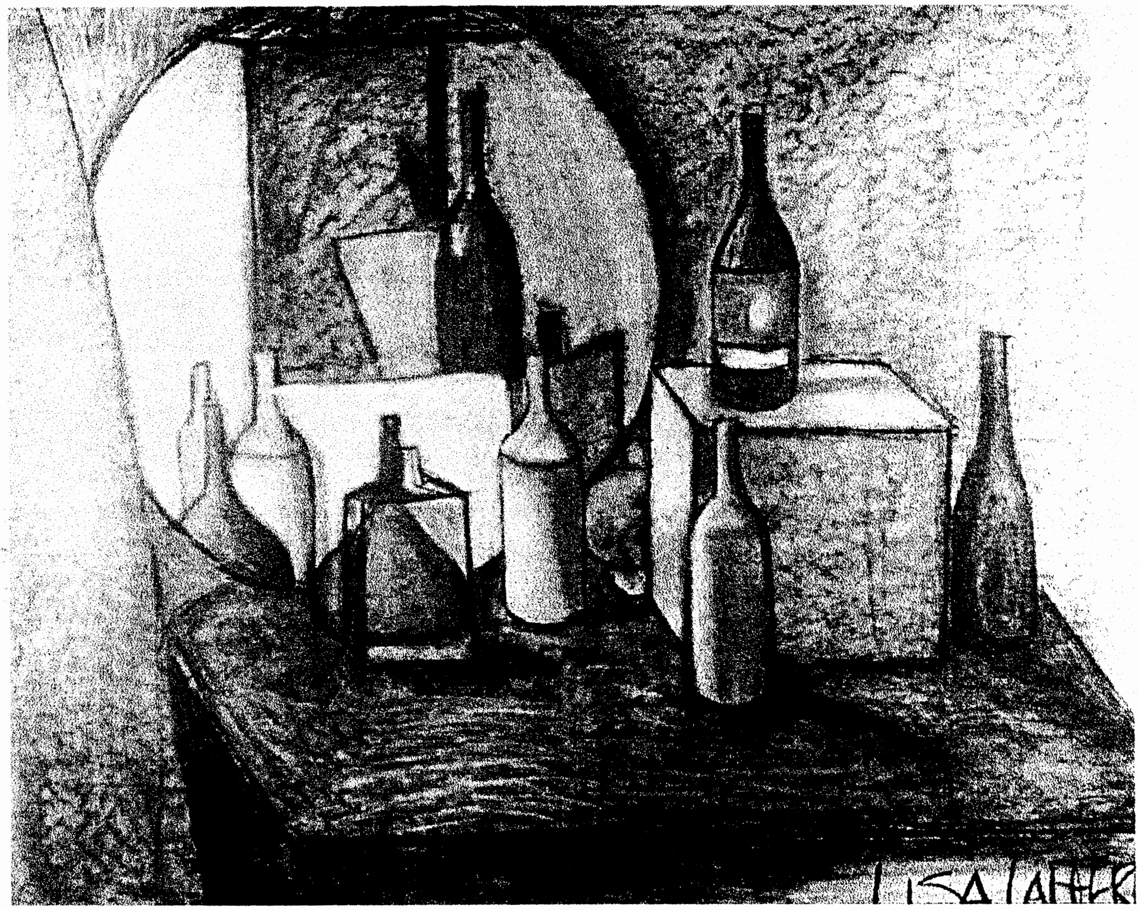
Although Gandhi does acknowledge and identify some of the existing inadequacies within the American system, I feel it is appropriate that he doesn't elaborate on them. I believe that if Gandhi had further elaborated on problems facing America, he would have undermined his whole purpose of directing his reader's attention towards the advantages of being an American. Instead, he illuminates the fact that American citizens have the good fortune of enjoying both the freedom of expression and a higher standard of living than most of the world' s population. I particularly agree with Gandhi's conviction that a higher standard of living and freedom of expression are valuable benefits of being an American citizen. My reasoning stems from the experiences I had during the eleven years I spent in the United States Air Force.

While I was in the Air Force I was fortunate enough to be able to travel to a few third-world countries and see the results of poverty and oppression first hand. For example, while stationed in Turkey, I clearly saw the virtues of the American freedom of speech one day when I overheard a merchant explaining to an American sergeant that his prices were increasing because his taxes were too high; unfortunately for the merchant, three Turkish Jardarma (Turkish police) also overheard his complaints and he received the butt of an AK-47 several times to his head and body for "discrediting the Turkish government." Yet another surprising observation I noted while overseas occurred when I was visiting Germany and England--countries that one would assume offer their citizens a relatively high standard of living--was that overall the American standard of living was higher.

In Gandhi's conclusion he points out that although many Americans "take their good fortune for granted," he does not because he immigrated from "the old world," where the prevalent view of America is still that of the "promised land" (429). I regard Gandhi's conclusion to be exceptionally straightforward and accurate. As American citizens we have the advantages of a government that protects our individual rights and freedoms, one of the highest standards of living in the world, extensive natural resources with efforts being focused more and more towards their becoming managed in a more environmentally sound manner and a fairly stable economy. However, because many Americans are too preoccupied with their frustrations over America's shortcomings, they often fail to recognize the numerous advantages they are privileged with as its citizens. Granted, America is presently facing many problems, and it will face many more in the future; nevertheless, jumping on the America-bashing bandwagon won't solve the problems. Americans need to discontinue lamenting America's imperfections and recognize how fortunate they are to be citizens of such a great and wondrous country. Consequently, by developing a more positive viewpoint of their country, Americans can begin focusing on America's problems from an optimistic standpoint. Solving problems with an optimistic rather than a pessimistic attitude is more likely to be successful.

*I found it extremely refreshing to read Gandhi's viewpoint of America. It greatly saddens me that many Americans lack confidence in their country and fail to acknowledge the many benefits they have as citizens. I was able to relate to Gandhi's comparison between a third world country and America. After spending three years in Turkey, I especially understood the many virtues of being an American citizen. Thus, I chose a topic to write about that I felt (and still do) strongly about. Initially I wrote my essay without concern for punctuation, spelling, grammar, structure, clarity or unity. Then through a process of self and peer revision, followed by several revisions, I eventually reached the point where I was satisfied with my essay.*

***Joyce Lee, student***



**Lisa Lafferty**
*Untitled*
Charcoal, 34" x 42"

Artist's Note:

*When I draw, I try not to just copy what I see and put it on paper. Often the drawing looks quite different. I draw what I visualize in my head, not necessarily what is in front of me.*

***Lisa Lafferty, student***

## A synthesis from English Composition 102

*After reading critically to understand various articles in our Writing and Reading Across the Curriculum text, I ask students to shape their newly informed opinions, supported by relevant facts from sources and presented in a logical manner, to persuade their audience to see from their point of view. This kind of persuasive paper requires a careful analysis of audience as well as written text.*

*In this paper, Rodney chose to reason inductively, to investigate an issue as he was writing and to show his process in thinking-through the ethical questions of biotechnology. In this way he draws his readers, students at WCC, along with him, questioning and summarizing explanatory material as he moves through his paper toward his own unique conclusion.*

***Vikki Ryan, instructor***

## On Ethics and Biotechnology

**by Rodney Lund**

"I used to be obsessed with root beer."

From *The Only Dance There Is* by Ram Dass

Whether we like it or not, we live today at the dawn of the age of biotechnology. This relatively new science deals with the engineering and biological study of relationships between man and machines. The science of biotechnology involves the manipulation of living microorganisms to manufacture products or perform industrial processes. Biotechnology is closely related to the science of genetic engineering, which offers the potential for human engineering, or eugenics, the possibility of which carries with it some very serious moral and ethical considerations (Wright 717).

While the prospects of these modern advancements in genetic science were foretold as long ago as 1931, when Aldous Huxley wrote Brave New World--an almost prophetic novel which describes a futuristic society where the politics of eugenics has virtually eliminated every vestige of human individuality--the real basis for the meaningful development of biogenetic engineering was not revealed until 1953, when James Watson and Francis Crick announced their discovery of the structure of the DNA (deoxyribonucleic acid) molecule, and thus began "a biological revolution by describing the smallest units of life" (Chamberland 653).

Whether the discovery of DNA is seen as a blessing for humanity or a curse depends largely upon one's personal values and sense of ethics, as well as being dependent upon how one may choose to interpret the history of scientific progress in the modern age. For example, one's view toward the development of atomic fission may be greatly influenced by whether one flew aboard the Enola Gay (the aircraft that dropped the atomic bombs that fell upon Japan at the end of World War II), or whether one is a hibakusha--a survivor of Hiroshima or Nagasaki. A similar schism of perspective might be found by considering the significance of Columbus and his voyages to the Americas: one's view toward the "discovery" of the New World is greatly influenced by whether one's ancestry can be traced to Europe, or whether perhaps one is of Native American descent. Moral judgment upon the merits of the scientific revolution set in motion by the DNA discoveries of Watson and Crick may ultimately have to wait to be determined by future generations.

However, a number of writers and moral critics of our present day have already begun to examine the ethical issues which plague biotechnology. Some critics believe that the stakes at risk in tinkering with human genetics are so great that humanity cannot afford the luxury of waiting for future generations to judge the goodness or folly of our current decisions. Among these critics is Dennis Chamberland, a science writer and nuclear engineer.

In "Genetic Engineering: Promise and Threat," Chamberland describes our current dilemma regarding biotechnology and the benefits--or peril--it poses for humankind:

> To date, the genetic engineering industry has shown itself to be the harbinger only of good, making medicines and food better and cheaper. We have been left in awe at both the realities and the possibilities.
>
> Yet, like any other human enterprise, genetic engineering has a malevolence equal to its potential for good" (658).

Among the most ardent critics of biotechnology today is Jeremy Rifkin, an environmentalist and founder of the Washington, D.C. based Foundation on Economic Trends. In the foreword to his 1983 book, Algeny, Rifkin writes:

> While the nation has turned its attention to the dangers of nuclear war, little or no debate has taken place over the emergence of an entirely new technology that in time could very well pose as serious a threat to

> the existence of life on this planet as the bomb itself. With the arrival of bioengineering, humanity approaches a crossroads in its own technological history.

Rifkin fervently challenges the assumption that the basic ethical questions regarding biotechnology are concerned with weighing the potential benefits against the risks of harm inherent in the use of genetic science. Rather, he prompts a different ethical framework by asking the question: Do we, as human beings, possess the requisite wisdom and authority to exercise sufficient control over this new technology without damning future generations to suffer the irreversible consequences of our unforeseen mistakes? If not, then Rifkin concludes we have no right to pursue such technology (Science Digest 670).

It is likely impossible to return the genie of biotechnology back into the bottle from whence it came. As Chamberland observes, "There is only one certainty: The river that is the knowledge of life has been crossed, and we cannot go back again" (660). Still, Rifkin is not alone in his warning that we ought to think again before we accept the wishes that this particular genie promises to fulfill for us.

One like-minded critic is feminist Linda Bullard, who warns in her essay, "Killing Us Softly," Like nuclear power, genetic engineering is not a neutral technology. It is by its very nature too powerful for our present state of social and scientific development..." (689). Bullard believes that the fundamental choice facing the current generation is between embracing the fruits of biotechnology--which Bullard rejects--or accepting an ethic of deep ecology, a world view based upon "understanding how to participate in the web of life over the long term without rupturing its delicate threads" (690). In our examination of the ethics of biotechnology Bullard admonishes us to carefully examine the consequences which this science may thrust upon future generations, and she believes that without a full. understanding of these ramifications, then we have no right to make any decision to use this technology (690).

Despite compelling arguments that question further development of this young science of biotechnology, it is unlikely that the momentum of progress in this field will be halted by the sincere warnings of critics of genetic engineering such as Bullard and Rifkin. Even now at this very moment, the Human Genome Project, a massive multibillion dollar scientific endeavor to map the genetic blueprint of the human body, is well underway (Watson 708). In the face of such ambition, if history is our teacher, we may recognize the futility of thinking that the dissent of critics can sway the tide of scientific advancement. When J. Robert Oppenheimer, the director of the Manhatten Project which created the atomic bomb, balked and raised ethical concerns over the development of the more powerful hydrogen bomb, another physicist, Edward Teller, stepped forward to act as midwife for the project. Ethics have rarely, if ever, been the deciding factor governing scientific progress.

The dynamics of decision making which govern the Human Genome Project are likely to be similar to the dynamics which influence decisions made by large business corporations. As noted by Kermit Vandivier in the essay "Why Should My Conscience Bother Me?" Large corporations can be dominated by shortsighted values driven by the expediency of short-term profits (796). In such a myopic climate it is improbable that the ecologically sound values espoused by Bullard and Rifkin will find a hearing, let alone prevail. What is more likely is that future generations will probably endure some form of dystopia such as described by Huxley in Brave New World, as a result of the current generation's failure to adequately exercise the self-restraint necessary to forestall our desire to see our wishes granted by the biotechnological genie released when Watson and Crick discovered the structure of DNA in 1953. The old adage to take care in what one wishes for lest that wish be granted seems apropos to the current dilemma over biotechnology.

Any hope for the development of stronger social ethics among corporate decision makers who will direct the utilization of gains from the Human Genome Project would seem naive. Findings of a 1989 Baylor University study (Longeneckey, McKinney, Moore 745) indicate a trend toward a weakened sense of ethics among younger business leaders when compared with their older counterparts. The Baylor study suggests that younger business leaders "tend more toward moral relativism in their reasoning about ethical issues" (751). The Baylor researchers interpreted the results of their study as indicating "a societal trend away from firm values based on natural rights" (750).

If such a trend is valid, this does not bode well for adherents of value systems akin to those espoused by Bullard and Rifkin, who assume there are a priori rights held by all living organisms that exist on our planet, for example the right to have the sanctity and integrity of natural life forms respected and the right to not be subjected to genetic tampering. Such presumed "natural rights" may become increasingly difficult to defend in the emergent environment of moral relativism, which research such as the Baylor study suggests is infiltrating the corporate culture of which the biotechnology industry is but one small, yet vital part.

If one wishes to maintain values which respect the absolute sanctity of natural life, then what ought one do in light of the dawning realities of the age of biotechnology? How does one cope with the awareness that decisions being made in the corporate boardrooms of major biotechnology firms--decisions over which common people can exercise little or no control--may have the resultant effect of condemning our grandchildren's grandchildren to the hellish future envisioned by Huxley in Brave New World?

Edward Teller, the so-called father of the hydrogen bomb, once was quoted as stating that he used to be a pessimist, in the sense that he believed he knew what the future held in store for humankind, and he felt that that future seemed very bleak and grim. Teller claimed, however, that he had since been converted to optimism, in the sense that he had come to understand that the only absolute he perceived in the universe was the fact that the future was uncertain. For this reason alone, Teller found cause to be optimistic about the fate of the world.

Not unlike Teller, others have come to embrace a similarly uneasy optimism regarding the future of humanity. In fact, I am, myself, among those optimists.

There was a time in my life, which I vividly recall, when my own obsessive pessimism about the future dominated my life. This pessimism was further fueled by reading the writings of authors such as Rifkin in the early 1980s. To be truthful, I have probably never fully recovered from the sense of hopelessness and desperation which overwhelmed me at that time in my life. Some psychologists refer to such feelings as existential despair. Even today, at times the powerlessness I feel over the direction in which the world turns can tend to haunt me. Yet, somehow I find a means to overcome such obsessive fears and keep the wolves of uncertainty at bay. Somewhere I have discovered a way to keep hope for the future alive. It may be something that I learned from my young granddaughter.

Perhaps my present attitude toward ethics, or the lack thereof, and biotechnology stems from a sort of spiritual conversion, albeit from a foxhole, which has allowed me a restored sense of serenity when regarding such matters of importance. Or perhaps it is simply a sharpened sense of denial. There remains no shortage of evidence to reinforce feelings of pessimism about the fate of the world.

Or perhaps it is simply faith. Faith in the uncertainty of the future. Whatever the source of my newfound sense of optimism, it seems that I have discovered, much like Ram Dass that I, too, am no longer obsessed with root beer.

Or with ethics and biotechnology either.

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*Two particular topics from our English 102 text, Writing Across the Curriculum, deeply affected me. In my argument synthesis paper I hoped to bring together these topics--business ethics and biotechnology--and make an argument against a reckless embrace of the latter. My feelings about this ran so deep that I became stymied and unable to begin writing the paper. As a diversion, I turned to read from a book by Ram Dass that I keep on a shelf near my desk. Stumbling upon the lead quotation about the obsession with root beer, my "writer's block" dissolved and my essay began to unfold.*

*If, after finishing this essay the reader is unclear regarding my thesis or my leap of faith at the conclusion, then it may be that a fuller understudying of Ran Dass is needed. His belief regarding the liberation of self through compassionate service to others remains essential to my own capacity for coping in a world where technology advances as swiftly as ethics seem to decline.*

***Rodney Lund, student***

## An argument synthesis from English Composition 102

*In order to synthesize, a student must generate new ideas by combining previously separate ideas. Synthesizing is the opposite of analyzing, which is the breaking down of ideas into component parts. In a synthesis, a writer brings together materials from a variety of sources, some old and some new, personal experience and factual evidence, and fuses this collection of "found" material into something new.*

*In this argument synthesis, Kim makes an arguable assertion and attempts to persuade her readers, students at WCC, with a careful explanation, description, discussion, and evaluation of the ideas she has discovered while investigating two seemingly disparate notions: business and ethics.*

***Vikki Ryan, instructor***

## ETHICAL PRACTICES OR POKER?

**by Kim Rosenkilde**

How would you feel if you found out that your bank, with which you have been a member of good standing for thirty years, is preparing to mail copies of all your accounts to an attorney in another state? And they are going to do this without even notifying you. Would you be surprised at their audacity? Would you be hurt at their lack of loyalty? Would you be angry at their credibility?

I felt these emotions and many more when this happened to me three years ago. My ex-husband's attorney in California attempted to pull off this sham by mailing an "official looking" letter to my bank in Washington. The letter demanded copies of my private accounts with no explanation as to why they were needed. Without so much as blinking an eye or even investigating the letter itself, my bank assumed it was a court order and hastened to comply. In the meantime, I received a letter from another attorney in California, one who had worked for me for a short time, and just wanted to inform me about what was going on. I immediately rushed to my bank where I found that the copies of my bank accounts had been prepared but not mailed yet. Only after being confronted by me, did the bank manager call the bank's own attorney and find out that they were not likely in anyway to do what they were being coerced into doing--the letter was not a court order issued by a judge, and it was not from Washington state, so it was not legally binding. Needless to say, that bank is no longer "my bank."

In "Is Business Bluffing Ethical?", Albert Carr expounds on the issue of businesses using the practice of bluffing, and compares these practices to the game of poker. By bluffing, he means "conscious misstatements, concealment of pertinent facts, or exaggeration" (757). Carr believes that all businesses use these methods and are within their rights to do so if they want to get ahead of the other guy and continue to make profits. Likewise, he thinks that it is perfectly okay to use this ruse as long as one does not play dirty by breaking the rules of the game with cheating, or by putting others at an unfair advantage with such tactics as getting the other person drunk. As long as businesses abide by the law, they can use any tactics they like. Carr says, "Cunning deception and concealment of one's strength and intentions, not kindness and openheartedness, are vital in poker" (759). By using these gaming principles, businesses have a chance to gain the upper hand, which is a main objective for their livelihood. He also believes that our society creates these kinds of strategies because we are such a competitive society. Our customs promote individual advancement, so his reasoning upholds that bluffing may be a necessary evil for success. And the practices only change if somebody makes a stink about it or if new laws are created. Consequently, for a person to become rich or powerful, Carr advocates the importance of learning the bluffing strategies of "the half-truth or the misleading omission (767). Only then can one advance to a position of superiority.

Gerald Cavanagh advances a different stance. In his essay, "Ethics in Business," he utilizes distinct strategies for business management by setting forth three theories for analyzing transactions: Utilitarianism, Theory of Justice, and Theory of Rights. These three principles can be applied to any decision that a business needs to make. Utilitarianism considers all members who were involved in the action and decides if "the greatest good for the greatest number" applies in this situation (Cavanagh 774). This is the primary mode for most business decisions, yet it can be difficult to figure if there are numerous parties involved or if the values are hard to figure into monetary values, such as human life or liberty. The Theory of Justice considers whether all members involved were treated fairly, and if there was an "equitable distribution of society's benefits and burdens" (Cavanagh 775). The Theory of Rights considers an individual's legal and moral rights, and takes into consideration such freedoms as life and safety, privacy, and free speech. The use of Cavanagh's principles starts with collecting and studying pertinent data and then systematically goes through the theories to analyze them and determine whether they conform to ethical standards. Sometimes there will be "overwhelming factors" that need to be figured into the process. If there were a conflict between the three principles or if there were dissimilar conclusions drawn, then additional questions would need to be considered before making a final judgment.

Let us now consider my personal case with the attorney and the bank. Both used the strategy of bluffing by concealment of facts, so in that respect it was like the game of poker. If it had worked, my ex and his lawyer would have felt they had the upper hand. In this case, it just promoted hostility. And nobody actually broke the law, so "they are within their rights to operate their businesses as they see fit" (Carr 761). On the other hand, if banks or attorneys keep losing business because of immoral practices, they may soon not even have a business. Using deceit to gain the upper hand can ultimately damage the relationship between clients and the companies they employ. Carr's analogy of business and poker is clarified with this quote by Henry Taylor, "falsehood ceases to be falsehood when it is understood on all sides that the truth is not expected to be spoken" (756). Sadly, this is not the case because too often at least one of the parties does not live by these rules, and this is where the controversy begins. Clients and customers expect to be treated with respect, which means being upfront and honest. If low or improper practices are used, then the main issues and decisions become murky, and pretty soon nobody is focusing on the real issues.

Now, if we analyze my personal case from Cavanagh's standpoint, we would see where the variances lie. From the utilitarian point, it certainly wasn't a case of being "for the greatest good" because if we look at all the parties affected we would see that possibly the only ones who may have benefited would have been my ex-husband and his attorney. Neither my bank nor I would have benefited. Even this point is debatable; it would seem to be more of a case for self-interest. From a justice standpoint, it would seem that I was not treated fairly because this was not a case of equitable distribution of information. The other party was definitely not treating me as he would like to be treated. Lastly, from a rights standpoint, there were many violations. Not only was I intentionally deceived, but more importantly my privacy and my property was invaded. As Cavanagh says, "...individual persons are not to be used merely as instruments for achieving one's interests" (779).

Too often, individuals do just that. From all of our readings and from my own personal experience, I contend that certain segments of society use unethical practices for their own personal advantage. Even back in 1922, Henry Sinclair Lewis, the first American to receive the Nobel Prize for literature, wrote a novel entitled <u>Babbitt</u> about a middle-class realtor who was "conventionally honest" (808). By that, he means he was superficial. On the outside he was a law abiding citizen, but on the inside he was all for himself. In this novel the realtor, George Babbitt, finds out that Archibald Purdy, a grocer, wants to open a butcher shop next to his own grocery store, so Babbitt persuades a real estate speculator to purchase the property first.

When the grocer comes to them to negotiate a price for the property, they bluff him into paying double the price (Lewis 813). This is just another example of an elite group using immoral practices for their own personal gain.

One way these groups do this is by using the bluffing strategies, which were previously discussed and which will do three things: 1) create hostility and confusion, 2) cloud the main issues, and 3) put the opponent at an unfair advantage. Yet the strategies used by certain segments of society for their own personal gain are in direct violation of some very conventional and ethical norms, and can result in more conflict in the long run.

It would be advantageous to better this problem with some basic, conventional solutions. One idea might be to start training sessions in schools and businesses. These classes would teach students ethical standards of morality, and also how they can apply these standards to real life situations. Another idea might be an ethics board set up to evaluate managerial decisions. This would create an objective party to weigh the decisions, and then before any decisions are actively enacted, they would need to have a majority vote or they would need to come up with some alternate plans. A lot of corporations have started these boards, but it would be beneficial for <u>all</u> businesses to incorporate this plan. And definitely every business, no matter what the size, should incorporate a set of ethical theories to use as a model for all transactions such as Cavanagh's Ethical Models for Business Decisions (775). In this way, businesses will have some definite concepts to go by, and might detect any violations before they happen.

Ethical controversies are not always easy to judge, but with some clear cut criteria this task could be easier. Classes, ethics boards, and systematic models are just a few ideas. And more importantly, with some new modifications, certain segments of our society will have to alter the way they do business. It would be good to see them better themselves instead of getting the better of others. Immanuel Kant said it best when he said, "Never treat humanity simply as a means, but always also as an end " (779).

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*I like to write from personal experience because words come more easily from incidents that I have been emotionally involved in. So when my instructor threw out ideas for an argumentative synthesis, I immediately jumped on an anecdote for my introduction. From that starting point, I then made comparisons to related essays in my textbook, combined specific elements, and drew up a rough draft. For me, that was the easy part. And for me, the actual critical thinking process began with revision and that meant making "fatter paragraphs." I used my thesaurus to look up synonyms and antonyms, not only for new words, but for new ideas. I critically reread all the essays to analyze and hunt for supporting statements. And I asked myself the journalist's questions--who, what, where, when, and why--to see if I had forgotten anything, and to see what I could add. The final product, which precedes this statement, is basically the argument that I have created from restructuring other author's opinions and ideas.*

***Kim Rosenkilde, student***

**Chris Bonds**
*Fragmented Star*
Linocut, 8" x 6"

Artist's Note:

*I chose to create* Fragmented Star *because it was a positive way to express myself. The assignment was to experiment by cutting our printmaking blocks with different tools to see what kind of textures we could create. It was the kind of assignment that allowed me to freely express all the positive and negative energy within me and work with the energy that surrounds me everyday. My print represents the diversity that can only be found at such places as Whatcom Community College.*

***Chris Bonds, student***

## A descriptive essay for Geology 101

*During the first meeting of my Geology 101 class, we discuss the essence of geology as a science. Fundamental to geology is the ability to make, record, and interpret observations. The primary observations in geology are those of the Earth's surface. At this time I stress the need to enhance the student's skill for making and recording observations. The first step we take to meet this goal is a "virtual field trip." By way of a slide show we visit geologic features in the Pacific Northwest, the Southwest, and Hawaii. I ask students to jot down descriptions of what they see in slides. We then use their descriptions to compare the three regions.*

*For the next step, I give them the descriptive essay assignment to write at home and return at the next class meeting. I make an assumption that even if this is the student's first geology class, Earth should not be a totally foreign concept. I ask students to write an essay that describes some aspect of Earth that they have observed and experienced. This essay does not have to be scientifically accurate or full of specific geologic details. The students use their own words to describe what they saw. These observations and experiences may come from a family vacation to Mount Rushmore ten years ago, or a raft trip down the Nooksack River this past summer, or a mountain hike they did last weekend. The purpose of this essay is to stress that student observations are important and that written communication of observations is a critical skill for this class. The ultimate goal is that at some point later in the quarter the student will learn a specific geological explanation for their personal experience. Hopefully, this will help link the science of geology with the everyday experience of Earth itself.*

***Bernie Dougan, instructor***

## Earth

**by Meesun Keel**

When I think of the word "earth," it immediately reminds me of how Koreans use the word quite often to indicate the completion of a cycle of life and death. I grew up with the notion that we are born of the earth, so naturally we are going back to where we came from. When someone has passed away we say, "One has returned to Earth." A Korean legend has it that the three spirits that live in the mountains, sky, and earth bring us to life, and they take us back at the end. Therefore, there was an intimate relationship between people's lives and every aspect of earth as a whole. But, it was not long ago that I began to have glimpses of understanding about what it all meant, and how much our lives are deeply connected to every aspect of the Earth we live on.

I remember when I was in San Francisco when the notorious earthquake occurred on October 17, 1989, and I had a good opportunity to experience some of its impact on my life. After attending a lecture in the city, I was heading home towards Walnut Creek, about 40 miles east of San Francisco. As I was driving in the direction of the Bay Bridge Freeway, I felt something funny about my car. The car went berserk, briefly shifting to the sides as if pushed by strong winds. Not knowing what caused it, I just thought my old car was acting up again. By the time I was approaching closer to the freeway ramp, I noticed that all the cars were backed up--traffic jam as usual. I didn't think much of it at first, but suddenly realized that all the traffic lights were out and people were pouring out on the streets from everywhere with the look of confusion and disbelief. Still not comprehending fully, I decided to turn around to avoid the traffic and I drove back in the direction of Golden Gate Park. Going back, while observing the same chaos and confusion on the street, I turned on the radio expecting only to hear of some local car accidents, but what I heard was the news of earthquake. A section of the Bay Bridge had collapsed, and the upper deck of the Nimitz Freeway in Oakland had collapsed onto the lower deck.

My heart sank with terror for a moment. I didn't know what to do or where to go next. After a pause, I thought Golden Gate Park would be a safe place to stay for a while until I could figure out how to get home. First, I tried to call home and work but couldn't get through since the lines were all blocked. The streets were dark without any electricity, but people still gathered around outside of the restaurants and shops, which were dimly lit with candle lights. After sitting in my car for hours watching the Marina district burning in full flame, I started to much on a cold sandwich and had my ears glued to the radio, trying to assess the situation. The radio reports on the earthquake damages were conflicting and as scattered and confused as my mind. It seemed that none of the bridges connecting to the East Bay was safe except the Dum Barton Bridge located in about 40 miles south of San Francisco. So, I took a detour and finally got home after driving 85 miles.

As I was driving away from the dark, chaotic city, the image of the collapsed Bay Bridge suddenly gripped me. Could I have ever imagined in my wildest dreams that the road in front of me could be dropped off just like that and I would be plunged into the water in no time? That was truly fear-provoking. days later, however, I realized the full scope of the collapsed Nimitz Freeway tragedy, and it saddened me deeply when I learned that many employees of my school, University of California, San Francisco, were killed on that freeway.

Experiencing this earthquake somehow woke me up to the full impact of the earth's movement. It also has awakened me to the fact that the earth has always been moving under our feet even though we don't feel it most of the time.

*When our instructor asked us to write an essay about earth, I didn't know what to write at first. Being an outdoor person, I had many opportunities to interact with nature. Among all my experiences, however, the one with the 1989 earthquake in San Francisco can to my mind strongly. Not only was it a ground-shaking experience on the physical level, but, more importantly, it heightened my awareness of the changing nature in all forms of our physical earth. Often, the earth we walk on seems ever so solid, substantial, and still, but its energy is like a fluid that is constantly flowing and moving, bringing about changes in shapes and forms on our lives.*

***Meesun Keel, student***

## A book review for History 215

*Each student in History 215 was required to read and write a formal review of the book* *Land Use, Environment, and Social Change* *by Richard White. The review was to be combination of a summary and an analysis of the book's argument, and point out its strengths and weaknesses. Suzy demonstrated a thorough understanding of the book's content by her use of specific examples from the book. She also outlined some of the book's important strength's and weaknesses, which demonstrated her analysis of an important piece of historical literature. The organization and writing style were also very easy to understand.*

***Mike Nagle, instructor***

### White Review

**by Suzy Hartman**

The Pacific Northwest is one region of the United States with a very unique history. Richard White's book, *Land Use, Environment, and Social Change*, narrowed down the term "Pacific Northwest" and focused primarily on the history of Island County, Washington. White's book looked at three major environmental areas that were subject to change. These areas are the forest, the animals, and the land itself. Two groups of people that were major contributors to the changes which took place are the Native Americans and the European settlers and explorers. Despite some dry parts, this was a good book overall.

The forest was a vital part of the environment in the Pacific Northwest. Douglas firs, cedars, hemlock and alder were all major components. The first change to the forest that took place was through Native American occupation. They had a great respect for the world around them, but they also knew how to use the land for their own benefit. It was common among Native Americans to burn portions of the forest. This was done mainly to encourage the growth of bracken, a fern which flourished in areas that had been recently burned. Resulting from this burning, was young growth throughout the forests and fields. The forest became dominated primarily by Douglas fir rather than the previous abundance of cedar and hemlock. These young trees were virtually free from disease and were given a park-like undergrowth due to the fires that opened the forest floor for secondary growth. The next change the forests were subjected to was when the Europeans began to settle in the Pacific Northwest. These settlers brought with them a view of the land that was very different than the one the Native Americans had. They saw the possibility of using the trees to make money through logging. One of the main affects of logging on the forests were the slash fires that transpired. Slash fires were caused by the "leftovers" of the logging industry. The loggers discarded any part of a tree that they considered imperfect in any way with the idea that there was an unlimited supply at their disposal. The slash fires not only burned the scraps, but also killed seedlings and did damage to the topsoil through erosion. These changes brought on the creation of the "new forest" consisting of an increased number of hemlock and alder as opposed to Douglas fir.

The alterations the Native Americans made to the forests and other areas had a drastic affect on the animals in the area. The new growth brought on by the fires attracted deer and elk that previously weren't as common. Not only did it bring deer and elk to the area, but those animals, in turn, lured predators such as wolves. The Europeans caused even greater commotion in the animal population. Not only did the Europeans bring capitalist ideas with them, as mentioned before, but also brought domesticated animals such as pigs, sheep, and cattle. Because of the expense of feeding pigs and raising crops for profit, the farmers allowed their pigs to run wild. When they needed a pig, they simply hunted one. However, they found that the wolves preyed on these pigs, and therefore the farmers killed the wolves. Killing the wolves, in turn, increased the deer and elk population along with saving the precious pigs. Once again, they found their efforts to be of little help. The pigs were back, but had a tendency to feed on the farmer's crops and camas. In addition to the pig problem, sheep and cattle overgrazed and ruined other crops such as potatoes.

The Native Americans, once again, were the first to impact the soil and land in a major way. The fires they set were specifically designed to encourage the growth of bracken. Camas and nettles were two other plants which were actually harvested. The natives kept these plants in a garden-like environment and weeded out any other unwanted plants or weeds. Also, because of the burning, there was an increased number of berries in the area. The natives not only affected the soil and land by burning, but also their mere occupation of the land brought changes. The soil became enriched with nutrients because of the waste put out by the people. This included human excrement along with remains of food or dead animals that were left. Europeans' affect on the soil was quite extensive. The damage done to the topsoil through logging resulted in trees with shallow roots. This was because all the nutrients the roots needed were found on the top layers of soil, therefore, the roots had no reason to go deeper. The Europeans' use of plows to farm the land was necessary due to the European style of farming, although it damaged the land. The plowing caused the break down of the native cover of the prairies which generated an increase in evaporation rates. This meant a lack of water for the crops during the hot, dry summers. As they continued to plow, the virgin soils proceeded to break down which reduced the water-holding ability of the soil. This deterioration continued until the soils could only be used for pasture land.

These interrelated areas of change were very dramatic. This is seen through the transformation of the forests and other plants due to burning. Because of the new vegetation, the animal population and the different kinds of animals found were greatly influenced. The changes to the forests and the soil beneath them were also strongly related. When the trees were cut down the soil eventually became damaged, and because of this damage trees could no longer grow tall and healthy. This all shows that one can not expect to occupy a region without causing some change to almost every aspect of the environment around them.

Richard White used a variety of sources to write *Land Use, Environment, and Social Change*. He used public documents such as surveys and annual financial reports along with a few newspapers and journals. A variety of secondary works such as books and articles from magazines and other sources were used as well. White also cited a court case from Seattle in the bibliography. This variety of sources gave him a wider base of information to draw from. He had some excerpts from diaries which showed a particular person's view or opinion about something, but he also added many facts and newspaper articles of specific events that could back up the dairy entries. This use of many different sources makes White's book more credible.

Richard White was born in 1947 and is currently a history professor at the University of Washington. Since this book, he wrote two others: *"It's Your Misfortune and None of My Own", A New History of the American West*, and *The Organic Machine*. White presented the information in *Land Use, Environment, and Social Change* with a thematic approach rather than in any chronological order. It served the purpose of this particular book well since it related to specific themes rather than provide an outline of historical events. Charts and tables were used to emphasize statistics that White wanted to reiterate. Basically, they put in chart form what he proved in his writing.

This book is recommended for one specifically interested in the study of Island County, Washington. A person, mainly history students or professors, may find the statistics White used much more interesting than the average reader would. White did a good job of getting his points across, although it sometimes became a bit dry because of all the facts he had to use to prove his points. In this book, White tried to make people think. Did the Native Americans make changes to the land? Did Europeans really come to a region that was untouched and undamaged by human hands? These questions and more arose and were answered throughout this book. As a text book, or a supplement to a text book, this book was very well written and recommended, but not for the recreational reader.

*In writing this book review, I was to first summarize themes of <u>Land Use, the Environment, and Social Change</u>, and them present my opinion of the book as an educated reader. In the first part of the review, I combined what I learned from reading the book and the notes I took during class discussions to come up with a thematic summary. In the latter part, I included how effectively I thought the author used other resources of reference and also noted who I believed the intended audience to be.*

***Suzy Hartman, student***

## Two experiments from Math 200

*Mathematics can be used to describe the laws of nature with surprising results. As a cup of coffee sits on your desk and cools, does the change in the liquid's temperature follow a mathematical model? Sir Isaac Newton (1642-1727) explored this question and developed a "Law of Cooling" in which the temperature of the cooling object was related to the temperature of the environment and the amount of time the object was allowed to cool.*

*Students in the Fall quarter Math 200 course, Calculus I, were given the task of studying Newton's Law of Cooling by conducting experiments with their graphing calculators linked to a special data gathering device called a "CBL." Once the data was collected, it was analyzed and an equation was created using the graphing calculator to fit the data. Students described the procedures used to conduct the experiment and suggested factors which might have affected the results. The final phase of the activity required students to test the cooling rates of various containers: glass, styrofoam, ceramic, and one group used china. Which material best retained the heat in the liquid? The students' reports reveal a difference of opinion.*

**Doug Mooers, instructor**

### Experiment #1: Cooling Curves

**by Andrea Birdsell, Matt Cole, Thuy Ho, Jeffrey Hottle, Lisa Nesbitt**

Each of the following four pages is the data found and formulated from measuring the cooling of hot water contained in three different materials. The first page is our trial run to ensure that the equipment was working and that we knew what we were doing. The data from each material and trial includes: a table of our time and temperature results, a graph of the cooling curve, an approximation of the equation of the resulting function, and an example of this equation. Each container, with the exception of the initial trial, was lidless and approximately the same volume of water. For the initial trial, a covered Styrofoam cup was used with about 460-470 ml of water. For each remaining trial, the volume of water was approximately 300 ml of water. The initial run was not included in our results for part 2 of the experiment.

The purpose of this experiment was to apply calculus applications to real life situations. There were difficulties that we encountered in transferring these situations to calculus. The first CBL that we used did not connect to the TI-82 correctly. The TI-82 read only a temperature of 0 degrees for the entire run of the program. Since the water was obviously not frozen solid, we obtained a different CBL to continue the experiment. Other inaccuracies and statistical deviation could be due to many factors. For example, the material that we measured for this experiment was water, not coffee. Different liquids would cool differently; alcohol, for instance, cools much more rapidly than water. Therefore, the rate of change for our experiment will be different from the rate of change for a group which used coffee as a cooling liquid. In addition, we did not precisely measure the volume of water for each trial, which also would have affected the rates of change. We also did not have the same initial temperature of the water in each container, and the room temperature was different for each trial. And finally, we were not holding the container (which would be much more likely if the liquid inside was coffee) and adding insulation. The lack of woodchucks clustered around the containers of liquid also affected the rates of change for the temperatures.

Some additional experiments could be conducted to account for these errors. Some other factors that could be accounted for include: the temperature of the material before addition of the liquid, the amount of that material, and the initial temperature of the probe itself.

## Styrofoam Cup (covered)

StyrofoamC :=

| Time | Temp |
|---|---|
| 75 | 50.21 |
| 150 | 48.87 |
| 225 | 47.84 |
| 300 | 46.90 |
| 375 | 45.76 |
| 450 | 44.86 |
| 525 | 43.98 |
| 600 | 43.18 |
| 675 | 42.32 |
| 750 | 41.49 |
| 825 | 40.85 |
| 900 | 40.10 |
| 975 | 39.30 |
| 1050 | 38.58 |
| 1125 | 37.98 |
| 1200 | 37.21 |
| 1275 | 36.69 |
| 1350 | 35.93 |
| 1425 | 35.43 |
| 1500 | 34.69 |
| 1575 | 34.20 |
| 1650 | 33.32 |
| 1725 | 33.07 |
| 1800 | 32.45 |
| 1875 | 31.82 |
| 1950 | 31.36 |
| 2025 | 30.82 |
| 2100 | 30.37 |
| 2175 | 29.84 |
| 2250 | 29.39 |
| 2325 | 28.95 |
| 2400 | 28.43 |
| 2475 | 27.99 |
| 2550 | 27.48 |
| 2625 | 27.12 |
| 2700 | 26.76 |

Initial temperature reading was 73.51 degrees Celsius.
Final temperature reading was 50.06 degrees Celsius.
Room temperature was 23.3 degrees Celsius.

Using the ExpReg on the graphing calculator,
the equation for a Styrofoam cup was:

$$y = 49.87342336 \cdot (0.9997635793^{x})$$

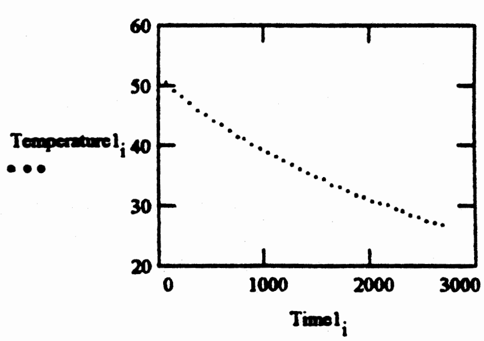
The correlation (r value) for this equation was -0.9989885948

This would be an exponential equation. If this equation is accurate, then when time is equal to 825, temperature should equal 41.03 degrees. As you can see from the table to the left, our temperature at that time was 40.85 degrees. The variation shown in our results could be due to rounding error.

Note: The matrix at left represents our table of values. The time in seconds is on the left. The adjusted temperature (our readings minus room temperature) in degrees Celsius is on the right. This graph was created using Mathcad; The Time, Temperature and i variables below were created solely for the purpose of graphing.

$Time1 := StyrofoamC^{\langle 0 \rangle}$ $\quad$ $Temperature1 := StyrofoamC^{\langle 1 \rangle}$

$i := 0..35$



Glass :=

| Time | Temp |
|---|---|
| 75 | 65.41 |
| 150 | 60.29 |
| 225 | 56.34 |
| 300 | 52.98 |
| 375 | 50.45 |
| 450 | 47.93 |
| 525 | 45.88 |
| 600 | 43.86 |
| 675 | 42.29 |
| 750 | 40.59 |
| 825 | 39.12 |
| 900 | 37.76 |
| 975 | 36.52 |
| 1050 | 35.16 |
| 1125 | 33.98 |
| 1200 | 32.74 |
| 1275 | 31.76 |
| 1350 | 30.72 |
| 1425 | 29.76 |
| 1500 | 28.89 |
| 1575 | 27.96 |
| 1650 | 27.04 |
| 1725 | 26.35 |
| 1800 | 25.66 |
| 1875 | 24.89 |
| 1950 | 24.22 |
| 2025 | 23.47 |
| 2100 | 22.94 |
| 2175 | 22.19 |
| 2250 | 21.67 |
| 2325 | 20.93 |
| 2400 | 20.41 |
| 2475 | 20.02 |
| 2550 | 19.42 |
| 2625 | 18.82 |
| 2700 | 18.44 |

## Glass Mug

**Initial temperature reading was 83.91 degrees Celsius.**
**Final temperature reading was 36.94 degrees Celsius.**
**Room temperature was 18.5 degrees Celsius.**

**Using the ExpReg on the graphing calculator, the equation for a glass mug was:**

$$y = 58.84214951\cdot(0.999548088^{x})$$

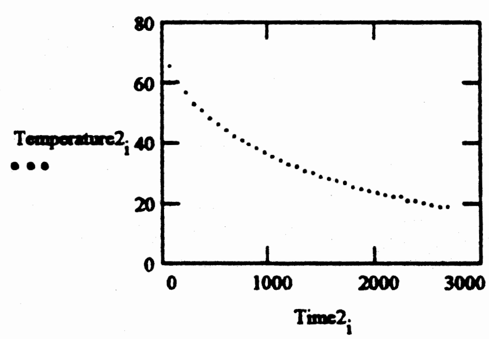
**The correlation (r value) for this equation was -0.9929497968.**

**This would be an exponential equation.**
**If this equation is accurate, then when time is equal to 825, temperature should equal 40.53 degrees. As you can see from the table to the left, our temperature at that time was 39.12 degrees. The variation shown in our results could be due to rounding error.**

**Note: The matrix at left represents our table of values. The time in seconds is on the left. The adjusted temperature (our readings minus room temperature) in degrees Celsius is on the right. This graph was created using Mathcad; The Time, Temperature and i variables below were created solely for the purpose of graphing.**

$Time2 := Glass^{\langle 0\rangle}$ $\quad$ $Temperature2 := Glass^{\langle 1\rangle}$

$i := 0..35$



## Styrofoam Cup

Styrofoam :=

| Time | Temp |
|---|---|
| 75 | 44.77 |
| 150 | 43.27 |
| 225 | 41.69 |
| 300 | 40.52 |
| 375 | 39.37 |
| 450 | 38.15 |
| 525 | 37.06 |
| 600 | 36.06 |
| 675 | 35.08 |
| 750 | 34.20 |
| 825 | 33.41 |
| 900 | 32.40 |
| 975 | 31.64 |
| 1050 | 30.73 |
| 1125 | 30.06 |
| 1200 | 29.32 |
| 1275 | 28.52 |
| 1350 | 27.94 |
| 1425 | 27.37 |
| 1500 | 26.80 |
| 1575 | 26.02 |
| 1650 | 25.47 |
| 1725 | 24.91 |
| 1800 | 24.37 |
| 1875 | 23.74 |
| 1950 | 23.20 |
| 2025 | 22.80 |
| 2100 | 22.27 |
| 2175 | 21.87 |
| 2250 | 21.39 |
| 2325 | 20.87 |
| 2400 | 20.47 |
| 2475 | 20.08 |
| 2550 | 19.61 |
| 2625 | 19.22 |
| 2700 | 18.84 |

Initial temperature reading was 63.77 degrees Celsius.
Final temperature reading was 37.84 degrees Celsius.
Room temperature was 19.0 degrees Celsius.

Using the ExpReg on the graphing calculator,
the equation for a styrofoam cup was:

$$y = 43.96609623\cdot(0.99967665^{x})$$

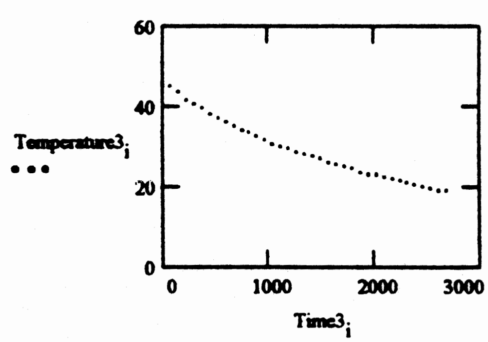
The correlation (r value) for this equation was -0.9980860732.

This would be an exponential equation.
If this equation is accurate, then when time is equal to 825, temperature should equal 33.67 degrees. As you can see from the table to the left, our temperature at that time was 33.41 degrees. The variation shown in our results could be due to rounding error.

**Note:** The matrix at left represents our table of values. The time in seconds is on the left. The adjusted temperature (our readings minus room temperature) in degrees Celsius is on the right. This graph was created using Mathcad; The Time, Temperature and i variables below were created solely for the purpose of graphing.

$Time3 := Styrofoam^{\langle 0\rangle}$ $Temperature3 := Styrofoam^{\langle 1\rangle}$

$i := 0..35$



## Ceramic Mug

Ceramic :=

| Time | Temp |
|---|---|
| 75 | 53.00 |
| 150 | 50.49 |
| 225 | 48.25 |
| 300 | 46.35 |
| 375 | 44.53 |
| 450 | 42.78 |
| 525 | 41.10 |
| 600 | 39.67 |
| 675 | 35.41 |
| 750 | 34.89 |
| 825 | 33.80 |
| 900 | 33.39 |
| 975 | 32.16 |
| 1050 | 31.03 |
| 1125 | 30.01 |
| 1200 | 29.08 |
| 1275 | 28.09 |
| 1350 | 27.26 |
| 1425 | 26.37 |
| 1500 | 25.57 |
| 1575 | 24.84 |
| 1650 | 24.05 |
| 1725 | 23.35 |
| 1800 | 22.71 |
| 1875 | 22.16 |
| 1950 | 21.39 |
| 2025 | 20.85 |
| 2100 | 20.23 |
| 2175 | 19.82 |
| 2250 | 19.29 |
| 2325 | 18.68 |
| 2400 | 18.15 |
| 2475 | 17.68 |
| 2550 | 17.29 |
| 2625 | 16.77 |
| 2700 | 16.38 |

Initial temperature reading was 76.30 degrees Celsius.
Final temperature reading was 39.68 degrees Celsius.
Room temperature was 23.3 degrees Celsius.

Using the ExpReg on the graphing calculator,
the equation for a ceramic mug was:

$$y = 50.72794815 \cdot (0.9995629052^{x})$$

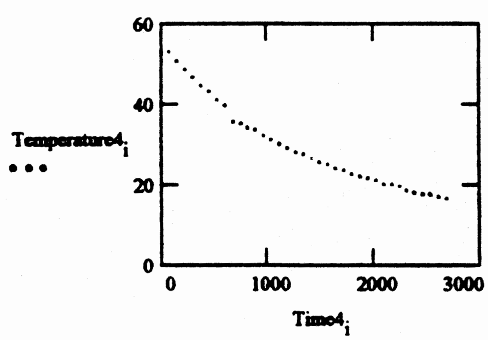
The correlation (r value) for this equation was -0.99491846

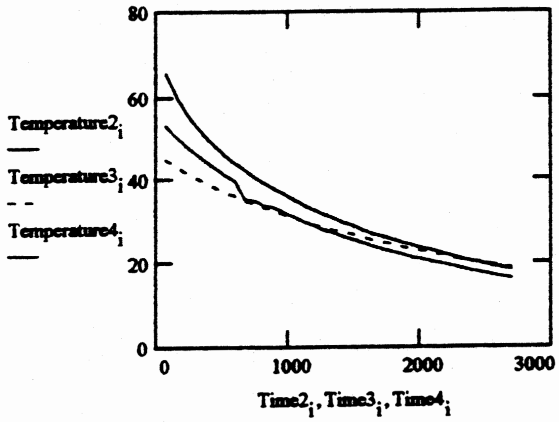
This would be an exponential equation.
If this equation is accurate, then when time is equal to 825, temperature should equal 35.36 degrees. As you can see from the table to the left, our temperature at that time was 33.80 degrees. The variation shown in our results could be due to rounding error.

Note: The matrix at left represents our table of values. The time in seconds is on the left. The adjusted temperature (our readings minus room temperature) in degrees Celsius is on the right. This graph was created using Mathcad; The Time, Temperature and i variables below were created solely for the purpose of graphing.

$\text{Time4} := \text{Ceramic}^{\langle 0 \rangle}$ $\text{Temperature4} := \text{Ceramic}^{\langle 1 \rangle}$

$i := 0..35$






**Legend:**

Solid red line: Glass Mug
Dashed blue line: Styrofoam cup
Solid green line: Ceramic mug

To find out which material holds heat best, we used the change in temperature divided by the change in time for each material. This equation will give us the average rate of change for the temperature per second.

For glass: $\dfrac{\Delta\text{Temperature}}{\Delta\text{Time}} = \dfrac{65.41 - 18.44}{2700 - 75} = 0.018$ degrees Celsius per second.

For Styrofoam: $\dfrac{\Delta\text{Temperature}}{\Delta\text{Time}} = \dfrac{44.77 - 18.84}{2700 - 75} = 0.01$ degrees Celsius per second.

For ceramic: $\dfrac{\Delta\text{Temperature}}{\Delta\text{Time}} = \dfrac{53.00 - 16.38}{2700 - 75} = 0.014$ degrees Celsius per second.

In conclusion, based upon the graph shown above and the difference for the rates of change, our group concluded that Styrofoam holds heat the best over a time interval of 45 minutes. The graph for Styrofoam has the smallest average slope, and the average rate of change per second is the smallest of the three values. To emphasize the point, notice that the water in the Styrofoam cup started at a temperature lower than in the other two materials. At the end of 45 minutes, however, the water in the Styrofoam cup was 0.4 degrees warmer than it was in the glass mug, and 2.46 degrees warmer than it was in the ceramic mug.

## Experiment #1: Heat

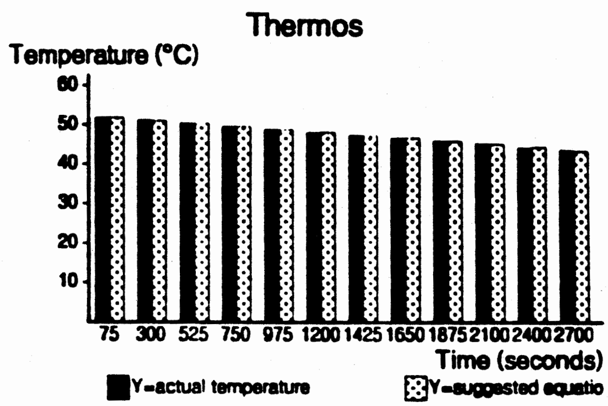
by Christine Ackerson, Kiran Dhillon, Todd Malsbary, Julissa Wilks, Susan Wall

*For all tables, the following information is given as follows:
L3 = the time in seconds (75 second intervals for 36 readings)
L5 = the water's temperature - the room temperature (measured in °C)
all temperatures have been rounded to two decimals.

For our extra experiment, we decided to test for the cooling rate of boiled water over an interval of 45 minutes from a small coffee thermos that had a lid. These cups are very popular with coffee drinkers and we wanted to test just how much hotter they keep a liquid compared to glass, styrofoam, and china cups.

Y=(51.9507720166)(.999931533675)^x

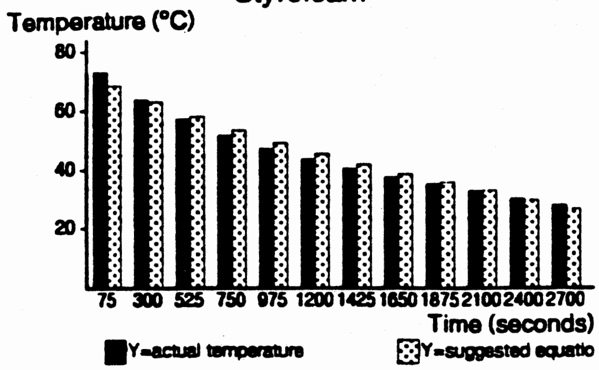
| L3 | L5 | Y=ab^x |
|---|---|---|
| 75 | 51.70 | 51.68 |
| 150 | 51.57 | 51.42 |
| 225 | 51.27 | 51.16 |
| 300 | 50.96 | 50.89 |
| 375 | 50.66 | 50.63 |
| 450 | 50.42 | 50.37 |
| 525 | 50.12 | 50.12 |
| 600 | 49.88 | 49.86 |
| 675 | 49.58 | 49.60 |
| 750 | 49.35 | 49.35 |
| 825 | 49.06 | 49.10 |
| 900 | 48.83 | 48.84 |
| 975 | 48.60 | 48.60 |
| 1050 | 48.31 | 48.35 |
| 1125 | 48.08 | 48.10 |
| 1200 | 47.79 | 47.85 |
| 1275 | 47.57 | 47.61 |
| 1350 | 47.28 | 47.36 |
| 1425 | 47.06 | 47.12 |
| 1500 | 46.85 | 46.88 |
| 1575 | 46.56 | 46.64 |
| 1650 | 46.35 | 46.40 |
| 1725 | 46.13 | 46.16 |
| 1800 | 45.85 | 45.93 |
| 1875 | 45.64 | 45.69 |
| 1950 | 45.43 | 45.46 |
| 2025 | 45.15 | 45.22 |
| 2100 | 44.94 | 44.99 |
| 2175 | 44.73 | 44.76 |
| 2250 | 44.46 | 44.53 |
| 2325 | 44.46 | 44.31 |
| 2400 | 44.04 | 44.08 |
| 2475 | 43.77 | 43.85 |
| 2550 | 43.77 | 43.63 |
| 2625 | 43.57 | 43.40 |
| 2700 | 43.37 | 43.18 |




This is a model of exponential regression. As you can see, the thermos hardly loses any heat. After 20 readings, or 25 minutes (1500 seconds), the temperature had decreased ≈ 4.85 °C. After the full 36 readings, 45 minutes (2700 seconds), the temperature had decreased only ≈8.33 °C.

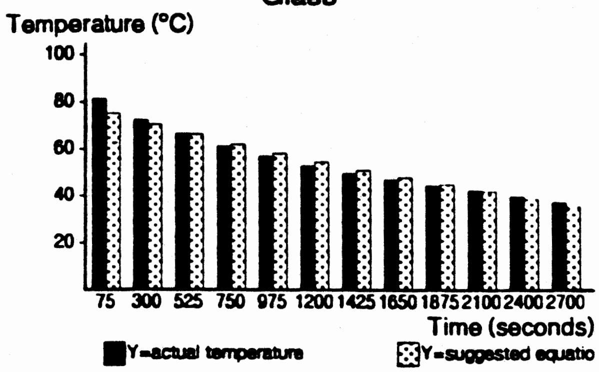
We found temperatures for each of the following: Styrofoam, glass, and china. The results (graphs, and tables) are listed below. Temperatures were measured for a total of 45 minutes for each item. We found glass to be the best material for holding heat (excluding the thermos results).

### Styrofoam



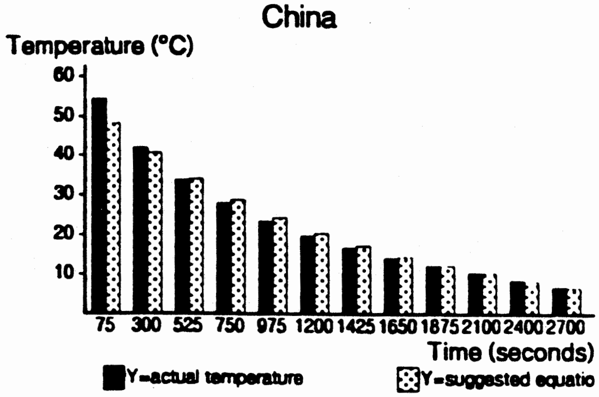

Y= (69.4615879181) (.999638347816)^x

### Glass




Y= (76.32345) (.99971)^x

### China




Y= (50.8548017374) (.999236289741)^x

## STYROFOAM

| L3 | L5 | Y=ab^x |
|---|---|---|
| 75 | 72.10 | 67.60 |
| 150 | 68.50 | 65.79 |
| 225 | 65.67 | 64.03 |
| 300 | 63.04 | 62.32 |
| 375 | 60.58 | 60.65 |
| 450 | 58.61 | 59.03 |
| 525 | 56.67 | 57.45 |
| 600 | 54.64 | 55.91 |
| 675 | 52.89 | 54.41 |
| 750 | 51.27 | 52.96 |
| 825 | 49.65 | 51.54 |
| 900 | 48.37 | 50.16 |
| 975 | 46.85 | 48.82 |
| 1050 | 45.65 | 47.51 |
| 1125 | 44.48 | 46.24 |
| 1200 | 43.09 | 45.00 |
| 1275 | 41.99 | 43.80 |
| 1350 | 40.85 | 42.63 |
| 1425 | 39.98 | 41.48 |
| 1500 | 38.95 | 40.37 |
| 1575 | 38.04 | 39.29 |
| 1650 | 37.05 | 38.24 |
| 1725 | 36.24 | 37.22 |
| 1800 | 35.38 | 36.22 |
| 1875 | 34.59 | 35.25 |
| 1950 | 33.82 | 34.31 |
| 2025 | 33.14 | 33.39 |
| 2100 | 32.24 | 32.50 |
| 2175 | 31.65 | 31.63 |
| 2250 | 31.07 | 30.78 |
| 2325 | 30.27 | 29.96 |
| 2400 | 29.70 | 29.16 |
| 2475 | 29.13 | 28.36 |
| 2550 | 28.50 | 27.62 |
| 2625 | 27.94 | 26.88 |
| 2700 | 27.39 | 26.16 |

## GLASS

| L3 | L5 | Y=ab^x |
|---|---|---|
| 75 | 80.82 | 74.68 |
| 150 | 77.34 | 73.07 |
| 225 | 74.50 | 71.50 |
| 300 | 71.85 | 69.96 |
| 375 | 69.79 | 68.46 |
| 450 | 67.62 | 66.98 |
| 525 | 65.82 | 65.54 |
| 600 | 64.03 | 64.13 |
| 675 | 62.12 | 62.75 |
| 750 | 60.53 | 61.40 |
| 825 | 59.10 | 60.08 |
| 900 | 57.68 | 58.79 |
| 975 | 56.10 | 57.52 |
| 1050 | 54.85 | 56.29 |
| 1125 | 53.56 | 55.07 |
| 1200 | 52.37 | 53.89 |
| 1275 | 51.14 | 52.73 |
| 1350 | 50.14 | 51.59 |
| 1425 | 49.09 | 50.48 |
| 1500 | 48.13 | 49.40 |
| 1575 | 47.18 | 48.34 |
| 1650 | 46.23 | 47.30 |
| 1725 | 45.51 | 46.28 |
| 1800 | 44.73 | 45.28 |
| 1875 | 43.87 | 44.31 |
| 1950 | 43.11 | 43.35 |
| 2025 | 42.35 | 42.42 |
| 2100 | 41.64 | 41.51 |
| 2175 | 41.02 | 40.62 |
| 2250 | 40.33 | 39.74 |
| 2325 | 39.71 | 38.89 |
| 2400 | 39.22 | 38.05 |
| 2475 | 38.54 | 37.23 |
| 2550 | 38.05 | 36.43 |
| 2625 | 37.57 | 35.65 |
| 2700 | 36.89 | 34.88 |

## CHINA

| L3 | L5 | Y=ab^x |
|---|---|---|
| 75 | 54.25 | 48.02 |
| 150 | 49.25 | 45.35 |
| 225 | 45.03 | 42.82 |
| 300 | 41.73 | 40.44 |
| 375 | 38.61 | 38.19 |
| 450 | 36.04 | 36.06 |
| 525 | 33.45 | 34.05 |
| 600 | 31.46 | 32.16 |
| 675 | 29.52 | 30.36 |
| 750 | 27.76 | 28.67 |
| 825 | 25.96 | 27.08 |
| 900 | 24.57 | 25.57 |
| 975 | 23.27 | 24.14 |
| 1050 | 21.94 | 22.80 |
| 1125 | 20.69 | 21.53 |
| 1200 | 19.66 | 20.33 |

| L3 | L5 | Y=ab^x |
|---|---|---|
| 1275 | 18.57 | 19.20 |
| 1350 | 17.57 | 18.13 |
| 1425 | 16.63 | 17.12 |
| 1500 | 15.78 | 16.17 |
| 1575 | 14.86 | 15.27 |
| 1650 | 14.14 | 14.42 |
| 1725 | 13.47 | 13.61 |
| 1800 | 12.76 | 12.86 |
| 1875 | 12.17 | 12.14 |
| 1950 | 11.50 | 11.46 |
| 2025 | 10.92 | 10.83 |
| 2100 | 10.26 | 10.22 |
| 2175 | 9.80 | 9.65 |
| 2250 | 9.23 | 9.12 |
| 2325 | 8.80 | 8.61 |
| 2400 | 8.34 | 8.13 |

| L3 | L5 | Y=ab^x |
|---|---|---|
| 2475 | 7.89 | 7.68 |
| 2550 | 7.46 | 7.25 |
| 2625 | 7.01 | 6.84 |
| 2700 | 6.67 | 6.46 |

Other things to consider:

The numbers on the x axis are in increments of 225 from 75 to 2100 and then in increments of 300 from 2100 to 2700. The reason for this is that the computer only allowed twelve inputs of information.

Our group conducted four individual experiments. The thermos and china experiments involved the use of the TI-85, whereas the glass and sytrofoam experiments involved the use of TI-82. Note that the beginning temperatures are higher in the experiments using the TI-82 than those using the TI-85. Whether the difference is the result of the different calculators or the separated experiments, we are unsure.

This experiment was very interesting. I never knew there was a machine like the CBL that would link with our calculators. The experiment was fairly easy if you followed the instructions, but it was a little more difficult to find the equations that matched the temperature curves. The hardest part was to connect the experiment and data to real life situations. This process involved a lot of critical thinking. As a group we had to weigh the connections and relationships of the experiment, analyze what was really going on, and determine a conclusion. Assuming the data was correct, we had to question its significance. The experiment led us to believe that there is more to math than meets the eye. The equation we came up with was similar to the actual temperatures plotted by the CBL, but only for the specific interval of time. Because the interval was given in the guidelines of the experiment, we don't know if the equation would still work on a larger interval of time. The experience had made me appreciate the processes mathematicians must go through to solve complex problems and create math texts.

Christine Ackerson

## Two experiments from Math 200

*The following reports were generated from an experiment in which students were asked to match a "distance versus time" graph generated by a computer program with a person walking in front of a motion detector. The data from the motion detector was fed to a graphing calculator which displayed the path which the person had walked.*

*The mechanical model used to describe the walk was broken into pieces on the basis of intervals of time and the shape of the picture (curve) representing the walk. Each piece was represented by an equation which the students had to determine from the data that they had gathered. As one group related in their report, "The experiment made us look more closely at what a velocity graph actually represents in real life..."*

*In short, here are two an examples of "walking the walk" and having the equations to describe it too.*

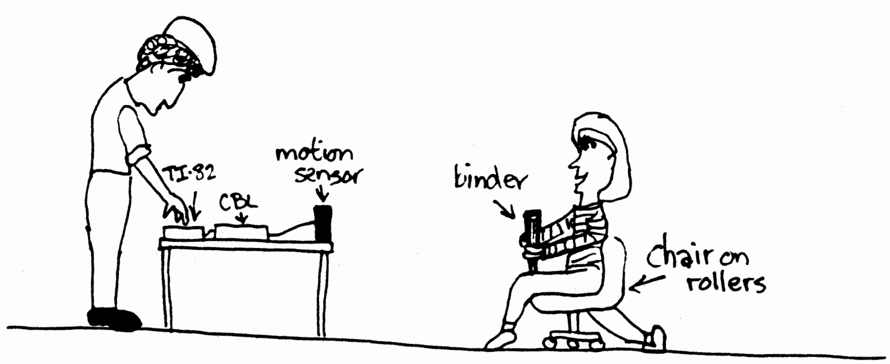
**Doug Mooers, instructor**

### Matching Distance vs. Time Graphs

**by Heather Dinsmore, Geoffrey Smigun, Audra Svedin, Nicole Wells**

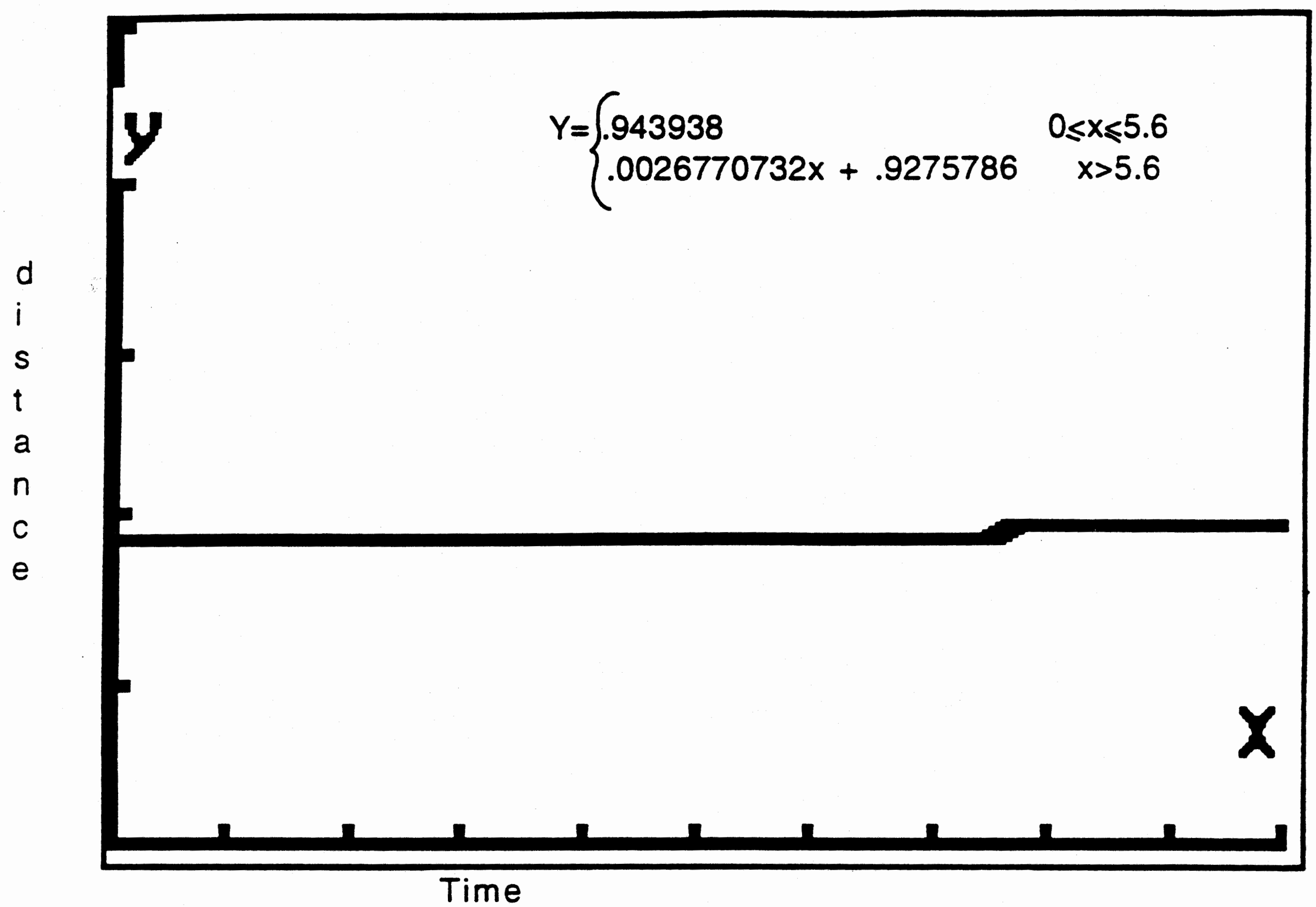
Purpose: To match distance vs. time graphs picked randomly by the CBL unit with graphs generated by our controlled movement to or from a motion sensor and to calculate piecewise equations that define these graphs.

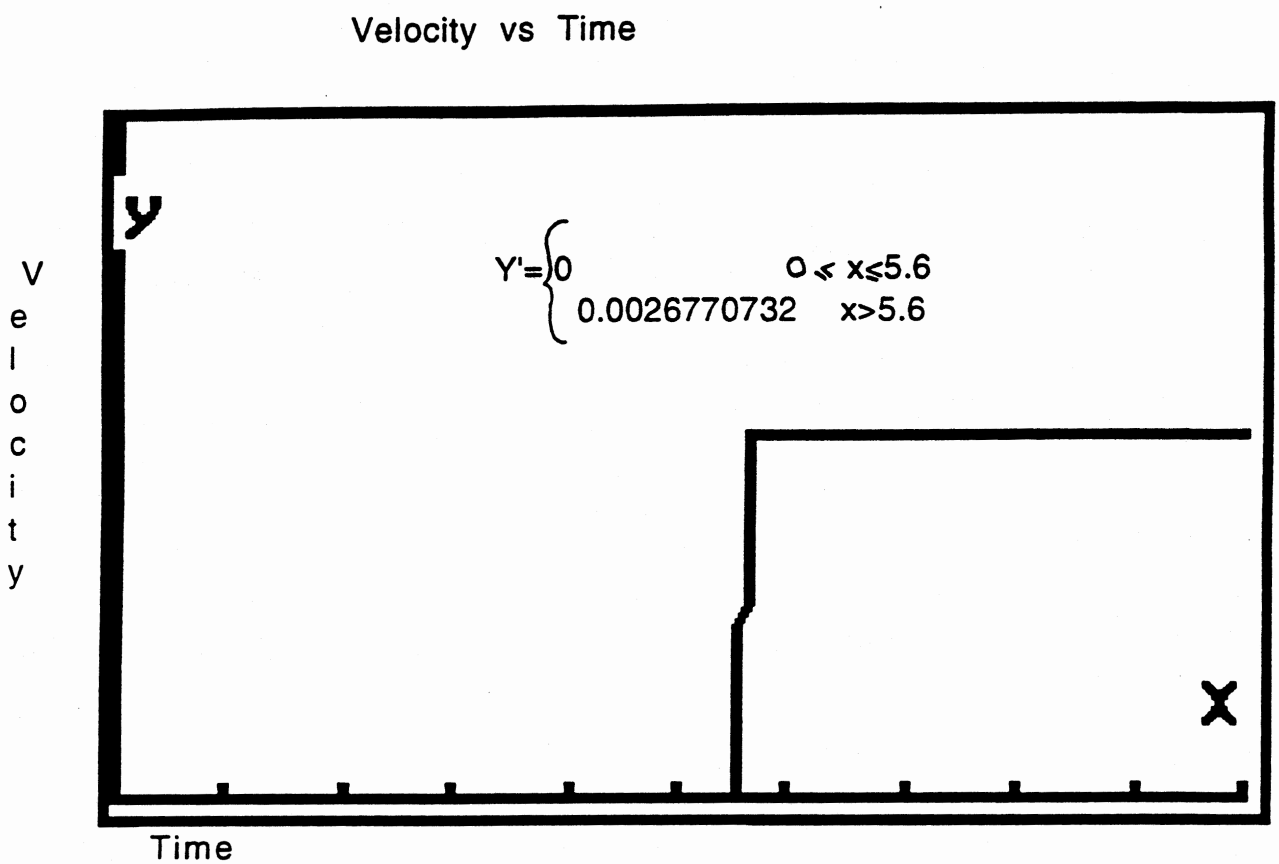
Procedure: The CBL unit was connected to the motion detector and the TI-82 calculator and placed on a level table. A graph was randomly chosen by the CBL unit and displayed on the calculator. A person with a plastic covered ring binder sat in a wheeled chair Z (with the large, flat side of the binder facing the motion sensor) and moved forward or backward on cue; the velocity with which this person moved was derived by estimating the velocity in meters per second that was displayed on the calculator. After mimicking the randomly chosen graph to an acceptable accuracy, the data was stored in the calculator. Using algebraic methods, a pieceswise function that defined the graph was calculated and entered into "Y1" on the calculator and then graphed against the previous graph to compare and check for accuracy. A graph of the velocity with respect to time was then graphed and the whole experiment repeated.



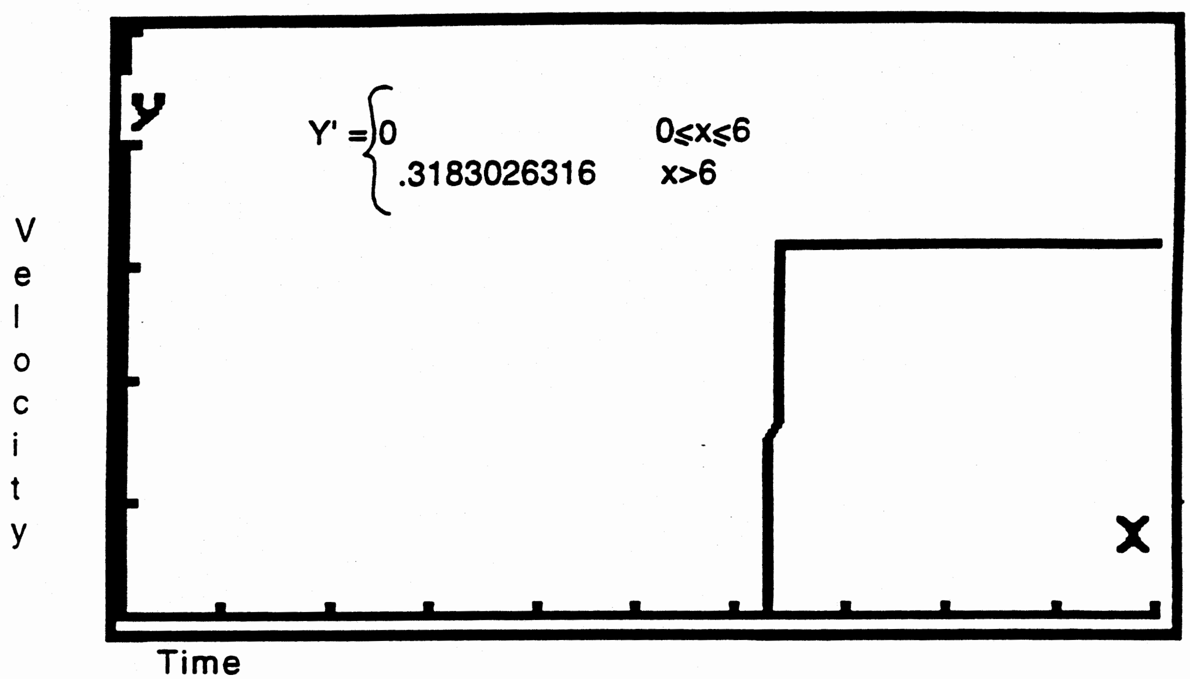

Conclusions and Value: We found that a smoother graphic line (hence more constant velocity) was attained when the moving subject sat in a wheeled chair and propelled himself that way rather that walking. As well, holding a flat surface (the binder) in the path between the body and the motion sensor increased this stability. The experiment made us look more closely at what a velocity graph actually represents in real life as well as giving us a better understanding of how to calculate a piecewise function and graph it on a calculator.

Time vs Distance - Exp. 1




Velocity vs Time
y
V
e
l
o
c
i
t
y
Y'= 0 0 ≤ x≤5.6
0.0026770732 x>5.6
X
Time

Velocity vs Time Exp. 2



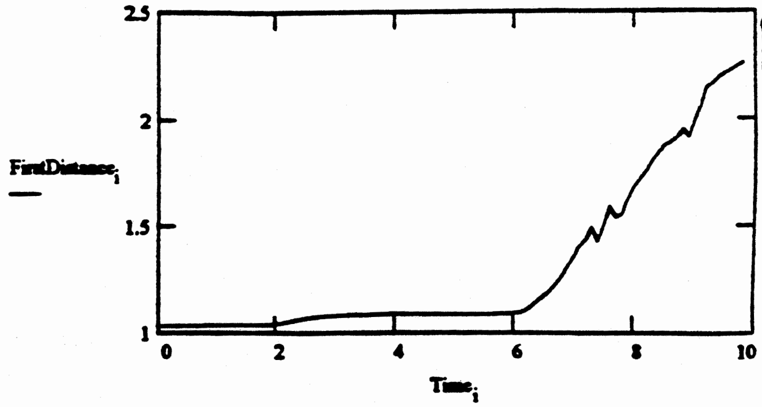
## Experiment #2: Matching Distance vs. Time Graphs

by Andrea Birdsell, Matt Cole, Thuy Ho, Jeffrey Hottle, Lisa Nesbit

Time, 1st Walk, 2nd Walk

c =

| | 0 | 1 | 2 |
|---|---|---|---|
| 0 | 0 | 1.00979 | 1.03284 |
| 1 | 0.1 | 1.00979 | 1.03284 |
| 2 | 0.2 | 1.00869 | 1.03284 |
| 3 | 0.3 | 1.00979 | 1.03284 |
| 4 | 0.4 | 1.00869 | 1.03284 |
| 5 | 0.5 | 1.00869 | 1.03393 |
| 6 | 0.6 | 1.00759 | 1.03284 |
| 7 | 0.7 | 1.00759 | 1.03393 |
| 8 | 0.8 | 1.00649 | 1.03503 |
| 9 | 0.9 | 1.0054 | 1.03503 |
| 10 | 1 | 1.0054 | 1.03503 |
| 11 | 1.1 | 1.0043 | 1.03503 |
| 12 | 1.2 | 1.0043 | 1.03503 |
| 13 | 1.3 | 1.0043 | 1.03613 |
| 14 | 1.4 | 1.0043 | 1.03503 |
| 15 | 1.5 | 1.00649 | 1.03503 |
| 16 | 1.6 | 1.00759 | 1.03613 |
| 17 | 1.7 | 1.00759 | 1.03613 |
| 18 | 1.8 | 1.0043 | 1.03613 |
| 19 | 1.9 | 1.00759 | 1.03723 |
| 20 | 2 | 1.00649 | 1.04052 |
| 21 | 2.1 | 1.01308 | 1.04491 |
| 22 | 2.2 | 1.02076 | 1.0515 |
| 23 | 2.3 | 1.02076 | 1.05808 |
| 24 | 2.4 | 1.02735 | 1.06357 |
| 25 | 2.5 | 1.03503 | 1.06906 |
| 26 | 2.6 | 1.03942 | 1.07345 |
| 27 | 2.7 | 1.04491 | 1.07564 |
| 28 | 2.8 | 1.0504 | 1.07674 |
| 29 | 2.9 | 1.05589 | 1.07894 |
| 30 | 3 | 1.06028 | 1.08003 |
| 31 | 3.1 | 1.06467 | 1.08223 |
| 32 | 3.2 | 1.06796 | 1.08333 |
| 33 | 3.3 | 1.07125 | 1.08442 |
| 34 | 3.4 | 1.07345 | 1.08442 |
| 35 | 3.5 | 1.07564 | 1.08442 |
| 36 | 3.6 | 1.07564 | 1.08552 |
| 37 | 3.7 | 1.07674 | 1.08662 |
| 38 | 3.8 | 1.07784 | 1.08772 |




Above is the graph for our first walk. The table of values, shown at left, consists of Time (column 0), First Walk (column 1), and Second Walk (column 2). We used Mathcad again for this experiment; unfortunately, there is no easy way to create a piecewise function in Mathcad. To accomplish the same results, we needed to create a program for each walk's corresponding function. The final equations for the first walk are as shown:

$x := 0, 0.1 .. 10 \quad a(x) := 0.0098783333 \cdot x + 1.020763333$

$b(x) := 0.3135567568 \cdot x - 0.8164081085$

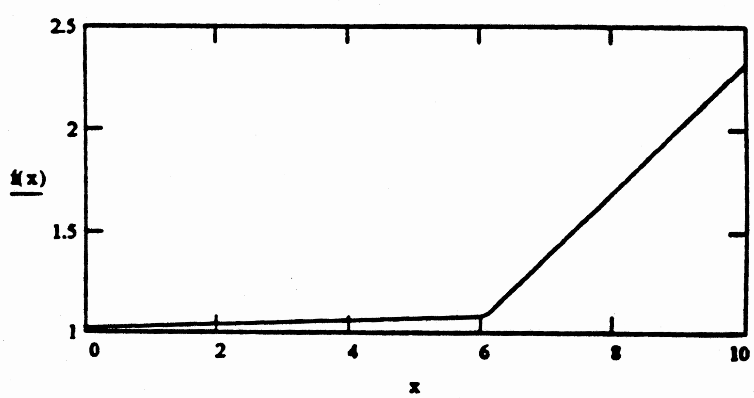
$$f(x) := \left| \begin{array}{l} a(x) \text{ if } x \le 6 \\ b(x) \text{ if } x > 6 \end{array} \right.$$

The translation of this is as follows:

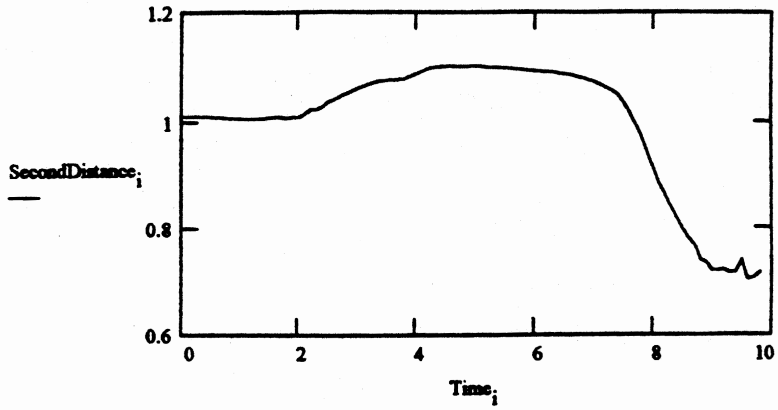
When $0 \le x \le 6$ the function is $f(x) = 0.0098783333x+1.020763333$

When $6 \le x \le 10$ the function is $f(x) = 0.3135567568x-0.8164081085$

The graph of this set of functions looks something like



| | | | |
|---|---|---|---|
| 39 | 3.9 | 1.08223 | 1.08881 |
| 40 | 4 | 1.08772 | 1.08881 |
| 41 | 4.1 | 1.09211 | 1.08881 |
| 42 | 4.2 | 1.0965 | 1.08772 |
| 43 | 4.3 | 1.09869 | 1.08772 |
| 44 | 4.4 | 1.10089 | 1.08772 |
| 45 | 4.5 | 1.10199 | 1.08662 |
| 46 | 4.6 | 1.10199 | 1.08552 |
| 47 | 4.7 | 1.10089 | 1.08552 |
| 48 | 4.8 | 1.10089 | 1.08662 |
| 49 | 4.9 | 1.10199 | 1.08552 |
| 50 | 5 | 1.10199 | 1.08552 |
| 51 | 5.1 | 1.10199 | 1.08552 |
| 52 | 5.2 | 1.09979 | 1.08552 |
| 53 | 5.3 | 1.09979 | 1.08662 |
| 54 | 5.4 | 1.09869 | 1.08662 |
| 55 | 5.5 | 1.0976 | 1.08772 |
| 56 | 5.6 | 1.0976 | 1.08772 |
| 57 | 5.7 | 1.0954 | 1.08881 |
| 58 | 5.8 | 1.0954 | 1.08991 |
| 59 | 5.9 | 1.0932 | 1.08991 |
| 60 | 6 | 1.0932 | 1.09211 |
| 61 | 6.1 | 1.09211 | 1.0954 |
| 62 | 6.2 | 1.09101 | 1.10638 |
| 63 | 6.3 | 1.09101 | 1.12504 |
| 64 | 6.4 | 1.08881 | 1.14918 |
| 65 | 6.5 | 1.08772 | 1.17113 |
| 66 | 6.6 | 1.08552 | 1.19418 |
| 67 | 6.7 | 1.08223 | 1.22711 |
| 68 | 6.8 | 1.08003 | 1.26443 |
| 69 | 6.9 | 1.07674 | 1.30724 |
| 70 | 7 | 1.07235 | 1.35224 |
| 71 | 7.1 | 1.06796 | 1.40273 |
| 72 | 7.2 | 1.06247 | 1.43566 |
| 73 | 7.3 | 1.05589 | 1.49273 |
| 74 | 7.4 | 1.0482 | 1.42468 |
| 75 | 7.5 | 1.03393 | 1.49932 |
| 76 | 7.6 | 1.01528 | 1.58932 |
| 77 | 7.7 | 0.99223 | 1.53773 |
| 78 | 7.8 | 0.968083 | 1.552 |
| 79 | 7.9 | 0.938448 | 1.62774 |




**Above is the graph for our second walk. The table of values, shown at left, consists of Time (column 0), First Walk (column 1), and Second Walk (column 2). We used Mathcad again for this experiment; unfortunately, there is no easy way to create a piecewise function in Mathcad. To accomplish the same results, we needed to create a program for each walk's corresponding function. The final equations for the second walk are as shown:**

$y := 0, 0.1 .. 10 \quad j(y) := -0.00165 \cdot y + 1.00727$

$k(y) := 0.0392842105 \cdot y + 0.930583158 \; l(y) := -0.0171117647 \cdot y + 1.162268235$

$$m(y) := -0.1362022727 \cdot y + 2.050417272 \quad g(y) := \left| \begin{array}{ll} j(y) & \text{if } y \le 2 \\ k(y) & \text{if } (y>2)\cdot(y \le 4) \\ l(y) & \text{if } (y>4)\cdot(y \le 7.5) \\ m(y) & \text{if } y>7.5 \end{array} \right.$$

**The translation of this is as follows:**

**When $0 \le x \le 2$ the function is f(x) = -0.00165x+1.00727**

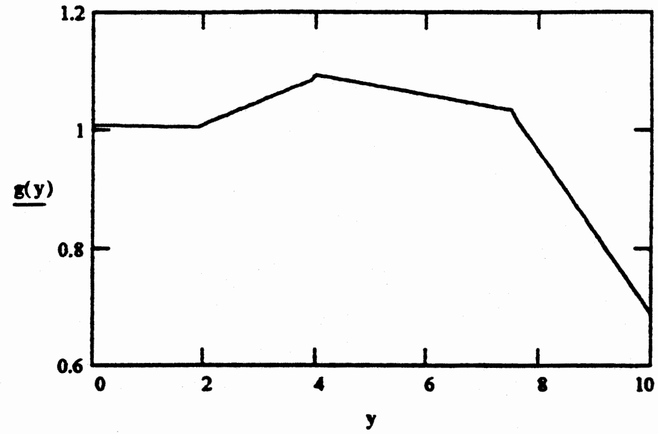
**When $2 < x \le 4$ the function is f(x) = 0.0392842105x+0.930583158**

**When $4 < x \le 7.5$ the function is f(x) = -0.0171117647x+1.162268235**

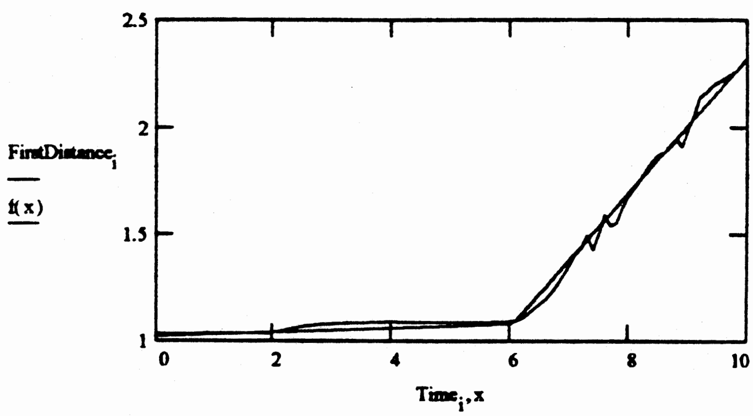
**When $7.5 < x \le 10$ the function is f(x) = -0.1362022727x+2.050417272**

| | | | |
|---|---|---|---|
| 80 | 8 | 0.911008 | 1.67823 |
| 81 | 8.1 | 0.88247 | 1.71335 |
| 82 | 8.2 | 0.860518 | 1.75286 |
| 83 | 8.3 | 0.836371 | 1.79677 |
| 84 | 8.4 | 0.816614 | 1.83738 |
| 85 | 8.5 | 0.796857 | 1.86811 |
| 86 | 8.6 | 0.780393 | 1.88018 |
| 87 | 8.7 | 0.767222 | 1.90653 |
| 88 | 8.8 | 0.738684 | 1.94055 |
| 89 | 8.9 | 0.734294 | 1.90653 |
| 90 | 9 | 0.720025 | 1.98775 |
| 91 | 9.1 | 0.718928 | 2.05141 |
| 92 | 9.2 | 0.721123 | 2.13812 |
| 93 | 9.3 | 0.71344 | 2.16227 |
| 94 | 9.4 | 0.716732 | 2.18861 |
| 95 | 9.5 | 0.739782 | 2.20617 |
| 96 | 9.6 | 0.702464 | 2.22044 |
| 97 | 9.7 | 0.705756 | 2.2402 |
| 98 | 9.8 | 0.715635 | 2.25556 |

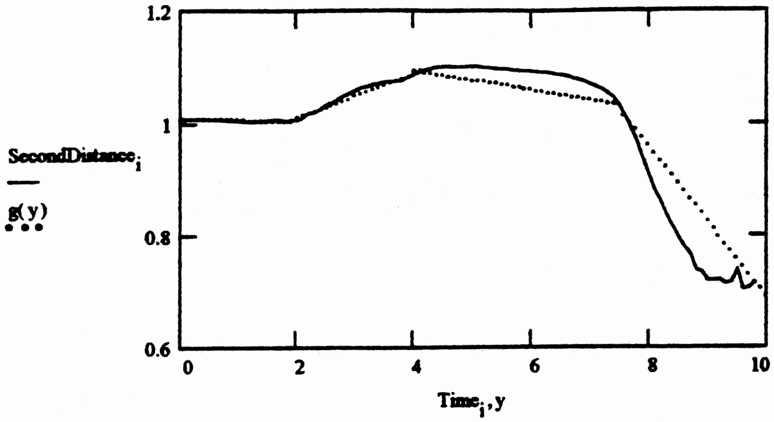
**The graph of this set of functions looks something like**




**By superimposing the two sets of graphs on their corresponding functions, we get**




**Note: The second walk did not fit onto this page, so it migrated south to the next one.**



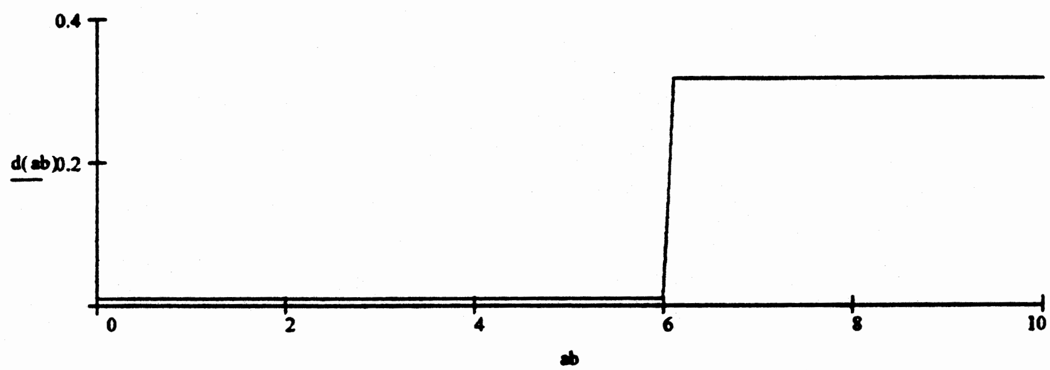

As you can see from the graphs above, our derived functions matched our data more closely on the first walk than on the second. The experiment procedure went quite smoothly; we had no problems with the program or the connection to the CBL. We did, however, speculate about the possible difficulties or inaccuracies we might have encountered. For example, the sonic motion detector connected to the CBL was not bouncing sound waves off of a hard, smooth surface. The sound waves that the CBL used to measure distance bounced off of soft clothing - not an entirely accurate reflector. In addition, the cables connecting the CBL, sound wave detector and the TI-82 sometimes had a mind of their own. One run of the experiment was deemed unusable due to the fact that the cables had tangled and prevented our group member to walk the distance necessary to match the graph. Occasionally, the cables were brought in front of the motion detector. This could also have caused inaccurate readings. According to the written materials included with the motion detector, the range of the detector is approximately 6 meters, with a deflection of 15 to 20 degrees. This means that the detector could have been reading echoes off of the tables and chairs near our group. In the area that we used, there was a distance of approximately 3.6 meters from the detector to the opposing wall. Using our Pre-Calculus skills, we determined that the area covered by the detector could be as much as 2.33 meters across at the far end of the cone. Since there were tables and chairs within that range, false readings could have been entered into the ear of the CBL. After a few entanglements with the cables, we decided to have a group member stand between the detector and the target (off to the side, though) to hold the cables aloft. We did not realize at the time that this may have altered our information. And finally, it is possible (though not very likely) that invisible penguins were crossing the path between our group member and the CBL. Penguins are not necessarily good reflectors of sound, either.

To calculate the velocity during each part of the motion, we needed to determine the first derivative of each graph. For the first walk, when 0 is less than x and x is less than 6, the first derivative is 0.0098783333. This is slightly obvious; the functions that we defined are all linear, and the derivative of that functon is merely the slope of that line. Therefore, between 0 and 6 seconds our target, Andrea, was moving 0.0098783333 meters per second towards the CBL. And between 6 and 10 seconds, her velocity was 0.313556 meters per second, again towards the CBL. For the second walk, between 0 and 2 seconds (approximately) Andrea was moving 0.00165 meters per second away from the CBL. For the time interval of 2 to 4 seconds, she moved at a rate of 0.0392842105 meters per second towards the CBL. From 4 to 7.5 seeconds, she moved again away from the CBL, this time with a velocity of 0.0171117647 meters per second. Finally, she increased her velocity to 0.1362022727 meters per second away from the CBL. Note that all of these velocities are positive; this was done to avoid confusion, and to take up more space. All of the motion towards the CBL produced negative velocities, and all of the motion away from the CBL produced positive velocities, surprisingly enough. The invisible penguins merely produced blips on the graph.

To create the graph for the function of Velocity vs. Time, we needed to create a piecewise function. Again, Mathcad doesn't like having students do their piecewise functions, so we neede to create mini-programs for the first and second walks so that we could fool the program into doing what we want it to do. (Shh. Don't tell the program)

$ab := 0, 0.1 .. 10 \qquad a(ab) := 0.0098783333 \quad b(ab) := 0.3135567568$

$$d(ab) := \left| \begin{array}{l} a(ab) \text{ if } ab \le 6 \\ b(ab) \text{ if } ab > 6 \end{array} \right.$$



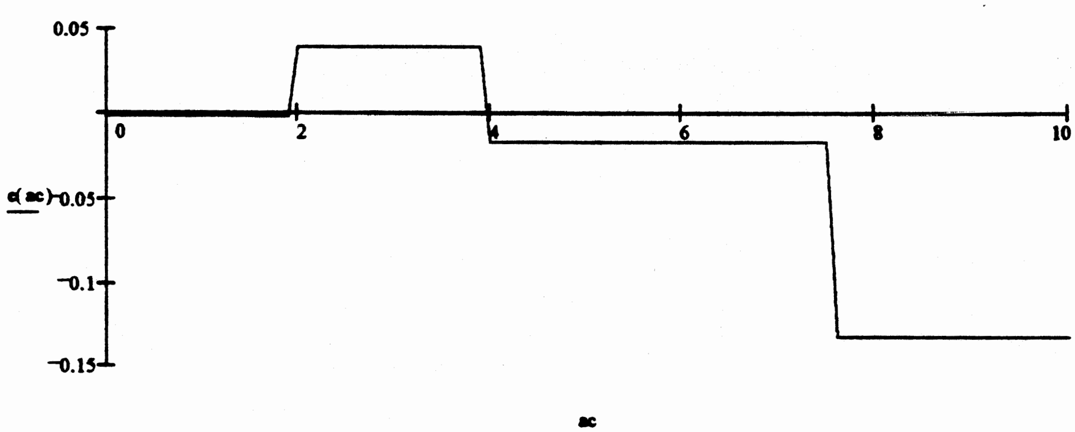

Above is the graph of velocity vs. time for the first walk.

$ac := 0, 0.1 .. 10 \quad a(ac) := -0.00165 \qquad b(ac) := 0.0392842105 \quad c(ac) := -0.01711117647$

$d(ac) := -0.132022727$

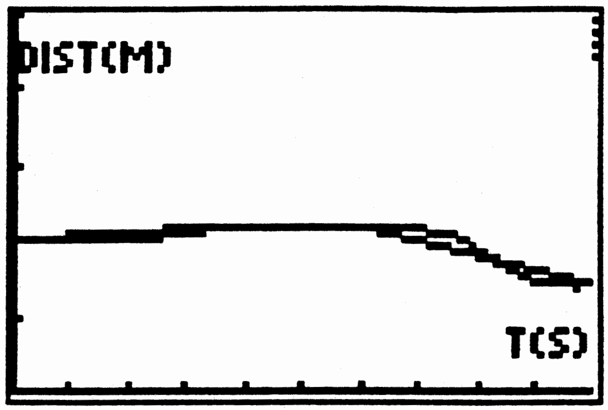
$$e(ac) := \left| \begin{array}{l} a(ac) \text{ if } ac \le 2 \\ b(ac) \text{ if } (ac>2)\cdot(ac \le 4) \\ c(ac) \text{ if } (ac>4)\cdot(ac \le 7.5) \\ d(ac) \text{ if } ac > 7.5 \end{array} \right.$$

Below is the graph of velocity vs. time for the second walk.



And finally, we have the two graphs that were generated randomly by the program DTMATCH. The walks that we walked are superimposed upon the random functions.

This is the second walk,

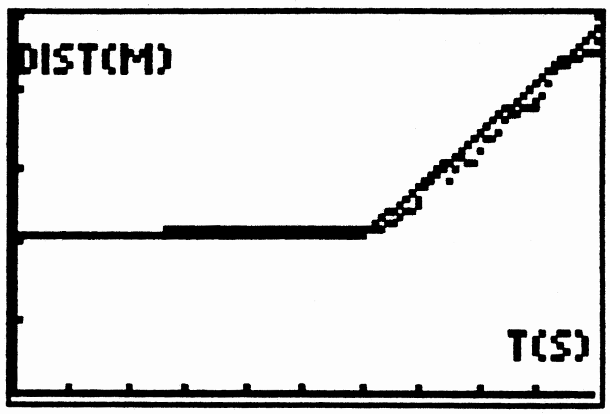



For both graphs,

Xmin = 0
Xmax = 99
Xscl = 10

Ymin = 0
Ymax = 2.5
Yscl = 0.5

and this is the first walk.



**Two experiments from Math 201**

*The element of critical thinking is the skill to determine the inappropriate use of a mathematical model in analyzing a problem.*

*The following experiment required students to record the time when a defined volume of water had leaked from a dripping faucet. The students were given a mathematical tool from Calculus, the integral, and used it to calculate the area under the curve of data. The number obtained using the integral represents the "total change" of a function when the function integrated represents a rate of change. In this particular experiment, the data did NOT represent a rate of change, and consequently, the number produced by the integral was meaningless in terms of the total amount of water lost by the dripping faucet.*

*Students worked in groups and were asked to consider: "What does the number produced by the integral represent?" Most groups reached the correct conclusion: It represents "nothing" in the context of the total volume.*

***Doug Mooers, instructor***

**Volume of Water Dripped by a Leaking Faucet**

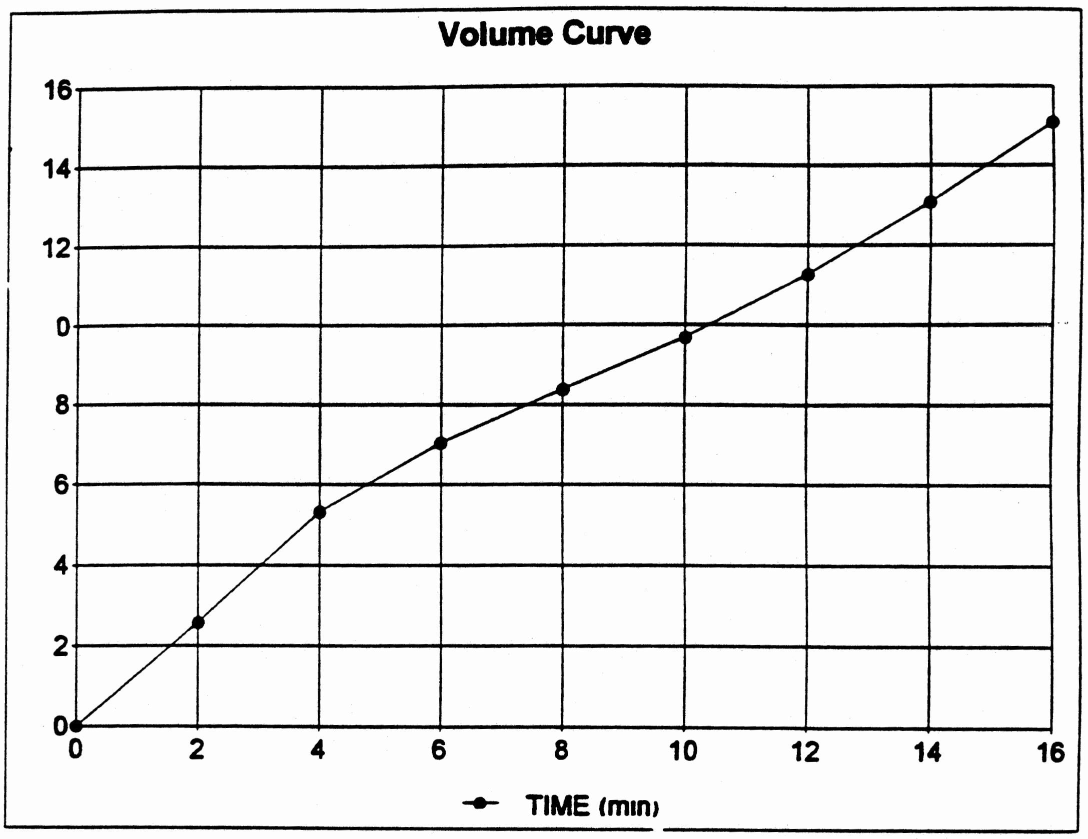
**by Matt Cole, Kiran Dhillon, David Lippman**

In this investigation the time required for the volume of water from leaky faucet to reach certain points was determined. Water from a dripping faucet was allowed to drip into a Pyrex measuring cup. The time it took for the water level in the cup to reach 2, 4, 6, 8, 12, 14 and 16 ounces was recorded. The following chart reports the number of minutes in which the water level in the measuring cup reached the listed volumes.

Data Chart 1: Time vs. Volume

| VOLUME (ounces) | TIME (min) |
|---|---|
| 0 | 0 |
| 2 | 2.58 |
| 4 | 5.33 |
| 6 | 7.05 |
| 8 | 8.38 |
| 10 | 9.68 |
| 12 | 11.27 |
| 14 | 13.08 |
| 16 | 15.1 |

The following is a graph the curve created by the points in the data chart above.



The area under the curve was determined by using two techniques. One of these was Riemann sums (right hand and left hand sums). The other method was counting the number of boxes and estimating the area. The calculations are as follows:

A. Riemann Sums

=> The change in "x" values = (16-0)/8 =2

=>Left Hand Sum=2*(0+2.58+5.33+7.05+8.38+9.68+11.27+ 13.08) =114.74

=>Right Hand Sum=2*(2.58+5.33+7.05+8.38+9.68+11.27+13.08+ 15.1) =144.94

=>Average $= \dfrac{(114.74+144.94)}{2}$

=129.84 minutes

B. Counting boxes:

A total of 32.65 boxes were counted. Each box has an area of 4. The total area was calculated as 130.6 minutes (32.65*4).

Although this information is quite interesting, the important question is whether it is significant. In simple terms the curve in the above graph represents the time "y" it takes the faucet to drip "x" ounces of water. In calculus terms this curve represents a distance.

Calculating the area of a distance curve does not result in any significant information. The area calculated under the curve was approximately 130 minutes implying that it took 130 minutes for the faucet to drip 16 ounces of water. This is incorrect since according to the experiment it took approximately 15.1 minutes for the water volume to reach 16 ounces.

This indicates that the area underneath the curve is indeed meaningless.

*Audra recognized that the data needed to be modified in order to obtain some meaningful conclusion, so she determined the drip rate and integrated it. The result confirmed the "real world" experience: a total of 8 oz. of water had been lost by the dripping faucet.*

***Doug Mooers, instructor***

**Dripping Faucet Experiment**

**by Audra Svedin**

Objective: To graph and analyze a function which we create by monitoring a dripping faucet.

Materials: dripping faucet
8 oz beaker or see-through measuring cup
a board the length of your sink basin may be helpful
a stopwatch or clock (preferably one that measures in seconds)

Procedure: If the faucet is not naturally dripping, adjust the tap so that it is dripping at a rate that is not too fast and not excessively slow. Place the beaker in the bottom of the sink so that it sits in a level position. If this is not possible (in a sink with a curved basin for example) or if you find that it evils be too difficult to assess the level of the water as it fills up the beaker, position the board in the sink basin to create a level and more suitable surface. (fig. I )

Once a suitable spot for the beaker is set up, dry out the beaker and, as simultaneously as possible, position the beaker under the faucet and start the stopwatch. When the water level reaches the 2 oz mark, record the time. Do the same at the 4 oz mark, the 6 oz mark and the 8 oz mark.

Organize the data into a table, graph it, and analyze it.

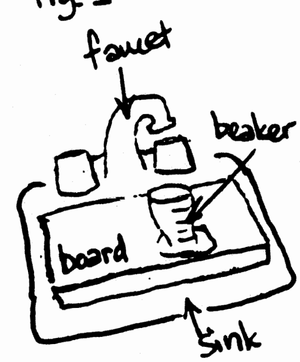
Optional: using a graphing calculator, determine an equation for the function.

Results: The straight-line graph of the volume vs. time function (fig.2) indicates that the volume of water in the beaker is increasing at a constant rate. The slope of the line depicts the rate at which the water is filling up the beaker - in this case that rate is I ounce per 5 minutes. The equation of this line is V(t)=.2t.

Charting the data we get:

| time(min.) | volume of oz) | rate (oz.per min.) |
|---|---|---|
| 10 | 2 | .2 |
| 20 | 4 | .2 |
| 30 | 6 | .2 |
| 40 | 8 | .2 |

fig. 1




The graph of R(t) is shown in fig.3. Because the rate is constant, the function is the horizontal line y=.2. The area under this line is 8 which represents the total volume of water (in ounces) that dripped into the beaker from 0 to 40 minutes.

fig.2 V(t)

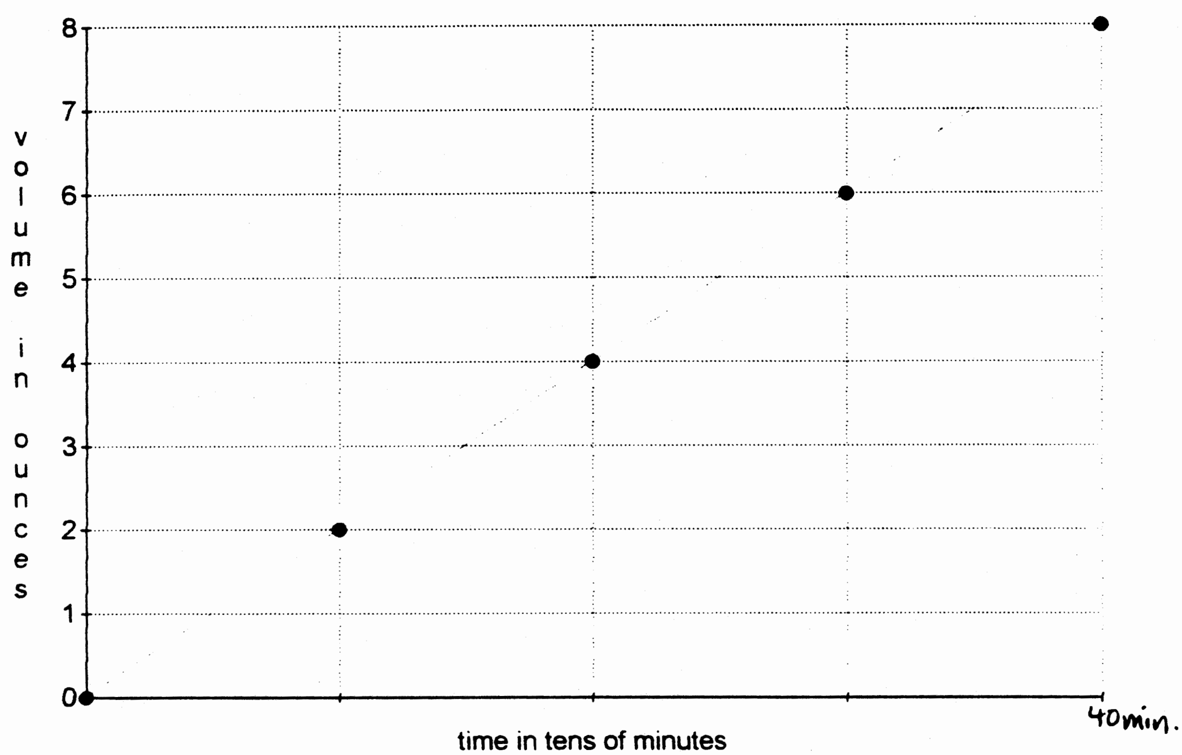
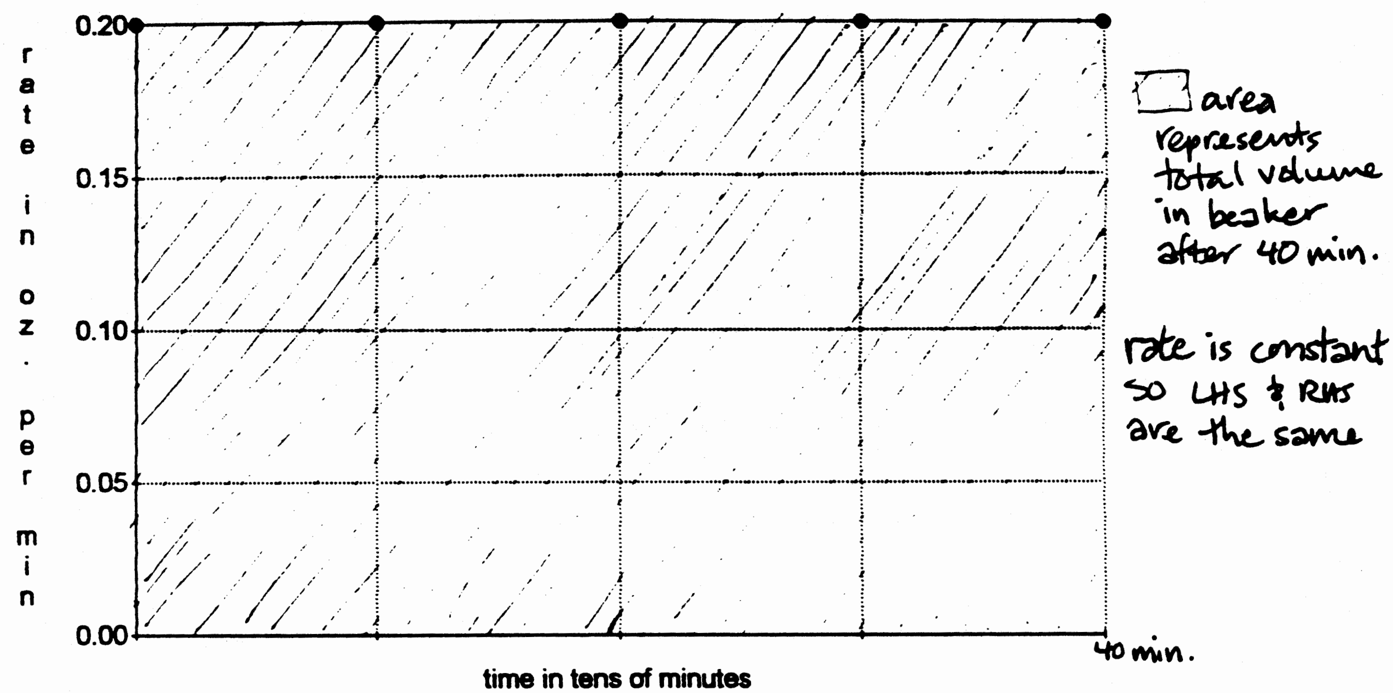


fig.3 R(t)


0.20
0.15
0.10
0.05
0.00
rate in oz. per min
time in tens of minutes
40 min.
area represents total volume in beaker after 40 min.
rate is constant so LHS & RHS are the same

## A term project from Math 295

*Once a student masters a subject, how far might he/she go? In the Spring 1995 Honors Mathematics course, James Eitelberg demonstrated that "the sky is the limit."*

*James wanted to determine the equation of a function which would represent the intensity of light as a light source is switched off. Imagine yourself in a room with the light turned on. Turn the light off at the switch by the door, and (if it is night time) the room suddenly becomes dark. James was curious about the degrees of darkness acquired in the microseconds which pass after the light has been extinguished.*

*His paper, "Light Intensity Curve As Light Is Turned Off," describes the equipment he used, clearly defines his thesis, describes the procedures he followed, and elaborates some of the challenges which he encountered. Was he able to capture the mathematics of light? Read hi article.*

***Doug Mooers, instructor***

## Light Intensity Curve As Light Is Turned Off

**by James Eitelberg**

**Equipment Used:**

- CBL & Light Sensor
- TI-85
- Program (self- written specifically for this experiment)
- Lighting Environment made of:
    1. round cardboard oatmeal container
    2. volt taillight bulb with pigtail leads
    3. electrical tape
    4. volt battery
    5. wire
    6. switch
    7. foil

**Thesis:**

My thesis is that as a light is turned off, the intensity in the room does not instantly drop. I suspect that the light intensity decreases in a decreasing curve as a function of time. I suspect that the human can be fooled into seeing the light instantly drop, because the eyes reaction time is too slow to notice the change. My hope was that the CBL could measure at close enough intervals to plot this decreasing function of light intensity as a function of time as a light is turned off.

**Procedure Followed:**

I could not find any suitable ready made programs to use, so I decided to write my own. I decided to use the TI-85, because its list length is only limited by available memory. The CBL does have a limit for list lengths of 512 collection points, though. I decides to collect the maximum number of points. With 512 points spaced .0006 seconds apart I would could collect light intensity for a total of .3072 seconds.

I studied CBL manual to learn how to make the needed program. I decided to take intensity reading as close together as possible. The smallest readings I could take was .0006 seconds apart. At first, I wanted to measure voltage to the light bulb and use the change of the voltage as the light was turned off to trigger the collection of data, but this turned out to be very difficult to program. I thought this method would allow for easy collection of data. However, the program I wrote turned out to be buggy. Sometimes it would work and sometimes it wouldn't. I decided to simplify the program and make it start collecting data with a manual trigger on the CBL. This ended up being just as good in process, and it was more reliable. Also, it was much less work to program.

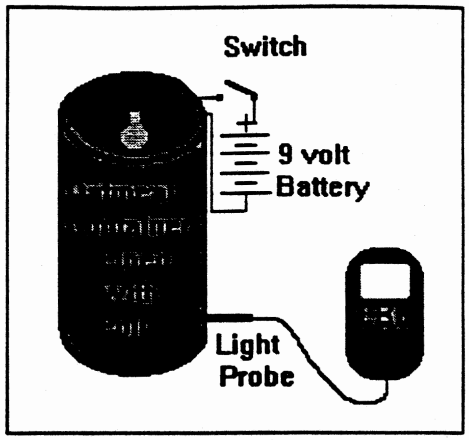
The program I wrote consist of four lists that are sent to the CBL. I send the lists to the CBL using the Link function on the TI-85. After the data is gathered, I sent a list called CBLDATA back to my calculator. The program is as follows:

| List | Commands | Explanation |
|---|---|---|
| 1 | {0} | • clears all channels and data in CBL |
| 2 | {1,1,1} | • sets CBL to use channel 1<br>• sets CBL to automatically detects sensor type |
| 3 | {2,1} | • sets CBL to store data in a list called "cbldata" |
| 4 | {3, .0006, 512, 1} | • sets interval for readings<br>• sets CBL to gather and store 512 data points<br>• sets CBL to start data collection with manual trigger on the CBL |

List one and two and three can be sent to the CBL together, but list four must be sent to the CBL last. It also must be sent to the CBL by itself. After all four are sent to the CBL, the CBL displays a ready signal on its display. To collect the data, I pushed the trigger button on the CBL after the ready signal was displayed. Immediately after I pushed the trigger, I also turned off the light. Then I used the Link to retrieve data from the CBL. It was necessary to set the TI-85 in receive mode and then push 2nd TI-85 button on the CBL. The data was sent to a list called CBLDATA. I looked at the data and completed the entire process until I was satisfied with the data collected. Each time the experiment is run it is necessary to send all the lists to the CBL.

**Homemade lighting environment:**

I conducted the experiment in three environments. One experiment was run in my bathroom with a 112 volt alternating current light source. Another experiment was run in our school classroom with the alternating current florescent lights. The other experiment was run in a homemade container with a 9 volt direct current light source. The container is an empty oatmeal container lined with tin-foil on the inside. I cut a hole in the lid and pushed a 12 volt automotive bulb through it. I cut a hole in the other end of the container and pushed the light sensor in it. I wired the circuit using a 9 volt battery and a switch to turn the light on and off. All the materials are just things I had around the house. I wanted to make the container nicer, but I didn't want to buy anything to make it. What I made works just as good, anyway.




**Challenges Encountered:**

The programming took a considerable amount of time studying to develop. The first programs were buggy, so I had to continue to make revisions. Finally, I decided simpler was better. The final program is simple, and it works great.

I first ran the experiment without the container lined with foil. I was discouraged, because the data showed a immediate drop in intensity as the light was turned off. Later I noticed that the flat brown interior of the cardboard container was absorbing all the light. Because of the flat brown interior, I wasn't able to get much initial intensity with only a 12 volt bulb. I decided to line the inside of the container with foil and try the experiment again. To my delight, the container lit up about four times brighter. This time when I ran the experiment, it showed a nice decreasing light intensity.

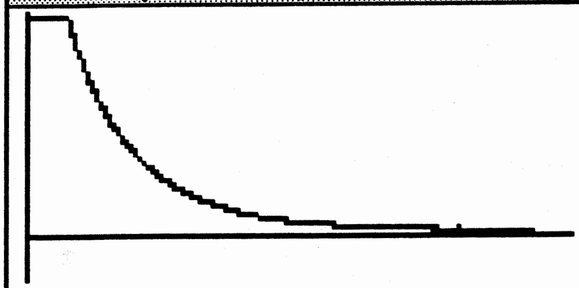
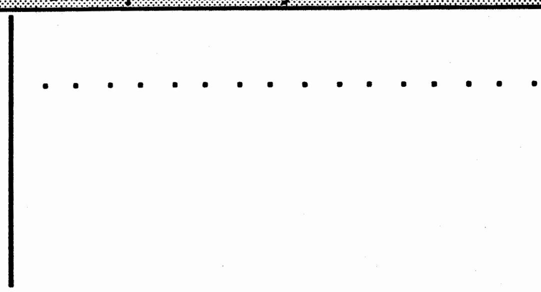
I decided to see if the data would be the same in a room environment. I tried the experiment run in my bathroom first. It was difficult to set up the light sensor to be close enough to the light. I also didn't know how close to put the sensor to the light. I decided to just try a bunch of distance between the light sensor and the light source. I found that if the initial intensity is greater, it is easier to see the change in intensity as the light is turned off.

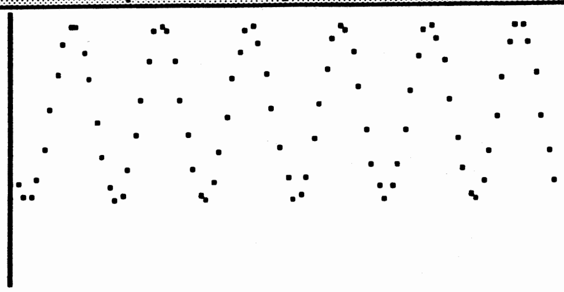
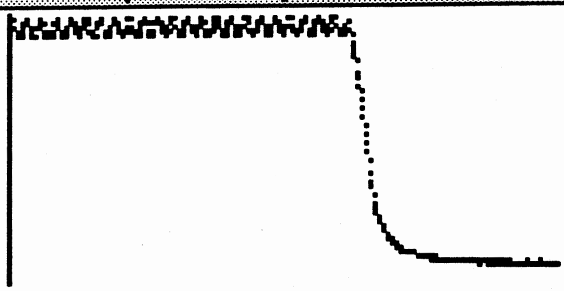
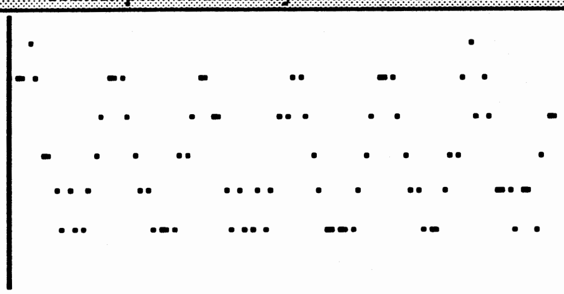
Another big problem I had was running out of memory on the calculator. I needed to save four different lists for the data gathered by the CBL. I had one for intervals, and three for intensity readings. Each of these list is 512 elements long. This takes up an enormous amount of memory. I had to dump all my unneeded programs, equations, pictures, etc. To make room for these lists. Each time I ran the experiment I had to overwrite the old data to save memory.

Later, when I was evaluating my data, I realized that I had overwritten my data for the intensity readings in the bathroom. Luckily I had already graphed a scatter plot of the function and saved the picture, but I was not able to find a regression equation because of the lost data.

To compute the regression equations for after the light was turned off, it was necessary to remove all of the data in the lists up to the point until the light was turned off. It was difficult to tell where exactly to "cut" off the data on the alternating current experiment because the intensity was fluctuating in a sine curve. I had to just take my best guess by looking at the list values.

Originally, I wanted to find equations for the fluctuating sine curves of the alternating current experiments, but my best data for the alternating current in the bathroom was lost. When I "cut" the other lists to remove the portion where the light was on, I had to discard the data for the time the light was on. I didn't know haw to transfer that data into another list so I could use it. This is a limitation of the calculator. A computer would of been nice, because I could of "cut and pasted" the data into another list to evaluate it, or I could have made two copies of the list and "cut" each one differently. I could have done this using the LINK software, but I was running into time limitations. My first reason for doing this experiment was to study the function as the light was turned off, anyway. Due to time limitations, I decided to stay focused on that one topic.

| Direct Current<br>Light in Container<br>scatter plot of intensity as a function of time | Window |
|---|---|
|  | RANGE<br>xMin=0<br>xMax=.33<br>xScl=.6<br>yMin=-.04<br>yMax=.22<br>yScl=10<br>y(x)= RANGE ZOOM TRACE GRAPH |
| **Direct Current**<br>**Light in Container**<br>**scatter plot of intensity as a function of time** | **Window** |
|  | RANGE<br>xMin=0<br>xMax=.01<br>xScl=.6<br>yMin=.21<br>yMax=.22<br>yScl=10<br>y(x)= RANGE ZOOM TRACE GRAPH |
| **Alternating Current**<br>**Light in Bathroom**<br>**scatter plot of intensity as a function of time** | **Window** |
|  | RANGE<br>xMin=0<br>xMax=.33<br>xScl=.6<br>yMin=-.04<br>yMax=.27<br>yScl=10<br>y(x)= RANGE ZOOM TRACE GRAPH |

| Alternating Current<br>Light in Bathroom<br>scatter plot of intensity as a function of time | Window |
|---|---|
|  | RANGE<br>xMin=0<br>xMax=.05<br>xScl=.6<br>yMin=.22<br>yMax=.27<br>yScl=10<br>y(x)= RANGE ZOOM TRACE GRAPH |
| Alternating Current<br>Light in Classroom<br>scatter plot of intensity as a function of time | Window |
|  | RANGE<br>xMin=0<br>xMax=.3072<br>xScl=1<br>yMin=.01<br>yMax=.088<br>yScl=1<br>y(x)= RANGE ZOOM TRACE GRAPH |
| Alternating Current<br>Light in Classroom<br>scatter plot of intensity as a function of time | Window |
|  | RANGE<br>xMin=0<br>xMax=.05<br>xScl=1<br>yMin=.08<br>yMax=.088<br>yScl=1<br>y(x)= RANGE ZOOM TRACE GRAPH |

**Analysis of Data:**

I started to analyze the data by looking at the lists and cutting off the portion of the list where the light was turned on. This made new shorter lists where the light was turned off at $X > 0$. I left one reading at the beginning of the list which was initial intensity as the light was turned on. On the regression equation this point is as $X = 0$. X is the independent variable "time" in increments of .0006 seconds. With these new lists, I graphed scatter plots and used the calculator to compute regression equations. None of the regression equations I calculated fit very well, but I found the following logarithmic regression equations to be the best fit for the two experiments for which I had data:

**DC light Experiment**

$Y = -.069 - .0477 * \ln x$ where x is time in seconds after light is turned off

**AC classroom Light Experiment**

$Y = -.0263 - .01583 * \ln x$ where x is time in seconds after light is turned off

By looking at the lists, scatter plots, and regression equations I have determined that the light does indeed decrease in a decreasing curve fashion as the light is turned off. I believe rate at which intensity decreases due in part to the amount of reflection in the room as well as the initial intensity. I also believe that the light does not instantly drop because the light source has a cooling off period in which it is still transmitting light even though the current to the bulb has been turned off. I also found that the intensity fluctuated on alternating current bulbs. I hope to research this some more.

**Demonstration of Models:**

**DC light experiment**

| X seconds after light is turned off | regression equation | actual intensity reading |
|---|---|---|
| .0012 | .2518 | .216333 |
| .018 | .1226 | .142891 |
| .0414 | .08289 | .083915 |
| .0516 | .07239 | .0672245 |
| .07687 | .05338 | .0405186 |

**AC classroom Experiment**

| X seconds after light is turned off | intensity for regression equation | actual intensity reading |
|---|---|---|
| .003 | .065637 | .0794647 |
| .0144 | .040799 | .0371804 |
| .0348 | .026827 | .0182637 |
| .0576 | .018849 | .0160381 |
| .072 | .015315 | .0160381 |

**Value of Experience:**

I was very happy to support my thesis as being a good one. Most of all, I was very surprised to find the alternating current producing a fluctuating intensity. This was something I had not thought about until I saw the data. This made the experiment very exciting. I really like designing my own experiment; it was much more valuable than doing a ready made experiment.

**Additional People who Assisted in the Experiment:**

I ran and designed this experiment by myself

**Resources and Bibliography:**


Texas Instrument TI-85 Graphics Calculator Guidebook
Texas Instruments Inc., 1993

Texas Instrument CBL System Guidebook
Texas Instruments Inc., 1994

Microsoft Encarta'95 Multimedia Encyclopedia (PC version)
Microsoft Corporation, 1995

## Two narratives from Nursing Care of the Child-Bearing Family

*The course in which these writings occurred was "Nursing Care of the Child-Bearing Family," and the clinical experiences were structured to provide a variety of experiences related to childbearing. The students had a clinical experience in the post-partum unit at St. Joseph Hospital, labor and delivery, special care nursery, and a home visit with SeaMar Maternal Support Services. The clinical experiences were a combination of observation and direct patient care. The writing assignment was derived from a workshop I attended entitled "The Reflective Learner: Self Assessment Through Stories of Learning." The purpose of the assignment was to provide students with a method through which to become aware of themselves as learners. It was structured as a narrative to allow students to be as free as possible to make connections between their perceptions and their articulation of the experience. It was hoped that the narratives would serve as a powerful mode by which they would discover meaning in, as well as shape as meaningful, their experience.*

*My objectives were to assist students to: make discoveries about their thinking processes, explore more than what they are asked to accept, observe their own performance, recognize when they are making assumptions, and identify learning that happens to them as people aside from that which takes place in the classroom.*

*Students wrote narratives throughout the quarter. The first assignment asked students to write a brief narrative in response to the following: "Please tell me about a time when you learned something about maternal child nursing." The second assignment called for a journal for each clinical experience in response to the question "Please tell me what stands out for you in your experience for the day." There were a total of 7 of these journals.*

*Jean Brock and Darlita Nieuwendorp's papers were written in response to the final narrative assignment which asked students to respond to the following: "Using your initial learning experience and your daily journals, construct a story of yourself as a learner of maternal child nursing."*

*While this assignment was not graded, it was required in order to achieve a satisfactory grade in the clinical portion of the quarter.*

***Ronna Loerch, instructor/coordinator***

## Newborn Nursing

**by Jean Brock**

I started out this quarter with a dubious attitude about maternity and newborn nursing. I thought it would be boring and that I wouldn't learn much because the patients were not sick. On a more personal note, I strove to keep my emotions in check and feared getting caught up in the joy and excitement felt by new, and in my opinion, clueless parents. Well, it was anything but boring. I learned a lot, and by the end of the quarter my spirit felt refreshed by all the love expressed by the new parents.

Of the four moms I cared for in the post-partum unity, two had "normal" birthing experiences and followed the textbook ideals of what the experience should be like. Even though these births were free from complications or illness, I was, and remain, amazed at the amount of material the nurse is expected to teach and then evaluate. This was made difficult by the fact that I had to learn much of this information for the first time myself. I felt I did a good job and hope the moms felt secure and relaxed by my presence. On the inside, I tended to be wound up a little tight, but I worked diligently to present a calm, composed and personable presence.

The other two moms I cared for had substance abuse problems and had received little or no prenatal care. I never thought that this type of problem existed in our community. I thought all women gave up their bad habits as soon as they had even an inkling that they might be pregnant. I thought all women sought prenatal care. Certainly, I thought, all Caucasian women with jobs and steady partners sought prenatal care. Look who's clueless now. I wonder if anyone considered adding "any woman who continues to use harmful substances during pregnancy" as another criteria for defining substance abuse.

The frequency with which I observed or heard about women having substance abuse problems in this unit leads me to question if perhaps many other hospital clients also have substance abuse problems but go undetected because screening protocols are not in place. Every week I heard of at least one woman on the unit having her urine screened for drugs. The nurses seemed almost militant about it. I couldn't help but feel a little victorious when one of my client's urine results came back negative.

One area I felt compelled to put a lot of effort into was to promote bonding between mother and baby. I felt this especially for the moms with drug problems and an uncertain future. I revised some assessment forms and felt that having the baby's name listed at the top of the form was very important. This would serve to remind me to address the baby by name in front of the mother when providing care. I wasn't sure why I felt this was important until I read a nursing journal article about disadvantaged teenage mothers. The article was about nursing staff working with these mothers, and their efforts to not only promote bonding, but also to help the young mothers pursue career choices. The nurses took Polaroid pictures of the mothers and babies and encouraged the mothers to name their babies right after birth. The women were then asked to select caricatures of working women with whom they identified the most. The faces of the mothers and babies were then cut out from the snapshots and pasted onto the caricatures of professional (advantaged) women with babes in arms. This helped to solidify the reality that the baby is dependent on the mother and that the mother can work towards a brighter future for herself and her child.

Whenever I saw a new mom making the effort to bond with her baby or perform a care giving task, I gave positive feedback. I saw the other nurses doing the same in an effort to promote bonding.

*This course required that a journal be written each day that the student was in the clinical setting. More specifically, the journal question to be answered was, "What stood out for you today?" This question went beyond a simple account of the day's activities or tasks and challenged me to put some of my feelings about what I saw into writing.*

*Although I started out this quarter with a "ho-hum" attitude, I soon realized that there is a lot more to maternity and newborn nursing than I thought. There are a lot of psycho-social needs that need to be addressed. It isn't easy--this is a very emotional time and the moms may not be receptive to intervention. Nurses must continue to promote bonding and provide teaching in a non-judgmental way.*

*What stood out for me nearly every day that I spent in the post-partum unit was the prevalence of substance abuse. Writing about it made me confront some of my judgmental values, learn from that confrontation, and advance my ability to provide care and teaching. Writing about these issues also helped me to delve further into the many psycho-social aspects of the whole family unit. I learned from this experience that the issues surrounding substance abuse cross all socio-economic and racial groups.*

***Jean Brock, student***

## Life-long Learner

**by Darlita Nieuwendorp**

Once upon a time there was a person who was given an assignment that involved describing herself as a learner of maternal child nursing in her nursing program. Although it was difficult for this person to identify a specific style or realize exactly what kind of a learner she was, she decided that her learning was heavily influenced by her life experience and the various roles that she had in her life. It is for this reason that this person shall be called DIAMOND, which stands for **D**aughter, **I**ntelligent, **A** **M**other, **O**lder student, **N**urse, and **D**oug's wife. Although this acronym is not all inclusive, it should serve its purpose for this story.

In September of 1995 DIAMOND started Fall Quarter at Whatcom Community College with minimal experience in relationship to pregnancy and childbirth. The birth of her twin daughters 14 years ago and the trials and tribulations she went through as a single parent had given DIAMOND a somewhat skeptical and narrow view of the world of maternal-child nursing.

Her pregnancy was difficult, the father of her children was non-supportive, the birth of her daughter's was by C-section, and her post partum experience was relatively miserable. It was difficult for her to get the health care providers she had during that time to listen to her, so as a result, she made a vow to be a different kind of nurse when she had the chance.

During the various clinical experiences that DIAMOND participated in, she noticed repeatedly that although there are many similarities between mothers, fathers and babies, there are also as many variations as there are people. It was necessary for DIAMOND to not only learn the technical aspects of Labor and Delivery, the Special Care Nursery, and post partum care; she also had to realize that each individual situation had to be carefully assessed and fine tuned to suit the client's individual needs.

DIAMOND was able to see that her learning was enforced and enriched by hands-on experience and that each time a procedure was repeated, it became easier. She discovered that it was difficult to get all the necessary work done and also attempt to treat each family as an individual and unique entity that not only had physical needs but emotional ones as well.

It became apparent to DIAMOND that actually seeing, touching, and hearing various facets of maternal child nursing were very instrumental to her true understanding of the subject. For instance, until she actually heard that rapid bird-like flutter of a newborn's heartbeat, it was difficult for her to imagine.

As a result of DIAMOND's experience both in the classroom and in the clinical setting during this wondrous fall of 1995, she began to realize that she was, and is, an accumulation of her life experiences. Like the actual gem, DIAMOND's value seems to increase with each facet that has been carved into her being. Integrating and building upon the knowledge she has gained throughout her life, thus far, is a very important aspect of her learning style. DIAMOND's ability and desire to remain open to new experiences should also enhance her effectiveness as a learner. So, as a result of these revelations, at least if she doesn't live "happily ever after," she has learned some valuable lessons along the way.

*During the clinical experience at St. Joseph Hospital's Childbirth Center our class was required to keep a daily journal regarding our activities. We were encouraged by our instructor to not only cover the clinical aspects of our learning, but also how the day's events affected us emotionally. At the end of the quarter we were challenged to use these daily journals to summarize and explain what type of learner we are as individuals. By reviewing my journals I could see that all aspects of my background as a mother, a daughter, a student, and a wife, came into play when I was interpreting the learning for the day. As I really couldn't identify a specific "learning style," I came upon the idea of using an acronym to describe myself.*

*This writing assignment provided a unique challenge for me, because it required close and thorough examination of how I actually used the learning experience at St. Joseph Hospital to increase my nursing and self-knowledge. It was much more difficult than just summarizing the technical and clinical aspects of my nursing experience.*

***Darlita Nieuwendorp, student***

## A position paper from Political Science 101

*Students in my winter quarter 1996 class were asked to write a total of three essays on controversial political issues. The basis of their short essays was to assimilate the two opposing positions on the issue (articles by leading proponents of each side were read) and then produce a reasoned critical analysis including their own position. Dale Perez wrote supporting the view that the C.I.A. should be abolished. Her essay incorporated her view of the proper "model" for future international relations. It is an effective position paper in that it is consistent, logical, and founded on the two required class articles.*

***Corlan Carlson, instructor***

### Yes Side
### Marcus Raskin: "Let's Terminate the C.I.A."

**by Dale Perez**

Marcus Raskin envisions a future for the United States that involves international cooperation: working together to solve issues which affect us all rather than breeding ill-will and distrust by spying on each other and wielding military power as a threat.

Raskin's argument incorporates many disturbing realities, which include the C.I.A.'s secret annual budget estimated to be at least $30 billion, its hazy agenda to seemingly be everywhere and control everything at once, its many poor, harmful, and even counter-productive decisions made and executed due to its "old boys" network of secrecy, and the fact that it immunizes itself to the same laws, restrictions and moral conduct that the rest of the people are expected to oblige. Raskin offers a variety of historical examples which point up the tendency of the C.I.A to be paranoid, controlling, and extremely misleading, both to the press and to the President. One stark example of the latter can be found in the Iran/Contra affair, in which there were at least two occasions of outright lying on the part of the C.I.A. to the intelligence committee.

America was once primarily threatened by the nuclear capability of the former Soviet Union, so perhaps a scaled-down C.I.A. was necessary to keep abreast of Soviet weapons technology and development. But along with this, as Raskin said "no area of the world was immune from the intervention by the C.I.A., N.S.A., and other agencies." The C.I.A. has been secretly diverted from its original purpose and become an elite society of busybodies who stick their unwelcome nose into everybody's business. I think this is not only unethical, but it only serves to stiffen international relations and invites the same treatment toward us from them--breeding world-wide distrust and paranoia between everyone. I also disapprove of runaway, bloated government budgets that we have no control over setting, and no say in how they're spending. As a bottom-rung, hardworking taxpayer, every dollar squeezed out of me by the Federal government hurts, and reducing the power and resources of the C.I.A. seems like out of hundreds of ways in which our tax burden can, and should be decreased.

Raskin's main focus is well-laid out and much within reason: He provides a model for international cooperation. This mainly includes opening communications over matters of global concern by inviting a public exchange of ideas and information from all cultures. Raskin also advocates a complete dismantling of the C.I.A. as it now stands, retaining only a defense-security intelligence that would be above-board and accountable. This means all of the C.I.A.'s many other duties would be allocated to other government and private institutions that are under the usual public scrutiny because this would result in more informed decisions being made and complete accountability. Raskin also desires some kind of government act for protection of records to ensure that no evidence of wrongdoings is destroyed.

I don't think this "openness" would render the U.S. vulnerable, because Woolsey's opposing argument never came through with any indications of threats to our national and economic security that justify the great expense, and if he, being a member of the C.I.A., couldn't make the argument without sounding petty and paranoid, than what better proof do we need? Spending billions of dollars, as he advocates, to monitor and influence every political and economic occurrence in the world because the results may eventually come around and affect us, in however a minor way, is a weak justification and an impossible expectation by any definition. It renders the C.I.A. a virtual black vortex of fund consuming capability because there is *always* something going on in the world which they could claim needs our attention.

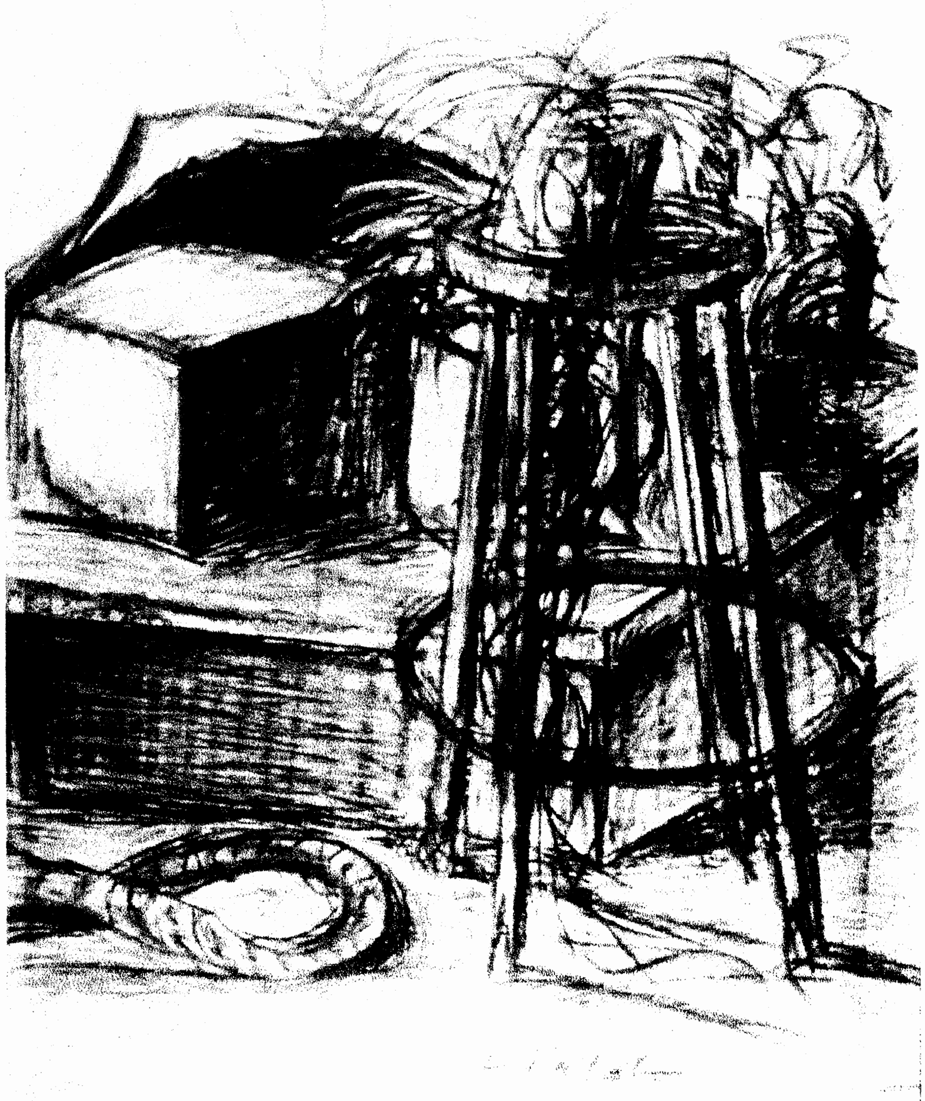
I simply hope that the future holds an effective, but not overblown defense system and the complete accountability of all government branches and operations. I know that we can find a better way to co-habitate with the other countries of the world, but first we have to establish trust and eliminate the hypocrisy of a government that uses a desire for "peace" as a guise for control.

*My assigned topic of analysis was a relatively easy topic for me to form a strong opinion about because once it was stripped down to the bare essence, the argument mainly concerned how our tax dollars are being used / abused. Raskin's article was already very persuasive because it was obvious that he had "dug deep" to find out how much the C.I.A. spends, what the money is used for, and what, of real import, the C.I.A. has accomplished over the last 30 years. The opposing argument was written by a director of the C.I.A. and it was weak and flabby, so it actually served to bolster Raskin's side.*

*The key for me was to begin by reading all the arguments, highlighting as I went along the ideas that seemed particularly important, ideas that had the most impact. Then I sat back and pondered, relating my own life, experiences, and background to the information in order to form my own opinion. I wrote down any good ideas and thoughts that occurred to me during this brainstorming session. After this, writing the rough analysis was just a matter of organizing the thoughts and highlighting again the main points into a coherent essay.*

*After my brief summary, the body of the analysis included three things: (1) an analysis of a couple of Raskin's points by weaving my own experience into them and expanding them further, (2) expansions of a couple of the ideas / points that I conceived during my brainstorm, and (3) a couple of particularly juicy arguments from the opposing essay to dispute. I think that the closing of an essay is just as important as the opening , so I made mine memorable by not only briefly summarizing the body, but I offered my own vision for the future. This is an inspiring and effective way to end an argument / analysis.*

***Dale Perez, student***



**Dan Delong**
*Untitled 33 1/2*
Charcoal, 29" x 24"

Artist's Note:

*On this still life drawing I used a different approach. Instead of thinking ahead or imagining what I wanted it to look like I did the exact opposite. I tried not to think and made it into a free flow drawing. The drawing turned into a kind of nice gesture and loose drawing.*

***Dan Delong, student***

## An in-class mid-term from Introduction to Political Science 110

*One of the fundamental concepts discussed in introductory Political Science courses is political ideologies--the belief systems that govern the way we look at politics, government, and humanity. In this course, we focused primarily on the ideologies of Liberalism, Conservatism, and Socialism. Michael first examined the circumstances that led to the formulation of liberal thought, and then the characteristics of Liberal societies that led to the development of both Conservatism and Socialism as reactions.*

***Michael Ceriello, instructor***

### The Development of Belief Systems

**by Michael Collins**

Throughout history mankind has struggled to put into order, and affect, ideas that would give structure and understanding to her/his socio-economic life. The intellectual constructions resulting from these efforts are called political ideologies. Formalized political ideologies are a relatively recent development of civilization, with complete theories presented and implemented beginning in the era of the Industrial Revolution. A political ideology is a cohesive set of ideas and notions that provides an answer to the management of social and economic problems. The political ideology is action oriented, stating what the society must do to realize itself; materialistic, speaking to the societies economic well-being; popular, embraced by many if not all in the society; and simplistic, not complex or highly academic, so all may understand it. Starting with the medieval period of human history I shall briefly describe the development of the Liberal ideology and the tangents to Conservative and Socialist ideologies.

European medieval society consisted of two distinct classes--those that ruled and those that were subject to it. The nobility who ruled, controlled the land holdings and the economy and were represented at the ignoble level of society by feudal lords, who had charge and command of the uneducated commoner's lives. Feudalism bound the masses together in a strict pattern of domination that was accomplished by a framework composed of four major parts. First of all, by ascribed status, the social and economic position given by birth. Second, the Divine Right of Kings, where nobility would do as it pleased with no accountability to anyone, the right to govern granted by God.

The third factor was economic privation, the strangle-hold on the economic well-being of the masses by the nobility. And lastly, religious orthodoxy, the cultural subjection the church imposed upon the people.

There were a few noteworthy events during this period that were mostly responsible for ideological ferment: first, the Black Death, where the nobles were found to be subject to the same indisposition as common folk; the vacuum left by the death of many in the ruling class provided opportunity for the commoner survivors; second, the Magna Carta, a bold document that guaranteed fundamental rights and privileges to the English nobility, a catalyst of social dissent; third, the Thirty Years War, which was an outgrowth of the Protestant Reformation, a two-fold movement a) for theological tolerance, and b) to take away the all consuming power of the church hierarchy (the pope, bishops, cardinals and the priests) and give it back to the individual worshipper. As the agrarian people of Europe started to advance through the rudimentary cultural steps leading to the Industrial Revolution, the need became clear for a new way of viewing contemporary political structure.

During this era intellectuals investigated and critically analyzed the structure of society. Early liberal thinkers were reacting to trying political times, oppression of the masses by wealthy land holders, and religious tyranny. Liberalism arose in response to the unjust political conditions under which the down-trodden masses toiled. Change was inevitable because of the intellectual advances ushering in the Age of Reason, for mankind's capacity to understand and work with the natural environment was on the increase and the existing political bounds stood in the way of progress. The material success found in the technological application of the Scientific Method gave people a confidence in their ability to solve other vexing problems as well, most importantly, those of long-standing social and economic concern.

Out-dated socail and economic structures called for a revolutionary ideology that would allow for the free development of an individual's economic and social capacity. Liberalism was the first ideology to develop in the Age of Reason, and it proved to be a call to action for the political progress of mankind. Liberalism was a new socio-economic theory advocating the disbanding of all monarchical or aristocratic regimentations and installing democracy. Democracy was itself an old idea popular in the time of the ancient Greeks.

The central assumption of liberalism is that in a democracy individuals take part in the decisions that affect their lives. This decision making develops both responsibility and maturity, thus allowing individuals to achieve their own highest good. Liberal ideology holds that people by nature are responsible, smart enough to make good decisions in their best interest, and reasonable to foresee the consequences of their own actions. Ideological thinkers such as John Stuart Mill and John Locke thought to design an idea of government that would capitalize on the potential of the individual by promoting a foundation of civil equality, yet at the same time curb the undesirable characteristics of too stringent a regulation of people's lives by any type of governance. Liberalism is an ideology that maintains the absolute freedom of individuals to determine exactly the extent of their commitment to society and to the economy.

Liberalism is dependent on a free market where one can rise to the heights of prosperity, unlimited by any boundaries of social architecture other than those maintaining equality of opportunity. The rise of commercialism--commonplace inter-region trade and increasing productivity of specialized workers in the market places--signifies the beginnings of capitalism. Liberal political ideology was the solution that would extirpate the power of the nobility, the trade guilds, and the church so the new economic leaders could conduct more far-reaching and profitable business. These circumstances provided an ideal breeding-ground for the avarice of the conservative capitalists. Supplanting the economic structure and control of the nobility, and concealing through franchise by their notion of best societial development, plotted to predominate.

Conservatism holds that human nature is not as promising as the liberals believe. In opposition, Conservatives believe that people are fundamentally flawed, not intelligent, rational and reasonable enough to see the consequences of their actions. Thomas Hobbes, a social contract theorist and a tutor to nobility of the 17th century, during the era of early liberal ferment, held a decidedly conservative position. Hobbes' premise holds that the reason for government to exist is to protect the people, that peoples lives would be "solitary, poor, nasty, brutish and short" without it. Conservative ideology insists that people ought to have strict and rigid governance. This ideology answers the political question of how to formulate a democracy when the majority of society was thought unfit to provide effective leadership. Edmund Burke, the father of modern conservative philosophy and a British Parliamentarian of the 18th century, posited that there is a natural aristocracy. Burke held that the political leaders should come from a select few within the ranks of property holders and businessmen, and because of their position, they ought to be obeyed. Conservatives' primary emphasis was on maintaining control; it was a reaction to the French Revolution where Liberalism appeared to have "gone mad." Conservative ideology allows a political strangle-hold on society and the economy while still claiming to be representative of democracy.

Socialism/Marxism takes a different political tack. Socialism, like Liberalism, holds the notion that the state exists because the citizens' political equality legitimizes it, but in Socialism, people do not develop independently of society. Socialist ideology, in difference to Liberalism, is not as suspicious of the concentration of power and action by the state. In fact, the state is the initial conduit for the good of the masses. This is similar to the initial intellectual thrust of Conservative ideology, but the basis for and the ends to be achieved by the two ideologies are diametrically opposed in respect to social equality. The state is the tool of the Conservative in the containment of the working class, whereas Socialism presupposes the state to be the vehicle of an equal and classless society. Two characteristics of Socialism are the public ownership of means of production and a social welfare system, both brought about by the state through nationalization of these concerns.

Karl Marx's theory holds socialism as the inevitable result of the Industrial Revolution. The economic inequalities because of class dialectic, as the result of capitalism, would create violent struggles between the haves and the have-nots. It was Marx's theory that in a Socialist political arrangement, when the workers gained control over their own fates, a dictatorship of the proletariat (worker class) would grow to eliminate all other political factions but itself. As class differences disappeared, the state would itself cease to be needed and a communist utopia would arise. Marxism, in theory, would allow its ideology to mediate the egalitarian division of material riches resulting from personal or corporate ambition, thereby creating social equality amongst the people.

The Industrial Revolution was the precursor to great socio-economic difficulties within the stratified societies of Europe and North America. Capitalism was running rampant with excesses of exploitation and economic privation. This, although perhaps unforeseen, was a direct result of liberal thought in allowing the unleashed and unregulated forces of individual power upon the natural environment and the beings contained therein. So it is shown that the differences in personal initiative and values leads to a certain natural social stratification in a quasi-theoretical atmosphere of equal personal potential. Because of liberal ideology allowing for the development of ruthless capitalists, workers were in a weak position socially and economically. It was Socialist thought that only a strong central government could rescue the workers from their plight, in ways that were antipodal with the liberalistic ideology of government.

It is obvious that there are opposing elements to these three basic ideologies. The Liberal would have an economy without rein as long as it is civilly fair, the manifestation of which is evidence of the Liberal's beliefs on human nature--that humans are good, logical, and rational people that can reason the consequences of their actions. The Conservative, on the other hand, has an antithetical view on human nature, that people cannot look out for their own common good and need to be lorded over in some sort of paternalistic and benifactoral arrangement, namely a monarchical or aristocratical governance. Equality and fairness are not intrinsic to the Conservative. One cannot easily superimpose the ideology of Socialism on top of either Liberalism or Conservatism. The Socialist would have a nationalized structure in regards to economic production and social welfare. This insures individuals social and material equality. A variant of Socialism, Marxism would have the central government wither away as the proletariat absorbed the communal conduction of all social and economic affairs. However, this does not fully address the nature of initiative and value inequities within the human population. In fact, none of these individual ideologies adequately do.

*This essay is of useful practice to the critical learning process I have been exposed to at Whatcom Community College: The identification of political ideologies, which in their intermingled forms, determine the structure of government and society in which we live. To be effective citizens, we must be knowledgeable in the political order that contains us. Analysis, interpretation, synthesis and evaluation are the steps to this knowledge and this paper. First, during analysis, the important ideas and facts are gathered. Second, the interpretation of this material allows me to manipulate the information during the next step of synthesis: the drawing of new relationships and organization. Lastly, evaluation determines the manner in which I present the material, along with observations drawn during synthesis. Naturally, the processes overlap and refer back to one another.*

*The material that I studied to form this essay came from the following sources, in order of importance: The Introduction to Political Science course instructor, Michael Ceriello; the textbook Political Ideologies, by Leon P. Baradat; the textbook Power and Choice, by W. Phillips Shively; and lastly, my own experience and observations of our nature as political animals.*

***Michael Collins, student***

## An in-class essay from Political Science 110

*To properly understand American Government, it is essential to examine the underlying ideological beliefs of those who created it--the men who wrote the Constitution. These "founding fathers" were influenced by two competing political ideologies: the Classical Liberalism, most often associated with John Locke, and the Classical Conservatism identified with Edmund Burke. The students in my Spring 1995 American Government course were asked to analyze the Constitution and argue whether the founders were influenced more by Locke's liberalism or Burke's conservatism.*

***Michael Ceriello, instructor***

### What Beliefs Underlie the Constitution?

**by Laura Dickinson**

When the framers of the Constitution met at a convention in Philadelphia during May 1787, their intended purpose was to revise the Articles of Confederation. After review, however, it became apparent that the Articles of Confederation did little more than promote confusion and hinder trade, both within the colonies and with other countries. Thus, it was unanimously decided among the delegated that the Articles of Confederation were fundamentally flawed and it was necessary to draw up a new document to shape American society. The result, accomplished in mid-September of 1787 and officially ratified in June of 1788, was the Constitution of the United States. This Constitution was basically the result of the influence of John Locke's classical liberalism, a political ideology that became the motivation for this group of men to write the Constitution.

The majority of beliefs reflected in the Constitution of the United States are those of classical liberalism. This can be seen in some of the goals accomplished by the authors. The first such goal was to protect private property. This was met by the private property protection established by the judicial system. This reflects classical liberalism since a fundamental value of this ideology is that of the natural rights, those of life, liberty, and property for all.

A second goal that reveals the classically liberal view of natural rights, as well as that of individual freedom being the most important aspect of government, was the protection of personal liberties from the government. This protection was carried out by the separation of federal power into the executive, legislative, and judicial branches, thereby limiting any power the government might try to exert over the population. Personal liberties were further protected by the Bill of Rights, those first ten amendments that were designed to limit federal control over individual freedoms and were ratified along with the Constitution. These protections also reflected the classically liberal view that government, although necessary, ought to be limited.

A third goal of the authors was to restrain revolution and protect against excessive democracy. The two houses of Congress were established to meet this goal, since it would make the chance less likely that representatives from both houses could be captured by popular passions or revolutionary upheaval, especially considering the various regulations set up regarding elections and governance of the two houses. In addition, checks and balances were built into the political system so that each branch of government needed the support of the others in order to make important decisions. This guards against one branch being able to absorb too much power. While it can be argued that this restraint against revolution supports the classically conservative view that order was necessary to guard against irrationality and passion of the average person, this overall goal was more of a classically liberal attempt to limit government. To a lesser extent, it also supports the classically liberal idea that minority rights needed to be protected in a government of majority rule, since the Constitution helps to prevent a large and possibly radical group from taking control of the government and neglecting the views of the minority.

A final goal of the framers of the Constitution that reflected Locke's liberalism was the actual popular acceptance of the document. The addition of the Bill of Rights as well as the establishment of direct elections of representatives to the House of Representatives by the American people helped to make the Constitution more popular with the public. These accomplishments reflected the classically liberal belief in majority rule by direct election. This view was revealed also in the fact that popular support was necessary in order to pass the Constitution at all.

The argument can be made that the Constitution supported the ideas of Burke's classical conservatism rather than Locke's liberalism. One strong point made for this argument is the Three-Fifths Compromise, where the Southern states were allowed to count every five slaves as three people for the purpose of electing a greater number of representatives, even though the slaves were not allowed to vote. This can be seen as a support of the classically conservative view that some people were born more intelligent than others and therefore should be allowed to establish themselves as the ruling class, such as in the case of slaveholder and slave. However, it should be noted that the Three-Fifths Compromise was little more than an appeasement to the Southern states to generate their support of the Constitution. In reality, the compromise did little more than delay the Civil War. In addition, it can be pointed out that the classically liberal view of equality for all people is evident in the fact that all states were treated as equals under the Constitution, demonstrated by their equal representation to the Senate and equal ability under the Tenth Amendment to reserve any powers not enumerated to the federal government. The Fourth Amendment further demonstrates this equality of al citizens by its protection of security against unreasonable searches and seizures by the government, regardless of who one is.

These same beliefs of John Locke's classical liberalism were the main motivation of the authors to write the Constitution. According to Robert Brow's "Charles Beard and the Constitution: A Critical Analysis," found in the book Point of View by DiClerico and Hammock, most people at this time owned private property and were interested in protecting it. Most delegates to the constitutional assembly recognized this classically liberal need for protection of property. They also realized that another natural right, that of personal protection, was equally as important. the delegates had these benefits of others in mind while they were drafting the Constitution, and tried to protect the rights of these individuals, a clear goal of classical liberalism.

The argument that the authors of the Constitution were purely interested their personal economic gain and represented only the wealthy voting class is not justifiable when other evidence is presented. According to Brow in his analysis, the only reason why the whole people were not represented was due to indifference of the voters. In addition, he mentions that small farmers represented a strong majority that could have rejected the Constitution if they had seen fit. Considering how these men were hardly among the wealthy and affluent in society, and seeing as how the delegates to conventions established to ratify the Constitution were elected by the people rather than selected by politicians, it becomes clear that the Constitution was, in fact, a democratic document.

The classically liberal motivation of the Constitution's authors is even recognized by those who argue differently. In his book Democracy for the Few, Michael Parenti contends that the motivation for a constitution was based on the wealth and greed of those writing it. Even so, he concedes that limits were placed on government through the lack of property qualifications for federal office holders, the limited terms of the President and legislators, and by the fact that one needn't be religious to hold office. These limits represent the liberal belief in limited government. Additionally, they also reveal the liberal view that all people are created equal, and therefore needn't be religious or hold property in order to govern the people.

In his article, Brow contends that men are motivated by what they believe as well as by what they have. This is evident in the motivation of the authors to write the Constitution. These men demonstrated their classically liberal beliefs throughout: by protecting the rights to private property, life, and liberty; by assuming the equality of all men within the eyes of God; by limiting government; by establishing a government by majority rule that still protected minorities' rights. Their product was the Constitution of the United States, the oldest written constitution that still stands today.

**Angela Fleming**
*Peopleonia*
Linocut, 9" x 6"

Artist's Note:

*I came up with the idea of using people for the subject before the class even began. When I was at home scratching down ideas for this print, I saw a vase sitting on our dining room table. I decided to put the two together and came up with Peopleonia. I used the combination of positive and negative lines in the background to make the rest of the picture seem somewhat 3-D.*

***Angela Fleming, student***

## Two literature reviews from General Psychology 110

*Each student in General Psychology was directed to conduct a literature review about a topic of the student's choice, synthesize the reviewed articles, and design "the next research project" the student thought should be conducted to gain additional knowledge in this area. The literature review was to include both academic research reports from primary sources and reports of the issue in the popular press such as newspapers and magazines. This necessitates the student becoming adept at utilizing electronic data bases for identifying relevant articles, to become familiar with Wilson Library at WWU to locate the articles, and often to plan ahead sufficiently to employ interlibrary loan. Both of these papers from Rick Abbott and Judith Elven exemplify ideal literature review strategies, synthesis of multiple sources of information, and applying research methodology to the design of interesting future research endeavors that would contribute to our knowledge base.*

***Bob Riesenberg, instructor***

## The Success of the 12 Steps of A.A.

**by Rick Abbott**

Introduction Section

Why is this a topic of interest to the researcher/writer?

The program of Alcoholics Anonymous (A.A.) is the dominant treatment initiative for alcoholism (Glaser and Ogborne, 1982; Saxe, 1983). The basis of recovery in A.A. is spiritual growth through the practice of certain spiritual principles (Carroll, 1991). These principles are contained in the 12 steps of the program and include dependence upon a self-defined Higher Power. These step are listed as follows:

1. We admitted we were powerless over alcohol--that our lives had become unmanageable.
2. Came to believe that a Power greater than ourselves could restore us to sanity.
3. Made a decision to turn our will and our lives over to the care of God as we understood Him.
4. Made a searching and fearless moral inventory of ourselves.

5. Admitted to God, to ourselves and to another human being the exact nature of our wrongs.
6. Were entirely ready to have God remove all these defects of character.
7. Humbly asked Him to remove our shortcomings.
8. Made a list of all persons we had harmed and became willing to make amends to them all.
9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take personal inventory and when we were wrong promptly admitted it.
11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as the result of these Steps, we tried to carry this message to others and to practice these principles in all our affairs. (A.A. 1949)

The 12-Step programs are meant to both facilitate the maintenance of abstinence and remove the obsession to drink or to use drugs so that the individual becomes "happily and usefully whole" (Gilbert, 1989). The program also needs a fellowship involvement with the other members or the group. It is very easy to get involved with members of an A.A. group because the twelve steps of the program suggest that a person is to carry the message to other alcoholics. Longitudinal research supports the utility of A.A. in alcoholism, with studies suggesting that regular A.A. attendance has a positive effect on abstention rates (Anderson and Gilbert, 1988).

It is a pretty amazing thing that a group of strangers can pull together a meeting when there is really nobody in charge. Alcoholics Anonymous is world wide with estimates of its membership having totals approaching 1.5-2 million, and the numbers are reported to be doubling every 10 years (Snow, Prochaska, and Rossi, 1992). The only requirement for A.A. membership is a desire to stop drinking (Step 3 of the Twelve Traditions of A.A.).

It sure sounds like a very easy group in which to become a member. All one has to do is to want to quit drinking. Now the question arises about who makes it in the program and who doesn't. Alcoholics Anonymous is not a religious organization; there is no dogma. The one theological proposition is a "power greater than one's self." Even this concept is forced on no one. "The newcomers merely immerse themselves in our society and try the program as best as they can" (William W. , The Society of Alcoholics Anonymous (1949).

I think it would be much easier to grasp this program if one had a prior knowledge or the practice of a religion that implies the Biblical God as the higher power and creator of all people in the entire world. Steps 2, 3, 5, 6, 7, 11, and 12 of the 12-step program explicitly endorse God with a capital G, advocating allegiance to a Higher Power, or calling for a "spiritual awakening" (Ellis, 1992). The 12-Steps definitely require a higher power to be successful. Some people in AA use the group as a higher power. People that believe in God the creator and have knowledge about their religion, I think, would have an easier time. How do you measure the ingredients to make the 12-Steps of A.A. work?

How is the effectiveness of the 12-Steps of A.A. studied?

Description research is the design used to evaluate the effectiveness of the A.A. 12 Step program; this includes surveys, case studies, and/or naturalistic observation. Snow, et al. took a survey. They ran an ad in the newspaper describing the survey and stating the requirement to recruit subjects. Criteria for inclusion were that the individual (1) self-identified as once having had a drinking problem; (2) was no longer drinking by self-report; and (3) expressed a goal of abstinence (Snow, et al., 1992). Then they went through and sifted out people demographically and gave them a Process of Change Questionnaire plus a questionnaire on involvement with A.A. and the 12-Step program. What they found was a positive correlation between the number of A.A. meetings attended, and working the 12 Steps into their lives and to maintain sobriety and a positive sense of life.

Another survey was done to study the extent to which the A.A. steps were practiced. This was positively correlated with a sense of meaning and purpose in the lives of A.A. members (Carroll, 1991). In this survey, researchers attended 20 A.A. meetings and handed out a modified version of Crumbaugh and Maholick's "The Purpose in Life" test. This test concluded that steps 10 and 11 were the steps that had the most positive correlation on maintaining sobriety and a meaningful life.

Two of the academic articles were case studies with some degree of naturalistic observation. In both of the studies the subjects selected were from among patients admitted to the Alcohol treatment Unit Of the Sepulveda Unit of Veterans' Affairs Medical Center, Sepulveda, California. The purpose of the study was to develop a scale to measure alcoholics' level of agreement with the first three of A.A.'s 12 Steps and to test the relationship between sobriety and the belief in these three steps (Gilbert, 1989). This was a seven month period where the researcher went into the hospital and handed out questionnaires and monitored behavior of the patients in the hospital. The test showed a positive correlation between the acceptance of steps 1, 2, and 3 as a major factor in sobriety and meaningfulness of life. The single factor that was necessary to accept steps 2 and 3 was the presence of God, or a Higher Power. The other academic case study article focused on steps 4, and 5. It was an experiment to improve communication among alcoholics to bring out the " fellowship" that was a very important part of A.A.'s success stories. This was a three month study. The subjects were assigned randomly, in blocks of four or five, to one of three experimental conditions. The three experimental groups consisted of a communication-skills training group, a discussion group, and an assessment-only control group. The result of the study supported the hypothesis that hospitalized alcoholics participating in a communication skills training program improve more on the self analysis and self-disclosure skills involved in Steps 4 and 5 of the A.A. recovery program than do alcoholics in discussion of assessment-only control groups (Anderson Gilbert, 1988 ).

Comparison of the academic research reports with the popular press reports

Both types of reports agree that the 12 Steps of the program of A.A. are a dominating factor in maintaining sobriety, and also a big factor in a positive meaning of one's life. Both types of reports agree that '"fellowship" is a main ingredient for the success of a candidate about to enter A.A. to seek sobriety and a new way of living. "Fellowship" is the healing cornerstone of A.A., and is a significant factor in successful psychological treatment outcome and good menial health (Machell). In this fellowship, nobody's going to ask you to believe in anything. They're just going to ask you to act as if you wanted to believe it (Butler, 1985).

The big difference in the articles was the definition of "spirituality" that is needed to bring in a new way of life for alcoholics by applying the 12 Steps of A.A. to each day of their lives. AA is religious, so you have to believe in God (Ellis, 1992). Bill W., the founder of A.A., says A.A. is not a religious group, and the higher power is a group conscience (Bill W., 1949). Academics say that the higher power is a feeling of self-worth and a change in behavior, so it comes from within the individual.

Methods Section

Abstract: No one to my knowledge has ever done a survey on the success rate for the program of Alcoholics Anonymous and its 12 Steps for newcomers to compare atheists and people who come from a religious background. My theory is that the 12 Steps of A.A. are totally based on religious beliefs, so the newcomers that are coming into the program that already believe in God the creator will have a much better success rate in the program of A.A.

Method Proposal

Subjects will be newcomers to the program of A.A. and be from the Whatcom County and Skagit County districts. Candidates will be on either their first, second, or third meeting, and they must have at least one day of sobriety. Candidates must be there of their own free will. Subjects who are court ordered or are going because of an employer or a spouse will not be considered. The sample size will be thirty, and there will be an equal number of atheists and religious background people.

The subjects will be given a 12 Step questionnaire that will evaluate their interpretation of each of the 12 Steps. They will then be given a separate questionnaire that will be an intense research on their religious or their atheistic background. Subjects will be measured on sixty-day period. The two questionnaires will be compared and four groups will be formed: the people who are actively in a religious organization; the people who were raised in a religious household and already believe in God but don't go to church; the people who think there might be a God, but aren't actually sure; and the people who are the true atheists and "know" there is no such thing as God, and get annoyed when people talk about God. Every week people would be given another questionnaire to follow up on their progress, and to see if they had ceased to abstain from alcohol, which is the stopping point for that individual.

Dependent variables

The dependent variable would be the number of days abstinent during the sixty days. The subjects would be attending at least three meeting a week, so another dependent variable would be if the subject exceeded the number of meetings. If the subject did exceed the three meeting minimum, they would have to tell the researcher because that would have to be factored into the study.

Procedure

This study consists of six phases. The first phase is to make up the questionnaire which included the 12 Step survey on every step, the religious background and belief surveys, and the eight once-a-week progress surveys. The second phase is to go to the A.A. meeting and select the sample set. The third phase is to narrow down the sample set into thirty people, half that believe in God and half that don't. The fourth phase is to gather up a team of researchers to go to three meetings a week and monitor all the sample subjects. The fifth phase is to gather all the data and graph it. The sixth phase is to document the report and publish the results.

I feel there will be a positive correlation between the success of sobriety and a meaningful life due to a change in behavior with the people that come into the program who already know that there is a power greater than themselves, and that power is the God of their particular religious beliefs. There will be a negative correlation of success of well being by applying the 12 Steps of A.A. to the life of the atheists because the 12 Steps is a spiritual program that requires the belief in God.

Discussion Section

This would be a very hard study to carry out. It is a very intense case study with many individuals to research. The biggest problem I see would be selecting the sample set.

The team of researchers would have to cover a lot of meetings at once to get that many first timers, and get them into the right category to make the study valid.

I think the implications of my findings would be a monumental leap for A.A. The steps and the book were written forty-five years ago. The whole program is about prayer and spiritual awakenings and believing in God, so let's get some nondenominational pastors in there and start saving these poor suffering atheistic alcoholics.

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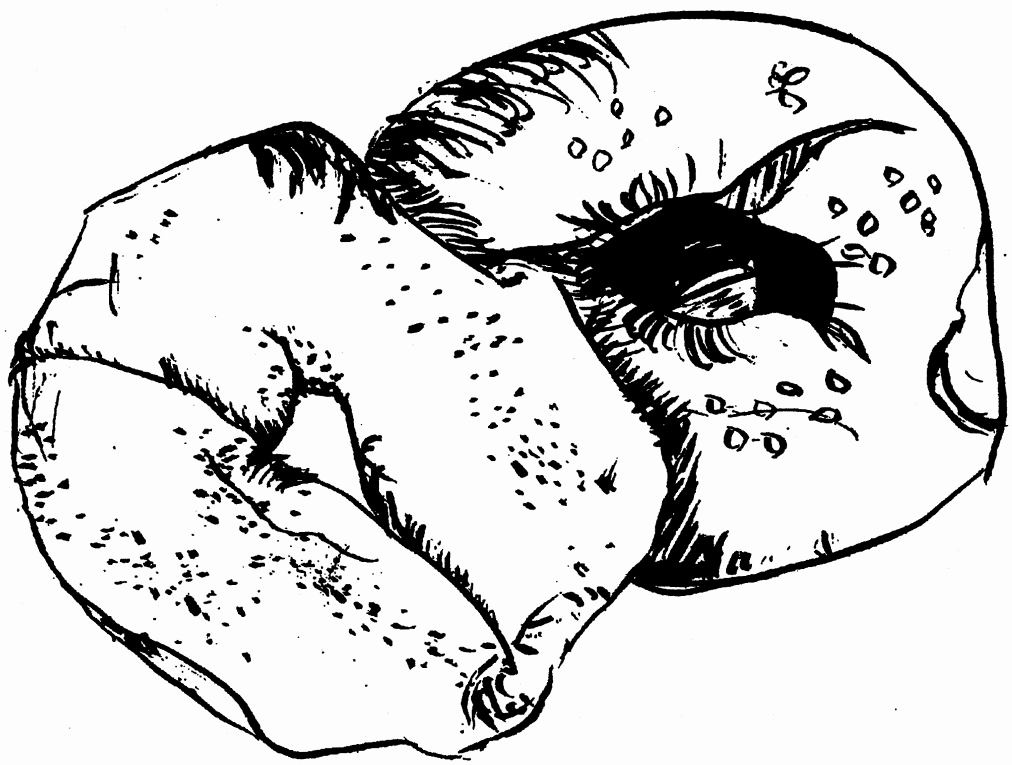

**Linnea Spitzer**
*Bagels*
Ink, 8.5" x 11"

Artist's Note:

*I think bagels are cool—they are good to eat and nice and round and easy to draw. Bagels are a favorite food of mine. These are poppy seed and sesame seed bagels; the first ones I've drawn. I wanted to recreate the coolness of bagels with pen and ink because I like working in that medium and because I like the artist R. Crumb; I wanted to emulate his cool style.*

***Linnea Spitzer, student***

# Our Authoritarian Society

**by Judith Elven**

Introduction

The recent upsurge in right-wing militia and ultra-conservative political groups in the U.S. prompted me to explore reasons why this is happening, if any correlations exist which could have predicted this trend, and what if any solutions to this dilemma have been arrived at by others who have explored this personality trait.

The first studies done on the "authoritarian personality" were in the early 1950s in an attempt to understand the Holocaust. How could people do such horrific things to each other and justify their behavior as just following orders? Early researchers were first concerned with establishing whether or not certain ethnic groups were prone to this phenomena (Freitag, 1985). Finding this to be a false hypothesis, they next concentrated their efforts on defining the authoritarian personality (Barrat, 1985). Adrono, et. al, began the study by testing Germans in the 1950s. He established a series of subtraits, such as dogmatism, aggressiveness, fixed beliefs, and then developed a series of finish the sentence type tests to establish a rating on the sub-traits. Using scores from these tests, Adrono established the F-scale. High scores on the F-scale indicated an authoritarian personality.

Rokeach took this testing a step farther and used open-- or closed-mindedness to help define authoritarianism. Rokeach developed his own tests and used statements with agree or disagree answers to determine the score on the D-scale. The more statements the test subject disagreed with, the higher their D-scale rating or the more closed-minded the individual was thought to be.

Many inconsistencies soon became apparent as other researchers investigated the topic (Barrat, 1985). One would think those persons who have very strong religious beliefs would score higher on the D-scale than those of more liberal beliefs but it was not so (Cox, Jr., 1985). Others who thought that communists should have higher scores on the F-scale and D-scale were again puzzled by their apparent low scores (Oesterreich, 1985).

These discrepancies brought to light how the wording of the question/statements was critical in determining reliable results (Barrat, 1985), how in this study, as well as any other study, it becomes critical to the results of the study to be open and unbiased when administrating the test and compiling the results (Freitag, 1985). Other studies refined the so-called traits associated with the authoritarian personality (AP). New studies dropped the F-scale and D-scale scores and began using names like Right-Wing Authoritarianism (RWA) scale, the Ray BF scale (balanced F-scale), and the Ray DIR scale (directiveness) (Heaven, 1984).

Early theorists treated the AP as an individual trait. They kept looking for genetic links that would predispose someone to readily acquiesce to authority (Freitag, 1985). The closest anyone came to linking it with a neurological disorder was Paul Schmitz, who found evidences of neuroticism and psychosis in the more extreme eases of the AP (Schmitz, 1984).

By the late 1960s, researchers began to make the societal connection (Oesterreieh, 1985). It is now generally believed that the appearance of the authoritarian personality is a direct result of the Industrial Age. We are taught throughout out lives to obey our parents our teachers, our bosses without question. Our very schools are based on the models of authoritarian society, one sole-authority, well-disciplined behavior and obedience to the primary power source (Brooks, 1994). For the next twenty years research was focused primarily on what were considered authoritarian societies and the overall affects of the citizens in these societies (Rigby, 1985). Societies that were considered the typical authoritarian society were South Africa, any communistic country, and dictatorships; democracies were not among those considered authoritarian.

The rise of the political right-wing in this country, the growing militia movement, the white supremacists movements (Doskoch, 1995), land use and gun control unrest, violence escalating into the Oklahoma bombing, the murder of abortion doctors (Jenkins, 1995), and threats of violence that have forest rangers fearing for their lives (Dowie, 1995) makes this an issue of vital concern to us all.

Much research has already been done with regard to the AP as an individual trait. Interesting and verifiable data shows many correlations with the AP and income levels, educational levels, age groups (Schmitz, 1985), gender (Browning, 1985), and ethnic groups, that a pretty accurate description can be drawn about the typical AP profile. He would be a white male, from a lower income, blue collar profession, with minimum education, between the ages of 16-25 or 40-55, very dogmatic in his religious beliefs, a firm believer in his way being the only way; for the AP, the issue is not as important as the belief in being right. This person would be more likely to come from a rural setting, and to come from a family with a very strong father figure who was also closed-minded and dogmatic.

These predictors or rather trait indicators can't help but come to mind when reading thc articles in the popular press written on incidents involving members of the militia, wise-use groups, right-wing political groups, and anti-abortionists (Snell, 1995). The popular press and professional writings differ greatly when presenting their conclusions and findings. The popular press usually focus on the sensational aspects and suppositions, while the professional press assails people with graphs, tables, and a firm statement is never made without being able to prove it at least three different reliable and verifiable ways.

They do both agree on one thing, that the manifestation of the AP in our midst is an indicator that changes must be made in our society. No one group made any suggestions or came up with any solutions either, except a note of caution about making the AP a martyr (Doskoch, 1989) because when threatened the AP becomes even more closed-minded (Schmitz, 1984).

<u>Methods Section</u>

I would propose a study that began with elementary aged children from the ages of 10 to 12 years old. I would extensively test these children using tests similar in design to Schmitz, Adrono, Rokeach, Heavens, and others used in past studies. A list of sub-traits would need to be complied that would indicate the presence of the AP personality in children. Some of these traits used in previous studies include motor impulsiveness, cognitive impulsiveness, belief in one truth, belief in one cause, future orientation, isolation, alienation, virtuous self-denial, and dogmatism. Each of these traits would include measures from these categories, cognitive, biological, social, and behavioral (Barrat, 1985).

The tests themselves would include fill-in-the-blank statements, agree or disagree statements, immediate reactions to simulated situations, and observations made by teachers and peers as to the behavior patterns of those tested. Peer evaluations have proved to provide the most accurate profiles (Rigby, 1985) of individuals. Scores and findings would then be compiled and an individual rating made on each child and on the groups as well. A final rating would be compiled with zero being neutral; a plus score would indicate a leaning towards authoritarianism and a minus score a more open minded attitude.

I would use students from grades 4-6, in two different schools. I would choose schools from two very similar rural communities. These communities would need to be similar in size and economic base. I would call these School A and School B. Though it would be great to have two schools with the broadest base of ethnic and racial differences. In addition to the personality profiles on each test subject, I would compile a personal background on each subject as well. It has been proved that AP runs in families with strong father figures (Schmitz, 1984). I would need to know the subject's family background.

School A would then enhance the test group with periodic in-house workshops on ethnic diversity, racial issues, attitudes and beliefs of other cultures throughout the rest of their school years. This is the independent variable. My attempt would be to expand their view of others and show them a more global outlook.

School B would continue with its regular curriculum. This would be my control group, where life goes on as it has for these children, with no overt efforts made at enriching their outlook.

Tests would have to administered by individuals who would have no personal connection with the results. In order for the tests to yield reliable results those actually administrating the tests would need to be impartial. A double-blind situation would be ideal, with neither those giving the tests nor those taking the tests knowing what this study was about.

Both groups would be tested again upon completion of high school. The tests would of course have to be updated and careful attention given to how each part of the test was worded (Cox, Jr., 1985). The text of the tests would have to reflect the maturing students' cognitive development. Personality profiles would again be compiled on each student as well as the whole group.

It is my hypothesis that School A and School B would have very similar profiles at the time the first series of tests were given and that by the end of their school career, School A's test subjects would have significantly lower scores on the PRN-scale, and that School B would have the same or slight increases in the PRN-scale.

A follow up study should be done on those individuals who could still be found four years later. Four years would mean those who went on to college would be near the end of their formal education, and those who didn't go on to college would have had four years experience in the "real world." Results of this study would indicate whether the PRN-scale ratings assigned to these individuals changed or stayed the same as these test subjects matured. This would further validate the effects of the enrichment program which was used in School A.

<u>Experimental Design Section</u>

It my hypothesis proves to be correct, I would validate my findings with graphs, and tables which would be constructed from the results of the differing tests. Each sub-trait test result would be compared to all the others to find any connections between findings from each test.

Correlations between the ratings on the PRN-scale with the curriculum offered by the control school would be identified and substantiated by the later test results. It the differences I predicted would still be evident by the results of the last test when the test subjects were in their early twenties, it would support my hypothesis and help determine whether the results I sought were lasting and reliable.

I would also be interested in any correlations between those who had the lowest scores and the family situation and whether or not the lower scorers came from single/mother headed households. Since the AP seems to run in families with strong father figures (Schmitz, 1984), it is my contention that perhaps this is why some ethnic groups who have significantly more mother headed households have the least amount of AP personality types.

I would also carefully note the differences, if there are, any between the genders. Research already done indicates that AP is a male phenomena (Browning, 1985). It would be interesting to note if children also fit this gender profile, or if boys and girls are similar in early development and change as they mature.

If my findings did not support my hypothesis, it would not mean that my test was invalid. But I would certainly want to know why the results differed from what I expected. I would carefully review the data and the tests themselves to evaluate whether or not discrepancies could be tied to confusing text or misinterpretation of the data collected, or whether biases of the test giver could have muddied the results.

If no errors could be found, then I would reevaluate my hypothesis to find any errors in my reasoning. At any rate, even if the hypothesis was not supported, the results of this study would be published in order for me to receive feedback from those who have also studied this field.

Discussion Section

The difficulties I would encounter setting up this experiment would be many. Finding two schools willing to participate would be the hardest part. Even though teachers may be willing to work with me, finding school boards willing to make their districts test subjects would take some diplomacy. I would have to sell my ideas to some of the most historically political conservative groups in America (Brooks, 1994). On creating the tests themselves, I would employ graduate students who are majoring in elementary education and child development. They would help me design the questions in terms the test subjects could understand.

My attempts to broaden a child's understanding and scope of the world seems a noble task, but do we have the right to change a person's personality? Don't we have the right to our own opinions and beliefs? But aren't these rights contingent on whether or not they could threaten society as a whole?

However, if my hypothesis proves correct, then our society could be greatly benefited. A broader understanding of the differences in us all would make these differences easier to accept in others. Our society would become a much safer and less anxiety-ridden place to live. I would love to find a connection between single-mother-headed households and open-mindedness in the children raised in these households. A potentially positive outcome for these families who are at present carrying the brunt of what's wrong with our society would do much to enhance their self- worth.

Most of the studies to date have been done with the perspective that the AP is an individual trait. Any correlation to it being a societal phenomena was made in connection with totalitarian societies. Democracies, which include the U.S., have been largely ignored. But our very society is based on the authoritarian principle (Freitag, 1985). We must address this issue and begin changing our views or we will be forever held hostage by the violence, hatred, and intolerance of the AP which is manifesting itself in today's culture.

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*Throughout my life I have encountered the authoritarian personality (AP) in many manifestations. Perhaps the issue differed in each situation but the reactions of those involved bore a disturbing similarity. The ideology matters little, whether the person's politics lean to the left or the right; a dogmatic, close-minded individual reacts the same way to confrontation. Studies done on such divergent groups as communists, Nazis, and fundamentalist religious sects all showed similar behavioral patterns.*

*As I got older, my politics caused increasingly more confrontations between myself and the AP. The situations left me feeling drained and wondering how anyone could be so staunchly attached to his opinions despite clear evidence to the contrary. I often asked myself, "Why do they act this way? What makes a person develop such a closed attitude? Are there any guidelines for predicting behavior? And can anything be done to modify their behavior without infringing on their personal rights?"*

*These are some of the questions I attempted to answer by writing this paper. I had not been to school for thirty years and this assignment proved to be quite challenging. The research and writing nearly overwhelmed me at the time, but eventually, the notes an scratchings I made came together to become this writing.*

***Judith L. Elven, student***

## Two research reports from Social Psychology 211

*Both Serena Dolly and Paula Maris selected interesting topics that demonstrate: 1) a review of academic research literature; 2) synthesizing of the reviewed articles for a meaningful written description of the state of our knowledge in this area; and 3) designing and implementing an independent research project that tested a hypothesis based upon the literature review. Both students developed research strategies, collected data in a systematic manner, and analyzed the data for presentation to the class and in this written format. These two papers exemplify the spirit of this assignment which requires a high degree of commitment and skill for a 200 level course.*

***Bob Riesenberg, instructor***

## A STUDY OF HINDSIGHT BIAS: THE O.J. SIMPSON CASE RETROSPECT

**by Serena L. Dolly**

INTRODUCTION

Hindsight bias is the tendency, once the outcome of an event is known, to overestimate how predictable that outcome was in foresight. This "Monday morning quarterback" or "Knew-it-all-along" phenomenon has been demonstrated in a number of studies and is one of the most frequent cited judgment biases in the psychology literature.

Hindsight bias can be demonstrated in a number of ways. Daphne Bartz tested hindsight bias on college students (1983). When she gave subjects a social finding they were led to believe was true, most students said they would have predicted it even when the finding was false. Laid-off workers also have shown hindsight bias (Mark & Mellor 1991). Workers who had been laid off reported less that the lay off was less foreseeable than workers who retained their jobs. In turn, community members reported more foreseeability than workers who survived the layoff Gaylen Bodenhausen tested the hindsight bias on perceptions of court cases (1990). When subjects evaluated evidence in a court case, the evidence was seen as incriminating if the subjects believed the defendant had been convicted. When told the defendant was found not guilty, the subjects viewed the evidence as less incriminating.

An early study on hindsight bias examined the influence of outcome knowledge in relation to past events (Fischoff 1975). Unfamiliar events were presented to subjects with four possible outcomes. Subjects given outcome information believed that could be the only possible outcome. Subjects not given the outcome information were much less likely to see the actual outcome as the only possible one.

This study demonstrated hindsight bias on a familiar event, the O.J. Simpson murder trial. Similar studies of current events have had similar results. Dorothee Dietrich and Matthew Olson demonstrated this bias with the Clarence Thomas confirmation hearings (1993). The 57 subjects recalled a higher number of confirming votes when asked a month after he was confirmed to recall the estimate they had provided the day before the vote. Similarly, when college students were surveyed before and after the Rodney King civil rights trial, the subjects showed bias towards the verdict and its aftermath (Gilbertson, Dietrich, Olson, and Gunther 1993). When people are asked to make predictions about an event before it occurs and to recall their predictions later, people remember their predictions to be closer to the actual results.

## GENERAL PROCEDURE

The subjects were led to believe that they were filling out a survey wanting only their opinion on the O.J. Simpson murder trial. They were asked to complete two similar surveys--one the day before the verdict was read and another one month later. The surveys asked ten questions concerning the trial. The surveys also asked for their age, sex, race, and amount of college credits. For those subjects unfamiliar with or ambivalent towards the trial, there was the option of circling “no opinion.”

## SUBJECTS

The subjects in the pre-verdict survey were 108 General Psychology students in four classes at Whatcom Community College. Forty of the subjects were male, and 68 were female. Only 89 of these students participated in the follow up survey due to absenteeism and drop-outs.

## HYPOTHESIS

Based on current knowledge of past studies, the hypothesis was that subjects would be more likely to say that they had predicted results more consistent with the outcome of the trial than they actually had.

## RESULTS

The subjects showed hindsight bias in a number of their predictions. The most obvious bias was observed in the defense's ability to raise reasonable doubt and if they thought money bought justice. When asked "Did the defense raise enough reasonable doubt to acquit O.J. Simpson?" the pre-verdict mean was 3.208 with five meaning no. When they were asked to recall their earlier prediction, the mean moved in the defense's favor to 2.694. This bias was consistent with the jury's verdict of not guilty.

Subjects tended to believe that money bought a defendant's freedom after O.J. Slmpson's acquittal. The pre-verdict group's mean was 2.688 with one indicating money bought justice. After the verdict the subjects reported that they had believed more strongly that money could buy an innocent verdict (mean=2.099).

Although the subjects demonstrated bias with the defense, they did so less with the prosecution. The results did tend toward hindsight bias, however. The pre-verdict mean was 2.152 with one indicating a very effective prosecution. The post-verdict mean was 2.509.

There was little change in the subjects' perception of Mark Fuhrman's influence and the overall fairness of the trial.

When asked what the verdict would be, 38.2% of the subjects believed he would be found guilty, 28.09% said not guilty, and 33.71 % thought the jury would be deadlocked. However, in the post-verdict survey, there was little change in the percentage of subjects who predicted he would be convicted (39.44%). There was a significant increase in the percentage of subjects who predicted he would be found not guilty (43.66%), and the amount of people who believed the jury would be deadlocked shrunk to 16.9%. Due to a decrease of 15% of those who indicated no verdict originally, it appears that those subjects recall thinking that he would be found not guilty. This is a clear demonstration of hindsight bias.

GENDER DIFFERENCES

Female subjects were less likely to be sure of O.J. Simpson's guilt. This was seen in both the pre- and post- verdict conditions. The male pre-verdict mean was 2.032, and the female pre-verdict mean was 2.357. A choice of one indicated the subjects were sure of his guilt. Similarly the male post-verdict mean was 2.152, while the female mean was 2.318. However there was no change by individual sex in the two surveys.

The female subjects remember being more confident in the post verdict survey than their pre-verdict answers indicated. With one being very confident, the females' pre-verdict mean of 2.246 rose to 2.045 in the post verdict survey. The males showed a greater amount of overall confidence with an average mean of 1 .9; the female's average mean was 2.158.

Both sexes indicated hindsight bias in remembering the prosecution's effectiveness. However, the males showed this to a greater extreme. The male pre-verdict mean equaled 2.08. The male post-verdict mean equaled 2.636. One indicated a very effective prosecution.

Both male and female groups showed a very significant change in thinking money bought justice. Females especially showed a significant change from 2.845 mean in the pre-verdict to a 2.058 mean in the post-verdict.

Also, the males were more likely to believe money bought justice in the pre verdict, but females recalled being much more sure of it.

There were no gender differences in opinions on Mark Fuhrman or premeditation.

## DISCUSSION

Many of the subject's answers in the post-verdict survey indicated hindsight bias similar to previous studies. The differences among sexes may be due to O.J. Simpson's popularity as a football hero. Some questions did not indicate bias. This may be because of the controversy that surrounded this case. Although the jury found O..J. Simpson innocent, there are many people who still believe he is guilty. An undisputed decision, such as an election, may be able to gain clearer results. In questions of certainty, like the effectiveness of the legal teams, there was a clear tendency for subjects to demonstrate this "knew-it-all along" effect.

The high attrition rate was of much concern in this study. There was a loss of 19 subjects between the pre- and post-verdict groups. It is impossible to know which students did not complete the second survey. If only subjects from one group were missing, there could have actually been more or less showing of hindsight bias. In a future study, keeping track of individuals would increase the validity of the research.

This study raised questions about domestic violence as well. Forty-two percent of males and forty-four percent of females indicated that they or somebody close to them had been a victim of domestic violence on the pre-verdict survey. As shocking as those statistics may be, the post-verdict group indicated an even higher amount of 53%. Further research could be done to explain this increase in domestic violence percentages. One possible explanation is that the media increased the amount of awareness about domestic violence. Another explanation is that the majority of the people absent from the second study had no experience with domestic violence. The latter explanation would be in contrast to what previous research has determined about domestic violence.

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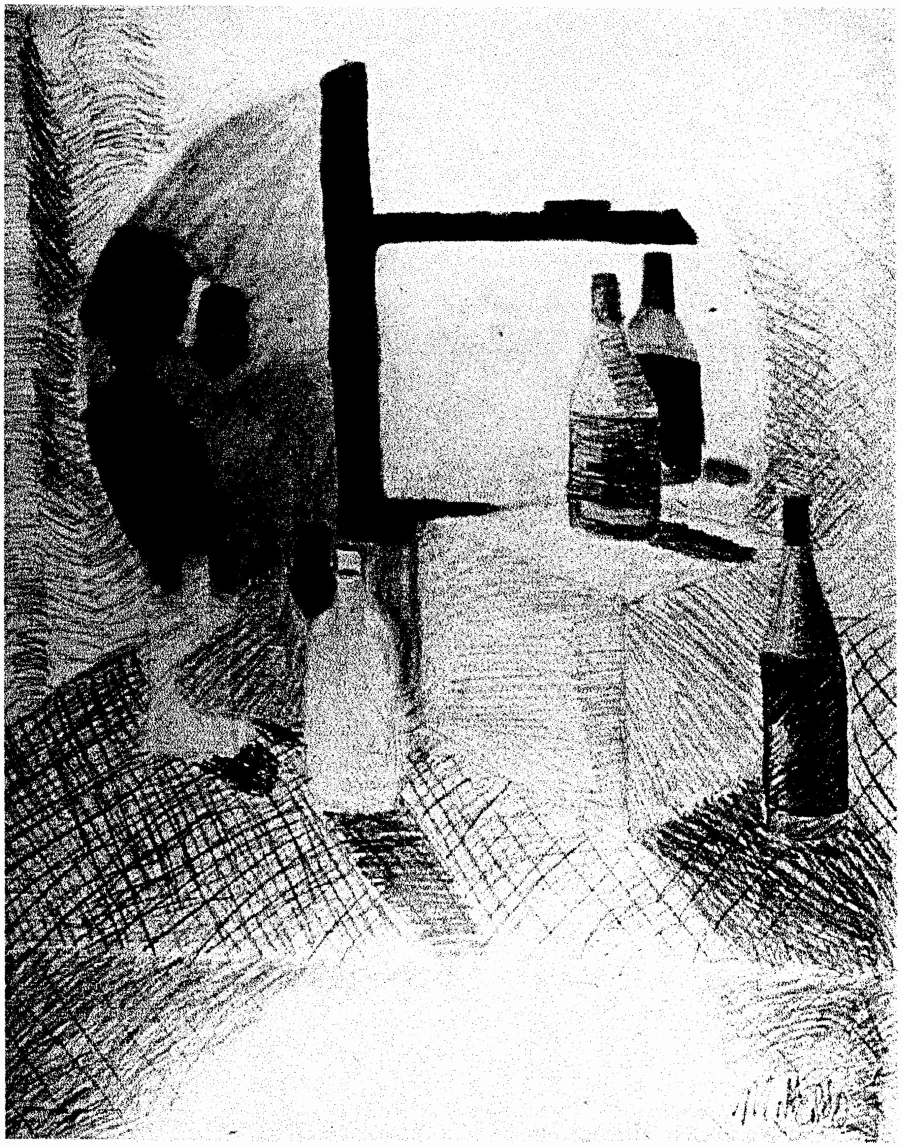
*When I was asked to do a research project in my Social Psychology class I was excited about undertaking a survey or experiment. I pondered various ideas until I read a case study on hindsight bias. I had been intrigued by the O.J. Simpson murder trial for over a year, and suddenly I knew I had found the topic for my project: I would attempt to demonstrate hindsight bias with the O.J. Simpson verdict. This was a risky decision for nobody knew how long it would take the jury to reach a verdict; they could continue deliberating long after the quarter ended. With my instructor's encouragement, I decided to take the chance. I began to survey classes at WCC and had completed just one before I heard the announcement that the jury had reached a verdict. I scrambled to get the surveys out before the verdict was read.*

*As a Psychology major, it was fascinating to learn the process of surveying and evaluating data. It was great to actually be able to test this human phenomenon, and I was thrilled that my results turned out to be similar to those of professional psychologists.*

***Serena Dolly, student***



**Matt Oakley**
*Untitled*
Graphite and Charcoal,
35" x 42"

Artist's Note:

*I tried to emphasize the interior/exterior transition from the interior of the mirror to the room by changing the use of the materials.*

***Matt Oakley, student***

**A research project from Social Psychology 211**

## Handwashing Behavior

**by Paula Maris**

### INTRODUCTION

The purpose of this research project was to study the effect of an observer on handwashing behavior in public restrooms. Specifically, would a person wash his/her hands only if an observer was present? If the observer was hidden would the person, believing he/she was alone, take the time to wash his/her hands after using the toilet facilities? Washing one's hands after using toilet facilities, private or public, is a socially defined behavior, a social norm. As a socially defined behavior it is also an expected behavior. Therefore, this research attempts to study if socially expected behavior is employed when an audience is not present to observe adherence to the social norm.

### LITERATURE REVIEW

In their article, "Effects of an Observer on Handwashing in a Public Restroom, "from *Perceptual and Motor Skills,* Kirsten Munger and Shelby J. Harris test a prediction arising from social influence theories: observation increases self-awareness. Therefore, they tested the hypothesis that the presence of an observer in a public restroom will increase both the frequency and duration of handwashing. The basis for this experiment comes from Wicklund's 1975 theory of self-awareness. Wicklund's theory states that attending to one's self rather than external objects tends to increase adherence to social norms (Munger & Harris, 733). In this experiment washing one's hands after using toilet facilities is the social norm.

To test their prediction, Munger and Harris had a student observe 59 college females entering a college library restroom. The observation lasted 14 days. Only women entering the restroom alone were observed. A total of 59 subjects were studied. The observer was visible to 31 of the subjects and not visible to *28* of the subjects. The restroom at the library had a reading room which the subjects passed through to reach the toilet area. The observer would greet each subject as she entered the reading room and was again in view at the sink area. In the condition where the observer was not visible to the subject, the observer sat in a corner of the reading lounge (Munger & Harris, 733).

The results were as expected: 24 of 31 subjects in the observer present condition washed their hands. Only 11 of 28 subjects washed their hands when the observer was not visible. However, Munger and Harris did not observe a statistically significant increase in the duration of handwashing which ranged from 4.7 to 5.2 seconds among both groups studied. Also noted by the researchers, those subjects stopping to wash their hands only quickly passed them through water and did not use soap (Munger & Harris, 734). Subsequently, while the subjects did adhere to the social norm of hand-washing after toilet use it appears to be more of an automatic behavior rather than one undertaken for the purpose of proper hygiene.

In his article, "A Self-Presentational View of Social Phenomena," *Psychological Bulletin,* 1982, Roy F. Baumeister discusses self-presentation theory. He defines self-presentation as the use of behavior to communicate information about oneself to others. According to Baumeister there are two main motives for such behavior. The first motive is to please the audience and the other is to construct a public image corresponding to the person's ideal image of him or herself (Baumeister, 3). Baumeister examines research which tests the hypothesis that the majority of social behavior is either determined or influenced by self-presentation.

In terms of behavior, Baumeister believes the conditions of the situation determine whether or not a person adheres to social norms. This represents that the person is concerned with what their behavior communicates to those observing. Therefore, they change and exhibit the appropriate behavior. On the other hand, if the person is anonymous, in a private condition, their behavior cannot influence their public image and they are less apt to follow social rules (Baumeister, 4).

To conclude, Baumeister points out that most people fear social rejection and this fear fuels their reluctance to go against the group's expectations when the group is observing. In addition, Baumeister believes, while people conform to present the most appropriate image, it is not desirable for the group to know the person is conforming. This is because a reputation built on conformity portrays the person as weak (Baumeister, 8).

Robert A. Wicklund discusses the formation of his theory of self-presentation in his chapter "Objective Self-Awareness," found in L. Berkowitz's *Advances in Experimental Social Psychology*. His theory states that at any one time attention is either totally directed at the self or at the environment. However, by focusing on the self as an object adherence to social norms tends to increase (Wicklund, 234). In addition, any stimuli which reminds the person that he/she is an object will increase self-awareness. In many experiments Wicklund and co-researcher Duval used mirrors and tape recordings of the subject's voice to enhance objective self-awareness (Wicklund, 234).

Research has shown that other types of behavior, in addition to hand washing are enhanced by self-awareness. For example, in "Facilitation of Physical Aggression Through Objective Self-Awareness," *Journal of*

*Experimental Social Psychology* 1975, author Charles S. Carver hypothesized that in a situation where aggression was valued mirrors could be utilized to enhance self-awareness and thereby increase aggression. His experiment proved that enhanced self-awareness did lead to an increased level of aggression exhibited by experimental subjects (Carver, 365).

In their article, "Self-Awareness and Physical Aggression," *Journal of Experimental Social Psychology*, Michael F. Scheier, Allan Fenigstein, and Arnold H. Buss report research obtained from two experiments in which a theory of self-awareness was applied to aggression. This theory stated that a self-aware person is more apt to examine his/her behavior in terms of his/her standards of correctness (Scheier, Fenigstein, and Buss, 264).

To test their hypothesis, increased self-awareness should reduce aggression toward women, the authors conducted two experiments. In an experiment with 40 male undergraduate psychology students, a female confederate was shocked according to her responses during a learning task. The male subjects could shock the female confederate on a scale of "just noticeable" to "unbearable" for each incorrect answer. Twenty subjects had a mirror present when shocking the confederate, and 20 subjects had only a passive audience present when shocking the confederate (Scheier et al., 266).

Results from this first experiment showed the shock delivered to the female confederate was less intense when the mirror was present. The shock was also less intense when the audience was present. However, the effect of the audience was not as significant as that of the mirror (Scheier et al., 267). The researchers concluded that self-awareness enhanced by the presence of the mirror inhibited aggression. In addition, they concluded the audiences had a less significant impact on inhibiting aggression because there was lack of eye contact between the subject and the audience members. Whereas with the mirror, the subject was looking at his own face.

Thus the researchers ran the experiment again; this time controlling for eye contact between the subject and the audience members (Scheier et al., 269). From this second experiment they determined that frequent eye contact, an average of 9.2 times, between the audience and the subject had a much stronger inhibitory effect on aggression than a purely passive audience, as in the first experiment (Scheier et al., 269).

To conclude, Scheier, Fenigstein, and Buss found that the presence of a mirror significantly reduces aggression. The presence of an audience, when frequent eye contact is established, also inhibits aggression but not to the same degree as a mirror. They state that while theories of self-awareness, generalized drive, and conformity can account for the effects of the audience on the subject, only the theory of self-awareness provides an explanation for the results the mirror caused (Scheier et al., 271).

## HYPOTHESES

In a public restroom, subjects will tend to wash their hands more often if an observer is present. Also, attitudes about handwashing imply that each person washes his/her hands after using either a public or private toilet facility.

## METHODOLOGY

For this research project the researcher utilized a combination of naturalistic observation and survey response to gather data. The survey (see below) was designed by the researcher to test subject's attitudes relating to handwashing etiquette.

The survey was administered to 20 community college students enrolled in a general psychology course. The respondents replied to a variety of situations and statements regarding toilet use and hand washing. They rated each of the ten statements/scenarios as either strongly agree or strongly disagree, very likely or very unlikely.

The researcher gathered information through naturalistic observation at the Seatac Airport and the San Francisco International Airport. Thirty minutes were spent observing behavior inside the Alaska Airlines women's restroom at each airport. The researcher did not attempt to hide from subjects inside the restroom, but rather acted as if she was there to use the facilities.

Male or Female

Circle the number which best describes your behavior in the following circumstances.

1. After using the bathroom at home I always wash my hands.

Strongly Agree 1 2 3 4 5 Strongly Disagree

2. I always wash my hands with soap and water.

Strongly Agree 1 2 3 4 5 Strongly Disagree

3. I always wash my hands with warm water.

Strongly Agree 1 2 3 4 5 Strongly Disagree

4. You are at your favorite clothes store using the restroom. You always wash your hands if someone else is present.

Very Likely 1 2 3 4 5 Very Unlikely

5. In the middle of a movie you leave to use the restroom. No one else is in the restroom so you don't take time to wash your hands.

Very Likely 1 2 3 4 5 Very Unlikely

6. You and your friend leave the movie to use the restroom. You begin to leave the restroom but notice your friend stops to wash his/her hands. You now wash your hands.

Very Likely 1 2 3 4 5 Very Unlikely

7. When washing your hands you scrub them for more than five seconds.

Very Likely 1 2 3 4 5 Very Unlikely

8. You are in a hurry. On your way to the food court to get something to eat you stop to use the restroom. You don't stop to wash your hands.

Strongly Agree 1 2 3 4 5 Strongly Disagree

9. You are alone in a public restroom at the mall. You are in a hurry. You don't stop to wash your hands.

Strongly Agree 1 2 3 4 5 Strongly Disagree

10. It is important to always wash your hands after using the restroom to stop the spread of germs .

Strongly Agree 1 2 3 4 5 Strongly Disagree

| Sex | f | f | f | f | f | f | f | f | f | f | f | f | f | f | f | f | m | m | m | m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Question | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 | 3 | 1 | 1 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 3 | 3 |
| 2 | 1 | 2 | 1 | 3 | 3 | 1 | 4 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 2 |
| 3 | 2 | 2 | 5 | 2 | 2 | 2 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| 4 | 1 | 2 | 3 | 2 | 1 | 3 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| 5 | 5 | 5 | 5 | 4 | 5 | 2 | 2 | 5 | 2 | 5 | 5 | 2 | 1 | 4 | 5 | 5 | 5 | 5 | 4 | 4 |
| 6 | 5 | 4 | 1 | 2 | 1 | 3 | 1 | 5 | 2 | 2 | 1 | 1 | 1 | 1 | 5 | 1 | 5 | 1 | 2 | 1 |
| 7 | 5 | 2 | 3 | 3 | 4 | 1 | 4 | 1 | 2 | 2 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 1 |
| 8 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 2 |
| 9 | 5 | 4 | 5 | 3 | 4 | 2 | 2 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 2 |
| 10 | 1 | 2 | 1 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |

Actual responses from class survey.

| | Very Likely | | | | | | | | Very Unlikely | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | 5 | |
| Question | | | | | | | | | | |
| 1 | 11 | 55% | 4 | 20% | 5 | 25% | | 0% | | 0% |
| 2 | 9 | 45% | 7 | 35% | 3 | 15% | 1 | 5% | | 0% |
| 3 | 7 | 35% | 11 | 55% | | 0% | 1 | 5% | 1 | 5% |
| 4 | 12 | 60% | 5 | 25% | 3 | 15% | | 0% | | 0% |
| 5 | 1 | 5% | 4 | 20% | | 0% | 4 | 20% | 11 | 55% |
| 6 | 10 | 50% | 4 | 20% | 3 | 15% | 1 | 5% | 4 | 20% |
| 7 | 10 | 50% | 3 | 15% | 2 | 10% | 4 | 20% | 1 | 5% |
| 8 | | 0% | 1 | 5% | | 0% | 6 | 30% | 13 | 65% |
| 9 | | 0% | 3 | 15% | 1 | 5% | 5 | 25% | 11 | 55% |
| 10 | 14 | 70% | 5 | 25% | 1 | 5% | | 0% | | 0% |

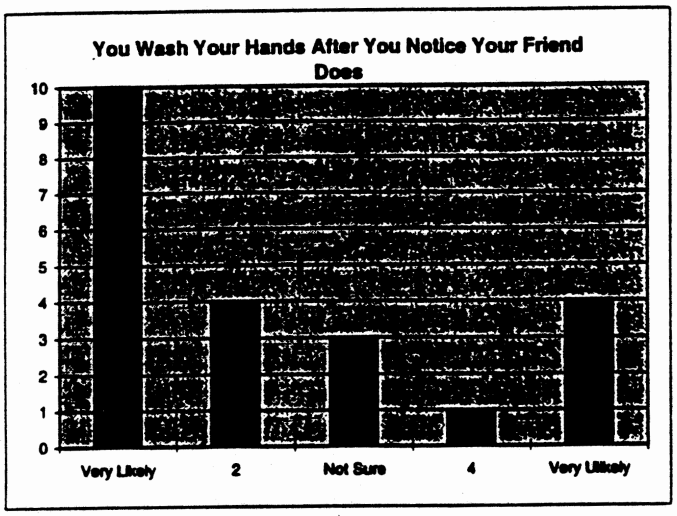
Results from class survey.
Date 11/27/95

**Results from class survey. Date 11/27/95**

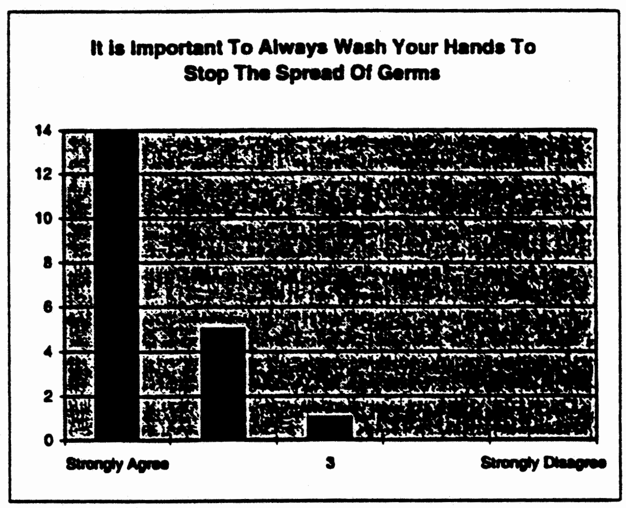
RESULTS

Results of the attitude survey were as expected. 70% of respondents answered that it is important to always wash their hands after using the restroom. 80% of respondents stated it was very unlikely for them to leave a public restroom without first washing their hands after using the facilities. 70% stated they would wash their hands if they saw a friend washing. Therefore, the trend in attitude of these survey respondents indicated they believed they always take the time to wash their hands whether or not an observer is present. The attitude displayed supports the socially correct behavior of washing your hands in a public or private restroom after using toilet facilities.

## Survey Responses




Question #6 Responses




Question #1 Responses

The behavior observed through naturalistic observation yielded some interesting results. At the San Francisco Airport only 1 of 12 subjects did not wash her hands. The subjects were a combination of groups of travelers, mothers with children, and individuals. The children demonstrated no desire to wash their hands after using the facilities. Yet, their mothers proceeded to take them to the sink and help them wash up. The mothers were teaching their children the appropriate social behavior for the situation, the social norm. The one subject who did not wash her hands appeared to be in a hurry.

At the Seatac Airport similar behavior was observed. The subjects were 119 females ranging in age. Again, some were in groups, some were alone. No small children were observed. The researcher noticed that at this airport the handwashing facilities were very modern. In order to turn on the water the subjects merely had to pass one hand under the faucet. The researcher observed 3 of 15 subjects leave the restroom without washing their hands. This occurred when after passing their hand under the faucet they could not get the water to turn on. Rather than ask for help, the subjects left the restroom while everyone was watching them. Therefore, it appears they would rather leave with unwashed hands than possibly embarrass themselves by asking for help with turning on the water.

The results of the attitude survey compiled with the naturalistic observation and the research results of the Munger and Harris experiment support the researcher's hypotheses. Through the survey respondents confirmed that handwashing is a socially defined behavior. Naturalistic observation illuminated socially conforming behavior and pointed out a break with the social norm. Finally, Munger and Harris's results prove that attitude and behavior do not always match. Only 39% of their subjects bothered to wash their hands when no observer was present (Munger & Harris, 734).

## DISCUSSION

This research illuminates attitudes, primarily among females, in relation to hand washing behavior. The researcher found the subject's anticipated behavior was not consistent with their actual behavior. This was determined through survey, naturalistic observation, and correlational data. Therefore, people may believe a certain behavior to be appropriate for a situation, yet when no one is around to check for that behavior they often do not follow through with their original belief. In this case, without an observer, females are less likely to wash their hands after using toilet facilities.

Naturalistic observation was limited to 30 minutes at each airport. This was due to time constraints on the researcher and the possibility of being hauled away by airport security. Nonetheless, an interesting behavior was detected. Certain subjects were willing to leave the restroom without washing their hands, even though several observers were present. This behavior was unexpected and points to an area of further research. It is possible that rather than risk being embarrassed because they could not turn on the water, the subjects preferred to leave the restroom since they would most likely never see the occupants again.

In addition to time constraints during naturalistic observation, there were other problems with this project. The most obvious obstacle to this research, and that of Munger and Harris, is lack of information pertaining to males' attitudes and behavior surrounding hand washing in public restrooms. To remedy this, a male research partner could be recruited.

In addition, the survey would require adjustments if this research project was repeated. A larger sample base would be polled. More questions pertaining to general hygiene habits would be included to detect if the subject is washing because society defines that as the situationally appropriate behavior, or if he/she is actually concerned with germs.

To conclude, the research was successful for the most part. Results coincided with the theories of social psychology. Studying the attitudes versus the actual behavior of subjects is a fascinating area of research with wide ranging applications. With modifications in surveying techniques and the addition of a male research partner, if this project was conducted again, a true indication of male and female behavior in public restrooms would result.

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*My research project on handwashing behavior in public restrooms began as an observation. Specifically, why did I frequently observe people avoid the sink area of the restroom? Many challenges arose in researching this idea. The biggest challenge came in relating the project to the primary theories of Social Psychology; this was one of the parameters of the assignment.*

*To accomplish this task, I spent many hours researching electronic data bases. When I was about to change topics, I discovered the research which became the foundation of my project. From this point, I continued to review the small amount of literature available on my topic, but more importantly, I designed a survey and performed naturalistic observation in order to gather further information. In the end I discovered that what I had originally perceived as a narrow area of study was actually intertwined with many of the major theories of Social Psychology. In addition, I discovered a topic which I could continue to study at length in the future.*

***Paula Maris, student***

## An analysis paper from Introduction to Speech Communication

*This assignment allows students the opportunity to explore a communication topic of interest to them. The paper is a standard report, a type of paper most students are already familiar with. The "analysis" component of the assignment requires students to locate and read materials on their topics from sources outside the textbook and apply that knowledge to their own specific inquiry. Students then report to me what they have learned about their topic, and importantly, how the information has helped them understand a communication experience in more detail. Alene's paper addresses the assignment requirements particularly well. She identified a communication topic that was of interest to her, researched what scholars in a variety of fields had to say about it, and then indicated how the knowledge she gained was of value to her.*

***Martha Hagan, instructor***

### So I Said To Myself...

**by Alene Gillians**

When I am home alone, I talk to my cats. If the cats are asleep, I have been known to make comments to inanimate objects. And yes--it is true, I even talk to *myself*. Why do I engage in this strange intrapersonal communication where I am both sender and receiver, speaker and audience? Does it do me any harm? Does it do me any good? In the not so distant past, intrapersonal communication was thought to be a sign of mental weakness, but present research on this current subject tells a new and exciting story.

In my searching out of this topic, I examined recent professional journals and published college papers. To my surprise, intrapersonal communication has been greatly explored by researchers from various professions--medicine, psychology, education, and business--to name just a few. As I read through the material I found, I chose to report on the findings that are most significant in my own life.

Problem-solving seems to be a very obvious motive for intrapersonal communication and indeed, in my own experience I have communicated with myself to find solutions for many problems. I have often felt that my right brain responds to the literal speaking of my left brain. "O.K., Alene. How will I expect to solve this problem?" I might speak to myself. The right brain eventually begins to answer with a mental picture of a possible solution. Do the words I speak begin a call-response sequence in my mind? I am not sure, but the paper I read by Rod Korba presented ideas on the "Genplore Model" for investigating and solving problems that used the course components of generative and exploratory processes. It seems that through intrapersonal communication the cognitive mind can "frame" the problem while the conceptual mind can explore and find new relationships for solutions. Talking to myself about the problem helps me solve it.

Charles Beck, editor of *Technical Communications*, introduced ideas on intrapersonal communication in relationship to the Johari Window. He considers intrapersonal communication a valuable tool of self-awareness which helps us understand and reflect on our "blind- self" and reduces the "blind-self" as well as the "hidden-self." When these are reduced, the "open-self" becomes larger, enabling us to be more successful in intrapersonal relationships. Beck also acknowledges that methods of intrapersonal communication vary with personality types and profiles, but whatever way we find to communicate with ourselves is significant to other relationships. Intrapersonal communication seems to be a key to feeling more comfortable and knowledgeable about ourselves.

Another interesting facet of intrapersonal communication is the psycho-physiological connection. Julia Weikle, executive director of a private community health service in West Virginia, attests that "inner speech" has a direct influence on health states. It can reduce stress as well as alert us to possible danger or risk. Weikle also observes that positive inner speech can be difficult for many females in our society, but very rewarding, since it requires that we take an active role in shaping events in our lives. She recommends using your own name as you speak to yourself and releasing pent up feelings through intrapersonal communication.

The most fascinating aspect of intrapersonal communication, in my own opinion, is its link to creativity. The creative process had long been a favorite subject of my own thoughts, and in my life I find that talking to myself (verbally or nonverbally) while being creative is a very natural occurrence. It has been said that creativity, in essence, is making and communicating meaningful, new connections, and Kenton Hyatt goes into great depth in the *Journal of Creative Behavior* as to how internal communications offer an understanding to our own creativity. Hyatt notes that inner language may be verbal or visual and is highly symbolic to the individual--"rich in meaning and association." This symbolic language allows for simultaneous communication roles of sender and receiver. The symbolic language becomes a dialogue with self that at some point will draw in the artistic medium as an *Other*. It is during this dialogue that the self can allow spontaneity to occur. For me, spontaneity is paramount to my own sense of fulfillment in the creative process.

Intrapersonal communication is obviously good for me. It helps me to problem solve, be more open as a person, have a change for better health, and it cuts a wider path through the brambles and struggles of the creative process in my own artwork. The materials I read were both surprising and reassuring. Surprising in the fact that there has been so much research done on this subject, and reassuring because what I read confirmed the positive feelings I already had about interpersonal communication.

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*It's very nice when we, as students, are assigned to research a topic of our own choosing pertaining to a certain subject. In this informal paper, done for Speech 100, I seized the opportunity to impart the exciting information I had gathered in a conversational way. As I organized my findings I realized the connection it had with what I had felt to be true regarding this subject. I tried to write the paper in a way that would convey the vital connection I felt, without getting bogged down in the technical aspects of the information I had found. This paper was fun to write as well as enriching my understanding of how things fit together around me.*

***Alene Gillians, student***

## An outline for an informative speech from Speech 120

*When preparing for a presentation in Speech 120, Public Speaking, students are required to create a full sentence outline of their speech. Clear organization and structure are vital in a speech that is easy to follow and to remember. Logical form also helps the speaker to remember their ideas and lowers their anxiety as they move smoothly from one topic to the next.*

*A full sentence outline is an important tool when preparing a speech: it helps the student develop their ideas fully; it assists in the correct subordination and organization of ideas during research; it allows for the development of appropriate structural patterns; and gives the students more opportunity to judge the clarity and unity of the overall speech.*

*A good rule of thumb when giving a speech is that you tell the audience what is going to be said, then you say it, then you tell them what you said. This technique of reiteration, not repetition, can be seen in Reni's outline as she presents her main ideas in her preview, main points, and summary. Reni's outline contains all the elements necessary to create a clear relationship with the subject and the audience. She uses personal language not only to involve the audience but to establish her own credibility as she uses her own experiences to enliven the speech.*

*After a student has written a full content outline, an abbreviated form is transferred onto note-cards to create a speaking outline. This shortened form is accompanied with color coding, drawings or anything else that is useful to prompt a speaker's memory. Abbreviation is necessary in the speaking outline since the student's aim is to speak extemporaneously (conversationally and spontaneously) and not to read the full content or memorize it.*

***Rosemary Vohs, instructor***

## Grief--Understanding and Helping Friends to Cope

**by Reni Kessinger**

Purpose: To inform my audience of the various stages of grieving and how to communicate more appropriately with loved ones, friends, or acquaintances who have suffered a loss.

Thesis: When a person suffers a great loss it is often difficult for the people around them to communicate concern or give comfort without feeling awkward or inadvertently saying inappropriate comments.

Introduction

I. (Attention-Getter) Envision this: a good friend of yours, someone you love and with whom you connect and enjoy spending your time, has recently lost someone close to him, perhaps a member of his family, to an illness or accident. Your friend is obviously in pain and his grief is overwhelming, yet as much as you would like to help him in this difficult time, you discover that you have absolutely no idea what to say or do for him. You fear that anything you say will come out wrong or anything you do might not be what he needs. You feel uncomfortable because you don't know if you should talk about the loss, if acknowledging the pain is making the situation worse, or if you should just wait for your friend to start talking. If any of you have been in this situation you will know that "death etiquette" is something Ms. Manners never taught and something most of us are not prepared to deal with.

II. (Audience-Adaptation) On a personal level, I know of what I speak. Like many of us, I have experienced great loss in my life. Because of my experience I would like to share with you my observations, and also the theories and observations of noted professionals, whose work in the field of death and the processes of grieving have opened many doors for those whose lives have been forever altered by the loss of a loved one.

III. (Purpose) As a result of my exposure to the grieving process, and also out of personal necessity, I have become very open when talking about loss and grief and, on occasion, have been asked about what is appropriate when offering comfort to a grieving person, what words to say, what words not to say, or how one can be emotionally supportive to friends in need.

IV. (Preview) Although death is a normal and universal experience, it remains a very individualized experience for anyone who may be mourning a great loss. There are three aspects I will be addressing tonight.
   A. The five stages of grieving.
   B. What to say and what not to say.
   C. What to do and how to help.

Transition: By becoming familiar with and understanding the various stages of the grieving process it then becomes easier to better comprehend the emotional state of the bereaved person.

Body

I. Grief, in its beginning stages, is all encompassing; the grieving person can think about nothing else but loss. As time progresses and if the healing process has been a healthy one, he will begin to turn his thoughts outward again and begin to lead a normal, though altered, life.

A. Elisabeth Kubler-Ross, in her book On Death and Dying, describes five stages of the grieving process.
1. Not everyone progresses through each stage exactly the same way or at the same time, nor do they consistently progress in a forward motion.
2. A person may go from stage one to stage two, back to stage one and then progress to stage three.

B. In a healthy healing process there is a general progression from stage one through to stage five.
1. Denial. This is the first stage of the grieving process and it occurs in the period directly after the death. The grieving person may not be able to believe that something this terrible could happen.
2. Anger. There is a strong impulse to blame someone, to be mad that something this horrible has happened to you and to your loved one. Choose your target because everyone, including the dead, are fair game in this stage.
3. Bargaining. This stage often results in the avoidance of forming close relationships in the future. The grieving person feels that if they don't get close to another person they won't run the risk of being hurt if that person dies.
4. Depression. The grieving person feels a sense of tremendous loss. He asks the "Why?" questions but there are no answers. He begins to reassess the meaning of life in general and his own life specifically.
5. Acceptance. The final stage. This is not a happy stage but there is a sense of relief when he finally comes to terms with the fact that the person he loved is dead and nothing will bring him back.

Transition: Communication has many facets. We talk and listen in many ways. At the uppermost layer, there is what we say in words. Then, beneath that, there is our body language messages we convey with our body.

II. According to Johnette Hartnett, author of Death Etiquette for the '90s: What to Do/What to Say, "For many bereaved, recovering from a loss takes extraordinary energy and patience; grief is tedious and discouraging. Being a friend to a bereaved person is not easy."

A. Because the person mourning is highly sensitive you must be careful not to offend or irritate in your attempts to console.

1. In our search for the right things to say it is easy to say the wrong things.
2. I remember being dumbfounded over comments made that were not meant to be offensive, but did offend and anger me.
3. For me, personally, I found the following comments to be thoughtless or irritating.
   a. "At least your father is not suffering anymore."
   b. "It was a blessing in disguise; he's in a better place now."
   c. "Just keep yourself busy and everything will be all right."
4. "God never gives you more than what you can handle."
5. "I know how you feel."

B. Although talking about death and grief can make you feel sad and anxious, not acknowledging the loss of a recently bereaved friend can be equally uncomfortable.

1. Most likely your friend knows how uncomfortable you may feel, but offerings of kind words are remembered long after the loss has occurred.
2. You cannot cause your friends pain by mentioning the deceased; the pain is already there.
3. The words I appreciated hearing were:
   a. I'm so sorry."
   b. "One of my favorite memories of your father was."
   c. "He loved you very much."
   d. "I can't imagine the pain you must be feeling."
   e. "Life can be so unfair."

Transition: One of the most important things we can do for the bereaved person is to stay in touch and let that person know we care.

III. In the words of Marguerite Bouvard in her book entitled, The Path Through Grief: A Practical Guide, "A grieving person needs to have his or her pain acknowledged and accepted."

A. If helping a friend cope with a great loss is a new experience for you, it really is very simple.

1. Just be sensitive and caring, whatever he or she might be feeling.
2. Listen with concern.
3. Allow your friend to express whatever he or she might be feeling.

B. I was fortunate in that I was surrounded by people who loved me very much and allowed me the freedom to grieve. A few of the things that meant a great deal to me were:

1. Being allowed to talk about my father as much as I needed to.
2. Being allowed the freedom to cry.
3. Having silence.
4. Loving arms that held me.
5. Acknowledgment of my grieving, weeks, months and years after the loss.

Conclusion

I. (Review) To summarize, let me quickly review the five stages of grieving.

A. Denial--"This is not happening to me."
B. Anger-- "Damn you for dying."
C. Bargaining--"Stay away; you might leave too."
D. Depression--"I'm lost, confused, and cry all the time."
E. Acceptance--"I know he is dead, but I miss him terribly." What you need to remember is that the grieving person needs to acknowledged, he needs to feel he is listened to and that he is loved. Most importantly, be sensitive and caring, listen with concern, and allow your friend the freedom to express whatever he is feeling.

II. (Closure) In her book entitled, <u>Death, The Final Stage of Growth</u>, Elisabeth Kubler-Ross writes, "In death and in grief, we do not need as much protection from painful experiences as we need the boldness to face them. We do not need as much tranquilization from pain as we need the strength to conquer it. If we choose to love, we must also have the courage to grieve. "With this heart let me encourage you on this holiday, this day of love, to acknowledge those in pain and offer yourself to someone in need of support. Believe me, the caring and love you offer will always be remembered and appreciated.

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*The motivation for writing and giving a speech on the process of grieving was a direct result of my personal journey through the grieving process. My goal was to inform my audience of the various stages of grief and to give examples of words and actions that can be useful in comforting those who are grieving the loss of a friend, or loved one, and also to give advice as to what the grieving person does not want to hear. I lost my father to cancer three years ago and it was my experience that many people avoided the subject of death because they felt inadequate giving comfort during this painful time. After my father's death I began to read many books about grief and came to understand that our society as a whole is one that does not allow the bereaved time to grieve, nor do we feel comfortable talking about death. By writing and giving this speech, it became obvious that I had reached the acceptance stage of the grieving process. After giving this speech it was expressed to me by members of my audience that it had helped to alleviate some of the ambivalence they felt when addressing grief.*

***Reni Kessinger, student***

# EPILOGUE

A student's life can be fairly hectic combined with other life obligations. So it was great to hear that there was going to be a publication that would bring together the writings of students. It was an opportunity to vicariously meet other students and gain a perspective on WCC instructors.

Of course I was amazed when a paper of mine was chosen to be one of the voices in *A Gathering of Voices*. As a returning student (after a twenty year hiatus), I felt new to this challenge of essay writing. And I was astonished that my essay to be published was a political science paper. Needless to say, I had a fine instructor and the topic was of interest to me.

The opportunity to publish was the chance I needed to hone some of my writing skills, to improve my writing by revising and editing my class assignment once again.

I have read most of the writings in the first anthology, and I believe the student work does the college justice. It reveals the commitment the students and faculty have in being able to write well across the disciplines. Although statistics reveal that many students have need for improvement, and I am one of them, *A Gathering of Voices* is a tool that encourages us to do our best, and the collection of writings in the anthology provides a vehicle for us to measure our success. Personally, I gained not only creatively. Having my paper accepted also boosted my self-esteem and inspired me to continue to succeed.

***Phoenix Raine, student***